

## Online Supplemental Materials

### **Salty food induces body water conservation and decreases fluid intake**

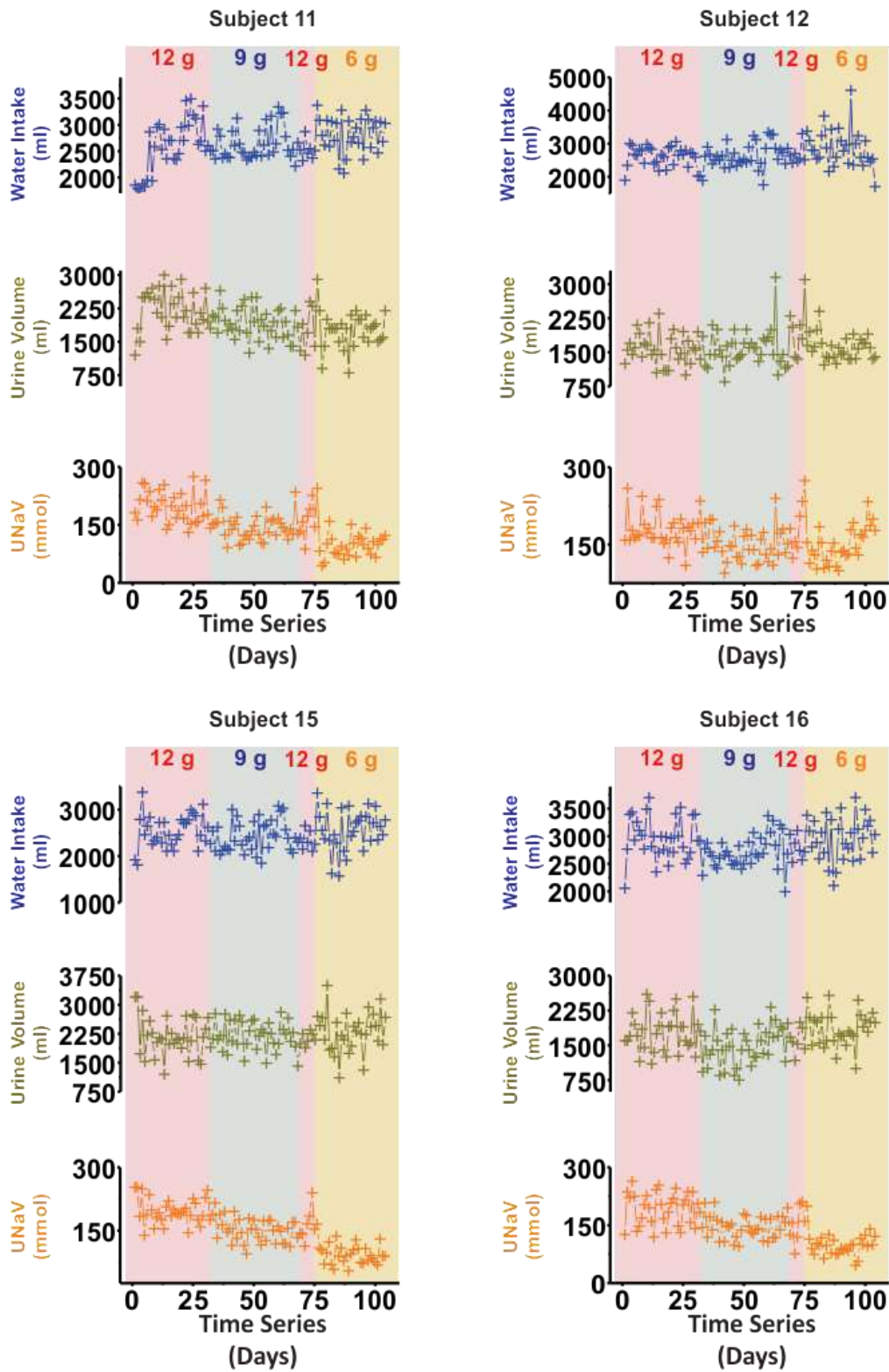
Natalia Rakova, Kento Kitada, Kathrin Lerchl, Anke Dahlmann, Anna Birukov, Steffen Daub, Christoph Kopp, Tetyana Pedchenko, Yahua Zhang, Luis Beck, Bernd Johannes, Adriana Marton, Dominik N. Müller, Manfred Rauh, Friedrich C. Luft, and Jens Titze

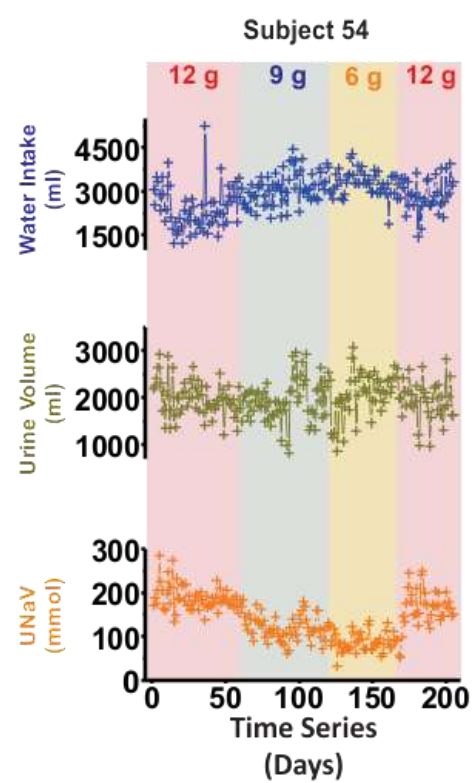
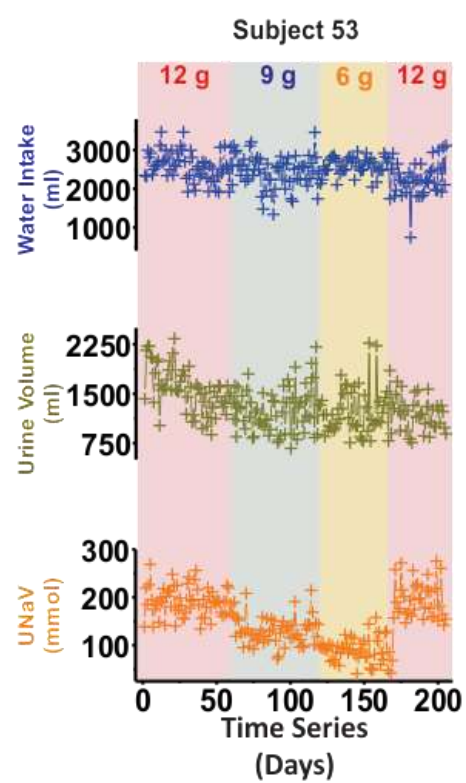
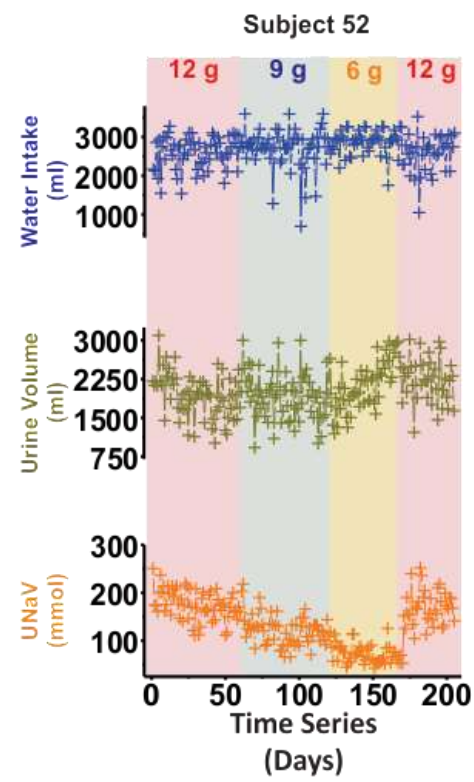
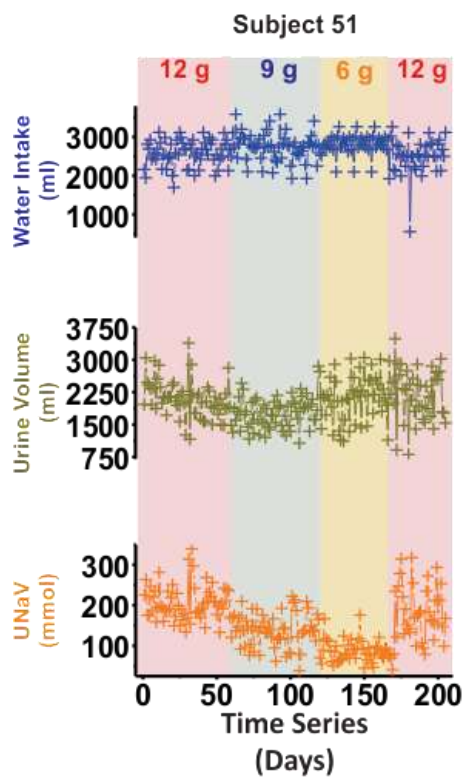
#### **Inventory:**

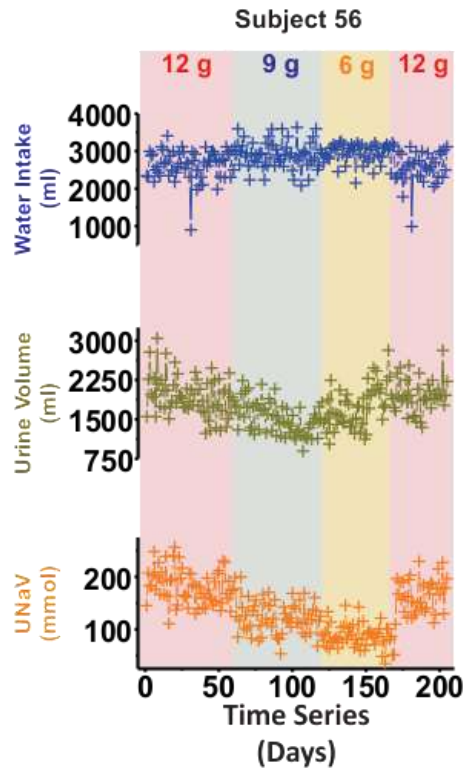
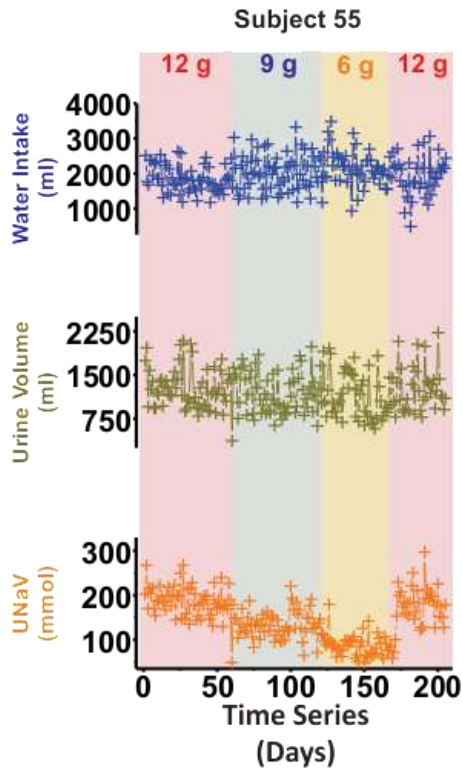
<b>Online Supplemental Figure S1</b>	Page 2
<b>Online Supplemental Figure S2</b>	Page 5
<b>Online Supplemental Figure S3</b>	Page 6
<b>Online Supplemental Figure S4</b>	Page 8
<b>Online Supplemental Figure S5</b>	Page 11
<b>Online Supplemental Figure S6</b>	Page 12
<b>Online Supplemental Figure S7</b>	Page 13
<b>Online Supplemental Figure S8</b>	Page 14
<b>Supplemental Experimental Procedures</b>	Page 15
<b>Online Supplemental Table S1</b>	Page 18
<b>Online Supplemental Table S2</b>	Page 19
<b>Online Supplemental Table S3</b>	Page 19
<b>Online Supplemental Table S4</b>	Page 20
<b>Online Supplemental Table S5</b>	Page 21
<b>Online Supplemental Calculations of Osmolyte-Driven Urine Volume Formation</b>	Page 22
<b>References</b>	Page 27
<b>Online Supplemental Statistical Analysis Figure 1</b>	Page 28
<b>Online Supplemental Statistical Analysis Figure 2</b>	Page 64
<b>Online Supplemental Statistical Analysis Figure 3</b>	Page 100
<b>Online Supplemental Statistical Analysis Figure 4</b>	Page 112
<b>Online Supplemental Statistical Analysis Figure 5</b>	Page 148
<b>Online Supplemental Statistical Analysis Table 1</b>	Page 292
<b>Online Supplemental Statistical Analysis Table 2</b>	Page 460
<b>Online Supplemental Statistical Analysis Table 3</b>	Page 748

### Online Supplemental Figure S1

Relationship between daily sodium excretion (UNaV), urine volume, and water intake in each subject. Data presented as time series.

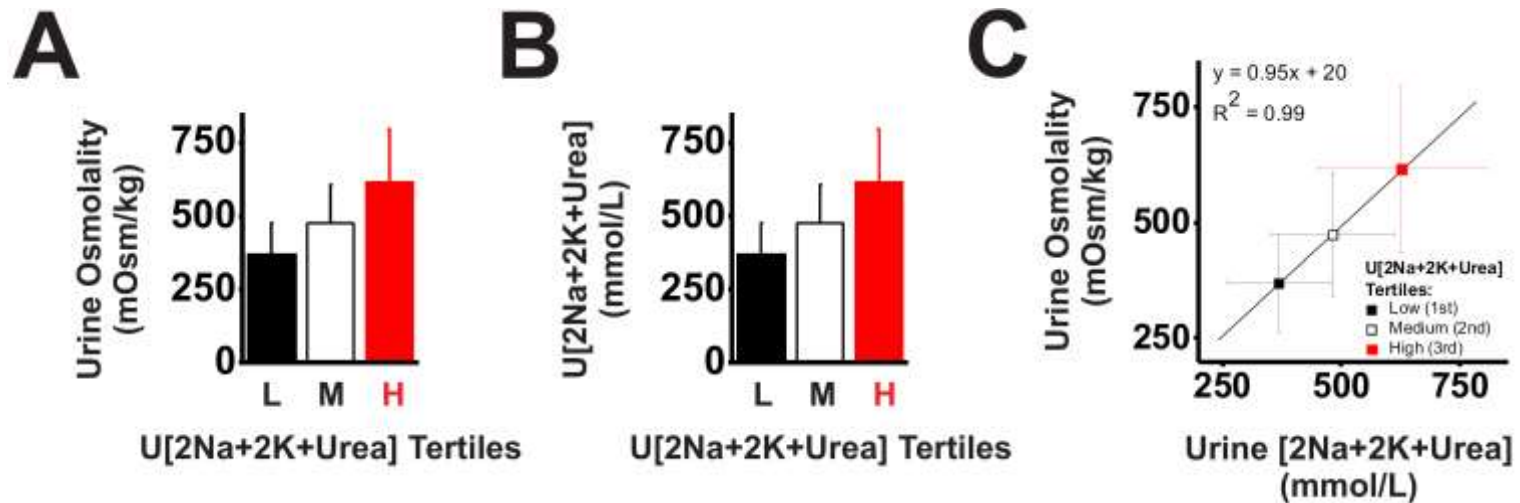






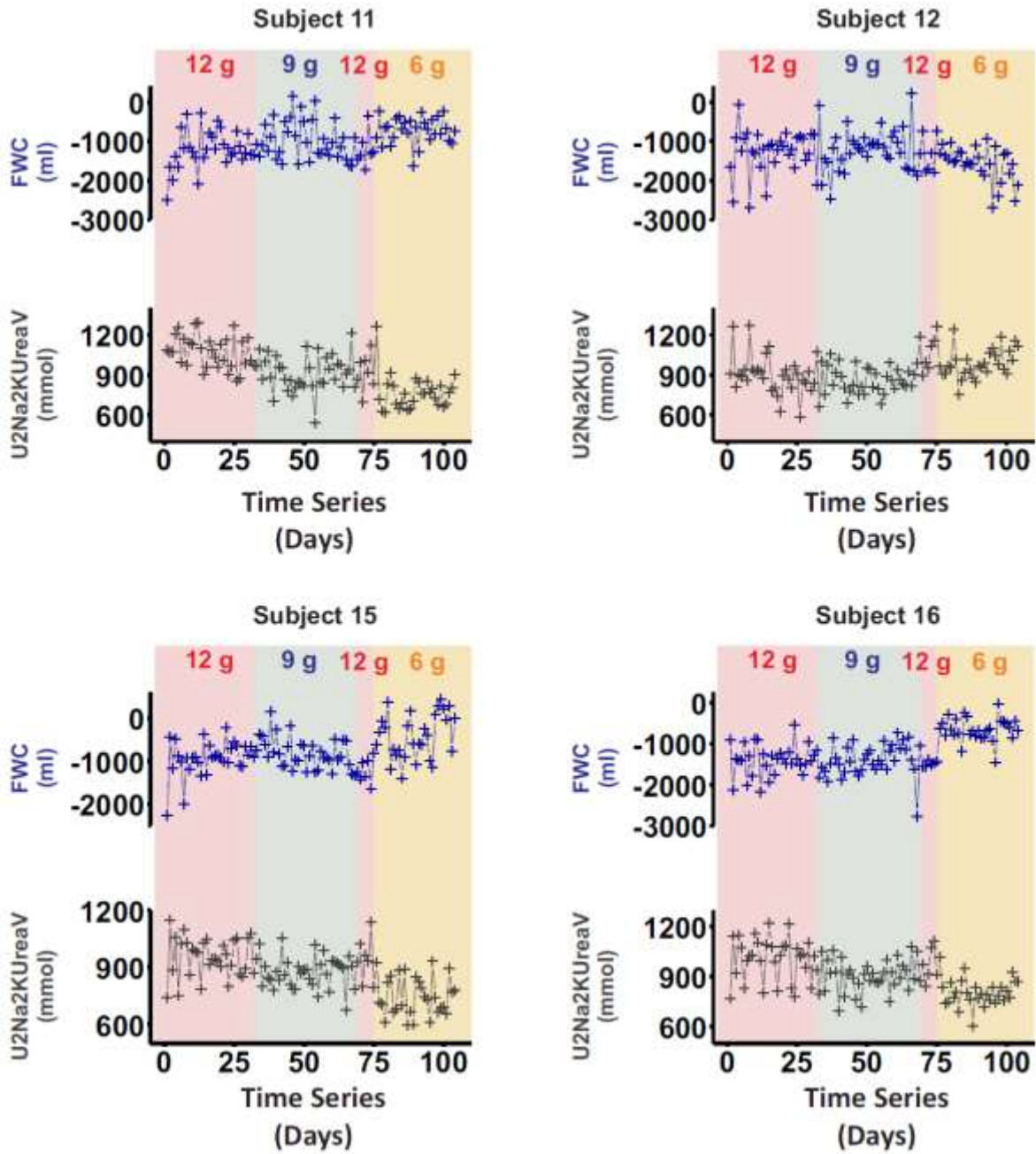
### Online Supplemental Figure S2

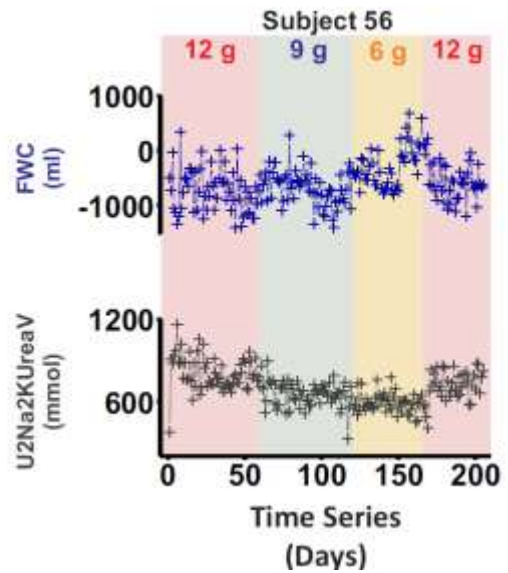
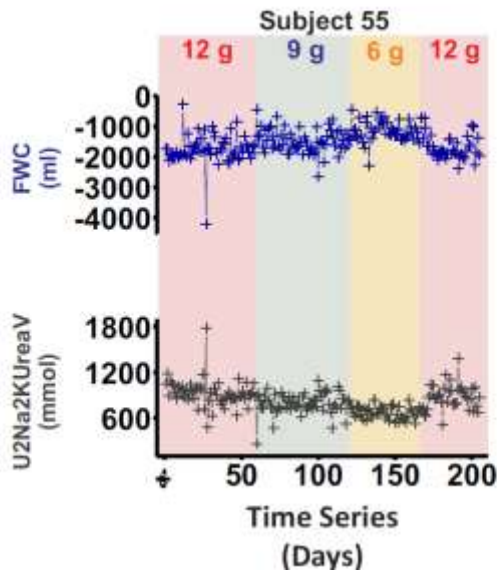
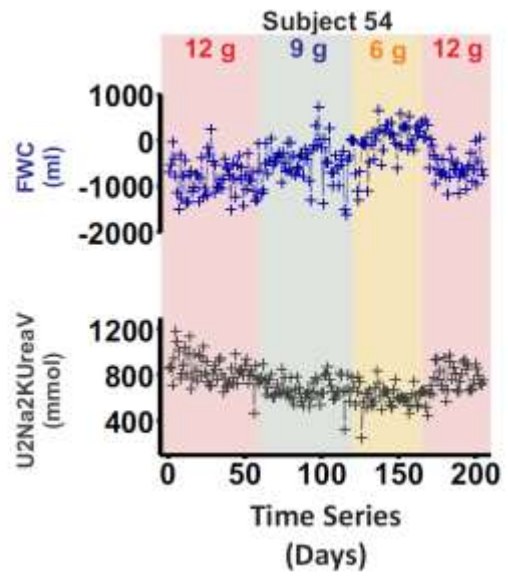
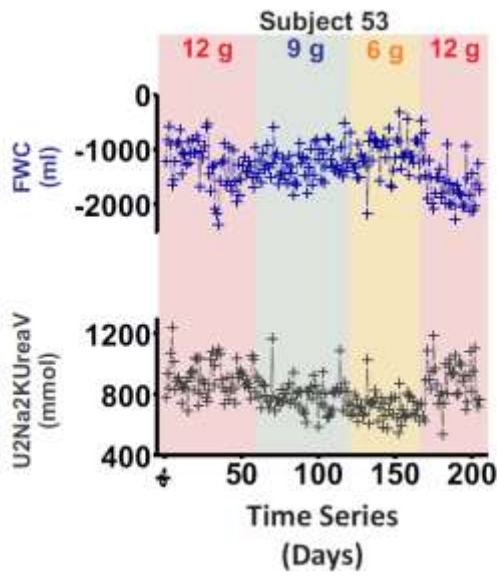
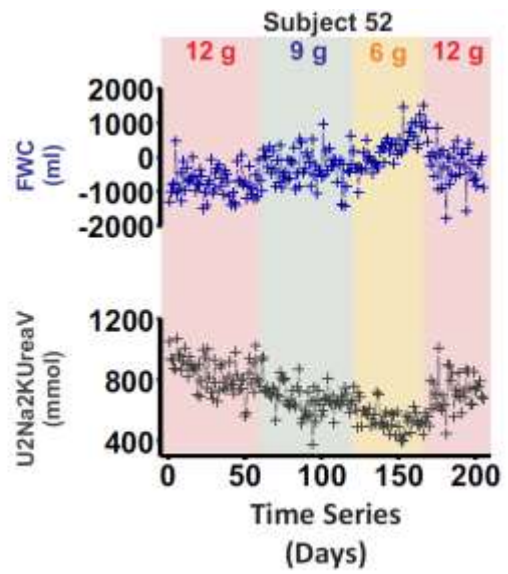
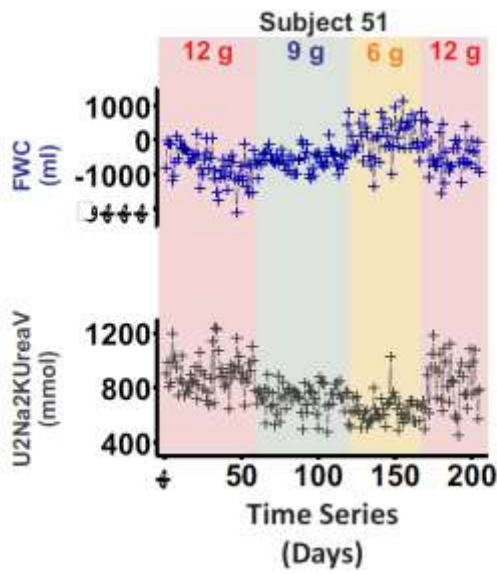
Relationship between urine  $\text{Na}^+$ ,  $\text{K}^+$ , and urea osmolyte concentration and urine osmolality. (A) Change in urine osmolality per tertile of  $[\text{2Na}^+ + \text{2K}^+ + \text{Urea}]$  concentration in the urine. We calculated the sum of  $2x[\text{Na}^+]$  and  $2x[\text{K}^+]$  to account for unmeasured excreted anions which parallel the cation excretion. (B) Change in  $[\text{2Na}^+ + \text{2K}^+ + \text{Urea}]$  concentration per tertile of  $[\text{2Na}^+ + \text{2K}^+ + \text{Urea}]$  concentration in the urine. (C) Agreement between calculated  $[\text{2Na}^+ + \text{2K}^+ + \text{Urea}]$  concentration and measured urine osmolality for each tertile of  $[\text{2Na}^+ + \text{2K}^+ + \text{Urea}]$  concentration. Data are expressed as average  $\pm$  SD.



**Online Supplemental Figure S3**

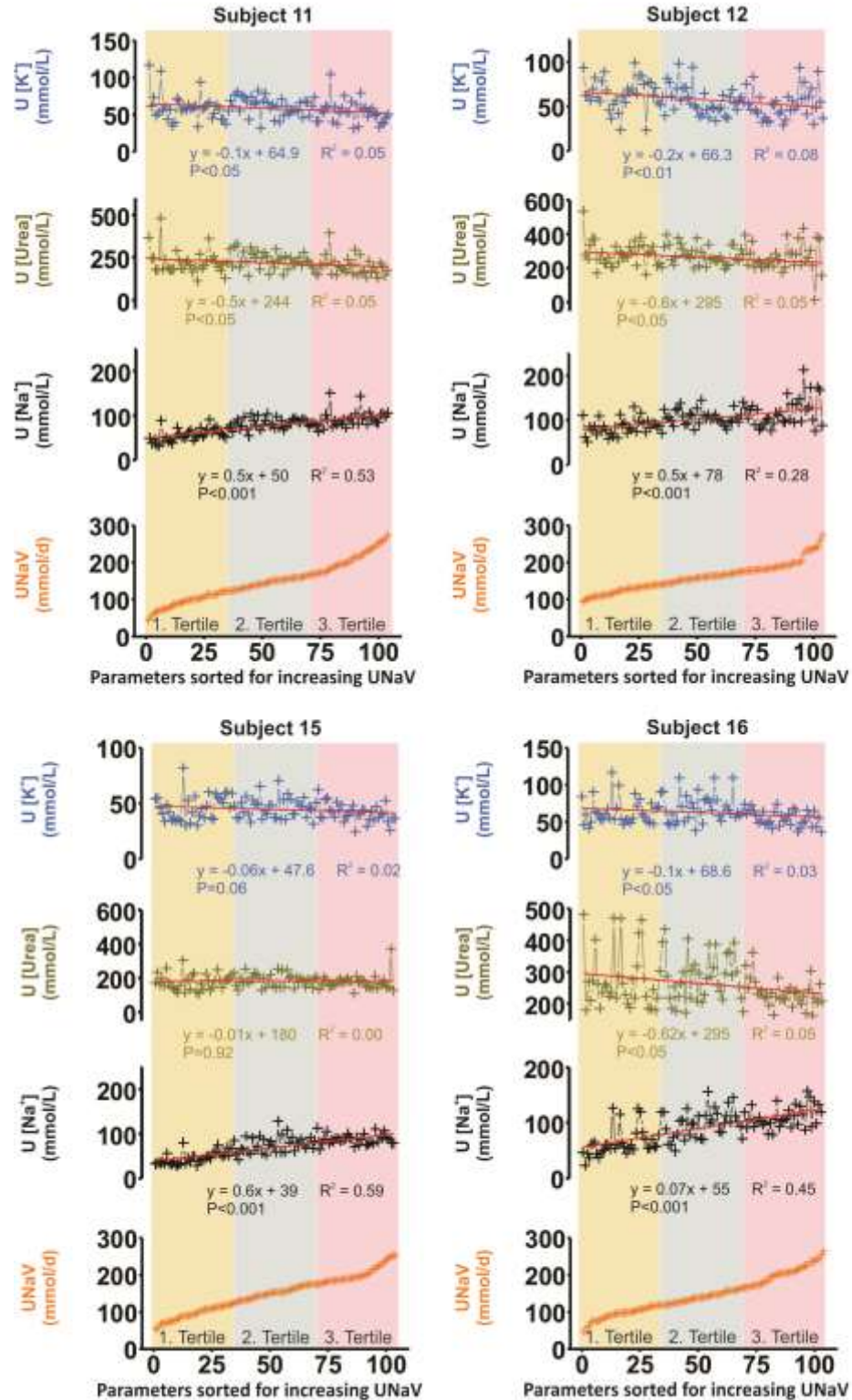
Relationship between daily osmolyte excretion (U2Na2KUreaV), and free water clearance (FWC) in each subject. Data presented as time series.



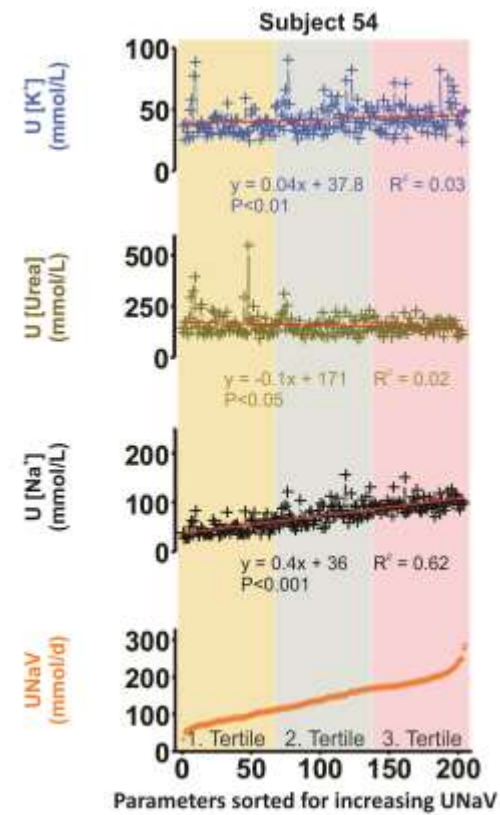
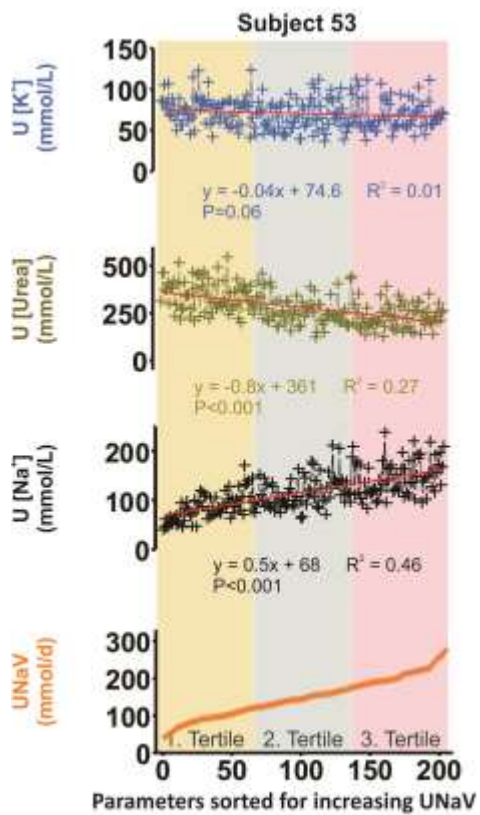
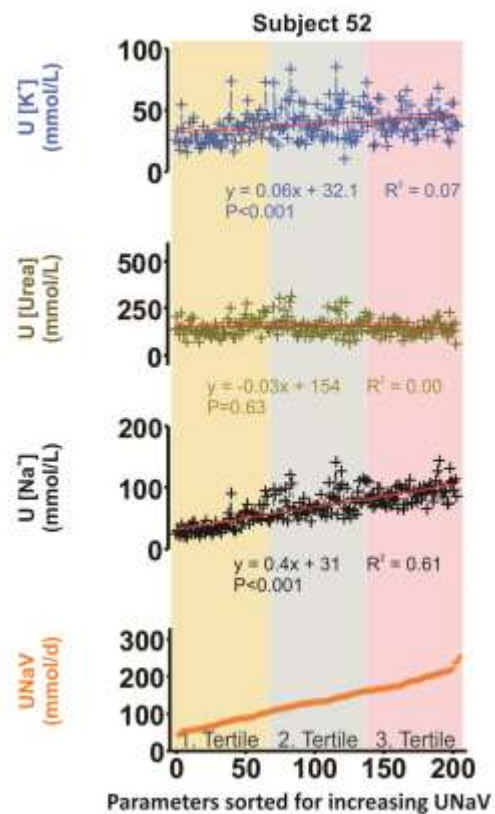
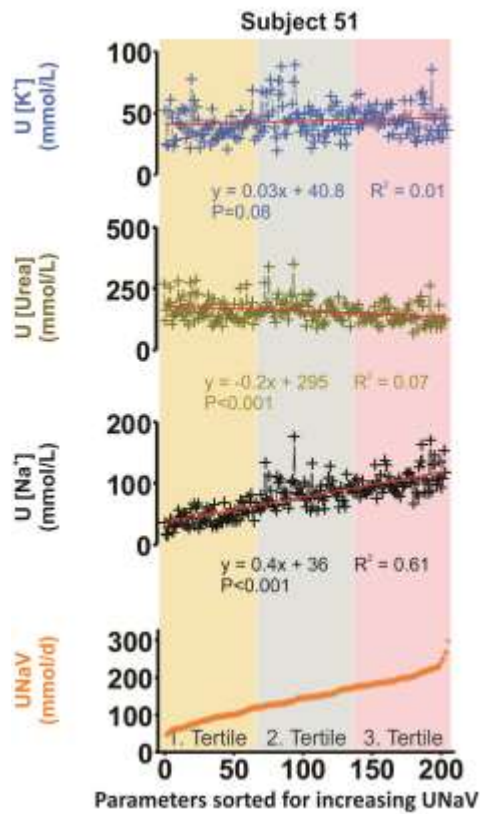


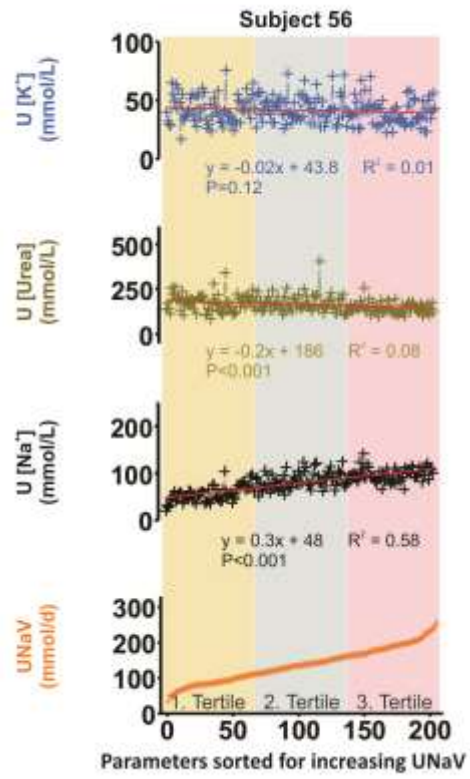
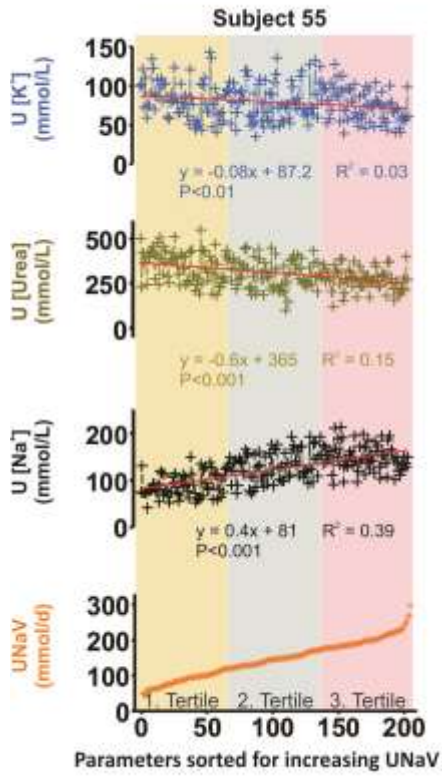
Online Supplemental Figure S4

Relationship between urine Na<sup>+</sup> excretion (UNaV; stratum) and urine Na<sup>+</sup> concentration (U[Na<sup>+</sup>]), urine urea concentration (U[Urea]), and urine K<sup>+</sup> concentration (U[K<sup>+</sup>]). Data stratified for increasing UNaV.

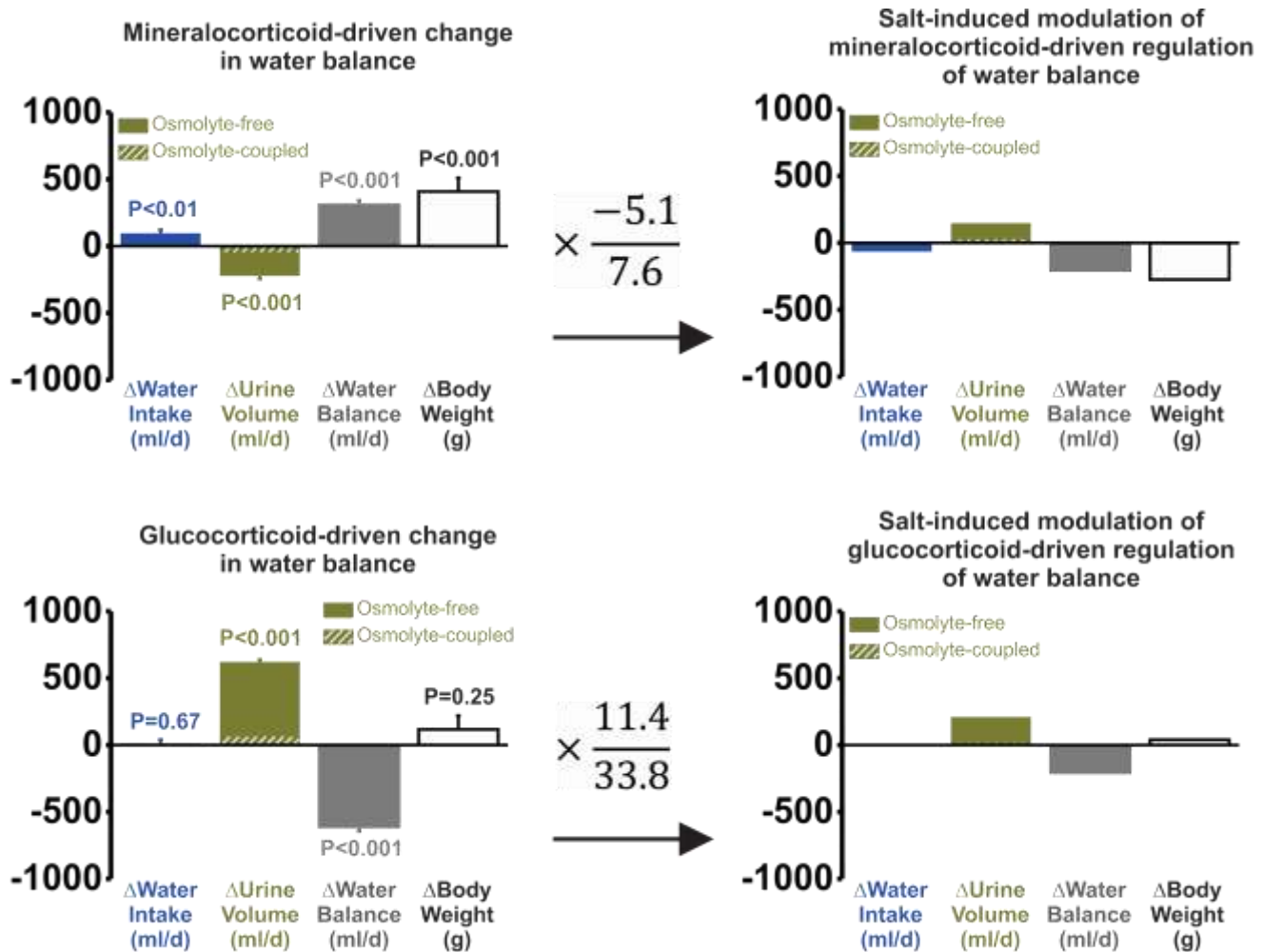




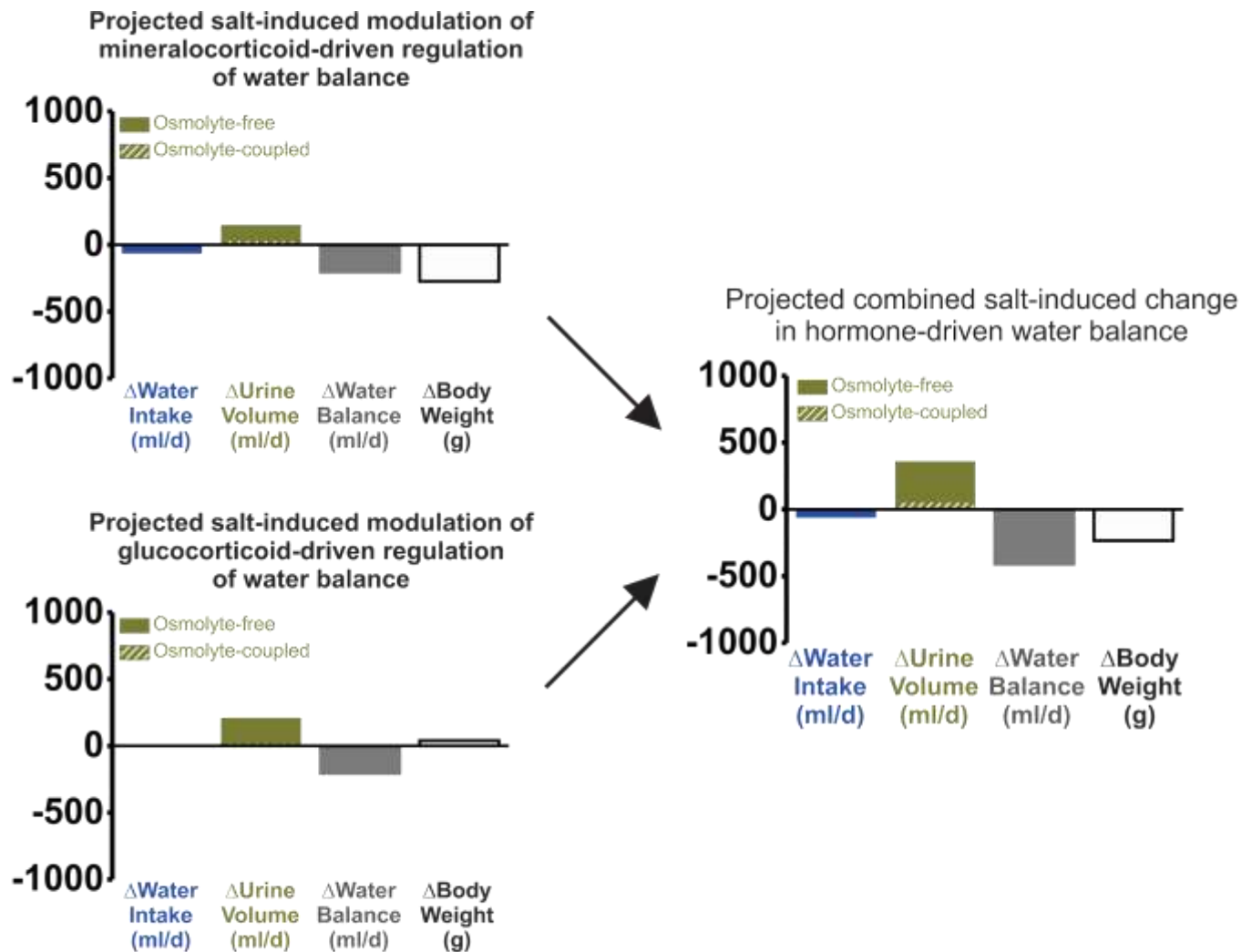




**Online Supplemental Figure S5. Projected effect of salt-driven mineralocorticoid level reduction and glucocorticoid activation on daily water balance.** Aldosterone showed half-weekly and weekly rhythmical release with a 7.6 µg/d difference between the 1<sup>st</sup> and 3<sup>rd</sup> tertile of rhythmical aldosterone excretion, which increased water intake, reduced urine volume, increased renal water balance and resulted in increased body weight across all 3 salt intake levels. A 6 g/d increase in salt intake reduced the level of rhythmical aldosterone release by -5.1 µg/d. The projected effect of this salt-driven reduction in mineralocorticoid release on water balance is a -5.1/7.6-fold change in the measured effect of spontaneous rhythmical mineralocorticoid release on water intake, urine volume, water balance, and body weight. Cortisone showed rhythmical release with a 33.8 µg/d difference between the 1<sup>st</sup> and 3<sup>rd</sup> tertile of rhythmical cortisone excretion, which increased urine volume and reduced renal water balance across all 3 salt intake levels. A 6 g/d increase in salt intake increased the level of rhythmical cortisone release by +11.4 µg/d. The projected effect of this salt-driven increase in glucocorticoid release on water balance is an 11.4/33.8-fold change in the measured effect of rhythmical glucocorticoid release on urine volume and water balance.



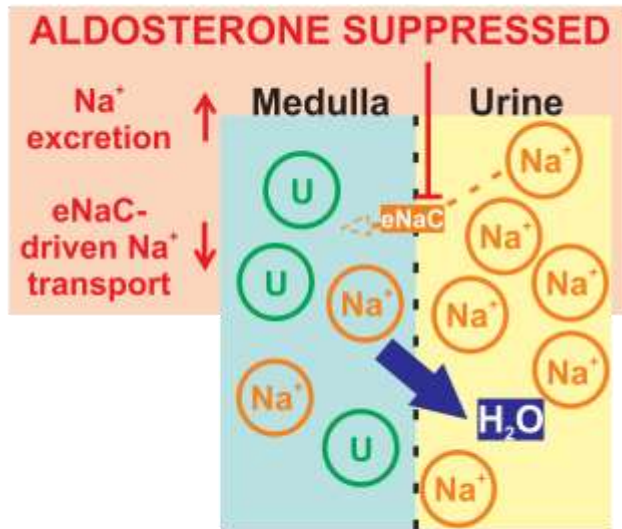
**Online Supplemental Figure S6.** In Online Supplemental Figure S5, we have calculated the projected effect of salt-driven suppression of rhythmical mineralocorticoid release and promotion of rhythmical glucocorticoid release on water intake, urine volume, water balance, and body weight. Adding the projected effect of salt-driven modulation of mineralocorticoid release to the projected effect of salt-driven modulation of glucocorticoid release results in an estimate of the combined projected salt-induced change in hormone-driven long-term water balance regulation in the subjects.



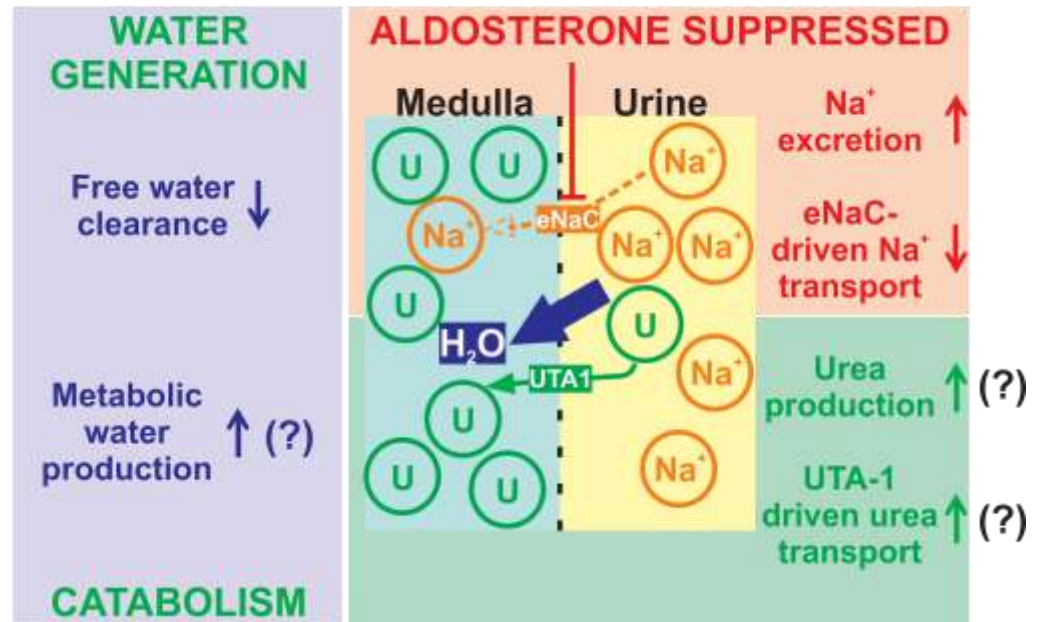
**Online Supplemental Figure S7**

*Natriuretic and natriuretic-ureotelic concept of extracellular body fluid homeostasis. (A) Traditional natriuretic concept. A high-salt diet suppresses the renin-angiotensin-aldosterone system (RAAS), which reduces renal Na<sup>+</sup> transport (epithelial Na<sup>+</sup> channels (eNaC) as an example) and increases Na<sup>+</sup> osmolyte excretion in the urine. The osmotic driving force of Na<sup>+</sup> osmolyte excretion induces osmotic diuresis, which increases the urine volume and thereby reduces the extracellular volume. (B) Natriuretic-ureotelic concept. A high-salt diet suppresses the RAAS and increases the urine volume as described above; however, parallel urea accumulation in the renal medulla provides an additional osmotic driving force that is anti-parallel to the one induced by the observed Na<sup>+</sup> osmolyte movement. The resulting anti-diuretic effect limits renal water loss and results in water conservation as it utilizes the renal concentration mechanism for Na<sup>+</sup> osmolyte excretion. This concentration mechanism is paralleled by elevated glucocorticoid levels and increased metabolic water production. We speculate that the resulting catabolic state involves energy-intense urea osmolyte generation and urea transporter A1 (UTA-1)-driven renal water conservation. In summary, the natriuretic-ureotelic concept defines water generation from organic fuels and limitation of extracellular water loss in biological barriers as a critical biological-physiological feature of high-salt intake.*

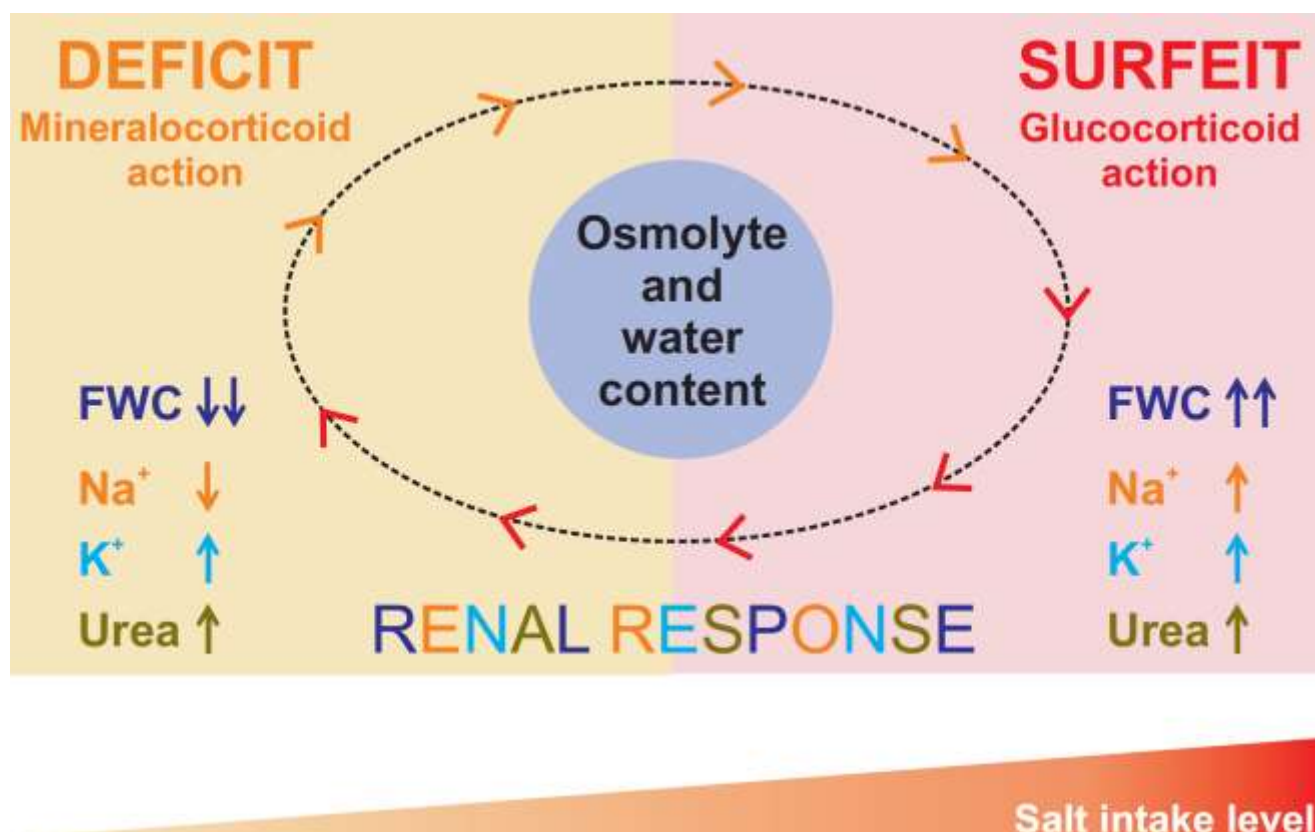
**A. Traditional natriuretic concept**



**B. Alternative natriuretic-ureotelic concept**



**Online Supplemental Figure S8. Proposed infradian-rhythmical water balance cycle in man.** Our ultra-long salt and water balance studies suggest that humans control body water homeostasis by spontaneous hormone-driven half-weekly and weekly reduction and elevation of body water content. At constant osmolyte intake, rhythmical mineralocorticoid action reduces free-water clearance. The resulting body water accrual leads to an endogenous water surfeit and limitation of rhythmical mineralocorticoid release. The generated water surfeit is then released at low-aldosterone / high cortisone levels, during which the kidneys release large amounts of surplus free-water and relevant amounts of all major osmolytes. This diuretic phase reduces body water content to a temporary deficit, which initiates the next cycle of endogenous mineralocorticoid-driven body fluid surplus generation. The renal concentration mechanism dominates rhythmical water accrual by reducing free-water clearance in the high-aldosterone phase. The renal dilution mechanism dominates rhythmical water release by increasing free-water clearance in the high-glucocorticoid phase. We can only speculate that glucocorticoid-driven changes in metabolic water production additionally contribute to endogenous water surfeit generation during the high-glucocorticoid phase. A 6 g/d increase in salt intake modulates hormonal control of the water balance cycle in favor of the high-glucocorticoid phase. FWC: 24-hour free-water clearance,  $\text{Na}^+$ : 24-hour  $\text{Na}^+$  excretion in the urine,  $\text{K}^+$ : 24-hour  $\text{K}^+$  excretion in the urine, Urea: 24-hour urea excretion in the urine.



## Supplemental Experimental Procedures

### *Subjects and Environmental Conditions*

Anthropometric data of all 12 subjects are listed in **Online Supplemental Table S1**. Averages over each salt phase of our dietary intervention show the course of body weight and Body-Mass-Index throughout the studies. The isolation study was conducted at the Institute for Biomedical Problems in Moscow and approved by several ethical boards of the Russian Federation and European Space Association authorities. Written informed consent was obtained and all studies were done as outlined in the *Declaration of Helsinki*.

Subjects as a group were enclosed in a simulator with a volume of 500 m<sup>3</sup>. In each study, six healthy young men agreed to spend prolonged periods in an enclosed habitat consisting of hermetically sealed interconnecting modules. The crew lived and worked like cosmonauts on the international space station (ISS) conducting scientific experiments and daily exercise routines. Environmental factors were maintained constant and enabled a “metabolic ward” setting for this experiment. Temperature was maintained between 18°C and 25°C. Air pressures were 730 to 760 mm Hg, with 18-25% oxygen content and 0-0.08% carbon dioxide content. Microgravity was not simulated. Subjects were busy performing experiments for 6 to 7 h daily. In addition, 30 to 60 min physical exercise training was required daily, again resembling the physical training program during Russian spaceflights. However, physical activity was limited by the rate of daily energy intake (**Online Supplemental Table S2**), which allowed only moderate energy expenditure and was not sufficient to allow for rigorous to the point of sweat losses that could have confounded the experiments. Average extrarenal Na<sup>+</sup> loss was 12.7 mmol/d (2). One important operational difference between the two studies was the occurrence of nightshift duties during the Mars105 pre-test. The subjects served these duties every 6<sup>th</sup> night, meaning that they were awake for ~ 36 h every 6<sup>th</sup> day (3). Nightshift duties were not continued in the Mars520 study.

### *Nutritional intervention*

Nutritional intervention was performed during the complete Mars105 study and the first 205 days of Mars520 study. Various European food producers provided more than 200 different food items with pre-analyzed nutrient content for our nutritional intervention. Using the PRODI software, we calculated and individualized daily menu plans for each subject. The goal of the dietary intervention implemented in the Mars500 project was to maintain all nutrients on a constant level throughout the studies, while only sodium ingestion was decreased. The salt reduction was performed step-wise from 12 g salt per day over 9 g to 6 g salt per day with a re-exposition of the subjects to 12 g salt per day in Mars520 study (**Online Supplemental Table S2**). Energy, carbohydrate, fat, protein, fiber, calcium, magnesium, and potassium intakes were maintained constant at each

salt intake level. Each crewmember was handed a booklet with his daily, individualized menu plans that served as protocols to document the actual food intake.

### *Drop-outs*

We defined adequate calorie intake and accuracy in daily Na<sup>+</sup> balance as dropout criteria. Accuracy was evaluated by individual average daily urinary Na<sup>+</sup> excretion (UNaV) as percentage of actual daily Na<sup>+</sup> intake. We excluded subjects from analysis when their UNaV was repeatedly less than 80% of Na<sup>+</sup> intake. Only this strict focus on experimental accuracy allowed us to implement a long-term balance approach. Because two subjects did not meet these criteria, we had to exclude both subjects from further analysis (3).

### *Specimen Collection*

The subjects measured their body weight each morning after voiding the bladder. Urine was collected and stored for a 24-hour period. 24-hour urine volumes were recorded at 7:00 AM and four aliquots of 10 mL were transferred into test tubes to be frozen for later analysis. The subjects measured their daily urine volume and fluid intake volumetrically.

### *Biochemical Methods*

Sodium and potassium concentrations of 24-hour urine samples were measured by flame photometry (Eppendorff EFIX 5055, Hamburg, Germany). Urinary hormone excretion was measured using LC-MS/MS (API 4000TM, Applied Biosystems, MDS Sciex, Foster City, USA). For measurement of aldosterone, we hydrolyzed 100 µl of urine with hydrochloride acid for 24h. We measured urinary free cortisol and cortisone in 100 µl of non-hydrolyzed urine. We used an online extraction cartridge with a column-switching technique, analytical liquid chromatography over a Chromolith RP 18e column, and atmospheric pressure chemical ionization tandem mass spectrometry for all steroid measurements. The d7-Aldosterone and d<sub>4</sub>-Cortisol served as internal standards. All solvents, reagents and available steroids were of analytical reagent grade or highest possible percent purity. We purchased steroids purchased from Sigma-Aldrich (Taufkirchen, Germany), Eurisotop (Saarbrücken, Germany) and LGC Promochem (Wesel, Germany). Coefficient of variation for inter-assay controls was 10% (Lyphocheck® Quantitative Urine Control Level 1 and 2, Bio-Rad, Irvine, USA; Seronorm Immunoassay Lyo L-1 and L-2; Billingstad, Norway). The intra-assay coefficients of variation (CVs) were 5-10% for all analyses. The limit of quantification derived from the precision profile curve was 0.5 µg/L for aldosterone and 1.0 µg/L for cortisol and cortisone.



## Data analysis

*Effect of salt intake and urine Na<sup>+</sup> excretion:* The experimental intervention during this study was prescription of 3 different salt intake levels (12 g/d, 9 g/d, and 6 g/d), resulting in 3 salt intake phases during the 105-day study and during the 205-day study, with a re-exposition from the low 6 g intake level to the high 12 g intake level at the end of the 205-day study (**Online Supplemental Table S2**). We first plotted data as time series and as average±SD per salt phase. We then analyzed the effect of salt intake phase on our measured variables (water intake, urine volume, urine Na<sup>+</sup> excretion, urine Na<sup>+</sup>, K<sup>+</sup> and urea concentration, free-water clearance, osmolyte excretion as the sum of Na<sup>+</sup>/K<sup>+</sup>/urea and accompanying anion excretion, and urine osmolyte concentration as the sum of Na<sup>+</sup>/K<sup>+</sup>/urea and accompanying anion concentration) by quantifying the change in the measured variables per salt intake phase by Mixed Linear Model analysis (Random Effect: individual subjects; Factor: salt intake phase; Covariate: constant; Fixed: salt intake phase; Interaction: none). In addition, we stratified our 24-hour urine Na<sup>+</sup> excretion (UNaV) data into 3 tertiles with increasing UNaV (1<sup>st</sup> tertile: low UNaV, 2<sup>nd</sup> tertile: medium UNaV, 3<sup>rd</sup> tertile: high UNaV) and tested for changes in the same variables per tertile of UNaV (Random Effect: individual subjects; Factor: UNaV tertile; Covariate: constant; Fixed: UNaV tertile; Interaction: none).

*Effect of urine aldosterone and cortisone levels:* It is well established that high salt intake suppresses urine aldosterone levels, resulting in increased urine Na<sup>+</sup> excretion and an increase in urine volume due to Na<sup>+</sup>-driven osmotic diuresis. To confirm this regulatory pattern in our subjects, we stratified our 24-hour aldosterone excretion data (UAldoV) into 3 tertiles with increasing UAldoV and tested for changes in aldosterone excretion, cortisone excretion, Na<sup>+</sup> intake, water intake, urine volume, renal water balance, body weight, urine osmolality, free-water clearance, Na<sup>+</sup> excretion, K<sup>+</sup> excretion, urea excretion, the sum of Na<sup>+</sup>/K<sup>+</sup>/urea and accompanying anion excretion, Na<sup>+</sup> concentration, K<sup>+</sup> concentration, urea concentration, and the sum of Na<sup>+</sup>/K<sup>+</sup>/urea and accompanying anion concentration per UAldoV tertile (Random Effect: individual subjects; Factor: UAldoV tertile; Covariate: constant; Fixed: UAldoV tertile; Interaction: none). Similarly, we additionally stratified our 24-hour cortisone excretion data (UCortisoneV) into 3 tertiles with increasing UCortisoneV and tested in the same measured variables for changes per UCortisoneV tertile (Random Effect: individual subjects; Factor: UCortisoneV tertile; Covariate: constant; Fixed: UCortisoneV tertile; Interaction: none). To exclude the effect of dietary salt intake intervention on mineralocorticoid and glucocorticoid-driven changes in osmolyte and water balance, we stratified for hormone level tertiles at each dietary salt intake level.

We used SPSS Version 21.0 for statistical analysis. To summarize the results of mixed linear model data analysis, data are expressed as average±SD, and as  $\Delta$  change±SEM.

## Online Supplemental Table S1

Anthropometric data are shown as mean  $\pm$  SD for each salt phase. \*  $P_{(12g \text{ versus } 6g)} < 0.05$ ; †  $P_{(12g \text{ versus } 9g)} < 0.05$ ; ‡  $P_{(9g \text{ versus } 6g)} < 0.05$ ; #  $P_{(6g \text{ versus } 12g)} < 0.05$  (re-exposition to high-salt intake). **BSA: Body surface area (calculated by the Du Bois formula). Statistical analysis of body weight changes by Mixed Linear Models.**

### Mars 105

	11	12	13	14	15	16	All
Age (yrs)	33	38	33	25	40	28+1	32.9 $\pm$ 5.1
Height (m)	1.78	1.78	1.87	1.73	1.73	1.84	1.79 $\pm$ 0.05
<b>BSA (m<sup>2</sup>)</b>	<b>1.9</b>	<b>2.1</b>	<b>2.2</b>	<b>2.0</b>	<b>1.8</b>	<b>2.1</b>	<b>2.0<math>\pm</math>0.1</b>
Bodyweight (kg)							
12 g	69.6 $\pm$ 1.5	88.7 $\pm$ 1.2	92.6 $\pm$ 1.8	85.3 $\pm$ 1.7	66.3 $\pm$ 0.5	86.3 $\pm$ 0.8	81.5 $\pm$ 10.0
9 g	71.3 $\pm$ 0.4†	85.3 $\pm$ 1.0	86.3 $\pm$ 1.8	79.8 $\pm$ 1.2†	66.7 $\pm$ 0.4	84.8 $\pm$ 0.6†	79.0 $\pm$ 7.5
6 g	71.9 $\pm$ 0.2‡*	82.8 $\pm$ 0.9‡	82.4 $\pm$ 1.0‡*	76.8 $\pm$ 0.4‡*	66.8 $\pm$ 0.4	83.5 $\pm$ 0.5	77.4 $\pm$ 6.3‡*
All	70.9 $\pm$ 1.3	85.8 $\pm$ 2.6	87.4 $\pm$ 4.4	80.8 $\pm$ 3.6	66.6 $\pm$ 0.5	84.9 $\pm$ 1.3	79.4 $\pm$ 8.3
BMI (kg/m <sup>2</sup> )							
12 g	22.0 $\pm$ 0.5	28.0 $\pm$ 0.4	26.5 $\pm$ 0.5	28.5 $\pm$ 0.6	22.1 $\pm$ 0.2	25.5 $\pm$ 0.2	25.4 $\pm$ 2.6
9 g	22.5 $\pm$ 0.1†	26.9 $\pm$ 0.3	24.7 $\pm$ 0.5	26.7 $\pm$ 0.4†	22.3 $\pm$ 0.1	25.0 $\pm$ 0.2†	24.7 $\pm$ 1.8†
6 g	22.7 $\pm$ 0.1‡*	26.1 $\pm$ 0.3‡	23.6 $\pm$ 0.3‡*	25.7 $\pm$ 0.1‡*	22.3 $\pm$ 0.1	24.7 $\pm$ 0.1	24.2 $\pm$ 1.5‡*
All	22.4 $\pm$ 0.4	27.1 $\pm$ 0.8	25.0 $\pm$ 1.3	27.0 $\pm$ 1.2	22.3 $\pm$ 0.2	25.1 $\pm$ 0.4	24.8 $\pm$ 2.1

### Mars520

	51	52	53	54	55	56	All
Age (yrs)	38	37+1	31+1	31+1	27	27+1	32.3 $\pm$ 4.3
Height (m)	1.77	1.76	1.70	1.81	1.80	1.75	1.76 $\pm$ 0.03
<b>BSA (m<sup>2</sup>)</b>	<b>2.0</b>	<b>2.2</b>	<b>1.9</b>	<b>2.1</b>	<b>2.0</b>	<b>1.9</b>	<b>2.0<math>\pm</math>0.1</b>
Bodyweight (kg)							
12 g	83.8 $\pm$ 1.1	99.0 $\pm$ 0.6	79.0 $\pm$ 1.4	86.7 $\pm$ 0.5	82.7 $\pm$ 0.6	74.0 $\pm$ 0.5	84.2 $\pm$ 7.8
9 g	84.6 $\pm$ 0.5†	95.9 $\pm$ 1.4†	80.8 $\pm$ 0.5†	85.1 $\pm$ 0.8†	82.2 $\pm$ 0.5†	73.0 $\pm$ 0.6†	83.6 $\pm$ 6.8†
6 g	83.7 $\pm$ 0.2‡*	92.9 $\pm$ 0.6‡*	79.5 $\pm$ 0.9‡*	82.9 $\pm$ 0.7‡*	80.9 $\pm$ 0.5‡*	70.6 $\pm$ 0.5‡*	81.7 $\pm$ 6.6‡*
12 g	84.4 $\pm$ 0.7#	92.2 $\pm$ 0.5#	80.1 $\pm$ 0.4#	82.3 $\pm$ 0.5#	80.5 $\pm$ 0.5#	69.5 $\pm$ 0.3#	81.4 $\pm$ 6.7#
All	84.1 $\pm$ 0.8	95.5 $\pm$ 2.8	79.8 $\pm$ 1.2	84.6 $\pm$ 1.8	81.8 $\pm$ 1.0	72.1 $\pm$ 1.8	83.0 $\pm$ 7.1
BMI (kg/m <sup>2</sup> )							
12 g	26.7 $\pm$ 0.4	32.0 $\pm$ 0.2	27.3 $\pm$ 0.5	26.5 $\pm$ 0.2	25.5 $\pm$ 0.2	24.2 $\pm$ 0.2	27.0 $\pm$ 2.4
9 g	27.0 $\pm$ 0.2†	30.9 $\pm$ 0.5†	28.0 $\pm$ 0.2†	26.0 $\pm$ 0.2†	25.4 $\pm$ 0.2†	23.8 $\pm$ 0.2†	26.9 $\pm$ 2.2†
6 g	26.7 $\pm$ 0.1‡*	30.0 $\pm$ 0.2‡*	27.5 $\pm$ 0.3‡*	25.3 $\pm$ 0.2‡*	25.0 $\pm$ 0.2‡*	23.0 $\pm$ 0.2‡*	26.3 $\pm$ 2.2‡*
12 g	26.9 $\pm$ 0.2#	29.8 $\pm$ 0.2#	27.7 $\pm$ 0.1#	25.1 $\pm$ 0.2#	24.9 $\pm$ 0.2#	22.7 $\pm$ 0.1#	26.2 $\pm$ 2.3#
All	26.8 $\pm$ 0.3	30.8 $\pm$ 0.9	27.6 $\pm$ 0.4	25.8 $\pm$ 0.6	25.2 $\pm$ 0.3	23.5 $\pm$ 0.6	26.7 $\pm$ 2.3

## Online Supplemental Table S2

Nutritional intervention – offered nutrients (data are shown as mean  $\pm$  SD for each salt phase).

<b>Mars 105 Salt Phase</b>	<b>12 g (Day 1-35)</b>	<b>9 g (Day 36-70)</b>	<b>6 g (Day 76-104)</b>
<b>Main Ingredients</b>			
Kilocalories	2835 $\pm$ 76	2849 $\pm$ 59	2821 $\pm$ 61
Carbohydrates (g)	383 $\pm$ 22	395 $\pm$ 19	403 $\pm$ 21
Fat (g)	91 $\pm$ 10	87 $\pm$ 8	84 $\pm$ 8
Protein (g)	104 $\pm$ 12	103 $\pm$ 10	94 $\pm$ 9
Total fiber (g)	28 $\pm$ 5	27 $\pm$ 4	29 $\pm$ 5
<b>Minerals</b>			
Calcium (mg)	1226 $\pm$ 202	1312 $\pm$ 157	1226 $\pm$ 170
Magnesium (mg)	425 $\pm$ 159	412 $\pm$ 146	391 $\pm$ 147
Potassium (mg)	3886 $\pm$ 519	3883 $\pm$ 553	3991 $\pm$ 554
Sodium (mg)	4822 $\pm$ 144	3661 $\pm$ 107	2464 $\pm$ 332

<b>Mars520 Salt Phase</b>	<b>12 g (Day 1-61)</b>	<b>9 g (Day 62-121)</b>	<b>6 g (Day 122-169)</b>	<b>12 g (Day 170-205)</b>
<b>Main Ingredients</b>				
Kilocalories	2768 $\pm$ 87	2788 $\pm$ 113	2744 $\pm$ 68	2769 $\pm$ 85
Carbohydrates (g)	365 $\pm$ 35	365 $\pm$ 21	353 $\pm$ 24	364 $\pm$ 35
Fat (g)	99 $\pm$ 15	101 $\pm$ 10	102 $\pm$ 12	99 $\pm$ 15
Protein (g)	94 $\pm$ 15	95 $\pm$ 12	92 $\pm$ 9	94 $\pm$ 15
Total fiber (g)	30 $\pm$ 7	35 $\pm$ 6	35 $\pm$ 6	29 $\pm$ 7
<b>Minerals</b>				
Calcium (mg)	998 $\pm$ 112	1051 $\pm$ 107	1093 $\pm$ 46	1000 $\pm$ 114
Magnesium (mg)	472 $\pm$ 74	511 $\pm$ 55	515 $\pm$ 60	475 $\pm$ 73
Potassium (mg)	3746 $\pm$ 598	4114 $\pm$ 564	4494 $\pm$ 498	3761 $\pm$ 620
Sodium (mg)	4492 $\pm$ 505	3334 $\pm$ 395	2196 $\pm$ 440	4499 $\pm$ 493

## Online Supplemental Table S3

Beverage consumption as % of total fluid consumption (g) in the six Mars520 subjects during the 205-day salt and water balance study (data are shown as mean $\pm$ SD for each salt intake phase).

<b>Salt Phase</b>	<b>12 g</b>	<b>9 g</b>	<b>6 g</b>
<b>Beverage consumption (% of total fluid intake)</b>			
Coffee	2.0 $\pm$ 4.4	0.9 $\pm$ 1.7	0.6 $\pm$ 1.5
Tea	29.2 $\pm$ 14.8	29.2 $\pm$ 14.5	30.4 $\pm$ 15.4
Juice	30.7 $\pm$ 8.6	30.6 $\pm$ 8.6	30.2 $\pm$ 11.8
Water	32.9 $\pm$ 5.6	33.9 $\pm$ 4.1	33.3 $\pm$ 3.9
Milk	5.2 $\pm$ 2.5	5.4 $\pm$ 2.6	5.5 $\pm$ 2.6

### Online Supplemental Table S4

Effect of 6 g/d reduction or 6 g/d increase in prescribed salt intake on recorded Na<sup>+</sup> intake, urine Na<sup>+</sup> excretion (UNaV), recorded water intake, urine volume, Water Balance Gap, body weight, urine aldosterone excretion (UAldoV), and urine cortisone excretion (UCortisoneV) during the Mars105 and the Mars520 experiments. **Data were analyzed by Mixed Linear Model analysis** and are expressed as change ( $\Delta$ ) per prescribed 6 g reduction in salt intake ( $\Delta \pm \text{SEM}$ ).

	<b>Mars105:</b>		<b>Mars 520:</b>		<b>Mars520:</b>	
	<b>from 12 g to 6 g phase</b>		<b>from 12 g to 6 g phase</b>		<b>from 6 g to 12 g re-exp. phase</b>	
<b><math>\Delta</math> Recorded Na<sup>+</sup> Intake (mmol/d)</b>	-101 $\pm$ 2	P<0.001	-98 $\pm$ 2	P<0.001	+94 $\pm$ 2	P<0.001
<b><math>\Delta</math> UNaV (mmol/d)</b>	-78 $\pm$ 5	P<0.001	-103 $\pm$ 2	P<0.001	+92 $\pm$ 3	P<0.001
<b><math>\Delta</math> Recorded Water Intake (ml/d)</b>	+143 $\pm$ 52	P<0.01	+334 $\pm$ 34	P<0.001	-345 $\pm$ 37	P<0.001
<b><math>\Delta</math> Urine Volume (ml/d)</b>	-31 $\pm$ 54	P=0.56	-48 $\pm$ 33	P=0.15	+38 $\pm$ 39	P=0.32
<b><math>\Delta</math> Water Balance Gap (ml/d)</b>	+174 $\pm$ 70	P<0.05	+382 $\pm$ 46	P<0.001	-367 $\pm$ 53	P<0.001
<b><math>\Delta</math> Body Weight (kg)</b>	-1.4 $\pm$ 0.2	P<0.001	-2.4 $\pm$ 0.1	P<0.001	-0.2 $\pm$ 0.1	P<0.001
<b><math>\Delta</math> UAldoV (<math>\mu</math>g/d)</b>	+3.6 $\pm$ 0.6	P<0.001	+4.9 $\pm$ 0.3	P<0.001	-7.0 $\pm$ 0.3	P<0.001
<b><math>\Delta</math> UCortisoneV (<math>\mu</math>g/d)</b>	-9.4 $\pm$ 2.3	P<0.001	-15.1 $\pm$ 1.3	P<0.001	+7.6 $\pm$ 1.5	P<0.001

## Online Supplemental Table S5

Comparison of the 105-day and 205-day salt and water balance studies during the Mars105 and the Mars520 project. **Data were analyzed by Mixed Linear Model analysis** and are expressed as experiment-induced change ( $\Delta \pm \text{SEM}$ ) in recorded  $\text{Na}^+$  intake, urine  $\text{Na}^+$  excretion (UNaV), recorded water intake, urine volume, Water Balance Gap, body weight, urine aldosterone excretion (UAldoV), and urine cortisone excretion (UCortisoneV) at the prescribed 12 g/d or 6 g/d salt intake phase during the Mars105 and the Mars520 experiments. While recorded  $\text{Na}^+$  intake and  $\text{Na}^+$  excretion were slightly higher in the Mars105 experiment as compared to the Mars520 experiment, we found no differences in recorded water intake, urine volume, the resulting Water Balance Gap, or urine hormone levels between the experiments.

	Initial 12 g phase		Initial 12 g phase (Mars105) versus 12 g re-exp. (Mars 520)		6g phase	
<b><math>\Delta</math> Recorded <math>\text{Na}^+</math> Intake (mmol/d)</b>	+13 $\pm$ 2	P<0.001	+17 $\pm$ 3	P<0.001	+10 $\pm$ 3	P<0.01
<b><math>\Delta</math> UNaV (mmol/d)</b>	+1 $\pm$ 6	P=0.85	+13 $\pm$ 7	P<0.1	+26 $\pm$ 10	P<0.05
<b><math>\Delta</math> Recorded Water Intake (ml/d)</b>	+212 $\pm$ 171	P=0.25	+223 $\pm$ 184	P=0.26	+21 $\pm$ 200	P=0.92
<b><math>\Delta</math> Urine Volume (ml/d)</b>	+120 $\pm$ 202	P=0.57	+130 $\pm$ 263	P=0.64	+137 $\pm$ 261	P=0.61
<b><math>\Delta</math> Water Balance Gap (ml/d)</b>	+92 $\pm$ 199	P=0.66	+77 $\pm$ 227	P=0.74	-116 $\pm$ 224	P=0.62
<b><math>\Delta</math> Body Weight (kg)</b>	-6.4 $\pm$ 6.3	P=0.33	-3.8 $\pm$ 5.9	P=0.54	-5.5 $\pm$ 4.9	P=0.30
<b><math>\Delta</math> UAldoV (<math>\mu\text{g}/\text{d}</math>)</b>	+0.5 $\pm$ 2.4	P=0.81	+2.5 $\pm$ 2.0	P=0.26	-0.8 $\pm$ 2.3	P=0.75
<b><math>\Delta</math> UCortisoneV (<math>\mu\text{g}/\text{d}</math>)</b>	+1.3 $\pm$ 7.7	P=0.87	+8.7 $\pm$ 9.3	P=0.38	+7.0 $\pm$ 8.9	P=0.46

**Online supplemental calculations of osmolyte-driven urine volume formation:**

**1. Relationship between osmolyte excretion, osmolyte concentration, and urine volume formation.**

Urine osmolarity (UOsm) is defined as the relationship between urine osmolyte content (UOsmV) and urine volume (UV),

$$U_{Osm} = \frac{UOsmV}{UV} \quad (1).$$

The sum of the urine Na<sup>+</sup> (plus anions), K<sup>+</sup> (plus anions) and urea osmolyte concentration explains almost 100% of the measured urine osmolality (**Online Supplemental Figure S2**). Therefore,

$$U_{Osm} \approx 2[Na] + 2[K] + [Urea] \quad (2).$$

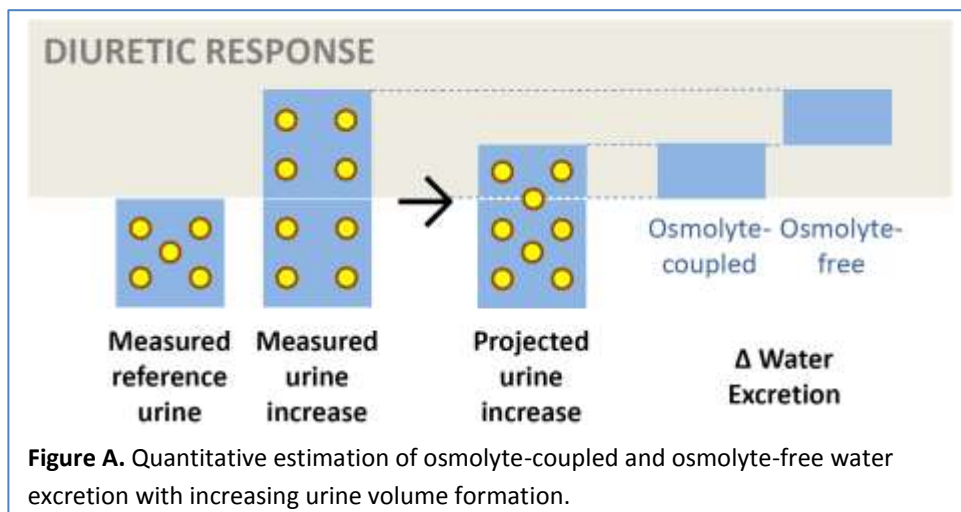
(2) into (1) and rearrangement results in

$$U_{Osm} \approx \frac{2NaV + 2KV + UreaV}{UV} \quad (3).$$

**2. Quantitative detection of surplus osmolyte and water excretion.**

Urine is formed in order to excrete surplus osmolytes and water. Because surplus osmolyte and water excretion is variable, the resulting change in urine osmolality does not provide information on the relative contribution of osmolytes and water excretion to the measured change in urine osmolality.

*i) Increased water excretion.* We use a low osmolyte/low water urine volume as reference level, and investigate the changes in water and osmolyte excretion with increased urine volume formation (**Figure A**). In our example with increased urine volume formation, the reference urine with low osmolyte/low water content (*measured reference urine*) is characterized by 5 osmolyte equivalents per water equivalent. Compared to this reference



urine, increased urine volume formation (*measured urine increase*) is characterized by 4 osmolyte equivalents per water equivalent. Thus, the diuretic response includes excretion of a diluted urine, which is characterized by surplus water excretion relative to osmolyte excretion. An increase in osmolyte excretion without additional urine dilution, would have resulted in a smaller urine volume than measured. Had the urine volume increase been generated by increasing osmolyte excretion from 5 to 8 osmolyte equivalents alone, the *projected urine volume* would be only 8/5 volume units higher than the *measured reference urine*. The difference between the *projected urine volume* and *measured reference urine volume* represents the amount of osmolyte-coupled water

excretion during diuresis (**Figure B**). The difference between the measured urine increase and the projected urine increase represents osmolyte-free water excretion during diuresis (**Figure B**).

Thus, we can quantitatively estimate a *projected increase in urine volume formation* ( $UV_{increased, projected}$ ) from the ratio between measured osmolyte excretion in the increased urine volume ( $UOsmV_{increased}$ ) and the measured urine osmolyte concentration in the low reference urine ( $UOsm_{reference}$ ):

$$UV_{increased, projected} = \frac{UOsmV_{increased}}{UOsm_{reference}} \quad (4).$$

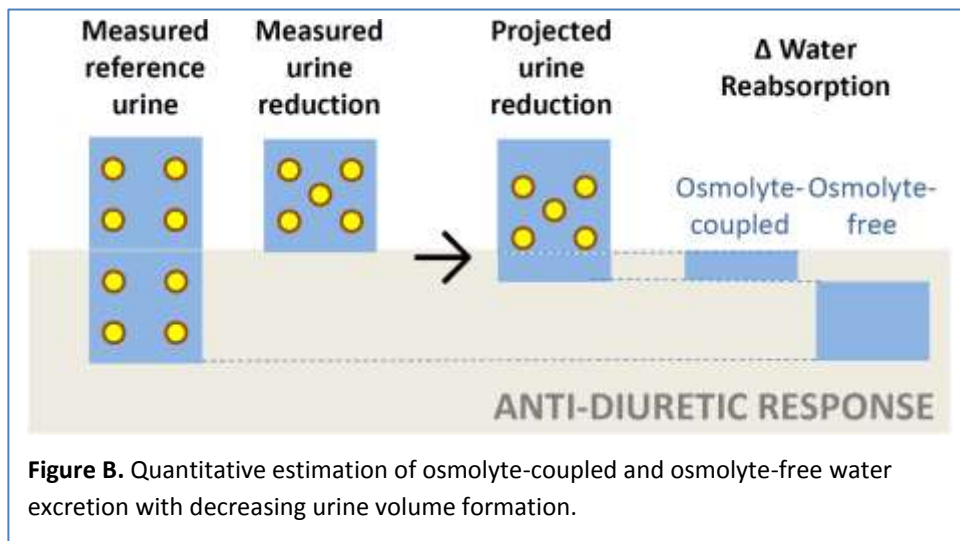
The difference between the increased projected urine volume ( $UV_{increased, projected}$ ) and the measured low osmolyte/low water reference urine volume ( $UV_{reference, measured}$ ) is the increase in osmolyte-coupled water excretion ( $\Delta Water_{osmolyte-coupled}$ ; **Figure A**):

$$\Delta Water_{osmolyte-coupled} = UV_{increased, projected} - UV_{reference, measured} \quad (5).$$

The difference between the measured high osmolyte/high water urine ( $UV_{increased, measured}$ ) and the increased projected urine volume ( $UV_{increased, projected}$ ) is the osmolyte-free water excretion ( $\Delta Water_{osmolyte-free}$ ; **Figure A**):

$$\Delta Water_{osmolyte-free} = UV_{increased, measured} - UV_{increased, projected} \quad (6).$$

ii) *Reduced water excretion.* We use a high osmolyte/high water urine as reference level, and investigate the changes in water and osmolyte excretion with urine volume reduction (**Figure B**). In our example of reduced urine volume formation, the reference urine with high osmolyte/high water content (*measured reference urine*) is characterized by 4 osmolyte equivalents per water equivalent. Compared to this reference urine, urine volume reduction (*measured urine reduction*) is characterized by 5 osmolyte equivalents per water equivalent. Thus, the



anti-diuretic response includes urine concentration, which is characterized by surplus water reabsorption relative to osmolyte reabsorption. A reduction in osmolyte excretion alone, without additional urine concentration, would have resulted in a higher urine volume than measured. Had the reduction in urine volume been generated by reducing osmolyte excretion

from 8 to 5 osmolyte equivalents alone, the *projected urine volume reduction* would have been 5/4 volume units higher than measured. The difference between the *projected urine reduction* and *measured urine reduction*

represents the amount of osmolyte-coupled water reabsorption during anti-diuresis (**Figure B**). The difference between the *measured reference urine* and the *projected urine reduction* represents osmolyte-free water reabsorption during anti-diuresis (**Figure B**).

Thus, we can quantitatively estimate the projected urine volume reduction ( $UV_{\text{reduced, projected}}$ ) from the ratio between measured osmolyte excretion in the reduced urine volume ( $UOsmV_{\text{reduced}}$ ) and the measured urine osmolyte concentration in the reference urine ( $UOsm_{\text{reference}}$ ):

$$UV_{\text{reduced, projected}} = \frac{UOsmV_{\text{reduced}}}{UOsm_{\text{reference}}} \quad (7).$$

The difference between the projected urine volume reduction ( $UV_{\text{reduced, projected}}$ ) and measured urine volume reduction ( $UV_{\text{reduced, measured}}$ ) quantifies the amount of osmolyte-coupled water reabsorption ( $\Delta\text{Water}_{\text{osmolyte-coupled}}$ ; **Figure B**).

$$\Delta\text{Water}_{\text{osmolyte-coupled}} = UV_{\text{reduced, projected}} - UV_{\text{reduced, measured}} \quad (8).$$

The difference between the measured reference urine ( $UV_{\text{reference, measured}}$ ) and the projected urine volume reduction ( $UV_{\text{reduced, projected}}$ ) quantifies osmolyte-free water reabsorption ( $\Delta\text{Water}_{\text{osmolyte-free}}$ ; **Figure B**):

$$\Delta\text{Water}_{\text{osmolyte-free}} = UV_{\text{reference, measured}} - UV_{\text{reduced, projected}} \quad (9).$$

## 1. Application.

### i. Effect of rhythmical aldosterone release.

Across all 3 levels of salt intake, the spontaneous  $+7.6 \pm 0.2 \mu\text{g/d}$  increase in urine mineralocorticoid levels (3<sup>rd</sup> tertile of UAldoV) reduced the urine volume (UV), only tended to decrease the urine osmolyte excretion ( $U2Na2KUreaV$ ), and increased the urine osmolyte concentration (UOsm). Thus, high mineralocorticoid levels induced an anti-diuretic response through the renal concentration mechanism. The high urine volume with low urine mineralocorticoid levels is the reference urine. Equations 7 – 9 are applied.

	Reference Urine at 1 <sup>st</sup> UAldoV tertile	Anti-diuretic response at 3 <sup>rd</sup> UAldoV tertile
Urine Volume (UV; ml/d)	1862±553	1643±509*
Urine Osmolyte Excretion ( $U2Na2KUreaV$ ; mmol/d)	800±171	784±168 <sup>t</sup>
Urine Osmolality (UOsm; mmol/L)	464±167	517±183*

\*  $P_{(UAldoV)} < 0.001$ ; <sup>t</sup>  $P_{(UAldoV)} = 0.07$

According to Equation 7, the *projected urine volume* at the 3<sup>rd</sup> tertile of mineralocorticoid excretion ( $UV_{(\text{high UAldoV, projected})}$ ) was

$$UV_{\text{high UAldoV, projected}} = \frac{U2Na2KUreaV_{\text{high UAldoV}}}{UOsm_{\text{low UAldoV}}} = \frac{784 \text{ mmol/d}}{464 \text{ mmol/L}} = 1.69 \text{ L/d}.$$



According to Equation 8, *aldosterone-driven osmolyte-coupled water reabsorption* at the 3<sup>rd</sup> tertile of mineralocorticoid excretion ( $\Delta\text{Water}_{\text{high UAldoV; osmolyte-coupled}}$ ) was

$$\Delta\text{Water}_{\text{high UAldoV; osmolyte-coupled}} = UV_{\text{high UAldoV, projected}} - UV_{\text{high UAldoV}} = 1.69 \text{ L/d} - 1.64 \text{ L/d} = \mathbf{0.05 \text{ L/d}}.$$

According to Equation 9, *aldosterone-driven osmolyte-free water reabsorption* at the 3<sup>rd</sup> tertile of mineralocorticoid excretion ( $\Delta\text{Water}_{\text{high Aldo; osmolyte-free}}$ ) was

$$\Delta\text{Water}_{\text{high UAldoV; osmolyte-free}} = UV_{\text{low UAldoV}} - UV_{\text{high UAldoV, projected}} = 1.86 \text{ L/d} - 1.69 \text{ L/d} = \mathbf{0.17 \text{ L/d}}.$$

ii. *Effect of rhythmical glucocorticoid release.*

The spontaneous  $+33.8 \pm 0.7 \mu\text{g/d}$  increase in urine cortisone levels (1<sup>st</sup> versus 3<sup>rd</sup> tertile of UCortisoneV) increased the urine volume (UV), increased the osmolyte excretion (U2Na2KUreaV), and reduced the urine osmolyte concentration (UOsm). Thus, high glucocorticoid levels were coupled with a diuretic response. The low urine volume with low urine cortisone levels is the reference urine. Equations 4 – 6 are applied.

	Reference urine at 1 <sup>st</sup> tertile of UCortisoneV	Diuretic response at 3 <sup>rd</sup> tertile of UCortisoneV
Urine volume (UV; ml/d)	1445±454	2071±482*
Urine Osmolyte Excretion (U2Na2KUreaV; mmol/d)	738±149	851±178*
Urine osmolality (UOsm; mmol/L)	560±200	422±131*

\*  $P_{(\text{UCortisoneV})} < 0.001$ .

The *projected urine volume* at the 3<sup>rd</sup> tertile of glucocorticoid excretion ( $UV_{(\text{high UCortisoneV, projected})}$ ) was

$$UV_{\text{high UCortisoneV, projected}} = \frac{U2Na2KUreaV_{\text{high UCortisoneV}}}{UOsm_{\text{low UCortisoneV}}} = \frac{851 \text{ mmol/d}}{560 \text{ mmol/L}} = \mathbf{1.52 \text{ L/d}}.$$

The change in *osmolyte-coupled water excretion* at the 3<sup>rd</sup> tertile of glucocorticoid excretion ( $\Delta\text{Water}_{\text{high UCortisoneV, osmolyte-coupled}}$ ) was, according to equation (5) :

$$\Delta\text{Water}_{\text{high UCortisoneV, osmolyte-coupled}} = UV_{\text{high UCortisoneV, projected}} - UV_{\text{low UCortisoneV, measured}} = 1.52 \text{ L/d} - 1.45 \text{ L/d} = \mathbf{0.07 \text{ L/d}}.$$

The change in *osmolyte-free water excretion* at the 3<sup>rd</sup> tertile of glucocorticoid excretion ( $\Delta\text{Water}_{\text{high UCortisoneV, osmolyte-free}}$ ) was, according to equation (6) :

$$\Delta\text{Water}_{\text{high UCortisoneV, osmolyte-free}} = UV_{\text{high UCortisoneV, measured}} - UV_{\text{high UCortisoneV, projected}} = 2.07 \text{ L/d} - 1.52 \text{ L/d} = \mathbf{0.55 \text{ L/d}}.$$

iii. *Effect of dietary salt.*

A 6 g/d increase in salt intake (not significantly) increased the urine volume, increased the urine osmolyte excretion as predicted, and increased the urine osmolyte concentration. We define the urine with low osmolyte excretion at the 6 g/d salt intake level as reference urine. Equations 4 – 6 are applied.

	Reference urine at 6 g salt/d	Salt-driven response at 12 g salt/d
Urine volume (UV; ml/d)	1783±573	1814±519 <sup>n.s.</sup>
Urine Osmolyte Excretion (U <sub>2Na2KUreaV</sub> ; mmol/d)	682±147	872±156*
Urine osmolality (UOsm; mmol/L)	431±175	508±170*

\* P<sub>(Salt)</sub><0.001; n.s. P<sub>(Salt)</sub>>0.1.

The *projected urine volume* at the 12 g/d salt intake level (UV<sub>(12 g/d; projected)</sub>) was

$$UV_{12\text{ g/d, projected}} = \frac{U_{2Na2KUreaV_{12\text{ g/d}}}}{UOsm_{6\text{ g/d}}} = \frac{872\text{ mmol/d}}{431\text{ mmol/L}} = 2.02\text{ L/d.}$$

The change in *osmolyte-coupled water excretion* at the 12 g/d salt intake level (ΔWater<sub>12 g/d, osmolyte-coupled</sub>) was

$$\Delta Water_{12\text{ g/d, osmolyte-coupled}} = UV_{12\text{ g/d, projected}} - UV_{6\text{ g/d, measured}} = 2.02\text{ L/d} - 1.78\text{ L/d} = +0.24\text{ L/d.}$$

The change in *osmolyte-free water excretion* at the 12 g/d salt intake level (ΔWater<sub>12 g/d, osmolyte-free</sub>) was

$$\Delta Water_{12\text{ g/d, osmolyte-free}} = UV_{12\text{ g/d, measured}} - UV_{12\text{ g/d, projected}} = 1.81\text{ L/d} - 2.02\text{ L/d} = -0.21\text{ L/d.}$$

iv. *Effect of urinary Na<sup>+</sup> excretion.*

An increase in urine Na<sup>+</sup> excretion in the urine (UNaV) increased the urine volume, increased the urine osmolyte excretion, and increased the urine osmolyte concentration. We define the low urine volume with low UNaV as the reference urine. Equations 4 – 6 are applied.

	Reference urine at 1 <sup>st</sup> tertile of UNaV	Diuretic response at 3 <sup>rd</sup> tertile of UNaV
Urine volume (UV; ml/d)	1640±558	1956±489*
Urine Osmolyte Excretion (U <sub>2Na2KUreaV</sub> ; mmol/d)	659±121	938±136*
Urine osmolality (UOsm; mmol/L)	462±191	496±160*

\* P<sub>(UNaV)</sub><0.001

The *projected urine volume* at the 3<sup>rd</sup> tertile of UNaV (UV<sub>(high UNaV, projected)</sub>) was

$$UV_{\text{high UNaV, projected}} = \frac{U2Na2KUreaV_{\text{high UNaV}}}{UOsm_{\text{low UNaV}}} = \frac{938 \text{ mmol/d}}{462 \text{ mmol/L}} = 2.03 \text{ L/d.}$$

The change in *osmolyte-coupled water excretion* at the 3<sup>rd</sup> tertile of UNaV ( $\Delta\text{Water}_{\text{high UNaV, osmolyte-coupled}}$ ) was

$$\Delta\text{Water}_{\text{high UNaV, osmolyte-coupled}} = UV_{\text{high UNaV, projected}} - UV_{\text{low UNaV, measured}} = 2.03 \text{ L/d} - 1.64 \text{ L/d} = +0.39 \text{ L/d.}$$

The change in *osmolyte-free water excretion* at the 3<sup>rd</sup> tertile of UNaV ( $\Delta\text{Water}_{\text{high UNaV, osmolyte-free}}$ ) was

$$\Delta\text{Water}_{\text{high UNaV, osmolyte-free}} = UV_{\text{high UNaV, measured}} - UV_{\text{high UNaV, projected}} = 1.96 \text{ L/d} - 2.03 \text{ L/d} = -0.07 \text{ L/d.}$$

## References

1. Madias NE, and Adrogué HJ. In: Davidson AM ed. *Oxford Textbook of Clinical Nephrology*. New York: Oxford University Press; 2005:214.
2. Lerchl K, Rakova N, Dahlmann A, Rauh M, Goller U, Basner M, Dinges DF, Beck L, Agureev A, Larina I, et al. Agreement between 24-hour salt ingestion and sodium excretion in a controlled environment. *Hypertension*. 2015;66(4):850-7.
3. Rakova N, Juttner K, Dahlmann A, Schroder A, Linz P, Kopp C, Rauh M, Goller U, Beck L, Agureev A, et al. Long-term space flight simulation reveals infradian rhythmicity in human Na(+) balance. *Cell metabolism*. 2013;17(1):125-31.

```

* Encoding: UTF-8.
* ONLINE SUPPLEMENTAL STATISTICAL ANALYSIS FIGURE 1

* Encoding: UTF-8.
GET
  FILE='C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav'.
DATASET NAME DataSet2 WINDOW=FRONT.

USE ALL.

* FIGURE 1B and 1C

MIXED WaterIntake BY salt WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 16:51:55
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Cases Used		Statistics are based on all cases with valid data for all variables in the model.
Syntax	MIXED WaterIntake BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:01.11

[DataSet2] C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	WaterIntake	29	2826.124	337.5911	11.9%
		Constant	29	1.000	.0000	0.0%
9	9	WaterIntake	35	2630.417	304.1828	11.6%
		Constant	35	1.000	.0000	0.0%
12	12	WaterIntake	40	2587.013	451.8143	17.5%
		Constant	40	1.000	.0000	0.0%
Total		WaterIntake	104	2668.296	385.8569	14.5%

		Constant	104	1.000	.0000	0.0%
12	6	WaterIntake	29	2855.839	566.8579	19.8%
		Constant	29	1.000	.0000	0.0%
	9	WaterIntake	35	2642.761	349.4580	13.2%
		Constant	35	1.000	.0000	0.0%
	12	WaterIntake	40	2604.106	324.9052	12.5%
		Constant	40	1.000	.0000	0.0%
	Total	WaterIntake	104	2687.310	423.0759	15.7%
		Constant	104	1.000	.0000	0.0%
15	6	WaterIntake	29	2565.251	440.8907	17.2%
		Constant	29	1.000	.0000	0.0%
	9	WaterIntake	35	2420.886	338.4132	14.0%
		Constant	35	1.000	.0000	0.0%
	12	WaterIntake	40	2501.908	334.0366	13.4%
		Constant	40	1.000	.0000	0.0%
	Total	WaterIntake	104	2492.304	369.0019	14.8%
		Constant	104	1.000	.0000	0.0%
16	6	WaterIntake	29	2960.501	389.7132	13.2%
		Constant	29	1.000	.0000	0.0%
	9	WaterIntake	35	2726.159	289.4471	10.6%
		Constant	35	1.000	.0000	0.0%
	12	WaterIntake	40	2918.243	361.6383	12.4%
		Constant	40	1.000	.0000	0.0%
	Total	WaterIntake	104	2865.383	358.7209	12.5%
		Constant	104	1.000	.0000	0.0%
51	6	WaterIntake	48	2817.281	283.2254	10.1%
		Constant	48	1.000	.0000	0.0%
	9	WaterIntake	60	2727.241	358.2580	13.1%
		Constant	60	1.000	.0000	0.0%
	12	WaterIntake	97	2544.190	386.6748	15.2%
		Constant	97	1.000	.0000	0.0%
	Total	WaterIntake	205	2661.709	373.4804	14.0%
		Constant	205	1.000	.0000	0.0%
52	6	WaterIntake	48	2873.716	318.7691	11.1%
		Constant	48	1.000	.0000	0.0%
	9	WaterIntake	60	2702.987	516.9863	19.1%
		Constant	60	1.000	.0000	0.0%
	12	WaterIntake	97	2585.780	436.9549	16.9%

		Constant	97	1.000	.0000	0.0%
	Total	WaterIntake	205	2687.504	451.3423	16.8%
		Constant	205	1.000	.0000	0.0%
53	6	WaterIntake	48	2593.796	243.0443	9.4%
		Constant	48	1.000	.0000	0.0%
	9	WaterIntake	60	2422.040	412.1159	17.0%
		Constant	60	1.000	.0000	0.0%
	12	WaterIntake	97	2448.500	439.2872	17.9%
		Constant	97	1.000	.0000	0.0%
	Total	WaterIntake	205	2474.776	397.5172	16.1%
		Constant	205	1.000	.0000	0.0%
54	6	WaterIntake	48	3266.531	425.7081	13.0%
		Constant	48	1.000	.0000	0.0%
	9	WaterIntake	60	3094.832	556.1431	18.0%
		Constant	60	1.000	.0000	0.0%
	12	WaterIntake	97	2589.923	722.7855	27.9%
		Constant	97	1.000	.0000	0.0%
	Total	WaterIntake	205	2896.127	682.2961	23.6%
		Constant	205	1.000	.0000	0.0%
55	6	WaterIntake	48	2177.257	488.6695	22.4%
		Constant	48	1.000	.0000	0.0%
	9	WaterIntake	60	2006.843	513.7284	25.6%
		Constant	60	1.000	.0000	0.0%
	12	WaterIntake	97	1880.932	470.7375	25.0%
		Constant	97	1.000	.0000	0.0%
	Total	WaterIntake	205	1987.168	499.6077	25.1%
		Constant	205	1.000	.0000	0.0%
56	6	WaterIntake	48	2955.127	253.2361	8.6%
		Constant	48	1.000	.0000	0.0%
	9	WaterIntake	60	2895.217	359.6671	12.4%
		Constant	60	1.000	.0000	0.0%
	12	WaterIntake	97	2607.356	408.0867	15.7%
		Constant	97	1.000	.0000	0.0%
	Total	WaterIntake	205	2773.037	394.7171	14.2%
		Constant	205	1.000	.0000	0.0%
Total	6	WaterIntake	404	2786.737	474.8743	17.0%
		Constant	404	1.000	.0000	0.0%
	9	WaterIntake	500	2631.315	519.5174	19.7%

	Constant	500	1.000	.0000	0.0%
12	WaterIntake	742	2488.071	529.8344	21.3%
	Constant	742	1.000	.0000	0.0%
Total	WaterIntake	1646	2604.889	527.3144	20.2%
	Constant	1646	1.000	.0000	0.0%

#### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

#### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	24728.069
Akaike's Information Criterion (AIC)	24732.069
Hurvich and Tsai's Criterion (AICC)	24732.077
Bozdogan's Criterion (CAIC)	24744.878
Schwarz's Bayesian Criterion (BIC)	24742.878

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

## Fixed Effects



**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.083	1036.866	.000
salt	2	1634.281	58.515	.000

a. Dependent Variable: WaterIntake.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2502.331086	83.057391	9.478	30.128	.000	2315.875503	2688.786669
[salt=6]	293.135948	27.342508	1634.375	10.721	.000	239.505902	346.765995
[salt=9]	138.265134	25.582585	1634.352	5.405	.000	88.087028	188.443240
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

**Covariance Parameters**

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	194734.962400	6812.775847
Constant [subject = subject] Variance	66151.408880	31687.788210

a. Dependent Variable: WaterIntake.

```
MIXED WaterIntake BY UNaV_low_mid_high WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UNaV_low_mid_high | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
```

/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 16:51:57
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED WaterIntake BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.37

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	WaterIntake	35	2718.913	317.5898	11.7%
		Constant	35	1.000	.0000	0.0%
	2.0	WaterIntake	34	2672.518	348.4903	13.0%
		Constant	34	1.000	.0000	0.0%
	3.0	WaterIntake	35	2613.577	475.9846	18.2%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2668.296	385.8569	14.5%
		Constant	104	1.000	.0000	0.0%
12	1.0	WaterIntake	35	2811.933	436.8655	15.5%
		Constant	35	1.000	.0000	0.0%
	2.0	WaterIntake	34	2622.724	337.9347	12.9%
		Constant	34	1.000	.0000	0.0%

	3.0	WaterIntake	35	2625.426	465.2421	17.7%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2687.310	423.0759	15.7%
		Constant	104	1.000	.0000	0.0%
15	1.0	WaterIntake	35	2517.310	423.8747	16.8%
		Constant	35	1.000	.0000	0.0%
	2.0	WaterIntake	34	2478.215	327.1564	13.2%
		Constant	34	1.000	.0000	0.0%
	3.0	WaterIntake	35	2480.984	357.7218	14.4%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2492.304	369.0019	14.8%
		Constant	104	1.000	.0000	0.0%
16	1.0	WaterIntake	35	2911.603	348.4115	12.0%
		Constant	35	1.000	.0000	0.0%
	2.0	WaterIntake	34	2797.592	379.5007	13.6%
		Constant	34	1.000	.0000	0.0%
	3.0	WaterIntake	35	2885.017	348.5108	12.1%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2865.383	358.7209	12.5%
		Constant	104	1.000	.0000	0.0%
51	1.0	WaterIntake	68	2747.242	331.4525	12.1%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	2677.539	415.6040	15.5%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2560.114	348.4023	13.6%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2661.709	373.4804	14.0%
		Constant	205	1.000	.0000	0.0%
52	1.0	WaterIntake	68	2821.576	340.0421	12.1%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	2658.666	481.3412	18.1%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2582.693	489.1071	18.9%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2687.504	451.3423	16.8%
		Constant	205	1.000	.0000	0.0%
53	1.0	WaterIntake	68	2545.395	313.5861	12.3%
		Constant	68	1.000	.0000	0.0%

	2.0	WaterIntake	69	2473.246	418.2330	16.9%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2405.710	442.0002	18.4%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2474.776	397.5172	16.1%
		Constant	205	1.000	.0000	0.0%
54	1.0	WaterIntake	68	3202.721	470.2229	14.7%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	2941.418	754.1551	25.6%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2543.575	628.8218	24.7%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2896.127	682.2961	23.6%
		Constant	205	1.000	.0000	0.0%
55	1.0	WaterIntake	68	2092.119	462.0202	22.1%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	1986.631	489.8542	24.7%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	1882.760	529.8637	28.1%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	1987.168	499.6077	25.1%
		Constant	205	1.000	.0000	0.0%
56	1.0	WaterIntake	68	2935.322	317.1122	10.8%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	2743.233	391.6526	14.3%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2640.994	415.6915	15.7%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2773.037	394.7171	14.2%
		Constant	205	1.000	.0000	0.0%
Total	1.0	WaterIntake	548	2728.119	486.2238	17.8%
		Constant	548	1.000	.0000	0.0%
	2.0	WaterIntake	550	2595.611	539.9772	20.8%
		Constant	550	1.000	.0000	0.0%
	3.0	WaterIntake	548	2490.972	528.0709	21.2%
		Constant	548	1.000	.0000	0.0%
	Total	WaterIntake	1646	2604.889	527.3144	20.2%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24765.324
Akaike's Information Criterion (AIC)	24769.324
Hurvich and Tsai's Criterion (AICC)	24769.332
Bozdogan's Criterion (CAIC)	24782.133
Schwarz's Bayesian Criterion (BIC)	24780.133

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.065	1003.323	.000
UNaV_low_mid_high	2	1634.068	38.837	.000

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2504.837906	84.134264	9.718	29.772	.000	2316.634223	2693.041588
[UNaV_low_mid_high=1.0]	237.146898	26.962994	1634.065	8.795	.000	184.261228	290.032567
[UNaV_low_mid_high=2.0]	105.426275	26.939253	1634.069	3.913	.000	52.587171	158.265379
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	199198.835100	6968.946165
Constant [subject = subject] Variance	67019.874390	32111.347310

a. Dependent Variable: WaterIntake.

\* FIGURE 1D and 1E

```
MIXED Uvol BY salt WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 16:51:57
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax		MIXED Uvol BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.26

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	Uvol	29	1765.517	412.7658	23.4%
		Constant	29	1.000	.0000	0.0%
	9	Uvol	35	1893.571	366.4206	19.4%
		Constant	35	1.000	.0000	0.0%
	12	Uvol	40	2123.750	462.9874	21.8%
		Constant	40	1.000	.0000	0.0%
Total	Uvol	104	1946.394	440.6535	22.6%	
	Constant	104	1.000	.0000	0.0%	
12	6	Uvol	29	1601.517	261.9754	16.4%
		Constant	29	1.000	.0000	0.0%
	9	Uvol	35	1626.143	420.4026	25.9%
		Constant	35	1.000	.0000	0.0%
	12	Uvol	40	1604.925	414.1308	25.8%

		Constant	40	1.000	.0000	0.0%
	Total	Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	6	Uvol	29	2299.655	520.3003	22.6%
		Constant	29	1.000	.0000	0.0%
	9	Uvol	35	2190.571	376.6489	17.2%
		Constant	35	1.000	.0000	0.0%
	12	Uvol	40	2181.125	458.2009	21.0%
		Constant	40	1.000	.0000	0.0%
	Total	Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	6	Uvol	29	1856.034	366.6459	19.8%
		Constant	29	1.000	.0000	0.0%
	9	Uvol	35	1512.286	397.3892	26.3%
		Constant	35	1.000	.0000	0.0%
	12	Uvol	40	1717.125	427.1430	24.9%
		Constant	40	1.000	.0000	0.0%
	Total	Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	6	Uvol	48	2129.892	531.9665	25.0%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1781.603	378.0611	21.2%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	97	2111.103	513.1321	24.3%
		Constant	97	1.000	.0000	0.0%
	Total	Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	6	Uvol	48	2134.250	480.7036	22.5%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1934.150	473.1934	24.5%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	96	2036.875	447.5123	22.0%
		Constant	96	1.000	.0000	0.0%
	Total	Uvol	204	2029.574	466.4834	23.0%
		Constant	204	1.000	.0000	0.0%
53	6	Uvol	48	1225.788	357.3093	29.1%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1251.705	337.5594	27.0%

		Constant	60	1.000	.0000	0.0%
	12	Uvol	97	1419.439	359.3373	25.3%
		Constant	97	1.000	.0000	0.0%
	Total	Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	6	Uvol	48	2071.771	473.7380	22.9%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1939.828	452.2927	23.3%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	97	1953.965	396.4988	20.3%
		Constant	97	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	6	Uvol	48	1148.990	396.1991	34.5%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1191.157	350.2436	29.4%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	96	1266.319	361.4959	28.5%
		Constant	96	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	6	Uvol	48	1750.679	394.2220	22.5%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1511.617	304.6813	20.2%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	97	1940.596	356.7685	18.4%
		Constant	97	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	6	Uvol	404	1782.932	572.8262	32.1%
		Constant	404	1.000	.0000	0.0%
	9	Uvol	500	1658.787	492.6102	29.7%
		Constant	500	1.000	.0000	0.0%
	12	Uvol	740	1814.079	518.6791	28.6%
		Constant	740	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24528.952
Akaike's Information Criterion (AIC)	24532.952
Hurvich and Tsai's Criterion (AICC)	24532.959
Bozdogan's Criterion (CAIC)	24545.758
Schwarz's Bayesian Criterion (BIC)	24543.758

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.027	298.404	.000
salt	2	1632.141	23.535	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1841.276617	103.252619	9.254	17.833	.000	1608.675421	2073.877812
[salt=6]	-41.476604	25.942428	1632.195	-1.599	.110	-92.360562	9.407354
[salt=9]	-164.556509	24.274204	1632.182	-6.779	.000	-212.168382	-116.944636
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	175140.733500	6131.118383
Constant [subject = subject] Variance	104055.213400	49562.071400

a. Dependent Variable: Uvol.

```
MIXED Uvol BY UNaV_low_mid_high WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
  ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UNaV_low_mid_high | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 16:51:57
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED Uvol BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.45

**Descriptive Statistics**

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	Uvol	35	1720.000	368.0633	21.4%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	1785.441	270.7631	15.2%
		Constant	34	1.000	.0000	0.0%
	3.0	Uvol	35	2329.143	390.0480	16.7%
		Constant	35	1.000	.0000	0.0%
Total	Uvol	104	1946.394	440.6535	22.6%	
	Constant	104	1.000	.0000	0.0%	
12	1.0	Uvol	35	1503.486	295.0478	19.6%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	1526.588	249.7685	16.4%
		Constant	34	1.000	.0000	0.0%

	3.0	Uvol	35	1800.857	476.0321	26.4%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	1.0	Uvol	35	2162.286	483.6402	22.4%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	2128.971	454.2840	21.3%
		Constant	34	1.000	.0000	0.0%
	3.0	Uvol	35	2358.286	384.8318	16.3%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	1.0	Uvol	35	1602.286	440.3297	27.5%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	1527.794	364.0142	23.8%
		Constant	34	1.000	.0000	0.0%
	3.0	Uvol	35	1926.143	347.3663	18.0%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	1.0	Uvol	68	1954.035	540.4472	27.7%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1865.090	453.5467	24.3%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	2240.329	440.4042	19.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	1.0	Uvol	68	1971.088	497.0601	25.2%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1950.106	486.7690	25.0%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	67	2170.772	379.4784	17.5%
		Constant	67	1.000	.0000	0.0%
	Total	Uvol	204	2029.574	466.4834	23.0%
		Constant	204	1.000	.0000	0.0%
53	1.0	Uvol	68	1113.028	272.5042	24.5%
		Constant	68	1.000	.0000	0.0%



	2.0	Uvol	69	1347.542	331.9573	24.6%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	1514.109	362.1696	23.9%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	1.0	Uvol	68	1922.868	491.5178	25.6%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1951.732	452.4168	23.2%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	2058.012	334.1512	16.2%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	1.0	Uvol	68	1051.847	354.6747	33.7%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1187.390	308.9666	26.0%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	67	1413.911	350.1703	24.8%
		Constant	67	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	1.0	Uvol	68	1608.293	388.7322	24.2%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1673.038	321.3074	19.2%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	2031.822	337.1103	16.6%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	1.0	Uvol	548	1640.184	558.2979	34.0%
		Constant	548	1.000	.0000	0.0%
	2.0	Uvol	550	1682.194	479.7681	28.5%
		Constant	550	1.000	.0000	0.0%
	3.0	Uvol	546	1956.207	489.4387	25.0%
		Constant	546	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24387.371
Akaike's Information Criterion (AIC)	24391.371
Hurvich and Tsai's Criterion (AICC)	24391.378
Bozdogan's Criterion (CAIC)	24404.177
Schwarz's Bayesian Criterion (BIC)	24402.177

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.017	303.488	.000
UNaV_low_mid_high	2	1632.019	99.675	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1975.849366	103.123493	9.358	19.160	.000	1743.921970	2207.776762
[UNaV_low_mid_high=1.0]	-315.532047	24.231212	1632.017	-13.022	.000	-363.059597	-268.004496
[UNaV_low_mid_high=2.0]	-272.379069	24.210086	1632.020	-11.251	.000	-319.865183	-224.892955
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	160584.360500	5621.548121
Constant [subject = subject] Variance	103298.115100	49161.804510

a. Dependent Variable: Uvol.

\* FIGURE 1F and 1G

```
MIXED UNaV BY salt WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 16:51:58
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED UNaV BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.28

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	UNaV	29	100.566	39.4611	39.2%
		Constant	29	1.000	.0000	0.0%
	9	UNaV	35	142.465	33.0367	23.2%
		Constant	35	1.000	.0000	0.0%
	12	UNaV	40	189.170	42.2832	22.4%
		Constant	40	1.000	.0000	0.0%
Total	UNaV	104	148.745	52.5559	35.3%	
	Constant	104	1.000	.0000	0.0%	
12	6	UNaV	29	147.751	33.6635	22.8%
		Constant	29	1.000	.0000	0.0%
	9	UNaV	35	149.101	31.6489	21.2%
		Constant	35	1.000	.0000	0.0%
	12	UNaV	40	180.578	35.8445	19.8%

		Constant	40	1.000	.0000	0.0%
	Total	UNaV	104	160.831	37.0344	23.0%
		Constant	104	1.000	.0000	0.0%
15	6	UNaV	29	94.633	25.1721	26.6%
		Constant	29	1.000	.0000	0.0%
	9	UNaV	35	149.073	26.0645	17.5%
		Constant	35	1.000	.0000	0.0%
	12	UNaV	40	191.603	33.8550	17.7%
		Constant	40	1.000	.0000	0.0%
	Total	UNaV	104	150.251	48.6414	32.4%
		Constant	104	1.000	.0000	0.0%
16	6	UNaV	29	98.945	28.8114	29.1%
		Constant	29	1.000	.0000	0.0%
	9	UNaV	35	144.653	28.0936	19.4%
		Constant	35	1.000	.0000	0.0%
	12	UNaV	40	184.445	45.8029	24.8%
		Constant	40	1.000	.0000	0.0%
	Total	UNaV	104	147.212	49.7702	33.8%
		Constant	104	1.000	.0000	0.0%
51	6	UNaV	48	87.357	27.2262	31.2%
		Constant	48	1.000	.0000	0.0%
	9	UNaV	60	136.060	43.4056	31.9%
		Constant	60	1.000	.0000	0.0%
	12	UNaV	97	195.847	54.1718	27.7%
		Constant	97	1.000	.0000	0.0%
	Total	UNaV	205	152.946	63.7798	41.7%
		Constant	205	1.000	.0000	0.0%
52	6	UNaV	48	72.525	19.1233	26.4%
		Constant	48	1.000	.0000	0.0%
	9	UNaV	60	119.668	29.4281	24.6%
		Constant	60	1.000	.0000	0.0%
	12	UNaV	97	172.267	34.9515	20.3%
		Constant	97	1.000	.0000	0.0%
	Total	UNaV	205	133.518	50.5501	37.9%
		Constant	205	1.000	.0000	0.0%
53	6	UNaV	48	88.296	26.2883	29.8%
		Constant	48	1.000	.0000	0.0%
	9	UNaV	60	128.738	28.7404	22.3%

		Constant	60	1.000	.0000	0.0%
	12	UNaV	97	192.236	33.8204	17.6%
		Constant	97	1.000	.0000	0.0%
	Total	UNaV	205	149.314	53.0373	35.5%
		Constant	205	1.000	.0000	0.0%
54	6	UNaV	48	84.972	21.6670	25.5%
		Constant	48	1.000	.0000	0.0%
	9	UNaV	60	119.232	28.0629	23.5%
		Constant	60	1.000	.0000	0.0%
	12	UNaV	97	180.640	31.9436	17.7%
		Constant	97	1.000	.0000	0.0%
	Total	UNaV	205	140.267	49.4036	35.2%
		Constant	205	1.000	.0000	0.0%
55	6	UNaV	48	86.124	24.2472	28.2%
		Constant	48	1.000	.0000	0.0%
	9	UNaV	60	133.878	30.2076	22.6%
		Constant	60	1.000	.0000	0.0%
	12	UNaV	97	181.981	39.0198	21.4%
		Constant	97	1.000	.0000	0.0%
	Total	UNaV	205	145.457	51.1656	35.2%
		Constant	205	1.000	.0000	0.0%
56	6	UNaV	48	86.439	23.1772	26.8%
		Constant	48	1.000	.0000	0.0%
	9	UNaV	60	120.043	29.8795	24.9%
		Constant	60	1.000	.0000	0.0%
	12	UNaV	97	174.701	33.4535	19.1%
		Constant	97	1.000	.0000	0.0%
	Total	UNaV	205	138.037	47.6387	34.5%
		Constant	205	1.000	.0000	0.0%
Total	6	UNaV	404	91.805	31.3086	34.1%
		Constant	404	1.000	.0000	0.0%
	9	UNaV	500	131.885	33.0255	25.0%
		Constant	500	1.000	.0000	0.0%
	12	UNaV	742	183.701	39.4621	21.5%
		Constant	742	1.000	.0000	0.0%
	Total	UNaV	1646	145.406	51.9146	35.7%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UNaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	16350.827
Akaike's Information Criterion (AIC)	16354.827
Hurvich and Tsai's Criterion (AICC)	16354.834
Bozdogan's Criterion (CAIC)	16367.635
Schwarz's Bayesian Criterion (BIC)	16365.635

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UNaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.975	1867.264	.000
salt	2	1634.767	994.527	.000

a. Dependent Variable: UNaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	186.210616	3.323278	10.609	56.032	.000	178.863073	193.558158
[salt=6]	-92.869201	2.144244	1635.151	-43.311	.000	-97.074954	-88.663447
[salt=9]	-52.692487	2.006250	1635.062	-26.264	.000	-56.627577	-48.757397
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UNaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	1197.963980	41.912489
Constant [subject = subject] Variance	93.098620	47.897449

a. Dependent Variable: UNaV.

```
MIXED UNaV BY UNaV_low_mid_high WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UNaV_low_mid_high | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 16:51:58
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UNaV BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.19

**Descriptive Statistics**

subject	UNaV_low_mid_high	Count	Mean	Standard Deviation	Coefficient of Variation	
11	1.0	UNaV	35	93.499	20.9556	22.4%
		Constant	35	1.000	.0000	0.0%
	2.0	UNaV	34	144.796	12.5818	8.7%
		Constant	34	1.000	.0000	0.0%
	3.0	UNaV	35	207.828	31.9973	15.4%
		Constant	35	1.000	.0000	0.0%
Total	UNaV	104	148.745	52.5559	35.3%	
	Constant	104	1.000	.0000	0.0%	
12	1.0	UNaV	35	122.415	13.4975	11.0%
		Constant	35	1.000	.0000	0.0%
	2.0	UNaV	34	158.987	9.1950	5.8%
		Constant	34	1.000	.0000	0.0%

	3.0	UNaV	35	201.038	26.5314	13.2%
		Constant	35	1.000	.0000	0.0%
	Total	UNaV	104	160.831	37.0344	23.0%
		Constant	104	1.000	.0000	0.0%
15	1.0	UNaV	35	95.197	19.7349	20.7%
		Constant	35	1.000	.0000	0.0%
	2.0	UNaV	34	152.555	14.5843	9.6%
		Constant	34	1.000	.0000	0.0%
	3.0	UNaV	35	203.065	23.9758	11.8%
		Constant	35	1.000	.0000	0.0%
	Total	UNaV	104	150.251	48.6414	32.4%
		Constant	104	1.000	.0000	0.0%
16	1.0	UNaV	35	95.199	18.4072	19.3%
		Constant	35	1.000	.0000	0.0%
	2.0	UNaV	34	141.234	13.5525	9.6%
		Constant	34	1.000	.0000	0.0%
	3.0	UNaV	35	205.032	26.9232	13.1%
		Constant	35	1.000	.0000	0.0%
	Total	UNaV	104	147.212	49.7702	33.8%
		Constant	104	1.000	.0000	0.0%
51	1.0	UNaV	68	83.443	19.5015	23.4%
		Constant	68	1.000	.0000	0.0%
	2.0	UNaV	69	150.182	18.6542	12.4%
		Constant	69	1.000	.0000	0.0%
	3.0	UNaV	68	225.253	37.8862	16.8%
		Constant	68	1.000	.0000	0.0%
	Total	UNaV	205	152.946	63.7798	41.7%
		Constant	205	1.000	.0000	0.0%
52	1.0	UNaV	68	75.883	17.2567	22.7%
		Constant	68	1.000	.0000	0.0%
	2.0	UNaV	69	133.691	15.1877	11.4%
		Constant	69	1.000	.0000	0.0%
	3.0	UNaV	68	190.977	22.9380	12.0%
		Constant	68	1.000	.0000	0.0%
	Total	UNaV	205	133.518	50.5501	37.9%
		Constant	205	1.000	.0000	0.0%
53	1.0	UNaV	68	90.562	21.1673	23.4%
		Constant	68	1.000	.0000	0.0%

	2.0	UNaV	69	147.538	15.0201	10.2%
		Constant	69	1.000	.0000	0.0%
	3.0	UNaV	68	209.869	25.6827	12.2%
		Constant	68	1.000	.0000	0.0%
	Total	UNaV	205	149.314	53.0373	35.5%
		Constant	205	1.000	.0000	0.0%
54	1.0	UNaV	68	85.004	17.1488	20.2%
		Constant	68	1.000	.0000	0.0%
	2.0	UNaV	69	140.392	17.3889	12.4%
		Constant	69	1.000	.0000	0.0%
	3.0	UNaV	68	195.402	25.4112	13.0%
		Constant	68	1.000	.0000	0.0%
	Total	UNaV	205	140.267	49.4036	35.2%
		Constant	205	1.000	.0000	0.0%
55	1.0	UNaV	68	87.864	19.9660	22.7%
		Constant	68	1.000	.0000	0.0%
	2.0	UNaV	69	145.637	15.4584	10.6%
		Constant	69	1.000	.0000	0.0%
	3.0	UNaV	68	202.868	24.8606	12.3%
		Constant	68	1.000	.0000	0.0%
	Total	UNaV	205	145.457	51.1656	35.2%
		Constant	205	1.000	.0000	0.0%
56	1.0	UNaV	68	85.179	17.3320	20.3%
		Constant	68	1.000	.0000	0.0%
	2.0	UNaV	69	136.388	14.1658	10.4%
		Constant	69	1.000	.0000	0.0%
	3.0	UNaV	68	192.569	23.4366	12.2%
		Constant	68	1.000	.0000	0.0%
	Total	UNaV	205	138.037	47.6387	34.5%
		Constant	205	1.000	.0000	0.0%
Total	1.0	UNaV	548	88.979	21.2277	23.9%
		Constant	548	1.000	.0000	0.0%
	2.0	UNaV	550	144.057	16.6699	11.6%
		Constant	550	1.000	.0000	0.0%
	3.0	UNaV	548	203.185	28.9719	14.3%
		Constant	548	1.000	.0000	0.0%
	Total	UNaV	1646	145.406	51.9146	35.7%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UNaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	14820.400
Akaike's Information Criterion (AIC)	14824.400
Hurvich and Tsai's Criterion (AICC)	14824.408
Bozdogan's Criterion (CAIC)	14837.209
Schwarz's Bayesian Criterion (BIC)	14835.209

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UNaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.002	3491.847	.000
UNaV_low_mid_high	2	1634.016	3796.929	.000

a. Dependent Variable: UNaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	204.339542	2.593327	10.753	78.794	.000	198.615616	210.063468
[UNaV_low_mid_high=1.0]	-114.206381	1.310824	1634.008	-87.126	.000	-116.777455	-111.635308
[UNaV_low_mid_high=2.0]	-59.062315	1.309669	1634.019	-45.097	.000	-61.631122	-56.493509
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UNaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	470.803424	16.471286
Constant [subject = subject]	Variance	58.364323
		28.995585

a. Dependent Variable: UNaV.

```

* Encoding: UTF-8.
* ONLINE SUPPLEMENTAL STATISTICAL ANALYSIS FIGURE 2

* Encoding: UTF-8.
GET
  FILE='C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav'.
DATASET NAME DataSet2 WINDOW=FRONT.

* FIGURE 2B and 2C

USE ALL.

MIXED free_water_clearance BY salt WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:02:38
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.



Cases Used		Statistics are based on all cases with valid data for all variables in the model.
Syntax	MIXED free_water_clearance BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.07

[DataSet2] C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	free_water_clearance	29	-724.4885	331.65395	-45.8%
		Constant	29	1.000	.0000	0.0%
9	9	free_water_clearance	35	-981.2210	502.88598	-51.3%
		Constant	35	1.000	.0000	0.0%
12	12	free_water_clearance	40	-1198.4958	465.69729	-38.9%
		Constant	40	1.000	.0000	0.0%
Total		free_water_clearance	104	-993.1994	481.91750	-48.5%

		Constant	104	1.000	.0000	0.0%
12	6	free_water_clearance	29	-1581.5875	437.69429	-27.7%
		Constant	29	1.000	.0000	0.0%
	9	free_water_clearance	35	-1198.4129	486.83562	-40.6%
		Constant	35	1.000	.0000	0.0%
	12	free_water_clearance	40	-1295.9233	570.49405	-44.0%
		Constant	40	1.000	.0000	0.0%
	Total	free_water_clearance	104	-1342.7636	526.82087	-39.2%
		Constant	104	1.000	.0000	0.0%
15	6	free_water_clearance	29	-405.9736	524.07763	-129.1%
		Constant	29	1.000	.0000	0.0%
	9	free_water_clearance	35	-872.6695	358.11224	-41.0%
		Constant	35	1.000	.0000	0.0%
	12	free_water_clearance	40	-930.3167	408.88020	-44.0%
		Constant	40	1.000	.0000	0.0%
	Total	free_water_clearance	104	-764.7051	480.77478	-62.9%
		Constant	104	1.000	.0000	0.0%
16	6	free_water_clearance	29	-653.8149	281.66841	-43.1%
		Constant	29	1.000	.0000	0.0%
	9	free_water_clearance	35	-1381.5529	395.85342	-28.7%
		Constant	35	1.000	.0000	0.0%
	12	free_water_clearance	40	-1427.1638	345.98196	-24.2%
		Constant	40	1.000	.0000	0.0%
	Total	free_water_clearance	104	-1196.1686	483.56642	-40.4%
		Constant	104	1.000	.0000	0.0%
51	6	free_water_clearance	48	62.9804	523.11066	830.6%
		Constant	48	1.000	.0000	0.0%
	9	free_water_clearance	60	-523.8706	341.53758	-65.2%
		Constant	60	1.000	.0000	0.0%
	12	free_water_clearance	97	-629.3829	505.99720	-80.4%
		Constant	97	1.000	.0000	0.0%
	Total	free_water_clearance	205	-436.3869	543.97128	-124.7%
		Constant	205	1.000	.0000	0.0%
52	6	free_water_clearance	48	277.8345	528.27560	190.1%
		Constant	48	1.000	.0000	0.0%
	9	free_water_clearance	60	-263.8075	476.35592	-180.6%
		Constant	60	1.000	.0000	0.0%
	12	free_water_clearance	96	-559.7997	504.86125	-90.2%

		Constant	96	1.000	.0000	0.0%
	Total	free_water_clearance	204	-275.6527	600.42143	-217.8%
		Constant	204	1.000	.0000	0.0%
53	6	free_water_clearance	48	-1089.4151	354.50816	-32.5%
		Constant	48	1.000	.0000	0.0%
	9	free_water_clearance	60	-1251.3453	289.77592	-23.2%
		Constant	60	1.000	.0000	0.0%
	12	free_water_clearance	97	-1440.7117	428.58485	-29.7%
		Constant	97	1.000	.0000	0.0%
	Total	free_water_clearance	205	-1303.0325	400.27016	-30.7%
		Constant	205	1.000	.0000	0.0%
54	6	free_water_clearance	48	-26.3839	438.60919	-1662.4%
		Constant	48	1.000	.0000	0.0%
	9	free_water_clearance	60	-451.0001	436.35678	-96.8%
		Constant	60	1.000	.0000	0.0%
	12	free_water_clearance	97	-732.6980	376.28662	-51.4%
		Constant	97	1.000	.0000	0.0%
	Total	free_water_clearance	205	-484.8690	494.99997	-102.1%
		Constant	205	1.000	.0000	0.0%
55	6	free_water_clearance	48	-1143.6883	338.94362	-29.6%
		Constant	48	1.000	.0000	0.0%
	9	free_water_clearance	60	-1507.6807	360.30836	-23.9%
		Constant	60	1.000	.0000	0.0%
	12	free_water_clearance	96	-1731.9375	456.41702	-26.4%
		Constant	96	1.000	.0000	0.0%
	Total	free_water_clearance	204	-1527.5681	465.32933	-30.5%
		Constant	204	1.000	.0000	0.0%
56	6	free_water_clearance	48	-267.8457	381.64478	-142.5%
		Constant	48	1.000	.0000	0.0%
	9	free_water_clearance	60	-675.1129	326.12794	-48.3%
		Constant	60	1.000	.0000	0.0%
	12	free_water_clearance	97	-691.2659	360.54557	-52.2%
		Constant	97	1.000	.0000	0.0%
	Total	free_water_clearance	205	-587.3959	396.11968	-67.4%
		Constant	205	1.000	.0000	0.0%
Total	6	free_water_clearance	404	-501.3934	708.03278	-141.2%
		Constant	404	1.000	.0000	0.0%
	9	free_water_clearance	500	-871.1080	575.51440	-66.1%

	Constant	500	1.000	.0000	0.0%
12	free_water_clearance	740	-1017.5762	610.40268	-60.0%
	Constant	740	1.000	.0000	0.0%
Total	free_water_clearance	1644	-846.1821	658.63173	-77.8%
	Constant	1644	1.000	.0000	0.0%

#### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

#### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	24700.494
Akaike's Information Criterion (AIC)	24704.494
Hurvich and Tsai's Criterion (AICC)	24704.502
Bozdogan's Criterion (CAIC)	24717.301
Schwarz's Bayesian Criterion (BIC)	24715.301

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

## Fixed Effects

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.022	35.676	.000
salt	2	1632.089	196.370	.000

a. Dependent Variable: free\_water\_clearance.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-1079.275029	141.679479	9.154	-7.618	.000	-1398.954266	-759.595791
[salt=6]	540.208933	27.294563	1632.121	19.792	.000	486.672872	593.744995
[salt=9]	168.115007	25.539368	1632.113	6.583	.000	118.021616	218.208397
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

**Covariance Parameters**

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	193868.988900	6786.737318
Constant [subject = subject] Variance	197900.492300	93823.341170

a. Dependent Variable: free\_water\_clearance.

```
MIXED free_water_clearance BY UNaV_low_mid_high WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
  ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UNaV_low_mid_high | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
```

/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:02:38
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED free_water_clearance BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.09

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	free_water_clearance	35	-685.1429	395.94318	-57.8%
		Constant	35	1.000	.0000	0.0%
	2.0	free_water_clearance	34	-1148.1069	372.79413	-32.5%
		Constant	34	1.000	.0000	0.0%
	3.0	free_water_clearance	35	-1150.7743	514.44995	-44.7%
		Constant	35	1.000	.0000	0.0%
Total	free_water_clearance	104	-993.1994	481.91750	-48.5%	
	Constant	104	1.000	.0000	0.0%	
12	1.0	free_water_clearance	35	-1221.0330	450.57487	-36.9%
		Constant	35	1.000	.0000	0.0%
	2.0	free_water_clearance	34	-1344.1689	316.74719	-23.6%
		Constant	34	1.000	.0000	0.0%

	3.0	free_water_clearance	35	-1463.1290	714.29539	-48.8%	
		Constant	35	1.000	.0000	0.0%	
	Total	free_water_clearance	104	-1342.7636	526.82087	-39.2%	
		Constant	104	1.000	.0000	0.0%	
15	1.0	free_water_clearance	35	-552.5181	526.31756	-95.3%	
		Constant	35	1.000	.0000	0.0%	
	2.0	free_water_clearance	34	-877.0456	389.18930	-44.4%	
		Constant	34	1.000	.0000	0.0%	
	3.0	free_water_clearance	35	-867.7614	454.21042	-52.3%	
		Constant	35	1.000	.0000	0.0%	
	Total	free_water_clearance	104	-764.7051	480.77478	-62.9%	
		Constant	104	1.000	.0000	0.0%	
	16	1.0	free_water_clearance	35	-908.0205	455.66474	-50.2%
			Constant	35	1.000	.0000	0.0%
2.0		free_water_clearance	34	-1280.4755	444.26291	-34.7%	
		Constant	34	1.000	.0000	0.0%	
3.0		free_water_clearance	35	-1402.4186	415.71967	-29.6%	
		Constant	35	1.000	.0000	0.0%	
Total		free_water_clearance	104	-1196.1686	483.56642	-40.4%	
		Constant	104	1.000	.0000	0.0%	
51		1.0	free_water_clearance	68	-63.4968	511.17204	-805.0%
			Constant	68	1.000	.0000	0.0%
	2.0	free_water_clearance	69	-534.3818	426.43826	-79.8%	
		Constant	69	1.000	.0000	0.0%	
	3.0	free_water_clearance	68	-709.8410	477.70062	-67.3%	
		Constant	68	1.000	.0000	0.0%	
	Total	free_water_clearance	205	-436.3869	543.97128	-124.7%	
		Constant	205	1.000	.0000	0.0%	
	52	1.0	free_water_clearance	68	86.0924	568.22312	660.0%
			Constant	68	1.000	.0000	0.0%
2.0		free_water_clearance	69	-348.9059	562.35709	-161.2%	
		Constant	69	1.000	.0000	0.0%	
3.0		free_water_clearance	67	-567.3572	477.92752	-84.2%	
		Constant	67	1.000	.0000	0.0%	
Total		free_water_clearance	204	-275.6527	600.42143	-217.8%	
		Constant	204	1.000	.0000	0.0%	
53		1.0	free_water_clearance	68	-1195.0501	318.97052	-26.7%
			Constant	68	1.000	.0000	0.0%



	2.0	free_water_clearance	69	-1207.8633	356.47236	-29.5%	
		Constant	69	1.000	.0000	0.0%	
	3.0	free_water_clearance	68	-1507.5838	439.86770	-29.2%	
		Constant	68	1.000	.0000	0.0%	
	Total	free_water_clearance	205	-1303.0325	400.27016	-30.7%	
		Constant	205	1.000	.0000	0.0%	
54	1.0	free_water_clearance	68	-206.0047	518.63967	-251.8%	
		Constant	68	1.000	.0000	0.0%	
	2.0	free_water_clearance	69	-483.1157	437.37947	-90.5%	
		Constant	69	1.000	.0000	0.0%	
	3.0	free_water_clearance	68	-765.5123	352.18987	-46.0%	
		Constant	68	1.000	.0000	0.0%	
	Total	free_water_clearance	205	-484.8690	494.99997	-102.1%	
		Constant	205	1.000	.0000	0.0%	
	55	1.0	free_water_clearance	68	-1246.0026	381.47130	-30.6%
			Constant	68	1.000	.0000	0.0%
2.0		free_water_clearance	69	-1532.2186	360.18626	-23.5%	
		Constant	69	1.000	.0000	0.0%	
3.0		free_water_clearance	67	-1808.5467	471.97250	-26.1%	
		Constant	67	1.000	.0000	0.0%	
Total		free_water_clearance	204	-1527.5681	465.32933	-30.5%	
		Constant	204	1.000	.0000	0.0%	
56		1.0	free_water_clearance	68	-368.3485	393.70878	-106.9%
			Constant	68	1.000	.0000	0.0%
	2.0	free_water_clearance	69	-678.1316	356.01206	-52.5%	
		Constant	69	1.000	.0000	0.0%	
	3.0	free_water_clearance	68	-714.3733	347.23884	-48.6%	
		Constant	68	1.000	.0000	0.0%	
	Total	free_water_clearance	205	-587.3959	396.11968	-67.4%	
		Constant	205	1.000	.0000	0.0%	
	Total	1.0	free_water_clearance	548	-586.3980	673.49606	-114.9%
			Constant	548	1.000	.0000	0.0%
2.0		free_water_clearance	550	-887.6939	581.61412	-65.5%	
		Constant	550	1.000	.0000	0.0%	
3.0		free_water_clearance	546	-1065.1018	627.79263	-58.9%	
		Constant	546	1.000	.0000	0.0%	
Total		free_water_clearance	1644	-846.1821	658.63173	-77.8%	
		Constant	1644	1.000	.0000	0.0%	

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24760.730
Akaike's Information Criterion (AIC)	24764.730
Hurvich and Tsai's Criterion (AICC)	24764.737
Bozdogan's Criterion (CAIC)	24777.536
Schwarz's Bayesian Criterion (BIC)	24775.536

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.019	40.936	.000
UNaV_low_mid_high	2	1632.020	159.717	.000

a. Dependent Variable: free\_water\_clearance.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-1109.077832	140.148395	9.248	-7.914	.000	-1424.821934	-793.333730
[UNaV_low_mid_high=1.0]	478.905711	27.121320	1632.019	17.658	.000	425.709448	532.101974
[UNaV_low_mid_high=2.0]	175.125634	27.097678	1632.021	6.463	.000	121.975743	228.275525
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	201175.279600	7042.502800
Constant [subject = subject] Variance	192598.731300	91338.505970

a. Dependent Variable: free\_water\_clearance.

\* FIGURE 2D and 2E

USE ALL.

```
MIXED @2Na2KUreaV BY salt WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:02:38
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED @2Na2KUreaV BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	@2Na2KUreaV	29	767.809	127.9553	16.7%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	907.953	131.8398	14.5%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	1045.790	135.3111	12.9%
		Constant	40	1.000	.0000	0.0%
Total	@2Na2KUreaV	104	921.889	172.7222	18.7%	
	Constant	104	1.000	.0000	0.0%	
12	6	@2Na2KUreaV	29	986.531	106.9524	10.8%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	875.706	106.8920	12.2%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	918.374	159.3935	17.4%

		Constant	40	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	923.020	135.6682	14.7%
		Constant	104	1.000	.0000	0.0%
15	6	@2Na2KUreaV	29	746.469	101.6424	13.6%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	874.268	82.3077	9.4%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	944.653	106.0182	11.2%
		Constant	40	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	865.703	125.4946	14.5%
		Constant	104	1.000	.0000	0.0%
16	6	@2Na2KUreaV	29	804.563	81.3216	10.1%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	906.756	92.8700	10.2%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	991.983	127.9940	12.9%
		Constant	40	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	911.040	128.8045	14.1%
		Constant	104	1.000	.0000	0.0%
51	6	@2Na2KUreaV	48	635.801	93.5618	14.7%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	717.868	105.6174	14.7%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	873.929	158.1381	18.1%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	772.496	164.8568	21.3%
		Constant	205	1.000	.0000	0.0%
52	6	@2Na2KUreaV	48	541.606	75.8521	14.0%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	677.273	95.9129	14.2%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	798.976	128.4130	16.1%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	703.093	149.8319	21.3%
		Constant	205	1.000	.0000	0.0%
53	6	@2Na2KUreaV	48	710.532	85.9888	12.1%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	786.971	100.1125	12.7%

		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	894.608	121.0904	13.5%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	820.004	131.4899	16.0%
		Constant	205	1.000	.0000	0.0%
54	6	@2Na2KUreaV	48	603.741	98.0649	16.2%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	676.104	100.2318	14.8%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	815.575	122.8008	15.1%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	725.154	142.4129	19.6%
		Constant	205	1.000	.0000	0.0%
55	6	@2Na2KUreaV	48	673.913	80.3412	11.9%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	799.205	120.4304	15.1%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	901.957	179.3234	19.9%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	818.487	170.7473	20.9%
		Constant	205	1.000	.0000	0.0%
56	6	@2Na2KUreaV	48	580.947	76.9497	13.2%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	644.229	90.9027	14.1%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	778.424	117.1985	15.1%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	692.909	131.6873	19.0%
		Constant	205	1.000	.0000	0.0%
Total	6	@2Na2KUreaV	404	682.400	146.5073	21.5%
		Constant	404	1.000	.0000	0.0%
	9	@2Na2KUreaV	500	765.726	138.2679	18.1%
		Constant	500	1.000	.0000	0.0%
	12	@2Na2KUreaV	742	872.222	155.5125	17.8%
		Constant	742	1.000	.0000	0.0%
	Total	@2Na2KUreaV	1646	793.281	167.3701	21.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20505.258
Akaike's Information Criterion (AIC)	20509.258
Hurvich and Tsai's Criterion (AICC)	20509.265
Bozdogan's Criterion (CAIC)	20522.066
Schwarz's Bayesian Criterion (BIC)	20520.066

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.995	688.612	.000
salt	2	1634.108	379.847	.000

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	902.115340	30.516195	9.213	29.562	.000	833.325583	970.905097
[salt=6]	-201.413959	7.551770	1634.161	-26.671	.000	-216.226126	-186.601792
[salt=9]	-116.932400	7.065683	1634.148	-16.549	.000	-130.791148	-103.073651
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	14854.099120	519.681389
Constant [subject = subject] Variance	9096.055954	4338.728020

a. Dependent Variable: @2Na2KUreaV.

```
MIXED @2Na2KUreaV BY UNaV_low_mid_high WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UNaV_low_mid_high | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:02:38
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED @2Na2KUreaV BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	@2Na2KUreaV	35	742.951	83.7654	11.3%
		Constant	35	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	34	920.759	75.8551	8.2%
		Constant	34	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	35	1101.924	106.9925	9.7%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	921.889	172.7222	18.7%
		Constant	104	1.000	.0000	0.0%
12	1.0	@2Na2KUreaV	35	843.466	109.2159	12.9%
		Constant	35	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	34	902.878	95.7288	10.6%
		Constant	34	1.000	.0000	0.0%

	3.0	@2Na2KUreaV	35	1022.140	133.7980	13.1%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	923.020	135.6682	14.7%
		Constant	104	1.000	.0000	0.0%
15	1.0	@2Na2KUreaV	35	747.918	93.0401	12.4%
		Constant	35	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	34	874.209	69.1476	7.9%
		Constant	34	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	35	975.225	87.8125	9.0%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	865.703	125.4946	14.5%
		Constant	104	1.000	.0000	0.0%
16	1.0	@2Na2KUreaV	35	792.852	70.7780	8.9%
		Constant	35	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	34	887.333	64.4791	7.3%
		Constant	34	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	35	1052.257	75.7951	7.2%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	911.040	128.8045	14.1%
		Constant	104	1.000	.0000	0.0%
51	1.0	@2Na2KUreaV	68	609.937	75.5120	12.4%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	761.564	84.3942	11.1%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	946.147	110.7776	11.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	772.496	164.8568	21.3%
		Constant	205	1.000	.0000	0.0%
52	1.0	@2Na2KUreaV	68	550.528	72.7907	13.2%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	702.164	64.1497	9.1%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	856.601	106.4811	12.4%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	703.093	149.8319	21.3%
		Constant	205	1.000	.0000	0.0%
53	1.0	@2Na2KUreaV	68	705.519	74.9661	10.6%
		Constant	68	1.000	.0000	0.0%

	2.0	@2Na2KUreaV	69	799.483	54.5927	6.8%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	955.310	108.0788	11.3%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	820.004	131.4899	16.0%
		Constant	205	1.000	.0000	0.0%
54	1.0	@2Na2KUreaV	68	588.952	79.9631	13.6%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	720.831	74.6252	10.4%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	865.743	103.9179	12.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	725.154	142.4129	19.6%
		Constant	205	1.000	.0000	0.0%
55	1.0	@2Na2KUreaV	68	677.375	100.3250	14.8%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	804.257	102.7556	12.8%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	974.040	151.6967	15.6%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	818.487	170.7473	20.9%
		Constant	205	1.000	.0000	0.0%
56	1.0	@2Na2KUreaV	68	568.246	67.9098	12.0%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	682.838	65.8405	9.6%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	827.791	97.2000	11.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	692.909	131.6873	19.0%
		Constant	205	1.000	.0000	0.0%
Total	1.0	@2Na2KUreaV	548	658.922	120.9585	18.4%
		Constant	548	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	550	782.554	108.1697	13.8%
		Constant	550	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	548	938.407	136.2633	14.5%
		Constant	548	1.000	.0000	0.0%
	Total	@2Na2KUreaV	1646	793.281	167.3701	21.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	19615.431
Akaike's Information Criterion (AIC)	19619.431
Hurvich and Tsai's Criterion (AICC)	19619.438
Bozdogan's Criterion (CAIC)	19632.239
Schwarz's Bayesian Criterion (BIC)	19630.239

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.993	829.859	.000
UNaV_low_mid_high	2	1633.994	1245.762	.000

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	959.893222	28.482431	9.229	33.701	.000	895.704731	1024.081714
[UNaV_low_mid_high=1.0]	-279.484698	5.609807	1633.993	-49.821	.000	-290.487868	-268.481528
[UNaV_low_mid_high=2.0]	-154.634158	5.604870	1633.994	-27.589	.000	-165.627644	-143.640672
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	8622.761414	301.672911
Constant [subject = subject] Variance	7949.392824	3776.425101

a. Dependent Variable: @2Na2KUreaV.

\*Figure 2F

\*Curve Estimation.

TSET NEWVAR=NONE.

CURVEFIT

/VARIABLES=free\_water\_clearance WITH @2Na2KUreaV

/CONSTANT

/MODEL=LINEAR

/PLOT FIT.

## Curve Fit

### Notes

Output Created	23-DEC-2016 17:02:38	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Cases with a missing value in any variable are not used in the analysis.
Syntax	CURVEFIT  /VARIABLES=free_water_clearan ce WITH @2Na2KUreaV /CONSTANT /MODEL=LINEAR /PLOT FIT.	
Resources	Processor Time	00:00:03.26
	Elapsed Time	00:00:01.48
Use	From	First observation
	To	Last observation



Predict	From	First Observation following the use period
	To	Last observation
Time Series Settings (TSET)	Amount of Output	PRINT = DEFAULT
	Saving New Variables	NEWVAR = NONE
	Maximum Number of Lags in Autocorrelation or Partial Autocorrelation Plots	MXAUTO = 16
	Maximum Number of Lags Per Cross-Correlation Plots	MXCROSS = 7
	Maximum Number of New Variables Generated Per Procedure	MXNEWVAR = 60
	Maximum Number of New Cases Per Procedure	MXPREDICT = 1000
	Treatment of User-Missing Values	MISSING = EXCLUDE
	Confidence Interval Percentage Value	CIN = 95
	Tolerance for Entering Variables in Regression Equations	TOLER = .0001
	Maximum Iterative Parameter Change	CNVERGE = .001
	Method of Calculating Std. Errors for Autocorrelations	ACFSE = IND
	Length of Seasonal Period	Unspecified
	Variable Whose Values Label Observations in Plots	Unspecified
	Equations Include	CONSTANT

### Model Description

Model Name		MOD_1
Dependent Variable	1	free_water_clearance
Equation	1	Linear
Independent Variable		@2Na2KUreaV
Constant		Included
Variable Whose Values Label Observations in Plots		Unspecified

### Case Processing Summary

	N
Total Cases	1646
Excluded Cases <sup>a</sup>	2
Forecasted Cases	0
Newly Created Cases	0

a. Cases with a missing value in any variable are excluded from the analysis.

### Variable Processing Summary

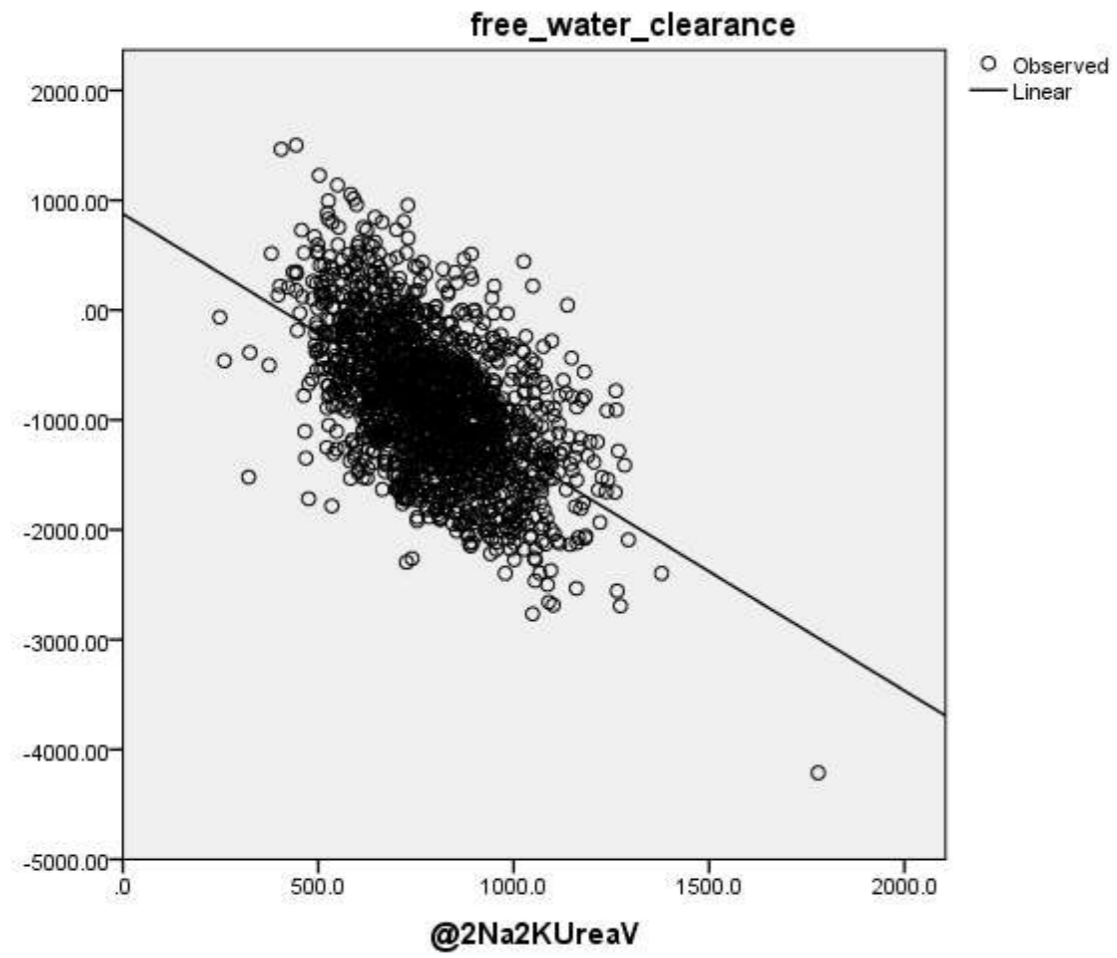
	Variables	
	Dependent free_water_clearance	Independent @2Na2KUreaV
Number of Positive Values	166	1646
Number of Zeros	7	0
Number of Negative Values	1471	0
Number of Missing Values	User-Missing	0
	System-Missing	2

### Model Summary and Parameter Estimates

Dependent Variable: free\_water\_clearance

Equation	R Square	F	Model Summary			Parameter Estimates	
			df1	df2	Sig.	Constant	b1
Linear	.303	714.850	1	1642	.000	876.569	-2.171

The independent variable is @2Na2KUreaV.



\*Figure 2G

\*Curve Estimation.

```
TSET NEWVAR=NONE.
CURVEFIT
/VARIABLES=free_water_clearance WITH NaIntake
/CONSTANT
/MODEL=LINEAR
/PLOT FIT.
```

## Curve Fit

**Notes**

Output Created	23-DEC-2016 17:02:39	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Cases with a missing value in any variable are not used in the analysis.
Syntax	CURVEFIT  /VARIABLES=free_water_clearance WITH NaIntake /CONSTANT /MODEL=LINEAR /PLOT FIT.	
Resources	Processor Time	00:00:00.25
	Elapsed Time	00:00:00.17
Use	From	First observation
	To	Last observation
Predict	From	First Observation following the use period
	To	Last observation
Time Series Settings (TSET)	Amount of Output	PRINT = DEFAULT
	Saving New Variables	NEWVAR = NONE

Maximum Number of Lags in Autocorrelation or Partial Autocorrelation Plots	MXAUTO = 16
Maximum Number of Lags Per Cross-Correlation Plots	MXCROSS = 7
Maximum Number of New Variables Generated Per Procedure	MXNEWVAR = 60
Maximum Number of New Cases Per Procedure	MPREDICT = 1000
Treatment of User-Missing Values	MISSING = EXCLUDE
Confidence Interval Percentage Value	CIN = 95
Tolerance for Entering Variables in Regression Equations	TOLER = .0001
Maximum Iterative Parameter Change	CNVERGE = .001
Method of Calculating Std. Errors for Autocorrelations	ACFSE = IND
Length of Seasonal Period	Unspecified
Variable Whose Values Label Observations in Plots	Unspecified
Equations Include	CONSTANT

### Model Description

Model Name		MOD_2
Dependent Variable	1	free_water_clearance
Equation	1	Linear
Independent Variable		Protocolled Na Intake (mmol/d)
Constant		Included
Variable Whose Values Label Observations in Plots		Unspecified

### Case Processing Summary

	N
Total Cases	1646

Excluded Cases <sup>a</sup>	2
Forecasted Cases	0
Newly Created Cases	0

a. Cases with a missing value in any variable are excluded from the analysis.

### Variable Processing Summary

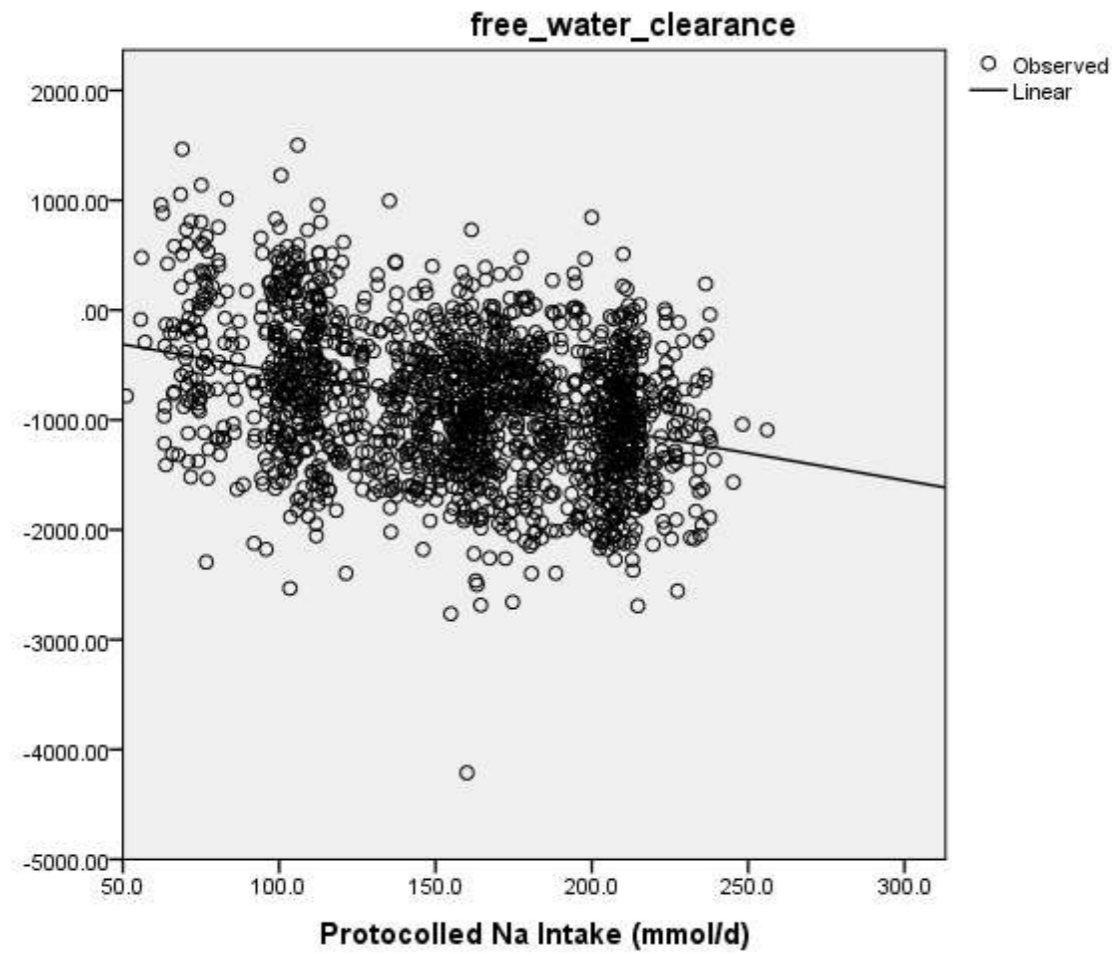
	Variables	
	Dependent free_water_clearance	Independent Protocolled Na Intake (mmol/d)
Number of Positive Values	166	1646
Number of Zeros	7	0
Number of Negative Values	1471	0
Number of Missing Values	User-Missing	0
	System-Missing	2

### Model Summary and Parameter Estimates

Dependent Variable: free\_water\_clearance

Equation	R Square	Model Summary				Parameter Estimates	
		F	df1	df2	Sig.	Constant	b1
Linear	.114	210.489	1	1642	.000	-64.730	-4.952

The independent variable is Protocolled Na Intake (mmol/d).



\*Figure 2H

\*Curve Estimation.

```
TSET NEWVAR=NONE.  
CURVEFIT  
  /VARIABLES=free_water_clearance WITH WaterIntake  
  /CONSTANT  
  /MODEL=LINEAR  
  /PLOT FIT.
```

**Curve Fit**

**Notes**

Output Created		23-DEC-2016 17:02:40
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Cases with a missing value in any variable are not used in the analysis.
Syntax	CURVEFIT  /VARIABLES=free_water_clearan ce WITH WaterIntake /CONSTANT /MODEL=LINEAR /PLOT FIT.	
Resources	Processor Time	00:00:00.27
	Elapsed Time	00:00:00.17
Use	From	First observation
	To	Last observation
Predict	From	First Observation following the use period
	To	Last observation
Time Series Settings (TSET)	Amount of Output	PRINT = DEFAULT
	Saving New Variables	NEWVAR = NONE



Maximum Number of Lags in Autocorrelation or Partial Autocorrelation Plots	MXAUTO = 16
Maximum Number of Lags Per Cross-Correlation Plots	MXCROSS = 7
Maximum Number of New Variables Generated Per Procedure	MXNEWVAR = 60
Maximum Number of New Cases Per Procedure	MXPREDICT = 1000
Treatment of User-Missing Values	MISSING = EXCLUDE
Confidence Interval Percentage Value	CIN = 95
Tolerance for Entering Variables in Regression Equations	TOLER = .0001
Maximum Iterative Parameter Change	CNVERGE = .001
Method of Calculating Std. Errors for Autocorrelations	ACFSE = IND
Length of Seasonal Period	Unspecified
Variable Whose Values Label Observations in Plots	Unspecified
Equations Include	CONSTANT

### Model Description

Model Name		MOD_3
Dependent Variable	1	free_water_clearance
Equation	1	Linear
Independent Variable		WaterIntake
Constant		Included
Variable Whose Values Label Observations in Plots		Unspecified

### Case Processing Summary

	N
Total Cases	1646
Excluded Cases <sup>a</sup>	2

Forecasted Cases	0
Newly Created Cases	0

a. Cases with a missing value in any variable are excluded from the analysis.

### Variable Processing Summary

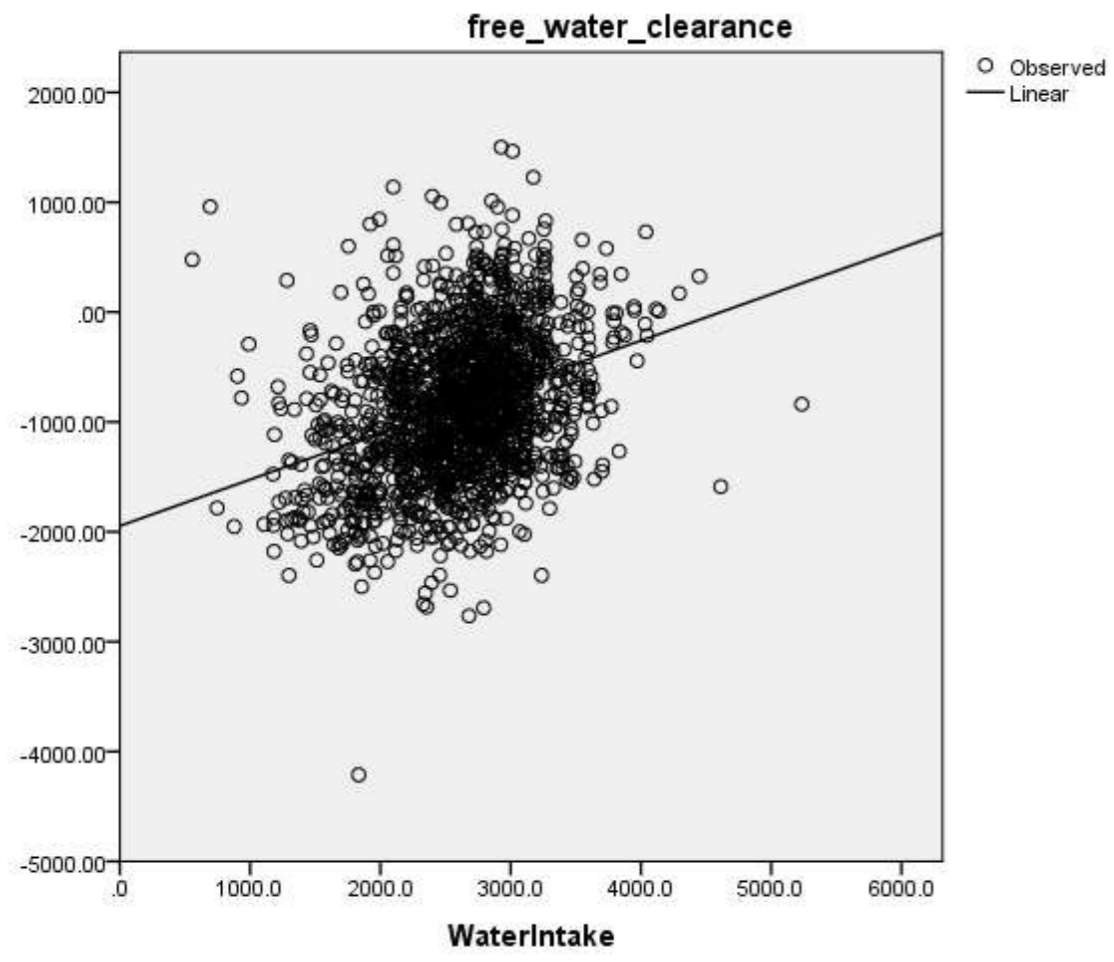
	Variables	
	Dependent free_water_clearance	Independent WaterIntake
Number of Positive Values	166	1646
Number of Zeros	7	0
Number of Negative Values	1471	0
Number of Missing Values	User-Missing	0
	System-Missing	2

### Model Summary and Parameter Estimates

Dependent Variable: free\_water\_clearance

Equation	R Square	Model Summary				Parameter Estimates	
		F	df1	df2	Sig.	Constant	b1
Linear	.112	208.137	1	1642	.000	-1946.087	.422

The independent variable is WaterIntake.



```

* Encoding: UTF-8.
* ONLINE SUPPLEMENTAL STATISTICAL ANALYSIS FIGURE 3

* Encoding: UTF-8.
GET
  FILE='C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav'.
DATASET NAME DataSet2 WINDOW=FRONT.

* FIGURE 3A

* No statistical analysis. See manuscript text for details.

* FIGURE 3B

USE ALL.

MIXED @2Na2KUreaV BY salt WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
  ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:06:36
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	MIXED @2Na2KUreaV BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

[DataSet2] C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	@2Na2KUreaV	29	767.809	127.9553	16.7%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	907.953	131.8398	14.5%
		Constant	35	1.000	.0000	0.0%

	12	@2Na2KUreaV	40	1045.790	135.3111	12.9%
		Constant	40	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	921.889	172.7222	18.7%
		Constant	104	1.000	.0000	0.0%
12	6	@2Na2KUreaV	29	986.531	106.9524	10.8%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	875.706	106.8920	12.2%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	918.374	159.3935	17.4%
		Constant	40	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	923.020	135.6682	14.7%
		Constant	104	1.000	.0000	0.0%
15	6	@2Na2KUreaV	29	746.469	101.6424	13.6%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	874.268	82.3077	9.4%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	944.653	106.0182	11.2%
		Constant	40	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	865.703	125.4946	14.5%
		Constant	104	1.000	.0000	0.0%
16	6	@2Na2KUreaV	29	804.563	81.3216	10.1%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	906.756	92.8700	10.2%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	991.983	127.9940	12.9%
		Constant	40	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	911.040	128.8045	14.1%
		Constant	104	1.000	.0000	0.0%
51	6	@2Na2KUreaV	48	635.801	93.5618	14.7%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	717.868	105.6174	14.7%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	873.929	158.1381	18.1%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	772.496	164.8568	21.3%
		Constant	205	1.000	.0000	0.0%
52	6	@2Na2KUreaV	48	541.606	75.8521	14.0%
		Constant	48	1.000	.0000	0.0%

	9	@2Na2KUreaV	60	677.273	95.9129	14.2%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	798.976	128.4130	16.1%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	703.093	149.8319	21.3%
		Constant	205	1.000	.0000	0.0%
53	6	@2Na2KUreaV	48	710.532	85.9888	12.1%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	786.971	100.1125	12.7%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	894.608	121.0904	13.5%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	820.004	131.4899	16.0%
		Constant	205	1.000	.0000	0.0%
54	6	@2Na2KUreaV	48	603.741	98.0649	16.2%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	676.104	100.2318	14.8%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	815.575	122.8008	15.1%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	725.154	142.4129	19.6%
		Constant	205	1.000	.0000	0.0%
55	6	@2Na2KUreaV	48	673.913	80.3412	11.9%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	799.205	120.4304	15.1%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	901.957	179.3234	19.9%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	818.487	170.7473	20.9%
		Constant	205	1.000	.0000	0.0%
56	6	@2Na2KUreaV	48	580.947	76.9497	13.2%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	644.229	90.9027	14.1%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	778.424	117.1985	15.1%
		Constant	97	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	692.909	131.6873	19.0%
		Constant	205	1.000	.0000	0.0%

Total	6	@2Na2KUreaV	404	682.400	146.5073	21.5%
		Constant	404	1.000	.0000	0.0%
	9	@2Na2KUreaV	500	765.726	138.2679	18.1%
		Constant	500	1.000	.0000	0.0%
	12	@2Na2KUreaV	742	872.222	155.5125	17.8%
		Constant	742	1.000	.0000	0.0%
Total		@2Na2KUreaV	1646	793.281	167.3701	21.1%
		Constant	1646	1.000	.0000	0.0%

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	20505.258
Akaike's Information Criterion (AIC)	20509.258
Hurvich and Tsai's Criterion (AICC)	20509.265
Bozdogan's Criterion (CAIC)	20522.066
Schwarz's Bayesian Criterion (BIC)	20520.066

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.



## Fixed Effects

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.995	688.612	.000
salt	2	1634.108	379.847	.000

a. Dependent Variable: @2Na2KUreaV.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	902.115340	30.516195	9.213	29.562	.000	833.325583	970.905097
[salt=6]	-201.413959	7.551770	1634.161	-26.671	.000	-216.226126	-186.601792
[salt=9]	-116.932400	7.065683	1634.148	-16.549	.000	-130.791148	-103.073651
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	14854.099120	519.681389
Constant [subject = subject]	Variance 9096.055954	4338.728020

a. Dependent Variable: @2Na2KUreaV.

MIXED two\_UNaUK\_Urea BY salt WITH Constant

```

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
  ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=salt | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:06:36
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED two_UNaUK_Urea BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.07

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	two_UNaUK_Urea	29	453.716	113.4644	25.0%
		Constant	29	1.000	.0000	0.0%
	9	two_UNaUK_Urea	35	494.872	107.1562	21.7%
		Constant	35	1.000	.0000	0.0%
	12	two_UNaUK_Urea	40	509.000	99.6463	19.6%
		Constant	40	1.000	.0000	0.0%
Total	two_UNaUK_Urea	104	488.829	107.5514	22.0%	
	Constant	104	1.000	.0000	0.0%	
12	6	two_UNaUK_Urea	29	626.528	93.6415	14.9%
		Constant	29	1.000	.0000	0.0%
	9	two_UNaUK_Urea	35	565.889	133.5627	23.6%
		Constant	35	1.000	.0000	0.0%
	12	two_UNaUK_Urea	40	596.475	143.2584	24.0%

		Constant	40	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	104	594.562	128.8862	21.7%
		Constant	104	1.000	.0000	0.0%
15	6	two_UNaUK_Urea	29	339.952	86.8051	25.5%
		Constant	29	1.000	.0000	0.0%
	9	two_UNaUK_Urea	35	408.242	63.1889	15.5%
		Constant	35	1.000	.0000	0.0%
	12	two_UNaUK_Urea	39	451.827	66.0220	14.6%
		Constant	39	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	103	405.518	84.0719	20.7%
		Constant	103	1.000	.0000	0.0%
16	6	two_UNaUK_Urea	29	445.673	76.5341	17.2%
		Constant	29	1.000	.0000	0.0%
	9	two_UNaUK_Urea	35	633.387	141.0442	22.3%
		Constant	35	1.000	.0000	0.0%
	12	two_UNaUK_Urea	40	602.034	119.7980	19.9%
		Constant	40	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	104	568.985	140.3853	24.7%
		Constant	104	1.000	.0000	0.0%
51	6	two_UNaUK_Urea	48	317.689	96.8443	30.5%
		Constant	48	1.000	.0000	0.0%
	9	two_UNaUK_Urea	60	414.233	75.2753	18.2%
		Constant	60	1.000	.0000	0.0%
	12	two_UNaUK_Urea	97	431.359	105.3663	24.4%
		Constant	97	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	205	399.731	105.5715	26.4%
		Constant	205	1.000	.0000	0.0%
52	6	two_UNaUK_Urea	48	268.438	81.4205	30.3%
		Constant	48	1.000	.0000	0.0%
	9	two_UNaUK_Urea	60	368.911	97.8373	26.5%
		Constant	60	1.000	.0000	0.0%
	12	two_UNaUK_Urea	96	411.060	98.9356	24.1%
		Constant	96	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	204	365.105	110.0461	30.1%
		Constant	204	1.000	.0000	0.0%
53	6	two_UNaUK_Urea	48	614.986	148.2537	24.1%
		Constant	48	1.000	.0000	0.0%
	9	two_UNaUK_Urea	60	662.239	144.7728	21.9%

		Constant	60	1.000	.0000	0.0%
	12	two_UNaUK_Urea	96	663.987	162.2679	24.4%
		Constant	96	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	204	651.943	154.6789	23.7%
		Constant	204	1.000	.0000	0.0%
54	6	two_UNaUK_Urea	48	305.919	91.0885	29.8%
		Constant	48	1.000	.0000	0.0%
	9	two_UNaUK_Urea	59	369.563	85.0897	23.0%
		Constant	59	1.000	.0000	0.0%
	12	two_UNaUK_Urea	96	431.190	84.7381	19.7%
		Constant	96	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	203	383.658	99.7706	26.0%
		Constant	203	1.000	.0000	0.0%
55	6	two_UNaUK_Urea	47	643.278	157.6759	24.5%
		Constant	47	1.000	.0000	0.0%
	9	two_UNaUK_Urea	59	719.604	175.1151	24.3%
		Constant	59	1.000	.0000	0.0%
	12	two_UNaUK_Urea	95	747.256	148.4423	19.9%
		Constant	95	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	201	714.826	163.3307	22.8%
		Constant	201	1.000	.0000	0.0%
56	6	two_UNaUK_Urea	48	346.302	78.6554	22.7%
		Constant	48	1.000	.0000	0.0%
	9	two_UNaUK_Urea	60	438.810	90.4951	20.6%
		Constant	60	1.000	.0000	0.0%
	12	two_UNaUK_Urea	96	411.286	71.7990	17.5%
		Constant	96	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	204	404.091	85.9968	21.3%
		Constant	204	1.000	.0000	0.0%
Total	6	two_UNaUK_Urea	403	430.036	177.6263	41.3%
		Constant	403	1.000	.0000	0.0%
	9	two_UNaUK_Urea	498	503.807	172.6522	34.3%
		Constant	498	1.000	.0000	0.0%
	12	two_UNaUK_Urea	735	520.864	169.2741	32.5%
		Constant	735	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	1636	493.298	176.1927	35.7%
		Constant	1636	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNaUK\_Urea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20220.255
Akaike's Information Criterion (AIC)	20224.255
Hurvich and Tsai's Criterion (AICC)	20224.262
Bozdogan's Criterion (CAIC)	20237.051
Schwarz's Bayesian Criterion (BIC)	20235.051

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNaUK\_Urea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.021	150.105	.000
salt	2	1624.081	85.827	.000

a. Dependent Variable: two\_UNaUK\_Urea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	527.147234	40.103803	9.137	13.145	.000	436.632363	617.662105
[salt=6]	-92.882109	7.194575	1624.108	-12.910	.000	-106.993733	-78.770484
[salt=9]	-19.203930	6.735889	1624.102	-2.851	.004	-32.415876	-5.991983
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNaUK\_Urea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	13415.152720	470.777139
Constant [subject = subject] Variance	15886.021440	7524.762030

a. Dependent Variable: two\_UNaUK\_Urea.

```

* Encoding: UTF-8.
* ONLINE SUPPLEMENTAL STATISTICAL ANALYSIS FIGURE 4

* Encoding: UTF-8.
GET
  FILE='C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav'.
DATASET NAME DataSet2 WINDOW=FRONT.

* FIGURE 4B and 4C

* Effect of salt excretion

MIXED two_UNa BY UNaV_low_mid_high WITH constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
  ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UNaV_low_mid_high | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:08:56
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.



Cases Used		Statistics are based on all cases with valid data for all variables in the model.
Syntax		<pre> MIXED two_UNa BY UNaV_low_mid_high WITH constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=constant   SUBJECT(subject) COVTYPE(VC). </pre>
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.05

[DataSet2] C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

### Descriptive Statistics

subject	UNaV_low_mid_high	Count	Mean	Standard Deviation	Coefficient of Variation	
11	1.0	two_UNa	35	111.873	28.3753	25.4%
		Constant	35	1.000	.0000	0.0%
	2.0	two_UNa	34	165.153	23.7729	14.4%
		Constant	34	1.000	.0000	0.0%
	3.0	two_UNa	35	182.147	35.4699	19.5%

		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	152.941	42.1229	27.5%
		Constant	104	1.000	.0000	0.0%
12	1.0	two_UNa	35	168.585	35.0461	20.8%
		Constant	35	1.000	.0000	0.0%
	2.0	two_UNa	34	212.927	31.6295	14.9%
		Constant	34	1.000	.0000	0.0%
	3.0	two_UNa	35	236.030	63.4311	26.9%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	205.779	53.4043	26.0%
		Constant	104	1.000	.0000	0.0%
15	1.0	two_UNa	35	92.543	30.0273	32.4%
		Constant	35	1.000	.0000	0.0%
	2.0	two_UNa	34	150.156	36.4414	24.3%
		Constant	34	1.000	.0000	0.0%
	3.0	two_UNa	35	174.705	22.3932	12.8%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	139.029	45.7851	32.9%
		Constant	104	1.000	.0000	0.0%
16	1.0	two_UNa	35	130.140	52.4938	40.3%
		Constant	35	1.000	.0000	0.0%
	2.0	two_UNa	34	195.448	49.9092	25.5%
		Constant	34	1.000	.0000	0.0%
	3.0	two_UNa	35	218.056	40.6844	18.7%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	181.078	60.5686	33.4%
		Constant	104	1.000	.0000	0.0%
51	1.0	two_UNa	68	91.164	29.6556	32.5%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UNa	69	169.817	43.9645	25.9%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UNa	68	205.992	41.8182	20.3%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	155.727	61.6950	39.6%
		Constant	205	1.000	.0000	0.0%
52	1.0	two_UNa	68	83.313	33.7761	40.5%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UNa	69	146.383	43.0142	29.4%

		Constant	69	1.000	.0000	0.0%
	3.0	two_UNa	67	180.433	33.3508	18.5%
		Constant	67	1.000	.0000	0.0%
	Total	two_UNa	204	136.543	54.5504	40.0%
		Constant	204	1.000	.0000	0.0%
53	1.0	two_UNa	68	170.646	55.2160	32.4%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UNa	69	232.016	62.0198	26.7%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UNa	68	292.271	73.3575	25.1%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	231.646	80.7241	34.8%
		Constant	205	1.000	.0000	0.0%
54	1.0	two_UNa	68	93.383	28.0250	30.0%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UNa	69	152.512	44.0112	28.9%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UNa	68	192.951	29.1124	15.1%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	146.312	53.4213	36.5%
		Constant	205	1.000	.0000	0.0%
55	1.0	two_UNa	68	178.693	51.0100	28.5%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UNa	69	260.146	64.2762	24.7%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UNa	67	299.352	57.2292	19.1%
		Constant	67	1.000	.0000	0.0%
	Total	two_UNa	204	245.872	76.3710	31.1%
		Constant	204	1.000	.0000	0.0%
56	1.0	two_UNa	68	111.258	33.2267	29.9%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UNa	69	168.753	35.4051	21.0%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UNa	68	192.867	28.5352	14.8%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	157.680	47.1211	29.9%
		Constant	205	1.000	.0000	0.0%
Total	1.0	two_UNa	548	122.527	53.3273	43.5%

	Constant	548	1.000	.0000	0.0%
2.0	two_UNa	550	186.454	60.8102	32.6%
	Constant	550	1.000	.0000	0.0%
3.0	two_UNa	546	220.963	64.3558	29.1%
	Constant	546	1.000	.0000	0.0%
Total	two_UNa	1644	176.606	72.2356	40.9%
	Constant	1644	1.000	.0000	0.0%

#### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

#### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	17193.745
Akaike's Information Criterion (AIC)	17197.745
Hurvich and Tsai's Criterion (AICC)	17197.752
Bozdogan's Criterion (CAIC)	17210.551
Schwarz's Bayesian Criterion (BIC)	17208.551

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

## Fixed Effects

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.022	197.456	.000
UNaV_low_mid_high	2	1632.024	682.320	.000

a. Dependent Variable: two\_UNa.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	219.702122	12.574559	9.307	17.472	.000	191.398988	248.005256
[UNaV_low_mid_high=1.0]	-98.489345	2.705557	1632.022	-36.403	.000	-103.796076	-93.182615
[UNaV_low_mid_high=2.0]	-34.637904	2.703199	1632.025	-12.814	.000	-39.940008	-29.335800
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	2002.010806	70.083924
Constant [subject = subject]	Variance 1543.212736	732.970045

a. Dependent Variable: two\_UNa.

\*Effect of salt intake phase

```

MIXED two_UNa BY salt WITH constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:08:56
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED two_UNa BY salt WITH constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

**Descriptive Statistics**

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	two_UNa	29	114.356	31.5339	27.6%
		Constant	29	1.000	.0000	0.0%
	9	two_UNa	35	153.267	33.0669	21.6%
		Constant	35	1.000	.0000	0.0%
	12	two_UNa	40	180.630	33.5474	18.6%
		Constant	40	1.000	.0000	0.0%
Total	two_UNa	104	152.941	42.1229	27.5%	
	Constant	104	1.000	.0000	0.0%	
12	6	two_UNa	29	187.091	43.3728	23.2%
		Constant	29	1.000	.0000	0.0%
	9	two_UNa	35	189.345	41.6254	22.0%
		Constant	35	1.000	.0000	0.0%
	12	two_UNa	40	233.708	58.0432	24.8%

		Constant	40	1.000	.0000	0.0%
	Total	two_UNa	104	205.779	53.4043	26.0%
		Constant	104	1.000	.0000	0.0%
15	6	two_UNa	29	85.002	25.1690	29.6%
		Constant	29	1.000	.0000	0.0%
	9	two_UNa	35	138.435	25.8024	18.6%
		Constant	35	1.000	.0000	0.0%
	12	two_UNa	40	178.717	26.7349	15.0%
		Constant	40	1.000	.0000	0.0%
	Total	two_UNa	104	139.029	45.7851	32.9%
		Constant	104	1.000	.0000	0.0%
16	6	two_UNa	29	107.284	22.3871	20.9%
		Constant	29	1.000	.0000	0.0%
	9	two_UNa	35	198.678	38.9045	19.6%
		Constant	35	1.000	.0000	0.0%
	12	two_UNa	40	219.179	46.8318	21.4%
		Constant	40	1.000	.0000	0.0%
	Total	two_UNa	104	181.078	60.5686	33.4%
		Constant	104	1.000	.0000	0.0%
51	6	two_UNa	48	86.999	34.4614	39.6%
		Constant	48	1.000	.0000	0.0%
	9	two_UNa	60	154.184	44.0296	28.6%
		Constant	60	1.000	.0000	0.0%
	12	two_UNa	97	190.691	52.1253	27.3%
		Constant	97	1.000	.0000	0.0%
	Total	two_UNa	205	155.727	61.6950	39.6%
		Constant	205	1.000	.0000	0.0%
52	6	two_UNa	48	71.464	26.7639	37.5%
		Constant	48	1.000	.0000	0.0%
	9	two_UNa	60	127.940	33.4116	26.1%
		Constant	60	1.000	.0000	0.0%
	12	two_UNa	96	174.459	40.8848	23.4%
		Constant	96	1.000	.0000	0.0%
	Total	two_UNa	204	136.543	54.5504	40.0%
		Constant	204	1.000	.0000	0.0%
53	6	two_UNa	48	148.550	41.8107	28.1%
		Constant	48	1.000	.0000	0.0%
	9	two_UNa	60	212.664	44.4728	20.9%



		Constant	60	1.000	.0000	0.0%
	12	two_UNa	97	284.507	72.6282	25.5%
		Constant	97	1.000	.0000	0.0%
	Total	two_UNa	205	231.646	80.7241	34.8%
		Constant	205	1.000	.0000	0.0%
54	6	two_UNa	48	84.833	25.6844	30.3%
		Constant	48	1.000	.0000	0.0%
	9	two_UNa	60	126.034	27.6246	21.9%
		Constant	60	1.000	.0000	0.0%
	12	two_UNa	97	189.278	35.5015	18.8%
		Constant	97	1.000	.0000	0.0%
	Total	two_UNa	205	146.312	53.4213	36.5%
		Constant	205	1.000	.0000	0.0%
55	6	two_UNa	48	157.511	36.4117	23.1%
		Constant	48	1.000	.0000	0.0%
	9	two_UNa	60	235.607	58.5145	24.8%
		Constant	60	1.000	.0000	0.0%
	12	two_UNa	96	296.467	55.5201	18.7%
		Constant	96	1.000	.0000	0.0%
	Total	two_UNa	204	245.872	76.3710	31.1%
		Constant	204	1.000	.0000	0.0%
56	6	two_UNa	48	101.591	28.0756	27.6%
		Constant	48	1.000	.0000	0.0%
	9	two_UNa	60	162.224	41.9330	25.8%
		Constant	60	1.000	.0000	0.0%
	12	two_UNa	97	182.625	32.2041	17.6%
		Constant	97	1.000	.0000	0.0%
	Total	two_UNa	205	157.680	47.1211	29.9%
		Constant	205	1.000	.0000	0.0%
Total	6	two_UNa	404	112.782	47.5859	42.2%
		Constant	404	1.000	.0000	0.0%
	9	two_UNa	500	169.819	55.0581	32.4%
		Constant	500	1.000	.0000	0.0%
	12	two_UNa	740	216.037	67.1137	31.1%
		Constant	740	1.000	.0000	0.0%
	Total	two_UNa	1644	176.606	72.2356	40.9%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	17160.831
Akaike's Information Criterion (AIC)	17164.831
Hurvich and Tsai's Criterion (AICC)	17164.838
Bozdogan's Criterion (CAIC)	17177.637
Schwarz's Bayesian Criterion (BIC)	17175.637

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.030	179.007	.000
salt	2	1632.117	712.697	.000

a. Dependent Variable: two\_UNa.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	215.580612	12.455499	9.204	17.308	.000	187.499013	243.662211
[salt=6]	-103.099488	2.746017	1632.159	-37.545	.000	-108.485576	-97.713399
[salt=9]	-46.080995	2.569433	1632.148	-17.934	.000	-51.120729	-41.041260
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	1962.306341	68.693987
Constant [subject = subject] Variance	1522.752320	723.192473

a. Dependent Variable: two\_UNa.

\* FIGURE 4D and 4E

\* Effect of salt excretion

```
MIXED UUrea BY UNaV_low_mid_high WITH constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UNaV_low_mid_high | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:08:56
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UUrea BY UNaV_low_mid_high WITH constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

**Descriptive Statistics**

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	UUrea	35	222.059	69.2125	31.2%
		Constant	35	1.000	.0000	0.0%
	2.0	UUrea	34	237.885	48.4653	20.4%
		Constant	34	1.000	.0000	0.0%
	3.0	UUrea	35	197.127	52.5555	26.7%
		Constant	35	1.000	.0000	0.0%
	Total	UUrea	104	218.842	59.4058	27.1%
		Constant	104	1.000	.0000	0.0%
12	1.0	UUrea	35	282.218	72.1080	25.6%
		Constant	35	1.000	.0000	0.0%
	2.0	UUrea	34	277.517	54.6162	19.7%
		Constant	34	1.000	.0000	0.0%

	3.0	UUrea	35	261.144	81.9977	31.4%	
		Constant	35	1.000	.0000	0.0%	
	Total	UUrea	104	273.589	70.5303	25.8%	
		Constant	104	1.000	.0000	0.0%	
15	1.0	UUrea	35	177.751	46.4141	26.1%	
		Constant	35	1.000	.0000	0.0%	
	2.0	UUrea	34	185.403	36.4024	19.6%	
		Constant	34	1.000	.0000	0.0%	
	3.0	UUrea	34	169.659	25.1210	14.8%	
		Constant	34	1.000	.0000	0.0%	
	Total	UUrea	103	177.606	37.3136	21.0%	
		Constant	103	1.000	.0000	0.0%	
	16	1.0	UUrea	35	277.385	92.7464	33.4%
			Constant	35	1.000	.0000	0.0%
2.0		UUrea	34	280.421	70.0195	25.0%	
		Constant	34	1.000	.0000	0.0%	
3.0		UUrea	35	231.050	43.0073	18.6%	
		Constant	35	1.000	.0000	0.0%	
Total		UUrea	104	262.784	74.4185	28.3%	
		Constant	104	1.000	.0000	0.0%	
51		1.0	UUrea	68	163.442	48.7523	29.8%
			Constant	68	1.000	.0000	0.0%
	2.0	UUrea	69	167.789	48.5067	28.9%	
		Constant	69	1.000	.0000	0.0%	
	3.0	UUrea	68	139.282	36.8520	26.5%	
		Constant	68	1.000	.0000	0.0%	
	Total	UUrea	205	156.891	46.5701	29.7%	
		Constant	205	1.000	.0000	0.0%	
	52	1.0	UUrea	68	149.919	45.0881	30.1%
			Constant	68	1.000	.0000	0.0%
2.0		UUrea	69	159.131	55.4035	34.8%	
		Constant	69	1.000	.0000	0.0%	
3.0		UUrea	67	145.213	36.7791	25.3%	
		Constant	67	1.000	.0000	0.0%	
Total		UUrea	204	151.489	46.6118	30.8%	
		Constant	204	1.000	.0000	0.0%	
53		1.0	UUrea	68	344.202	83.6187	24.3%
			Constant	68	1.000	.0000	0.0%

	2.0	UUrea	69	261.193	72.0469	27.6%
		Constant	69	1.000	.0000	0.0%
	3.0	UUrea	67	237.173	70.1940	29.6%
		Constant	67	1.000	.0000	0.0%
	Total	UUrea	204	280.974	88.0558	31.3%
		Constant	204	1.000	.0000	0.0%
54	1.0	UUrea	67	160.397	57.4108	35.8%
		Constant	67	1.000	.0000	0.0%
	2.0	UUrea	68	152.362	42.4014	27.8%
		Constant	68	1.000	.0000	0.0%
	3.0	UUrea	68	147.979	29.6132	20.0%
		Constant	68	1.000	.0000	0.0%
	Total	UUrea	203	153.546	44.6158	29.1%
		Constant	203	1.000	.0000	0.0%
55	1.0	UUrea	68	347.853	90.5026	26.0%
		Constant	68	1.000	.0000	0.0%
	2.0	UUrea	67	305.595	77.9145	25.5%
		Constant	67	1.000	.0000	0.0%
	3.0	UUrea	66	277.205	57.3445	20.7%
		Constant	66	1.000	.0000	0.0%
	Total	UUrea	201	310.569	81.6346	26.3%
		Constant	201	1.000	.0000	0.0%
56	1.0	UUrea	68	175.413	47.1797	26.9%
		Constant	68	1.000	.0000	0.0%
	2.0	UUrea	68	169.671	36.4626	21.5%
		Constant	68	1.000	.0000	0.0%
	3.0	UUrea	68	144.182	28.6878	19.9%
		Constant	68	1.000	.0000	0.0%
	Total	UUrea	204	163.089	40.3762	24.8%
		Constant	204	1.000	.0000	0.0%
Total	1.0	UUrea	547	227.829	102.6197	45.0%
		Constant	547	1.000	.0000	0.0%
	2.0	UUrea	546	213.030	80.2525	37.7%
		Constant	546	1.000	.0000	0.0%
	3.0	UUrea	543	189.960	70.7686	37.3%
		Constant	543	1.000	.0000	0.0%
	Total	UUrea	1636	210.321	86.9852	41.4%
		Constant	1636	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	18036.515
Akaike's Information Criterion (AIC)	18040.515
Hurvich and Tsai's Criterion (AICC)	18040.522
Bozdogan's Criterion (CAIC)	18053.311
Schwarz's Bayesian Criterion (BIC)	18051.311

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.015	120.337	.000
UNaV_low_mid_high	2	1624.016	55.183	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	194.661057	19.696913	9.219	9.883	.000	150.264648	239.057467
[UNaV_low_mid_high=1.0]	37.438799	3.596142	1624.015	10.411	.000	30.385233	44.492364
[UNaV_low_mid_high=2.0]	23.168010	3.597844	1624.016	6.439	.000	16.111106	30.224914
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3523.875709	123.663227
Constant [subject = subject] Variance	3812.441461	1807.000596

a. Dependent Variable: UUrea.

\* Effect of salt intake phase

```
MIXED UUrea BY salt WITH constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
  ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:08:56
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED UUrea BY salt WITH constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	UUrea	29	221.663	64.9844	29.3%
		Constant	29	1.000	.0000	0.0%
	9	UUrea	35	222.868	61.8382	27.7%
		Constant	35	1.000	.0000	0.0%
	12	UUrea	40	213.274	53.8745	25.3%
		Constant	40	1.000	.0000	0.0%
Total	UUrea	104	218.842	59.4058	27.1%	
	Constant	104	1.000	.0000	0.0%	
12	6	UUrea	29	307.520	47.2809	15.4%
		Constant	29	1.000	.0000	0.0%
	9	UUrea	35	252.847	81.4808	32.2%
		Constant	35	1.000	.0000	0.0%
	12	UUrea	40	267.137	66.7835	25.0%

		Constant	40	1.000	.0000	0.0%
	Total	UUrea	104	273.589	70.5303	25.8%
		Constant	104	1.000	.0000	0.0%
15	6	UUrea	29	168.653	47.4630	28.1%
		Constant	29	1.000	.0000	0.0%
	9	UUrea	35	180.938	35.2095	19.5%
		Constant	35	1.000	.0000	0.0%
	12	UUrea	39	181.272	29.7141	16.4%
		Constant	39	1.000	.0000	0.0%
	Total	UUrea	103	177.606	37.3136	21.0%
		Constant	103	1.000	.0000	0.0%
16	6	UUrea	29	230.672	59.7018	25.9%
		Constant	29	1.000	.0000	0.0%
	9	UUrea	35	295.167	83.9755	28.5%
		Constant	35	1.000	.0000	0.0%
	12	UUrea	40	257.730	64.6949	25.1%
		Constant	40	1.000	.0000	0.0%
	Total	UUrea	104	262.784	74.4185	28.3%
		Constant	104	1.000	.0000	0.0%
51	6	UUrea	48	156.857	51.4631	32.8%
		Constant	48	1.000	.0000	0.0%
	9	UUrea	60	170.688	39.4764	23.1%
		Constant	60	1.000	.0000	0.0%
	12	UUrea	97	148.374	46.4971	31.3%
		Constant	97	1.000	.0000	0.0%
	Total	UUrea	205	156.891	46.5701	29.7%
		Constant	205	1.000	.0000	0.0%
52	6	UUrea	48	137.758	42.9925	31.2%
		Constant	48	1.000	.0000	0.0%
	9	UUrea	60	162.418	48.8919	30.1%
		Constant	60	1.000	.0000	0.0%
	12	UUrea	96	151.524	45.5292	30.0%
		Constant	96	1.000	.0000	0.0%
	Total	UUrea	204	151.489	46.6118	30.8%
		Constant	204	1.000	.0000	0.0%
53	6	UUrea	48	325.886	93.8556	28.8%
		Constant	48	1.000	.0000	0.0%
	9	UUrea	60	310.365	82.3237	26.5%

		Constant	60	1.000	.0000	0.0%
	12	UUrea	96	240.149	68.9396	28.7%
		Constant	96	1.000	.0000	0.0%
	Total	UUrea	204	280.974	88.0558	31.3%
		Constant	204	1.000	.0000	0.0%
54	6	UUrea	48	149.271	51.6756	34.6%
		Constant	48	1.000	.0000	0.0%
	9	UUrea	59	159.296	53.1183	33.3%
		Constant	59	1.000	.0000	0.0%
	12	UUrea	96	152.150	34.0160	22.4%
		Constant	96	1.000	.0000	0.0%
	Total	UUrea	203	153.546	44.6158	29.1%
		Constant	203	1.000	.0000	0.0%
55	6	UUrea	47	333.149	92.2271	27.7%
		Constant	47	1.000	.0000	0.0%
	9	UUrea	59	324.260	86.0959	26.6%
		Constant	59	1.000	.0000	0.0%
	12	UUrea	95	290.895	68.4053	23.5%
		Constant	95	1.000	.0000	0.0%
	Total	UUrea	201	310.569	81.6346	26.3%
		Constant	201	1.000	.0000	0.0%
56	6	UUrea	48	165.390	41.8151	25.3%
		Constant	48	1.000	.0000	0.0%
	9	UUrea	60	183.317	45.0211	24.6%
		Constant	60	1.000	.0000	0.0%
	12	UUrea	96	149.295	30.1054	20.2%
		Constant	96	1.000	.0000	0.0%
	Total	UUrea	204	163.089	40.3762	24.8%
		Constant	204	1.000	.0000	0.0%
Total	6	UUrea	403	217.053	98.5683	45.4%
		Constant	403	1.000	.0000	0.0%
	9	UUrea	498	223.797	90.1594	40.3%
		Constant	498	1.000	.0000	0.0%
	12	UUrea	735	197.499	75.6073	38.3%
		Constant	735	1.000	.0000	0.0%
	Total	UUrea	1636	210.321	86.9852	41.4%
		Constant	1636	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	18090.611
Akaike's Information Criterion (AIC)	18094.611
Hurvich and Tsai's Criterion (AICC)	18094.618
Bozdogan's Criterion (CAIC)	18107.407
Schwarz's Bayesian Criterion (BIC)	18105.407

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.021	123.365	.000
salt	2	1624.089	26.719	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	202.843234	19.596778	9.152	10.351	.000	158.624365	247.062103
[salt=6]	17.658605	3.749483	1624.120	4.710	.000	10.304274	25.012937
[salt=9]	24.443295	3.510437	1624.113	6.963	.000	17.557834	31.328757
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3643.591673	127.864378
Constant [subject = subject] Variance	3786.800148	1795.222035

a. Dependent Variable: UUrea.

\* FIGURE 4F and 4G

\* Effect of salt excretion

```
MIXED two_UK BY UNaV_low_mid_high WITH constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UNaV_low_mid_high | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:08:56
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED two_UK BY UNaV_low_mid_high WITH constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.09

**Descriptive Statistics**

subject	UNaV_low_mid_high	Count	Mean	Standard Deviation	Coefficient of Variation	
11	1.0	two_UK	35	119.126	35.6447	29.9%
		Constant	35	1.000	.0000	0.0%
	2.0	two_UK	34	123.906	24.4447	19.7%
		Constant	34	1.000	.0000	0.0%
	3.0	two_UK	35	108.303	29.5305	27.3%
		Constant	35	1.000	.0000	0.0%
Total	two_UK	104	117.046	30.6870	26.2%	
	Constant	104	1.000	.0000	0.0%	
12	1.0	two_UK	35	128.034	34.6469	27.1%
		Constant	35	1.000	.0000	0.0%
	2.0	two_UK	34	112.829	31.5777	28.0%
		Constant	34	1.000	.0000	0.0%

	3.0	two_UK	35	104.651	33.0706	31.6%
		Constant	35	1.000	.0000	0.0%
	Total	two_UK	104	115.194	34.2400	29.7%
		Constant	104	1.000	.0000	0.0%
15	1.0	two_UK	35	92.200	23.0638	25.0%
		Constant	35	1.000	.0000	0.0%
	2.0	two_UK	34	91.541	18.4450	20.1%
		Constant	34	1.000	.0000	0.0%
	3.0	two_UK	35	83.080	16.1813	19.5%
		Constant	35	1.000	.0000	0.0%
	Total	two_UK	104	88.915	19.7113	22.2%
		Constant	104	1.000	.0000	0.0%
16	1.0	two_UK	35	128.337	34.5224	26.9%
		Constant	35	1.000	.0000	0.0%
	2.0	two_UK	34	136.271	37.2454	27.3%
		Constant	34	1.000	.0000	0.0%
	3.0	two_UK	35	111.080	21.1309	19.0%
		Constant	35	1.000	.0000	0.0%
	Total	two_UK	104	125.123	33.1179	26.5%
		Constant	104	1.000	.0000	0.0%
51	1.0	two_UK	68	78.316	22.8982	29.2%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UK	69	92.722	29.6617	32.0%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UK	68	90.221	23.0290	25.5%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	205	87.113	26.0636	29.9%
		Constant	205	1.000	.0000	0.0%
52	1.0	two_UK	68	66.638	23.4904	35.3%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UK	69	81.371	30.2082	37.1%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UK	67	83.239	22.8314	27.4%
		Constant	67	1.000	.0000	0.0%
	Total	two_UK	204	77.074	26.6941	34.6%
		Constant	204	1.000	.0000	0.0%
53	1.0	two_UK	68	149.853	36.0998	24.1%
		Constant	68	1.000	.0000	0.0%

	2.0	two_UK	69	134.029	37.6700	28.1%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UK	68	138.371	37.0594	26.8%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	205	140.718	37.3748	26.6%
		Constant	205	1.000	.0000	0.0%
54	1.0	two_UK	68	76.213	22.1535	29.1%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UK	69	86.693	25.3958	29.3%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UK	68	87.841	23.6182	26.9%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	205	83.598	24.2238	29.0%
		Constant	205	1.000	.0000	0.0%
55	1.0	two_UK	68	165.903	48.2868	29.1%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UK	69	159.061	48.4849	30.5%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UK	67	151.645	42.6885	28.2%
		Constant	67	1.000	.0000	0.0%
	Total	two_UK	204	158.906	46.7256	29.4%
		Constant	204	1.000	.0000	0.0%
56	1.0	two_UK	68	84.976	24.0090	28.3%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UK	69	86.394	22.5927	26.2%
		Constant	69	1.000	.0000	0.0%
	3.0	two_UK	68	78.556	21.4269	27.3%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	205	83.324	22.8457	27.4%
		Constant	205	1.000	.0000	0.0%
Total	1.0	two_UK	548	107.041	46.8174	43.7%
		Constant	548	1.000	.0000	0.0%
	2.0	two_UK	550	109.042	41.9650	38.5%
		Constant	550	1.000	.0000	0.0%
	3.0	two_UK	546	104.112	38.1931	36.7%
		Constant	546	1.000	.0000	0.0%
	Total	two_UK	1644	106.738	42.4988	39.8%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	16024.001
Akaike's Information Criterion (AIC)	16028.001
Hurvich and Tsai's Criterion (AICC)	16028.008
Bozdogan's Criterion (CAIC)	16040.807
Schwarz's Bayesian Criterion (BIC)	16038.807

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.030	147.563	.000
UNaV_low_mid_high	2	1632.032	3.440	.032

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	105.081599	8.932552	9.307	11.764	.000	84.976050	125.187148
[UNaV_low_mid_high=1.0]	2.887927	1.894235	1632.030	1.525	.128	-.827461	6.603315
[UNaV_low_mid_high=2.0]	4.941607	1.892584	1632.033	2.611	.009	1.229458	8.653756
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	981.342835	34.353552
Constant [subject = subject] Variance	779.286425	369.868444

a. Dependent Variable: two\_UK.

\* Effect of salt intake phase

```
MIXED two_UK BY salt WITH constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0,
  ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=constant | SUBJECT(subject) COVTYPE(VC) .
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:08:56
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED two_UK BY salt WITH constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	two_UK	29	117.697	38.7734	32.9%
		Constant	29	1.000	.0000	0.0%
	9	two_UK	35	118.737	26.0156	21.9%
		Constant	35	1.000	.0000	0.0%
	12	two_UK	40	115.095	28.4755	24.7%
		Constant	40	1.000	.0000	0.0%
Total	two_UK	104	117.046	30.6870	26.2%	
	Constant	104	1.000	.0000	0.0%	
12	6	two_UK	29	131.917	25.9766	19.7%
		Constant	29	1.000	.0000	0.0%
	9	two_UK	35	123.697	31.5873	25.5%
		Constant	35	1.000	.0000	0.0%
	12	two_UK	40	95.630	32.8113	34.3%

		Constant	40	1.000	.0000	0.0%
	Total	two_UK	104	115.194	34.2400	29.7%
		Constant	104	1.000	.0000	0.0%
15	6	two_UK	29	86.297	23.3689	27.1%
		Constant	29	1.000	.0000	0.0%
	9	two_UK	35	88.869	17.0691	19.2%
		Constant	35	1.000	.0000	0.0%
	12	two_UK	40	90.855	19.2639	21.2%
		Constant	40	1.000	.0000	0.0%
	Total	two_UK	104	88.915	19.7113	22.2%
		Constant	104	1.000	.0000	0.0%
16	6	two_UK	29	107.717	18.1400	16.8%
		Constant	29	1.000	.0000	0.0%
	9	two_UK	35	139.543	34.9570	25.1%
		Constant	35	1.000	.0000	0.0%
	12	two_UK	40	125.125	34.3977	27.5%
		Constant	40	1.000	.0000	0.0%
	Total	two_UK	104	125.123	33.1179	26.5%
		Constant	104	1.000	.0000	0.0%
51	6	two_UK	48	73.833	22.9618	31.1%
		Constant	48	1.000	.0000	0.0%
	9	two_UK	60	89.361	22.3121	25.0%
		Constant	60	1.000	.0000	0.0%
	12	two_UK	97	92.295	27.5860	29.9%
		Constant	97	1.000	.0000	0.0%
	Total	two_UK	205	87.113	26.0636	29.9%
		Constant	205	1.000	.0000	0.0%
52	6	two_UK	48	59.217	18.3506	31.0%
		Constant	48	1.000	.0000	0.0%
	9	two_UK	60	78.553	26.8631	34.2%
		Constant	60	1.000	.0000	0.0%
	12	two_UK	96	85.077	26.0896	30.7%
		Constant	96	1.000	.0000	0.0%
	Total	two_UK	204	77.074	26.6941	34.6%
		Constant	204	1.000	.0000	0.0%
53	6	two_UK	48	140.550	38.7428	27.6%
		Constant	48	1.000	.0000	0.0%
	9	two_UK	60	139.210	35.9433	25.8%



		Constant	60	1.000	.0000	0.0%
	12	two_UK	97	141.734	37.9080	26.7%
		Constant	97	1.000	.0000	0.0%
	Total	two_UK	205	140.718	37.3748	26.6%
		Constant	205	1.000	.0000	0.0%
54	6	two_UK	48	71.815	19.5049	27.2%
		Constant	48	1.000	.0000	0.0%
	9	two_UK	60	82.763	21.5402	26.0%
		Constant	60	1.000	.0000	0.0%
	12	two_UK	97	89.944	25.7870	28.7%
		Constant	97	1.000	.0000	0.0%
	Total	two_UK	205	83.598	24.2238	29.0%
		Constant	205	1.000	.0000	0.0%
55	6	two_UK	48	154.000	45.5282	29.6%
		Constant	48	1.000	.0000	0.0%
	9	two_UK	60	159.827	51.0753	32.0%
		Constant	60	1.000	.0000	0.0%
	12	two_UK	96	160.783	44.7599	27.8%
		Constant	96	1.000	.0000	0.0%
	Total	two_UK	204	158.906	46.7256	29.4%
		Constant	204	1.000	.0000	0.0%
56	6	two_UK	48	79.321	20.7977	26.2%
		Constant	48	1.000	.0000	0.0%
	9	two_UK	60	93.270	22.4283	24.0%
		Constant	60	1.000	.0000	0.0%
	12	two_UK	97	79.153	22.3774	28.3%
		Constant	97	1.000	.0000	0.0%
	Total	two_UK	205	83.324	22.8457	27.4%
		Constant	205	1.000	.0000	0.0%
Total	6	two_UK	404	100.605	43.6596	43.4%
		Constant	404	1.000	.0000	0.0%
	9	two_UK	500	110.117	41.7379	37.9%
		Constant	500	1.000	.0000	0.0%
	12	two_UK	740	107.803	42.0756	39.0%
		Constant	740	1.000	.0000	0.0%
	Total	two_UK	1644	106.738	42.4988	39.8%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	16007.490
Akaike's Information Criterion (AIC)	16011.490
Hurvich and Tsai's Criterion (AICC)	16011.497
Bozdogan's Criterion (CAIC)	16024.296
Schwarz's Bayesian Criterion (BIC)	16022.296

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.037	145.754	.000
salt	2	1632.122	11.721	.000

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	109.058474	8.912915	9.205	12.236	.000	88.964315	129.152634
[salt=6]	-7.703255	1.932172	1632.161	-3.987	.000	-11.493052	-3.913457
[salt=9]	1.856213	1.807923	1632.152	1.027	.305	-1.689880	5.402307
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	971.519154	34.009661
Constant [subject = subject]	Variance	780.219759
		370.284678

a. Dependent Variable: two\_UK.

\* Encoding: UTF-8.

\*ONLINE SUPPLEMENTAL STATISTICAL ANALYSIS FIGURE 5

GET

FILE='C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav'.  
DATASET NAME DataSet2 WINDOW=FRONT.

\* FIGURE 5A

\* Effect of Aldosterone Excretion on Fluid Intake

MIXED WaterIntake BY UAldoV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UAldoV\_h\_l\_perdiet | SSTYPE(3)

/METHOD=REML

/PRINT=DESCRIPTIVES SOLUTION

/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:11:48
Comments	
Input	Data
	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset
	DataSet2
	Filter
	<none>
	Weight
	<none>
	Split File
	<none>
	N of Rows in Working Data File
	1646
Missing Value Handling	Definition of Missing
	User-defined missing values are treated as missing.

Cases Used	Statistics are based on all cases with valid data for all variables in the model.	
Syntax	<pre> MIXED WaterIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

[DataSet2] C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	WaterIntake	35	2604.937	399.3817	15.3%
	Constant	35	1.000	.0000	0.0%
	WaterIntake	34	2766.364	365.5193	13.2%
	Constant	34	1.000	.0000	0.0%
	WaterIntake	35	2636.388	383.4806	14.5%
	Constant	35	1.000	.0000	0.0%

	Total	WaterIntake	104	2668.296	385.8569	14.5%
		Constant	104	1.000	.0000	0.0%
12	.0	WaterIntake	35	2612.982	540.3055	20.7%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2744.045	346.1820	12.6%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2706.523	353.1443	13.0%
		Constant	35	1.000	.0000	0.0%
Total	WaterIntake	104	2687.310	423.0759	15.7%	
	Constant	104	1.000	.0000	0.0%	
15	.0	WaterIntake	35	2462.273	399.5084	16.2%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2484.214	369.4884	14.9%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2530.194	343.3760	13.6%
		Constant	35	1.000	.0000	0.0%
Total	WaterIntake	104	2492.304	369.0019	14.8%	
	Constant	104	1.000	.0000	0.0%	
16	.0	WaterIntake	35	2738.597	382.8601	14.0%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2875.127	337.4728	11.7%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2982.704	319.2104	10.7%
		Constant	35	1.000	.0000	0.0%
Total	WaterIntake	104	2865.383	358.7209	12.5%	
	Constant	104	1.000	.0000	0.0%	
51	.0	WaterIntake	68	2626.142	405.5268	15.4%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2663.004	382.1623	14.4%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2695.963	330.9865	12.3%
		Constant	68	1.000	.0000	0.0%
Total	WaterIntake	205	2661.709	373.4804	14.0%	
	Constant	205	1.000	.0000	0.0%	
52	.0	WaterIntake	68	2632.422	538.8772	20.5%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2679.694	449.0947	16.8%
		Constant	69	1.000	.0000	0.0%

	2.0	WaterIntake	68	2750.510	343.5041	12.5%
		Constant	68	1.000	.0000	0.0%
Total		WaterIntake	205	2687.504	451.3423	16.8%
		Constant	205	1.000	.0000	0.0%
53	.0	WaterIntake	68	2361.674	371.4852	15.7%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2538.486	400.9752	15.8%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2523.231	400.5087	15.9%
		Constant	68	1.000	.0000	0.0%
Total	WaterIntake	205	2474.776	397.5172	16.1%	
	Constant	205	1.000	.0000	0.0%	
54	.0	WaterIntake	68	2856.627	678.7662	23.8%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2898.266	735.9309	25.4%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2933.455	635.6292	21.7%
		Constant	68	1.000	.0000	0.0%
Total	WaterIntake	205	2896.127	682.2961	23.6%	
	Constant	205	1.000	.0000	0.0%	
55	.0	WaterIntake	68	1983.969	550.4942	27.7%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2007.160	452.7203	22.6%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	1970.080	498.2199	25.3%
		Constant	68	1.000	.0000	0.0%
Total	WaterIntake	205	1987.168	499.6077	25.1%	
	Constant	205	1.000	.0000	0.0%	
56	.0	WaterIntake	68	2710.731	422.2677	15.6%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2771.629	414.2197	14.9%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2836.771	337.4423	11.9%
		Constant	68	1.000	.0000	0.0%
Total	WaterIntake	205	2773.037	394.7171	14.2%	
	Constant	205	1.000	.0000	0.0%	
Total	.0	WaterIntake	548	2548.037	546.8208	21.5%
		Constant	548	1.000	.0000	0.0%

1.0	WaterIntake	550	2623.800	525.1389	20.0%
	Constant	550	1.000	.0000	0.0%
2.0	WaterIntake	548	2642.763	505.3590	19.1%
	Constant	548	1.000	.0000	0.0%
Total	WaterIntake	1646	2604.889	527.3144	20.2%
	Constant	1646	1.000	.0000	0.0%

#### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

#### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	24827.878
Akaike's Information Criterion (AIC)	24831.878
Hurvich and Tsai's Criterion (AICC)	24831.885
Bozdogan's Criterion (CAIC)	24844.686
Schwarz's Bayesian Criterion (BIC)	24842.686

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.



## Fixed Effects

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.067	1002.741	.000
UAldoV_h_l_perdiet	2	1634.071	6.693	.001

a. Dependent Variable: WaterIntake.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2656.674232	84.214319	9.746	31.547	.000	2468.367535	2844.980929
[UAldoV_h_l_perdiet=.0]	-94.726150	27.484021	1634.068	-3.447	.001	-148.633771	-40.818529
[UAldoV_h_l_perdiet=1.0]	-18.173270	27.459821	1634.072	-.662	.508	-72.033423	35.686884
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	206971.768800	7240.875831
Constant [subject = subject] Variance	67007.817620	32125.895190

a. Dependent Variable: WaterIntake.

\* Effect of Aldosterone Excretion on Urine Volume

MIXED Uvol BY UAldoV\_h\_l\_perdiet WITH Constant

```

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED Uvol BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Uvol	35	2042.857	434.0546	21.2%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	2013.235	428.4059	21.3%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	1785.000	425.2525	23.8%
		Constant	35	1.000	.0000	0.0%
Total	Uvol	104	1946.394	440.6535	22.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	Uvol	35	1656.057	413.3614	25.0%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1581.324	394.1260	24.9%
		Constant	34	1.000	.0000	0.0%

	2.0	Uvol	35	1595.114	324.7695	20.4%
		Constant	35	1.000	.0000	0.0%
Total		Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	Uvol	35	2351.143	423.6954	18.0%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	2091.176	417.8935	20.0%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2206.143	479.7856	21.7%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	.0	Uvol	35	1844.143	307.0363	16.6%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1735.294	464.2393	26.8%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	1482.714	400.7554	27.0%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	.0	Uvol	68	2188.609	509.2211	23.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1981.232	469.1360	23.7%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1887.906	492.3650	26.1%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	.0	Uvol	67	2253.899	468.3937	20.8%
		Constant	67	1.000	.0000	0.0%
	1.0	Uvol	69	2015.758	421.7096	20.9%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1822.566	410.7245	22.5%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	204	2029.574	466.4834	23.0%
		Constant	204	1.000	.0000	0.0%
53	.0	Uvol	68	1313.744	342.0549	26.0%
		Constant	68	1.000	.0000	0.0%

	1.0	Uvol	69	1392.301	397.9870	28.6%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1267.975	337.3940	26.6%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	.0	Uvol	68	2015.982	420.7232	20.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	2048.617	396.2795	19.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1866.587	464.4225	24.9%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	.0	Uvol	67	1304.690	381.7299	29.3%
		Constant	67	1.000	.0000	0.0%
	1.0	Uvol	69	1229.191	355.2615	28.9%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1117.046	348.1493	31.2%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	.0	Uvol	68	1864.606	429.1508	23.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1806.620	332.1448	18.4%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1639.962	389.3158	23.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	.0	Uvol	546	1862.202	552.6479	29.7%
		Constant	546	1.000	.0000	0.0%
	1.0	Uvol	550	1772.730	501.6096	28.3%
		Constant	550	1.000	.0000	0.0%
	2.0	Uvol	548	1642.980	509.0607	31.0%
		Constant	548	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24500.173
Akaike's Information Criterion (AIC)	24504.173
Hurvich and Tsai's Criterion (AICC)	24504.180
Bozdogan's Criterion (CAIC)	24516.979
Schwarz's Bayesian Criterion (BIC)	24514.979

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.018	303.058	.000
UAldoV_h_l_perdiet	2	1632.020	38.523	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1663.305702	103.256734	9.382	16.108	.000	1431.163744	1895.447660
[UAldoV_h_l_perdiet=.0]	218.729124	25.083168	1632.018	8.720	.000	169.530532	267.927717
[UAldoV_h_l_perdiet=1.0]	130.904296	25.038087	1632.020	5.228	.000	81.794125	180.014467
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	172074.980400	6023.796084
Constant [subject = subject] Variance	103365.266200	49226.877720

a. Dependent Variable: Uvol.

\* Effect of Aldosterone Excretion on Water Balance Gap

```
MIXED Water_Balance_Gap BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED Water_Balance_Gap BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.07

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	35	562.080	579.7575	103.1%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	753.129	560.7683	74.5%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	851.388	537.1157	63.1%
		Constant	35	1.000	.0000	0.0%
Total	Water_Balance_GAP	104	721.901	567.1254	78.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	35	956.925	737.3253	77.1%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	1162.721	494.9852	42.6%
		Constant	34	1.000	.0000	0.0%

	2.0	Water_Balance_GAP	35	1111.409	409.1066	36.8%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	1076.194	566.5065	52.6%
		Constant	104	1.000	.0000	0.0%
15	.0	Water_Balance_GAP	35	111.130	565.2259	508.6%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	393.037	467.4736	118.9%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	324.051	499.2416	154.1%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	274.948	521.8144	189.8%
		Constant	104	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	35	894.454	373.1935	41.7%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	1139.833	346.0007	30.4%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	1499.989	431.3600	28.8%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	1178.460	456.9264	38.8%
		Constant	104	1.000	.0000	0.0%
51	.0	Water_Balance_GAP	68	437.533	743.3704	169.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	681.772	654.8244	96.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	808.057	642.3085	79.5%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	642.646	695.4008	108.2%
		Constant	205	1.000	.0000	0.0%
52	.0	Water_Balance_GAP	68	411.669	712.8377	173.2%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	663.936	661.0918	99.6%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	927.943	503.6122	54.3%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	667.830	663.5499	99.4%
		Constant	205	1.000	.0000	0.0%
53	.0	Water_Balance_GAP	68	1047.930	458.0846	43.7%
		Constant	68	1.000	.0000	0.0%

	1.0	Water_Balance_GAP	69	1146.185	527.2879	46.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	1255.256	482.8737	38.5%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1149.773	495.3241	43.1%
		Constant	205	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	68	840.645	663.3227	78.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	849.649	754.0846	88.8%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	1066.869	675.9934	63.4%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	918.716	703.6338	76.6%
		Constant	205	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	68	698.465	535.2468	76.6%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	777.969	554.3180	71.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	853.034	558.8792	65.5%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	776.497	550.5289	70.9%
		Constant	205	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	68	846.125	648.8676	76.7%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	965.009	538.1029	55.8%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	1196.810	569.8346	47.6%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1002.464	602.2082	60.1%
		Constant	205	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	548	692.631	669.6547	96.7%
		Constant	548	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	550	851.070	621.3038	73.0%
		Constant	550	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	548	999.783	606.9382	60.7%
		Constant	548	1.000	.0000	0.0%
	Total	Water_Balance_GAP	1646	847.832	645.1024	76.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	25668.230
Akaike's Information Criterion (AIC)	25672.230
Hurvich and Tsai's Criterion (AICC)	25672.238
Bozdogan's Criterion (CAIC)	25685.039
Schwarz's Bayesian Criterion (BIC)	25683.039

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.881	91.569	.000
UAldoV_h_l_perdiet	2	1633.886	37.375	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	993.261212	90.263842	9.873	11.004	.000	791.789605	1194.732818
[UAldoV_h_l_perdiet=.0]	-307.152464	35.531333	1633.881	-8.645	.000	-376.844222	-237.460705
[UAldoV_h_l_perdiet=1.0]	-149.083656	35.500035	1633.888	-4.200	.000	-218.714026	-79.453285
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	345918.316500	12102.589130
Constant [subject = subject] Variance	74938.783650	36666.847520

a. Dependent Variable: Water\_Balance\_GAP.

\* Effect of Aldosterone Excretion on Body Weight

```
MIXED bodyweight BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED bodyweight BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	bodyweight	35	70.806	1.4707	2.1%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	71.000	1.0899	1.5%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	70.846	1.3446	1.9%
		Constant	35	1.000	.0000	0.0%
Total	bodyweight	104	70.883	1.3032	1.8%	
	Constant	104	1.000	.0000	0.0%	
12	.0	bodyweight	35	85.714	2.5887	3.0%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	85.691	2.6252	3.1%
		Constant	34	1.000	.0000	0.0%

	2.0	bodyweight	35	85.874	2.5507	3.0%
		Constant	35	1.000	.0000	0.0%
Total		bodyweight	104	85.761	2.5641	3.0%
		Constant	104	1.000	.0000	0.0%
15	.0	bodyweight	35	66.623	.3889	0.6%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	66.521	.5558	0.8%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	66.677	.5364	0.8%
		Constant	35	1.000	.0000	0.0%
	Total	bodyweight	104	66.608	.4981	0.7%
		Constant	104	1.000	.0000	0.0%
16	.0	bodyweight	35	84.877	1.4951	1.8%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	84.779	1.1430	1.3%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	34	85.171	1.1345	1.3%
		Constant	34	1.000	.0000	0.0%
	Total	bodyweight	103	84.942	1.2696	1.5%
		Constant	103	1.000	.0000	0.0%
51	.0	bodyweight	67	84.107	.8305	1.0%
		Constant	67	1.000	.0000	0.0%
	1.0	bodyweight	69	84.170	.9558	1.1%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	67	84.019	.6968	0.8%
		Constant	67	1.000	.0000	0.0%
	Total	bodyweight	203	84.100	.8339	1.0%
		Constant	203	1.000	.0000	0.0%
52	.0	bodyweight	65	94.037	2.4310	2.6%
		Constant	65	1.000	.0000	0.0%
	1.0	bodyweight	67	95.903	2.9315	3.1%
		Constant	67	1.000	.0000	0.0%
	2.0	bodyweight	66	96.500	2.5943	2.7%
		Constant	66	1.000	.0000	0.0%
	Total	bodyweight	198	95.489	2.8489	3.0%
		Constant	198	1.000	.0000	0.0%
53	.0	bodyweight	68	80.035	.7928	1.0%
		Constant	68	1.000	.0000	0.0%



	1.0	bodyweight	69	79.670	1.2578	1.6%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	79.879	1.1236	1.4%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	79.860	1.0822	1.4%
		Constant	205	1.000	.0000	0.0%
54	.0	bodyweight	67	84.775	1.7864	2.1%
		Constant	67	1.000	.0000	0.0%
	1.0	bodyweight	69	84.600	1.8480	2.2%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	84.254	1.8355	2.2%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	204	84.542	1.8276	2.2%
		Constant	204	1.000	.0000	0.0%
55	.0	bodyweight	68	81.637	1.0528	1.3%
		Constant	68	1.000	.0000	0.0%
	1.0	bodyweight	69	81.779	.9178	1.1%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	81.793	1.0970	1.3%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	81.736	1.0223	1.3%
		Constant	205	1.000	.0000	0.0%
56	.0	bodyweight	67	71.446	1.8008	2.5%
		Constant	67	1.000	.0000	0.0%
	1.0	bodyweight	68	72.228	1.8609	2.6%
		Constant	68	1.000	.0000	0.0%
	2.0	bodyweight	66	72.686	1.5624	2.1%
		Constant	66	1.000	.0000	0.0%
	Total	bodyweight	201	72.118	1.8126	2.5%
		Constant	201	1.000	.0000	0.0%
Total	.0	bodyweight	542	81.160	7.7346	9.5%
		Constant	542	1.000	.0000	0.0%
	1.0	bodyweight	547	81.524	8.0127	9.8%
		Constant	547	1.000	.0000	0.0%
	2.0	bodyweight	542	81.611	8.0709	9.9%
		Constant	542	1.000	.0000	0.0%
	Total	bodyweight	1631	81.432	7.9385	9.7%
		Constant	1631	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6385.666
Akaike's Information Criterion (AIC)	6389.666
Hurvich and Tsai's Criterion (AICC)	6389.674
Bozdogan's Criterion (CAIC)	6402.456
Schwarz's Bayesian Criterion (BIC)	6400.456

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.000	887.485	.000
UAldoV_h_l_perdiet	2	1619.000	8.463	.000

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	80.783818	2.706318	9.008	29.850	.000	74.662538	86.905099
[UAldoV_h_l_perdiet=.0]	-.408741	.101515	1619.000	-4.026	.000	-.607856	-.209625
[UAldoV_h_l_perdiet=1.0]	-.130252	.101285	1619.000	-1.286	.199	-.328916	.068413
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2.792696	.098156
Constant [subject = subject] Variance	73.188186	34.510938

a. Dependent Variable: bodyweight.

\*Effect of Aldosterone Excretion on Urine Volume (for online supplemental calculations)

```
MIXED UVol BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UVol BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

**Descriptive Statistics**

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Uvol	35	2042.857	434.0546	21.2%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	2013.235	428.4059	21.3%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	1785.000	425.2525	23.8%
		Constant	35	1.000	.0000	0.0%
Total	Uvol	104	1946.394	440.6535	22.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	Uvol	35	1656.057	413.3614	25.0%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1581.324	394.1260	24.9%
		Constant	34	1.000	.0000	0.0%

	2.0	Uvol	35	1595.114	324.7695	20.4%
		Constant	35	1.000	.0000	0.0%
Total		Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	Uvol	35	2351.143	423.6954	18.0%
		Constant	35	1.000	.0000	0.0%
1.0		Uvol	34	2091.176	417.8935	20.0%
		Constant	34	1.000	.0000	0.0%
2.0		Uvol	35	2206.143	479.7856	21.7%
		Constant	35	1.000	.0000	0.0%
Total		Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	.0	Uvol	35	1844.143	307.0363	16.6%
		Constant	35	1.000	.0000	0.0%
1.0		Uvol	34	1735.294	464.2393	26.8%
		Constant	34	1.000	.0000	0.0%
2.0		Uvol	35	1482.714	400.7554	27.0%
		Constant	35	1.000	.0000	0.0%
Total		Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	.0	Uvol	68	2188.609	509.2211	23.3%
		Constant	68	1.000	.0000	0.0%
1.0		Uvol	69	1981.232	469.1360	23.7%
		Constant	69	1.000	.0000	0.0%
2.0		Uvol	68	1887.906	492.3650	26.1%
		Constant	68	1.000	.0000	0.0%
Total		Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	.0	Uvol	67	2253.899	468.3937	20.8%
		Constant	67	1.000	.0000	0.0%
1.0		Uvol	69	2015.758	421.7096	20.9%
		Constant	69	1.000	.0000	0.0%
2.0		Uvol	68	1822.566	410.7245	22.5%
		Constant	68	1.000	.0000	0.0%
Total		Uvol	204	2029.574	466.4834	23.0%
		Constant	204	1.000	.0000	0.0%
53	.0	Uvol	68	1313.744	342.0549	26.0%
		Constant	68	1.000	.0000	0.0%

	1.0	Uvol	69	1392.301	397.9870	28.6%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1267.975	337.3940	26.6%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	.0	Uvol	68	2015.982	420.7232	20.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	2048.617	396.2795	19.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1866.587	464.4225	24.9%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	.0	Uvol	67	1304.690	381.7299	29.3%
		Constant	67	1.000	.0000	0.0%
	1.0	Uvol	69	1229.191	355.2615	28.9%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1117.046	348.1493	31.2%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	.0	Uvol	68	1864.606	429.1508	23.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1806.620	332.1448	18.4%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1639.962	389.3158	23.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	.0	Uvol	546	1862.202	552.6479	29.7%
		Constant	546	1.000	.0000	0.0%
	1.0	Uvol	550	1772.730	501.6096	28.3%
		Constant	550	1.000	.0000	0.0%
	2.0	Uvol	548	1642.980	509.0607	31.0%
		Constant	548	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24500.173
Akaike's Information Criterion (AIC)	24504.173
Hurvich and Tsai's Criterion (AICC)	24504.180
Bozdogan's Criterion (CAIC)	24516.979
Schwarz's Bayesian Criterion (BIC)	24514.979

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.018	303.058	.000
UAldoV_h_l_perdiet	2	1632.020	38.523	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1663.305702	103.256734	9.382	16.108	.000	1431.163744	1895.447660
[UAldoV_h_l_perdiet=.0]	218.729124	25.083168	1632.018	8.720	.000	169.530532	267.927717
[UAldoV_h_l_perdiet=1.0]	130.904296	25.038087	1632.020	5.228	.000	81.794125	180.014467
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	172074.980400	6023.796084
Constant [subject = subject] Variance	103365.266200	49226.877720

a. Dependent Variable: Uvol.

\*Effect of Aldosterone Excretion on Urine Osmolyte Excretion (for online supplemental calculations)

```
MIXED @2Na2KUreaV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED @2Na2KUreaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	@2Na2KUreaV	35	917.905	178.6761	19.5%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	929.072	175.6389	18.9%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	918.894	168.6188	18.4%
		Constant	35	1.000	.0000	0.0%
Total	@2Na2KUreaV	104	921.889	172.7222	18.7%	
	Constant	104	1.000	.0000	0.0%	
12	.0	@2Na2KUreaV	35	919.397	146.2868	15.9%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	898.045	119.6986	13.3%
		Constant	34	1.000	.0000	0.0%

	2.0	@2Na2KUreaV	35	950.903	137.8954	14.5%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	923.020	135.6682	14.7%
		Constant	104	1.000	.0000	0.0%
15	.0	@2Na2KUreaV	35	884.435	140.2292	15.9%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	857.332	128.7251	15.0%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	855.103	106.8455	12.5%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	865.703	125.4946	14.5%
		Constant	104	1.000	.0000	0.0%
16	.0	@2Na2KUreaV	35	943.934	136.9204	14.5%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	919.141	135.6684	14.8%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	870.275	103.7202	11.9%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	911.040	128.8045	14.1%
		Constant	104	1.000	.0000	0.0%
51	.0	@2Na2KUreaV	68	825.043	164.2520	19.9%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	762.661	164.6158	21.6%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	729.928	153.3873	21.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	772.496	164.8568	21.3%
		Constant	205	1.000	.0000	0.0%
52	.0	@2Na2KUreaV	68	671.847	136.9274	20.4%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	715.585	157.0362	21.9%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	721.664	151.9040	21.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	703.093	149.8319	21.3%
		Constant	205	1.000	.0000	0.0%
53	.0	@2Na2KUreaV	68	845.702	140.7043	16.6%
		Constant	68	1.000	.0000	0.0%

	1.0	@2Na2KUreaV	69	816.861	118.0375	14.5%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	797.495	132.3247	16.6%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	820.004	131.4899	16.0%
		Constant	205	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	68	714.278	128.6334	18.0%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	749.102	138.6868	18.5%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	711.730	157.4522	22.1%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	725.154	142.4129	19.6%
		Constant	205	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	68	796.521	168.1077	21.1%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	837.450	146.8004	17.5%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	821.213	194.3440	23.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	818.487	170.7473	20.9%
		Constant	205	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	68	706.860	124.7625	17.7%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	686.756	146.3607	21.3%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	685.201	123.2779	18.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	692.909	131.6873	19.0%
		Constant	205	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	548	799.992	170.5255	21.3%
		Constant	548	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	550	795.896	163.0109	20.5%
		Constant	550	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	548	783.947	168.3900	21.5%
		Constant	548	1.000	.0000	0.0%
	Total	@2Na2KUreaV	1646	793.281	167.3701	21.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	21125.096
Akaike's Information Criterion (AIC)	21129.096
Hurvich and Tsai's Criterion (AICC)	21129.104
Bozdogan's Criterion (CAIC)	21141.905
Schwarz's Bayesian Criterion (BIC)	21139.905

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.981	828.764	.000
UAldoV_h_l_perdiet	2	1633.984	1.846	.158

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	805.188105	28.769706	9.582	27.987	.000	740.703878	869.672332
[UAldoV_h_l_perdiet=.0]	16.044888	8.903714	1633.981	1.802	.072	-1.419006	33.508783
[UAldoV_h_l_perdiet=1.0]	13.154183	8.895874	1633.985	1.479	.139	-4.294335	30.602701
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	21721.656120	759.948896
Constant [subject = subject] Variance	7866.287651	3781.347651

a. Dependent Variable: @2Na2KUreaV.

\*Effect of Aldosterone Excretion on Urine Osmolality (for online supplemental calculations)

```
MIXED UOsmo BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED UOsmo BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.06

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UOsmo	35	436.800	89.1399	20.4%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	450.265	85.2385	18.9%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	520.571	132.8868	25.5%
		Constant	35	1.000	.0000	0.0%
Total	UOsmo	104	469.394	110.2346	23.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	UOsmo	35	551.029	139.6202	25.3%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	560.618	129.9995	23.2%
		Constant	34	1.000	.0000	0.0%

	2.0	UOsmo	35	595.086	129.5214	21.8%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	568.990	133.2335	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	UOsmo	35	406.286	78.8851	19.4%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	430.529	76.9416	17.9%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	410.457	85.2630	20.8%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	415.615	80.3905	19.3%
		Constant	104	1.000	.0000	0.0%
16	.0	UOsmo	35	497.714	101.9500	20.5%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	527.324	129.6061	24.6%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	601.771	176.4903	29.3%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	542.413	145.0733	26.7%
		Constant	104	1.000	.0000	0.0%
51	.0	UOsmo	68	373.265	105.0823	28.2%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	385.971	103.2585	26.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	389.221	94.0360	24.2%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	382.834	100.6600	26.3%
		Constant	205	1.000	.0000	0.0%
52	.0	UOsmo	68	310.978	93.5186	30.1%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	362.899	97.9386	27.0%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	403.632	108.3245	26.8%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	359.188	106.5899	29.7%
		Constant	205	1.000	.0000	0.0%
53	.0	UOsmo	68	648.191	157.8445	24.4%
		Constant	68	1.000	.0000	0.0%

	1.0	UOsмо	69	604.174	161.8589	26.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsмо	68	638.603	146.6584	23.0%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	630.195	156.0136	24.8%
		Constant	205	1.000	.0000	0.0%
54	.0	UOsмо	68	378.956	92.8665	24.5%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsмо	69	374.145	87.0313	23.3%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsмо	68	414.029	107.9231	26.1%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	388.971	97.4666	25.1%
		Constant	205	1.000	.0000	0.0%
55	.0	UOsмо	68	649.713	158.3643	24.4%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsмо	69	717.420	170.6293	23.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsмо	68	784.588	166.0104	21.2%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	717.241	173.2769	24.2%
		Constant	205	1.000	.0000	0.0%
56	.0	UOsмо	68	402.044	86.0086	21.4%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsмо	69	397.174	74.6429	18.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsмо	68	439.044	87.9368	20.0%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	412.678	84.7183	20.5%
		Constant	205	1.000	.0000	0.0%
Total	.0	UOsмо	548	463.701	166.9781	36.0%
		Constant	548	1.000	.0000	0.0%
	1.0	UOsмо	550	478.218	169.3466	35.4%
		Constant	550	1.000	.0000	0.0%
	2.0	UOsмо	548	516.745	182.8946	35.4%
		Constant	548	1.000	.0000	0.0%
	Total	UOsмо	1646	486.211	174.5454	35.9%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20488.954
Akaike's Information Criterion (AIC)	20492.954
Hurvich and Tsai's Criterion (AICC)	20492.962
Bozdogan's Criterion (CAIC)	20505.763
Schwarz's Bayesian Criterion (BIC)	20503.763

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.024	163.659	.000
UAldoV_h_l_perdiet	2	1634.025	28.036	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	519.202132	38.435268	9.246	13.508	.000	432.606942	605.797323
[UAldoV_h_l_perdiet=.0]	-53.043796	7.316700	1634.024	-7.250	.000	-67.394894	-38.692697
[UAldoV_h_l_perdiet=1.0]	-38.386876	7.310261	1634.026	-5.251	.000	-52.725345	-24.048407
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	14668.343400	513.176544
Constant [subject = subject] Variance	14495.247640	6870.592142

a. Dependent Variable: UOsmo.

\* FIGURE 5B

\* Effect of Cortisone Excretion on Fluid Intake

```
MIXED WaterIntake BY UFEV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED WaterIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	WaterIntake	35	2554.982	366.2643	14.3%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2745.643	416.5211	15.2%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2706.471	357.4892	13.2%
		Constant	35	1.000	.0000	0.0%
Total	WaterIntake	104	2668.296	385.8569	14.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	WaterIntake	35	2700.631	394.6250	14.6%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2639.700	397.7300	15.1%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2720.238	478.9709	17.6%

		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2687.310	423.0759	15.7%
		Constant	104	1.000	.0000	0.0%
15	.0	WaterIntake	35	2519.989	381.5091	15.1%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2454.219	357.0692	14.5%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2501.616	375.3208	15.0%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2492.304	369.0019	14.8%
		Constant	104	1.000	.0000	0.0%
16	.0	WaterIntake	35	2859.049	394.4850	13.8%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2821.171	324.3075	11.5%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2914.665	357.2537	12.3%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2865.383	358.7209	12.5%
		Constant	104	1.000	.0000	0.0%
51	.0	WaterIntake	68	2698.147	315.6463	11.7%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2656.204	441.8934	16.6%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2630.858	352.9119	13.4%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2661.709	373.4804	14.0%
		Constant	205	1.000	.0000	0.0%
52	.0	WaterIntake	68	2705.800	421.7865	15.6%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2727.523	358.8024	13.2%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2628.599	553.3316	21.1%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2687.504	451.3423	16.8%
		Constant	205	1.000	.0000	0.0%
53	.0	WaterIntake	68	2409.971	424.7703	17.6%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2494.716	425.6144	17.1%



		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2519.349	331.9125	13.2%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2474.776	397.5172	16.1%
		Constant	205	1.000	.0000	0.0%
54	.0	WaterIntake	68	2897.106	639.2335	22.1%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2897.822	670.2557	23.1%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2893.427	743.5387	25.7%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2896.127	682.2961	23.6%
		Constant	205	1.000	.0000	0.0%
55	.0	WaterIntake	68	1938.361	400.5121	20.7%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	1956.806	546.0784	27.9%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2066.782	535.8521	25.9%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	1987.168	499.6077	25.1%
		Constant	205	1.000	.0000	0.0%
56	.0	WaterIntake	68	2841.571	327.1821	11.5%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2738.102	432.3474	15.8%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2739.952	412.8968	15.1%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2773.037	394.7171	14.2%
		Constant	205	1.000	.0000	0.0%
Total	.0	WaterIntake	548	2601.456	510.7332	19.6%
		Constant	548	1.000	.0000	0.0%
	1.0	WaterIntake	550	2599.956	536.0554	20.6%
		Constant	550	1.000	.0000	0.0%
	2.0	WaterIntake	548	2613.274	535.5870	20.5%
		Constant	548	1.000	.0000	0.0%
	Total	WaterIntake	1646	2604.889	527.3144	20.2%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24840.949
Akaike's Information Criterion (AIC)	24844.949
Hurvich and Tsai's Criterion (AICC)	24844.956
Bozdogan's Criterion (CAIC)	24857.758
Schwarz's Bayesian Criterion (BIC)	24855.758

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.068	1002.925	.000
UFEV_h_l_perdiet	2	1634.071	.130	.878

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2627.134387	84.218108	9.752	31.194	.000	2438.836223	2815.432551
[UFEV_h_l_perdiet=.0]	-11.818558	27.594189	1634.068	-.428	.668	-65.942264	42.305147
[UFEV_h_l_perdiet=1.0]	-12.531911	27.569891	1634.073	-.455	.649	-66.607959	41.544137
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	208634.357200	7299.039923
Constant [subject = subject] Variance	66982.795150	32118.355430

a. Dependent Variable: WaterIntake.

\* Effect of Cortisone Excretion on Urine Volume

```
MIXED Uvol BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED Uvol BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Uvol	35	1655.714	405.6171	24.5%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1939.118	323.9376	16.7%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2244.143	378.9042	16.9%
		Constant	35	1.000	.0000	0.0%
Total	Uvol	104	1946.394	440.6535	22.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	Uvol	35	1379.343	288.4937	20.9%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1649.324	252.0536	15.3%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	1805.771	435.5284	24.1%

		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	Uvol	35	2039.286	470.2129	23.1%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	2163.088	410.7790	19.0%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2448.143	372.0138	15.2%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	.0	Uvol	35	1350.571	307.7952	22.8%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1686.618	315.1688	18.7%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2023.571	332.4078	16.4%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	.0	Uvol	68	1609.190	368.6891	22.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	2052.686	376.0201	18.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	2394.821	422.8577	17.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	.0	Uvol	68	1641.132	341.8793	20.8%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	2024.958	346.9955	17.1%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	67	2428.566	330.9240	13.6%
		Constant	67	1.000	.0000	0.0%
	Total	Uvol	204	2029.574	466.4834	23.0%
		Constant	204	1.000	.0000	0.0%
53	.0	Uvol	68	1006.918	201.4104	20.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1349.786	287.6003	21.3%

		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1617.943	291.1318	18.0%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	.0	Uvol	68	1663.397	388.2356	23.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1991.357	308.4031	15.5%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	2277.275	363.9758	16.0%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	.0	Uvol	68	913.625	226.8684	24.8%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	68	1181.190	263.1330	22.3%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	68	1555.001	281.8826	18.1%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	.0	Uvol	68	1501.040	290.4314	19.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1772.152	336.2516	19.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	2038.503	360.0474	17.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	.0	Uvol	548	1444.658	453.6101	31.4%
		Constant	548	1.000	.0000	0.0%
	1.0	Uvol	549	1762.099	453.4754	25.7%
		Constant	549	1.000	.0000	0.0%
	2.0	Uvol	547	2071.393	482.0170	23.3%
		Constant	547	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	23831.139
Akaike's Information Criterion (AIC)	23835.139
Hurvich and Tsai's Criterion (AICC)	23835.147
Bozdogan's Criterion (CAIC)	23847.946
Schwarz's Bayesian Criterion (BIC)	23845.946

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.012	302.998	.000
UFEV_h_l_perdiet	2	1632.013	471.544	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2092.263364	102.935203	9.253	20.326	.000	1860.374554	2324.152174
[UFEV_h_l_perdiet=.0]	-627.228694	20.425072	1632.012	-30.709	.000	-667.290811	-587.166577
[UFEV_h_l_perdiet=1.0]	-309.612141	20.416431	1632.014	-15.165	.000	-349.657310	-269.566972
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	114203.462700	3997.906295
Constant [subject = subject] Variance	103793.095800	49260.581860

a. Dependent Variable: Uvol.

\* Effect of Cortisone Excretion on Water Balance Gap

```
MIXED Water_Balance_Gap BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED Water_Balance_Gap BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.06

**Descriptive Statistics**

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	35	899.268	571.4514	63.5%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	806.525	564.8227	70.0%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	462.329	478.8006	103.6%
		Constant	35	1.000	.0000	0.0%
Total	Water_Balance_GAP	104	721.901	567.1254	78.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	35	1321.288	448.2668	33.9%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	990.376	458.6918	46.3%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	914.466	686.2558	75.0%

		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	1076.194	566.5065	52.6%
		Constant	104	1.000	.0000	0.0%
15	.0	Water_Balance_GAP	35	480.703	490.5514	102.0%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	291.131	588.6552	202.2%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	53.473	391.8917	732.9%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	274.948	521.8144	189.8%
		Constant	104	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	35	1508.478	461.9995	30.6%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	1134.553	300.8930	26.5%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	891.094	363.4798	40.8%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	1178.460	456.9264	38.8%
		Constant	104	1.000	.0000	0.0%
51	.0	Water_Balance_GAP	68	1088.957	544.6950	50.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	603.519	653.5269	108.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	236.037	608.8456	257.9%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	642.646	695.4008	108.2%
		Constant	205	1.000	.0000	0.0%
52	.0	Water_Balance_GAP	68	1064.668	557.2889	52.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	702.565	533.6345	76.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	235.747	624.8745	265.1%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	667.830	663.5499	99.4%
		Constant	205	1.000	.0000	0.0%
53	.0	Water_Balance_GAP	68	1403.053	462.7743	33.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	1144.930	484.9058	42.4%

		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	901.406	408.0212	45.3%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1149.773	495.3241	43.1%
		Constant	205	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	68	1233.709	648.0967	52.5%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	906.465	683.1239	75.4%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	616.152	648.1129	105.2%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	918.716	703.6338	76.6%
		Constant	205	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	68	1024.736	426.1809	41.6%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	792.734	546.9158	69.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	511.781	551.0636	107.7%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	776.497	550.5289	70.9%
		Constant	205	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	68	1340.531	482.2898	36.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	965.950	570.7091	59.1%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	701.449	575.9325	82.1%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1002.464	602.2082	60.1%
		Constant	205	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	548	1156.798	568.5190	49.1%
		Constant	548	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	550	841.060	600.0010	71.3%
		Constant	550	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	548	545.662	616.3026	112.9%
		Constant	548	1.000	.0000	0.0%
	Total	Water_Balance_GAP	1646	847.832	645.1024	76.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	25430.545
Akaike's Information Criterion (AIC)	25434.545
Hurvich and Tsai's Criterion (AICC)	25434.552
Bozdogan's Criterion (CAIC)	25447.354
Schwarz's Bayesian Criterion (BIC)	25445.354

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.897	91.392	.000
UFEV_h_l_perdiet	2	1633.901	171.149	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	539.087627	90.027465	9.752	5.988	.000	337.799540	740.375713
[UFEV_h_l_perdiet=.0]	611.136369	33.038674	1633.897	18.498	.000	546.333754	675.938983
[UFEV_h_l_perdiet=1.0]	295.025576	33.009576	1633.903	8.938	.000	230.280034	359.771118
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	299085.784400	10464.015390
Constant [subject = subject] Variance	75396.668550	36702.105740

a. Dependent Variable: Water\_Balance\_GAP.

\* Effect of Cortisone Excretion on Body Weight

```
MIXED bodyweight BY UFEV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED bodyweight BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	bodyweight	35	70.931	1.4628	2.1%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	70.921	1.1047	1.6%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	70.797	1.3450	1.9%
		Constant	35	1.000	.0000	0.0%
Total	bodyweight	104	70.883	1.3032	1.8%	
	Constant	104	1.000	.0000	0.0%	
12	.0	bodyweight	35	85.751	2.7178	3.2%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	86.165	2.3473	2.7%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	85.377	2.6206	3.1%
		Constant	35	1.000	.0000	0.0%

		Constant	35	1.000	.0000	0.0%
	Total	bodyweight	104	85.761	2.5641	3.0%
		Constant	104	1.000	.0000	0.0%
15	.0	bodyweight	35	66.794	.5017	0.8%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	66.603	.4123	0.6%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	66.426	.5147	0.8%
		Constant	35	1.000	.0000	0.0%
	Total	bodyweight	104	66.608	.4981	0.7%
		Constant	104	1.000	.0000	0.0%
16	.0	bodyweight	35	85.283	1.4486	1.7%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	33	84.852	1.1023	1.3%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	35	84.686	1.1825	1.4%
		Constant	35	1.000	.0000	0.0%
	Total	bodyweight	103	84.942	1.2696	1.5%
		Constant	103	1.000	.0000	0.0%
51	.0	bodyweight	67	84.048	.9159	1.1%
		Constant	67	1.000	.0000	0.0%
	1.0	bodyweight	68	84.166	.7158	0.9%
		Constant	68	1.000	.0000	0.0%
	2.0	bodyweight	68	84.084	.8662	1.0%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	203	84.100	.8339	1.0%
		Constant	203	1.000	.0000	0.0%
52	.0	bodyweight	65	95.709	2.7111	2.8%
		Constant	65	1.000	.0000	0.0%
	1.0	bodyweight	68	95.326	2.8463	3.0%
		Constant	68	1.000	.0000	0.0%
	2.0	bodyweight	65	95.440	3.0118	3.2%
		Constant	65	1.000	.0000	0.0%
	Total	bodyweight	198	95.489	2.8489	3.0%
		Constant	198	1.000	.0000	0.0%
53	.0	bodyweight	68	79.891	.9773	1.2%
		Constant	68	1.000	.0000	0.0%
	1.0	bodyweight	69	79.951	1.0978	1.4%

		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	79.738	1.1675	1.5%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	79.860	1.0822	1.4%
		Constant	205	1.000	.0000	0.0%
54	.0	bodyweight	68	84.113	1.6679	2.0%
		Constant	68	1.000	.0000	0.0%
	1.0	bodyweight	69	84.288	1.8334	2.2%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	67	85.239	1.7992	2.1%
		Constant	67	1.000	.0000	0.0%
	Total	bodyweight	204	84.542	1.8276	2.2%
		Constant	204	1.000	.0000	0.0%
55	.0	bodyweight	68	81.300	1.0117	1.2%
		Constant	68	1.000	.0000	0.0%
	1.0	bodyweight	69	81.865	1.0073	1.2%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	82.042	.9074	1.1%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	81.736	1.0223	1.3%
		Constant	205	1.000	.0000	0.0%
56	.0	bodyweight	66	71.948	1.7224	2.4%
		Constant	66	1.000	.0000	0.0%
	1.0	bodyweight	69	72.229	1.8148	2.5%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	66	72.171	1.9110	2.6%
		Constant	66	1.000	.0000	0.0%
	Total	bodyweight	201	72.118	1.8126	2.5%
		Constant	201	1.000	.0000	0.0%
Total	.0	bodyweight	542	81.344	7.9582	9.8%
		Constant	542	1.000	.0000	0.0%
	1.0	bodyweight	547	81.492	7.8951	9.7%
		Constant	547	1.000	.0000	0.0%
	2.0	bodyweight	542	81.461	7.9763	9.8%
		Constant	542	1.000	.0000	0.0%
	Total	bodyweight	1631	81.432	7.9385	9.7%
		Constant	1631	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6401.060
Akaike's Information Criterion (AIC)	6405.060
Hurvich and Tsai's Criterion (AICC)	6405.067
Bozdogan's Criterion (CAIC)	6417.850
Schwarz's Bayesian Criterion (BIC)	6415.850

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.000	887.407	.000
UFEV_h_l_perdiet	2	1619.000	.723	.485

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	80.653297	2.706439	9.008	29.801	.000	74.531749	86.774845
[UFEV_h_l_perdiet=.0]	-.117884	.101998	1619.000	-1.156	.248	-.317947	.082179
[UFEV_h_l_perdiet=1.0]	-.029712	.101773	1619.000	-.292	.770	-.229332	.169908
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2.819375	.099093
Constant [subject = subject]	Variance	73.194280
		34.513902

a. Dependent Variable: bodyweight.

\*Effect of Cortisone Excretion on Urine Volume (for online supplemental calculations)

```
MIXED UVol BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UVol BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Uvol	35	1655.714	405.6171	24.5%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1939.118	323.9376	16.7%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2244.143	378.9042	16.9%
		Constant	35	1.000	.0000	0.0%
Total	Uvol	104	1946.394	440.6535	22.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	Uvol	35	1379.343	288.4937	20.9%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1649.324	252.0536	15.3%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	1805.771	435.5284	24.1%

		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	Uvol	35	2039.286	470.2129	23.1%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	2163.088	410.7790	19.0%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2448.143	372.0138	15.2%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	.0	Uvol	35	1350.571	307.7952	22.8%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1686.618	315.1688	18.7%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2023.571	332.4078	16.4%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	.0	Uvol	68	1609.190	368.6891	22.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	2052.686	376.0201	18.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	2394.821	422.8577	17.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	.0	Uvol	68	1641.132	341.8793	20.8%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	2024.958	346.9955	17.1%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	67	2428.566	330.9240	13.6%
		Constant	67	1.000	.0000	0.0%
	Total	Uvol	204	2029.574	466.4834	23.0%
		Constant	204	1.000	.0000	0.0%
53	.0	Uvol	68	1006.918	201.4104	20.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1349.786	287.6003	21.3%



		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1617.943	291.1318	18.0%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	.0	Uvol	68	1663.397	388.2356	23.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1991.357	308.4031	15.5%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	2277.275	363.9758	16.0%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	.0	Uvol	68	913.625	226.8684	24.8%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	68	1181.190	263.1330	22.3%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	68	1555.001	281.8826	18.1%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	.0	Uvol	68	1501.040	290.4314	19.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1772.152	336.2516	19.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	2038.503	360.0474	17.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	.0	Uvol	548	1444.658	453.6101	31.4%
		Constant	548	1.000	.0000	0.0%
	1.0	Uvol	549	1762.099	453.4754	25.7%
		Constant	549	1.000	.0000	0.0%
	2.0	Uvol	547	2071.393	482.0170	23.3%
		Constant	547	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	23831.139
Akaike's Information Criterion (AIC)	23835.139
Hurvich and Tsai's Criterion (AICC)	23835.147
Bozdogan's Criterion (CAIC)	23847.946
Schwarz's Bayesian Criterion (BIC)	23845.946

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.012	302.998	.000
UFEV_h_l_perdiet	2	1632.013	471.544	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2092.263364	102.935203	9.253	20.326	.000	1860.374554	2324.152174
[UFEV_h_l_perdiet=.0]	-627.228694	20.425072	1632.012	-30.709	.000	-667.290811	-587.166577
[UFEV_h_l_perdiet=1.0]	-309.612141	20.416431	1632.014	-15.165	.000	-349.657310	-269.566972
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	114203.462700	3997.906295
Constant [subject = subject] Variance	103793.095800	49260.581860

a. Dependent Variable: Uvol.

\*Effect of Cortisone Excretion on Urine Osmolyte Excretion (for online supplemental calculations)

```
MIXED @2Na2KUreaV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED @2Na2KUreaV BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	@2Na2KUreaV	35	851.988	149.4291	17.5%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	913.403	164.8127	18.0%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	1000.033	174.0545	17.4%
		Constant	35	1.000	.0000	0.0%
Total	@2Na2KUreaV	104	921.889	172.7222	18.7%	
	Constant	104	1.000	.0000	0.0%	
12	.0	@2Na2KUreaV	35	873.700	124.1465	14.2%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	889.338	92.9497	10.5%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	1005.058	146.2684	14.6%

		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	923.020	135.6682	14.7%
		Constant	104	1.000	.0000	0.0%
15	.0	@2Na2KUreaV	35	814.731	104.4317	12.8%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	870.639	135.3888	15.6%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	911.880	118.8234	13.0%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	865.703	125.4946	14.5%
		Constant	104	1.000	.0000	0.0%
16	.0	@2Na2KUreaV	35	836.093	110.0583	13.2%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	919.507	111.7724	12.2%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	977.761	124.8389	12.8%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	911.040	128.8045	14.1%
		Constant	104	1.000	.0000	0.0%
51	.0	@2Na2KUreaV	68	703.910	152.0047	21.6%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	781.742	148.3259	19.0%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	831.699	169.9889	20.4%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	772.496	164.8568	21.3%
		Constant	205	1.000	.0000	0.0%
52	.0	@2Na2KUreaV	68	655.659	133.0662	20.3%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	712.580	150.2941	21.1%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	740.901	154.5797	20.9%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	703.093	149.8319	21.3%
		Constant	205	1.000	.0000	0.0%
53	.0	@2Na2KUreaV	68	765.831	120.5149	15.7%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	818.092	118.7069	14.5%

		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	876.117	132.8140	15.2%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	820.004	131.4899	16.0%
		Constant	205	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	68	663.508	118.0914	17.8%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	723.806	136.7738	18.9%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	788.168	144.6776	18.4%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	725.154	142.4129	19.6%
		Constant	205	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	68	739.314	147.8065	20.0%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	817.674	132.4473	16.2%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	898.486	190.4222	21.2%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	818.487	170.7473	20.9%
		Constant	205	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	68	677.278	131.1868	19.4%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	679.738	126.0363	18.5%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	721.904	134.8668	18.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	692.909	131.6873	19.0%
		Constant	205	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	548	737.503	149.2664	20.2%
		Constant	548	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	550	790.871	154.1475	19.5%
		Constant	550	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	548	851.479	177.7597	20.9%
		Constant	548	1.000	.0000	0.0%
	Total	@2Na2KUreaV	1646	793.281	167.3701	21.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20956.413
Akaike's Information Criterion (AIC)	20960.413
Hurvich and Tsai's Criterion (AICC)	20960.420
Bozdogan's Criterion (CAIC)	20973.222
Schwarz's Bayesian Criterion (BIC)	20971.222

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.983	829.277	.000
UFEV_h_l_perdiet	2	1633.986	90.895	.000

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	872.753604	28.717453	9.524	30.391	.000	808.331308	937.175900
[UFEV_h_l_perdiet=.0]	-113.975182	8.455805	1633.983	-13.479	.000	-130.560541	-97.389823
[UFEV_h_l_perdiet=1.0]	-59.400707	8.448361	1633.987	-7.031	.000	-75.971464	-42.829949
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	19591.175900	685.412010
Constant [subject = subject] Variance	7876.501000	3778.989580

a. Dependent Variable: @2Na2KUreaV.

\*Effect of Aldosterone Excretion on Urine Osmolality (for online supplemental calculations)

```
MIXED UOsmo BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UOsmo BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UOsmo	35	523.971	148.3901	28.3%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	456.088	74.5054	16.3%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	427.743	66.1502	15.5%
		Constant	35	1.000	.0000	0.0%
Total	UOsmo	104	469.394	110.2346	23.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	UOsmo	35	617.086	163.8115	26.5%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	532.912	90.7295	17.0%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	555.943	122.8560	22.1%

		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	568.990	133.2335	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	UOsmo	35	440.200	83.8110	19.0%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	428.118	71.3832	16.7%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	378.886	73.7614	19.5%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	415.615	80.3905	19.3%
		Constant	104	1.000	.0000	0.0%
16	.0	UOsmo	35	628.629	161.6241	25.7%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	533.088	124.3802	23.3%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	465.257	93.5585	20.1%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	542.413	145.0733	26.7%
		Constant	104	1.000	.0000	0.0%
51	.0	UOsmo	68	441.059	110.2270	25.0%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	374.725	87.6299	23.4%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	332.838	69.7284	20.9%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	382.834	100.6600	26.3%
		Constant	205	1.000	.0000	0.0%
52	.0	UOsmo	68	415.838	119.7832	28.8%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	357.725	93.2990	26.1%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	304.022	71.1493	23.4%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	359.188	106.5899	29.7%
		Constant	205	1.000	.0000	0.0%
53	.0	UOsmo	68	770.000	130.4722	16.9%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	597.159	117.8968	19.7%

		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	523.912	102.7361	19.6%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	630.195	156.0136	24.8%
		Constant	205	1.000	.0000	0.0%
54	.0	UOsmo	68	432.794	111.9730	25.9%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	379.971	81.5125	21.5%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	354.279	79.9320	22.6%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	388.971	97.4666	25.1%
		Constant	205	1.000	.0000	0.0%
55	.0	UOsmo	68	846.456	138.1012	16.3%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	723.283	145.4276	20.1%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	581.897	123.7238	21.3%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	717.241	173.2769	24.2%
		Constant	205	1.000	.0000	0.0%
56	.0	UOsmo	68	471.162	84.5364	17.9%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	400.957	69.8775	17.4%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	366.088	62.7287	17.1%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	412.678	84.7183	20.5%
		Constant	205	1.000	.0000	0.0%
Total	.0	UOsmo	548	560.224	199.2588	35.6%
		Constant	548	1.000	.0000	0.0%
	1.0	UOsmo	550	476.074	157.7223	33.1%
		Constant	550	1.000	.0000	0.0%
	2.0	UOsmo	548	422.373	131.4372	31.1%
		Constant	548	1.000	.0000	0.0%
	Total	UOsmo	1646	486.211	174.5454	35.9%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20151.882
Akaike's Information Criterion (AIC)	20155.882
Hurvich and Tsai's Criterion (AICC)	20155.889
Bozdogan's Criterion (CAIC)	20168.690
Schwarz's Bayesian Criterion (BIC)	20166.690

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.020	163.746	.000
UFEV_h_I_perdiet	2	1634.021	221.638	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	424.829881	38.382079	9.200	11.068	.000	338.290481	511.369280
[UFEV_h_I_perdiet=.0]	137.851277	6.599655	1634.020	20.888	.000	124.906603	150.795952
[UFEV_h_I_perdiet=1.0]	53.839878	6.593847	1634.021	8.165	.000	40.906594	66.773161
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	11934.192800	417.522016
Constant [subject = subject] Variance	14506.093470	6868.724436

a. Dependent Variable: UOsmo.

\* FIGURE 5D

\* Effect of UNaV on Fluid Intake

```
MIXED WaterIntake BY UNaV_low_mid_high WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UNaV_low_mid_high | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED WaterIntake BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	WaterIntake	35	2718.913	317.5898	11.7%
		Constant	35	1.000	.0000	0.0%
	2.0	WaterIntake	34	2672.518	348.4903	13.0%
		Constant	34	1.000	.0000	0.0%
	3.0	WaterIntake	35	2613.577	475.9846	18.2%
		Constant	35	1.000	.0000	0.0%
Total	WaterIntake	104	2668.296	385.8569	14.5%	
	Constant	104	1.000	.0000	0.0%	
12	1.0	WaterIntake	35	2811.933	436.8655	15.5%
		Constant	35	1.000	.0000	0.0%
	2.0	WaterIntake	34	2622.724	337.9347	12.9%
		Constant	34	1.000	.0000	0.0%

	3.0	WaterIntake	35	2625.426	465.2421	17.7%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2687.310	423.0759	15.7%
		Constant	104	1.000	.0000	0.0%
15	1.0	WaterIntake	35	2517.310	423.8747	16.8%
		Constant	35	1.000	.0000	0.0%
	2.0	WaterIntake	34	2478.215	327.1564	13.2%
		Constant	34	1.000	.0000	0.0%
	3.0	WaterIntake	35	2480.984	357.7218	14.4%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2492.304	369.0019	14.8%
		Constant	104	1.000	.0000	0.0%
16	1.0	WaterIntake	35	2911.603	348.4115	12.0%
		Constant	35	1.000	.0000	0.0%
	2.0	WaterIntake	34	2797.592	379.5007	13.6%
		Constant	34	1.000	.0000	0.0%
	3.0	WaterIntake	35	2885.017	348.5108	12.1%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2865.383	358.7209	12.5%
		Constant	104	1.000	.0000	0.0%
51	1.0	WaterIntake	68	2747.242	331.4525	12.1%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	2677.539	415.6040	15.5%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2560.114	348.4023	13.6%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2661.709	373.4804	14.0%
		Constant	205	1.000	.0000	0.0%
52	1.0	WaterIntake	68	2821.576	340.0421	12.1%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	2658.666	481.3412	18.1%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2582.693	489.1071	18.9%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2687.504	451.3423	16.8%
		Constant	205	1.000	.0000	0.0%
53	1.0	WaterIntake	68	2545.395	313.5861	12.3%
		Constant	68	1.000	.0000	0.0%

	2.0	WaterIntake	69	2473.246	418.2330	16.9%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2405.710	442.0002	18.4%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2474.776	397.5172	16.1%
		Constant	205	1.000	.0000	0.0%
54	1.0	WaterIntake	68	3202.721	470.2229	14.7%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	2941.418	754.1551	25.6%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2543.575	628.8218	24.7%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2896.127	682.2961	23.6%
		Constant	205	1.000	.0000	0.0%
55	1.0	WaterIntake	68	2092.119	462.0202	22.1%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	1986.631	489.8542	24.7%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	1882.760	529.8637	28.1%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	1987.168	499.6077	25.1%
		Constant	205	1.000	.0000	0.0%
56	1.0	WaterIntake	68	2935.322	317.1122	10.8%
		Constant	68	1.000	.0000	0.0%
	2.0	WaterIntake	69	2743.233	391.6526	14.3%
		Constant	69	1.000	.0000	0.0%
	3.0	WaterIntake	68	2640.994	415.6915	15.7%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2773.037	394.7171	14.2%
		Constant	205	1.000	.0000	0.0%
Total	1.0	WaterIntake	548	2728.119	486.2238	17.8%
		Constant	548	1.000	.0000	0.0%
	2.0	WaterIntake	550	2595.611	539.9772	20.8%
		Constant	550	1.000	.0000	0.0%
	3.0	WaterIntake	548	2490.972	528.0709	21.2%
		Constant	548	1.000	.0000	0.0%
	Total	WaterIntake	1646	2604.889	527.3144	20.2%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24765.324
Akaike's Information Criterion (AIC)	24769.324
Hurvich and Tsai's Criterion (AICC)	24769.332
Bozdogan's Criterion (CAIC)	24782.133
Schwarz's Bayesian Criterion (BIC)	24780.133

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.065	1003.323	.000
UNaV_low_mid_high	2	1634.068	38.837	.000

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2504.837906	84.134264	9.718	29.772	.000	2316.634223	2693.041588
[UNaV_low_mid_high=1.0]	237.146898	26.962994	1634.065	8.795	.000	184.261228	290.032567
[UNaV_low_mid_high=2.0]	105.426275	26.939253	1634.069	3.913	.000	52.587171	158.265379
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	199198.835100	6968.946165
Constant [subject = subject] Variance	67019.874390	32111.347310

a. Dependent Variable: WaterIntake.

\* Effect of UNaV on Urine Volume

```
MIXED Uvol BY UNaV_low_mid_high WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UNaV_low_mid_high | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED Uvol BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	Uvol	35	1720.000	368.0633	21.4%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	1785.441	270.7631	15.2%
		Constant	34	1.000	.0000	0.0%
	3.0	Uvol	35	2329.143	390.0480	16.7%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1946.394	440.6535	22.6%
		Constant	104	1.000	.0000	0.0%
12	1.0	Uvol	35	1503.486	295.0478	19.6%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	1526.588	249.7685	16.4%
		Constant	34	1.000	.0000	0.0%

	3.0	Uvol	35	1800.857	476.0321	26.4%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	1.0	Uvol	35	2162.286	483.6402	22.4%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	2128.971	454.2840	21.3%
		Constant	34	1.000	.0000	0.0%
	3.0	Uvol	35	2358.286	384.8318	16.3%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	1.0	Uvol	35	1602.286	440.3297	27.5%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	1527.794	364.0142	23.8%
		Constant	34	1.000	.0000	0.0%
	3.0	Uvol	35	1926.143	347.3663	18.0%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	1.0	Uvol	68	1954.035	540.4472	27.7%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1865.090	453.5467	24.3%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	2240.329	440.4042	19.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	1.0	Uvol	68	1971.088	497.0601	25.2%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1950.106	486.7690	25.0%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	67	2170.772	379.4784	17.5%
		Constant	67	1.000	.0000	0.0%
	Total	Uvol	204	2029.574	466.4834	23.0%
		Constant	204	1.000	.0000	0.0%
53	1.0	Uvol	68	1113.028	272.5042	24.5%
		Constant	68	1.000	.0000	0.0%



	2.0	Uvol	69	1347.542	331.9573	24.6%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	1514.109	362.1696	23.9%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	1.0	Uvol	68	1922.868	491.5178	25.6%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1951.732	452.4168	23.2%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	2058.012	334.1512	16.2%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	1.0	Uvol	68	1051.847	354.6747	33.7%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1187.390	308.9666	26.0%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	67	1413.911	350.1703	24.8%
		Constant	67	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	1.0	Uvol	68	1608.293	388.7322	24.2%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1673.038	321.3074	19.2%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	2031.822	337.1103	16.6%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	1.0	Uvol	548	1640.184	558.2979	34.0%
		Constant	548	1.000	.0000	0.0%
	2.0	Uvol	550	1682.194	479.7681	28.5%
		Constant	550	1.000	.0000	0.0%
	3.0	Uvol	546	1956.207	489.4387	25.0%
		Constant	546	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24387.371
Akaike's Information Criterion (AIC)	24391.371
Hurvich and Tsai's Criterion (AICC)	24391.378
Bozdogan's Criterion (CAIC)	24404.177
Schwarz's Bayesian Criterion (BIC)	24402.177

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.017	303.488	.000
UNaV_low_mid_high	2	1632.019	99.675	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1975.849366	103.123493	9.358	19.160	.000	1743.921970	2207.776762
[UNaV_low_mid_high=1.0]	-315.532047	24.231212	1632.017	-13.022	.000	-363.059597	-268.004496
[UNaV_low_mid_high=2.0]	-272.379069	24.210086	1632.020	-11.251	.000	-319.865183	-224.892955
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	160584.360500	5621.548121
Constant [subject = subject] Variance	103298.115100	49161.804510

a. Dependent Variable: Uvol.

\* Effect of UNaV on Water Balance Gap

```
MIXED Water_Balance_Gap BY UNaV_low_mid_high WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UNaV_low_mid_high | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED Water_Balance_Gap BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	Water_Balance_GAP	35	998.913	456.6858	45.7%
		Constant	35	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	34	887.077	428.9751	48.4%
		Constant	34	1.000	.0000	0.0%
	3.0	Water_Balance_GAP	35	284.434	532.8248	187.3%
		Constant	35	1.000	.0000	0.0%
Total	Water_Balance_GAP	104	721.901	567.1254	78.6%	
	Constant	104	1.000	.0000	0.0%	
12	1.0	Water_Balance_GAP	35	1308.448	469.3196	35.9%
		Constant	35	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	34	1096.136	394.1803	36.0%
		Constant	34	1.000	.0000	0.0%

	3.0	Water_Balance_GAP	35	824.569	692.8603	84.0%	
		Constant	35	1.000	.0000	0.0%	
	Total	Water_Balance_GAP	104	1076.194	566.5065	52.6%	
		Constant	104	1.000	.0000	0.0%	
15	1.0	Water_Balance_GAP	35	355.025	467.6967	131.7%	
		Constant	35	1.000	.0000	0.0%	
	2.0	Water_Balance_GAP	34	349.245	521.4583	149.3%	
		Constant	34	1.000	.0000	0.0%	
	3.0	Water_Balance_GAP	35	122.698	553.3853	451.0%	
		Constant	35	1.000	.0000	0.0%	
	Total	Water_Balance_GAP	104	274.948	521.8144	189.8%	
		Constant	104	1.000	.0000	0.0%	
	16	1.0	Water_Balance_GAP	35	1309.317	504.1067	38.5%
			Constant	35	1.000	.0000	0.0%
2.0		Water_Balance_GAP	34	1269.798	465.1437	36.6%	
		Constant	34	1.000	.0000	0.0%	
3.0		Water_Balance_GAP	35	958.875	304.5676	31.8%	
		Constant	35	1.000	.0000	0.0%	
Total		Water_Balance_GAP	104	1178.460	456.9264	38.8%	
		Constant	104	1.000	.0000	0.0%	
51		1.0	Water_Balance_GAP	68	793.207	670.4347	84.5%
			Constant	68	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	69	812.450	683.7629	84.2%	
		Constant	69	1.000	.0000	0.0%	
	3.0	Water_Balance_GAP	68	319.785	624.4287	195.3%	
		Constant	68	1.000	.0000	0.0%	
	Total	Water_Balance_GAP	205	642.646	695.4008	108.2%	
		Constant	205	1.000	.0000	0.0%	
	52	1.0	Water_Balance_GAP	68	850.488	554.7252	65.2%
			Constant	68	1.000	.0000	0.0%
2.0		Water_Balance_GAP	69	708.560	779.4224	110.0%	
		Constant	69	1.000	.0000	0.0%	
3.0		Water_Balance_GAP	68	443.844	574.3129	129.4%	
		Constant	68	1.000	.0000	0.0%	
Total		Water_Balance_GAP	205	667.830	663.5499	99.4%	
		Constant	205	1.000	.0000	0.0%	
53		1.0	Water_Balance_GAP	68	1432.367	428.3674	29.9%
			Constant	68	1.000	.0000	0.0%

	2.0	Water_Balance_GAP	69	1125.704	491.6963	43.7%
		Constant	69	1.000	.0000	0.0%
	3.0	Water_Balance_GAP	68	891.601	410.9200	46.1%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1149.773	495.3241	43.1%
		Constant	205	1.000	.0000	0.0%
54	1.0	Water_Balance_GAP	68	1279.853	530.5803	41.5%
		Constant	68	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	69	989.686	703.8930	71.1%
		Constant	69	1.000	.0000	0.0%
	3.0	Water_Balance_GAP	68	485.563	628.5851	129.5%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	918.716	703.6338	76.6%
		Constant	205	1.000	.0000	0.0%
55	1.0	Water_Balance_GAP	68	1040.272	502.9123	48.3%
		Constant	68	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	69	799.241	516.9003	64.7%
		Constant	69	1.000	.0000	0.0%
	3.0	Water_Balance_GAP	68	489.642	494.0245	100.9%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	776.497	550.5289	70.9%
		Constant	205	1.000	.0000	0.0%
56	1.0	Water_Balance_GAP	68	1327.030	478.8727	36.1%
		Constant	68	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	69	1070.195	534.2624	49.9%
		Constant	69	1.000	.0000	0.0%
	3.0	Water_Balance_GAP	68	609.172	562.6363	92.4%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1002.464	602.2082	60.1%
		Constant	205	1.000	.0000	0.0%
Total	1.0	Water_Balance_GAP	548	1087.935	592.0024	54.4%
		Constant	548	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	550	913.417	624.5285	68.4%
		Constant	550	1.000	.0000	0.0%
	3.0	Water_Balance_GAP	548	541.904	594.7631	109.8%
		Constant	548	1.000	.0000	0.0%
	Total	Water_Balance_GAP	1646	847.832	645.1024	76.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	25486.925
Akaike's Information Criterion (AIC)	25490.925
Hurvich and Tsai's Criterion (AICC)	25490.933
Bozdogan's Criterion (CAIC)	25503.734
Schwarz's Bayesian Criterion (BIC)	25501.734

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.893	91.474	.000
UNaV_low_mid_high	2	1633.898	137.634	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	535.484283	90.066500	9.779	5.945	.000	334.187401	736.781165
[UNaV_low_mid_high=1.0]	546.030876	33.613676	1633.894	16.244	.000	480.100441	611.961311
[UNaV_low_mid_high=2.0]	371.148631	33.584071	1633.900	11.051	.000	305.276264	437.020998
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	309586.913500	10831.427000
Constant [subject = subject] Variance	75268.715620	36682.327320

a. Dependent Variable: Water\_Balance\_GAP.

\* Effect of UNaV on Body Weight

```
MIXED bodyweight BY UNaV_low_mid_high WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UNaV_low_mid_high | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED bodyweight BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	bodyweight	35	71.629	.5773	0.8%
		Constant	35	1.000	.0000	0.0%
	2.0	bodyweight	34	70.976	1.0281	1.4%
		Constant	34	1.000	.0000	0.0%
	3.0	bodyweight	35	70.046	1.5758	2.2%
		Constant	35	1.000	.0000	0.0%
Total	bodyweight	104	70.883	1.3032	1.8%	
	Constant	104	1.000	.0000	0.0%	
12	1.0	bodyweight	35	84.563	1.7517	2.1%
		Constant	35	1.000	.0000	0.0%
	2.0	bodyweight	34	86.479	2.7832	3.2%
		Constant	34	1.000	.0000	0.0%

	3.0	bodyweight	35	86.260	2.6608	3.1%	
		Constant	35	1.000	.0000	0.0%	
Total		bodyweight	104	85.761	2.5641	3.0%	
		Constant	104	1.000	.0000	0.0%	
15	1.0	bodyweight	35	66.931	.4185	0.6%	
		Constant	35	1.000	.0000	0.0%	
	2.0	bodyweight	34	66.626	.3879	0.6%	
		Constant	34	1.000	.0000	0.0%	
	3.0	bodyweight	35	66.266	.4491	0.7%	
		Constant	35	1.000	.0000	0.0%	
	Total	bodyweight	104	66.608	.4981	0.7%	
		Constant	104	1.000	.0000	0.0%	
	16	1.0	bodyweight	34	84.018	.7849	0.9%
			Constant	34	1.000	.0000	0.0%
2.0		bodyweight	34	85.082	1.2525	1.5%	
		Constant	34	1.000	.0000	0.0%	
3.0		bodyweight	35	85.703	1.1158	1.3%	
		Constant	35	1.000	.0000	0.0%	
Total		bodyweight	103	84.942	1.2696	1.5%	
		Constant	103	1.000	.0000	0.0%	
51		1.0	bodyweight	66	83.932	.4965	0.6%
			Constant	66	1.000	.0000	0.0%
	2.0	bodyweight	69	84.254	.9068	1.1%	
		Constant	69	1.000	.0000	0.0%	
	3.0	bodyweight	68	84.106	.9852	1.2%	
		Constant	68	1.000	.0000	0.0%	
	Total	bodyweight	203	84.100	.8339	1.0%	
		Constant	203	1.000	.0000	0.0%	
	52	1.0	bodyweight	65	93.685	1.5621	1.7%
			Constant	65	1.000	.0000	0.0%
2.0		bodyweight	67	95.691	2.5101	2.6%	
		Constant	67	1.000	.0000	0.0%	
3.0		bodyweight	66	97.062	3.1602	3.3%	
		Constant	66	1.000	.0000	0.0%	
Total		bodyweight	198	95.489	2.8489	3.0%	
		Constant	198	1.000	.0000	0.0%	
53		1.0	bodyweight	68	80.050	.6199	0.8%
			Constant	68	1.000	.0000	0.0%

	2.0	bodyweight	69	80.135	1.1439	1.4%
		Constant	69	1.000	.0000	0.0%
	3.0	bodyweight	68	79.393	1.2318	1.6%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	79.860	1.0822	1.4%
		Constant	205	1.000	.0000	0.0%
54	1.0	bodyweight	67	83.631	1.2901	1.5%
		Constant	67	1.000	.0000	0.0%
	2.0	bodyweight	69	84.472	1.6966	2.0%
		Constant	69	1.000	.0000	0.0%
	3.0	bodyweight	68	85.510	1.9425	2.3%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	204	84.542	1.8276	2.2%
		Constant	204	1.000	.0000	0.0%
55	1.0	bodyweight	68	81.200	.7559	0.9%
		Constant	68	1.000	.0000	0.0%
	2.0	bodyweight	69	82.110	1.0630	1.3%
		Constant	69	1.000	.0000	0.0%
	3.0	bodyweight	68	81.893	1.0013	1.2%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	81.736	1.0223	1.3%
		Constant	205	1.000	.0000	0.0%
56	1.0	bodyweight	65	71.445	1.3230	1.9%
		Constant	65	1.000	.0000	0.0%
	2.0	bodyweight	68	72.276	1.7725	2.5%
		Constant	68	1.000	.0000	0.0%
	3.0	bodyweight	68	72.603	2.0711	2.9%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	201	72.118	1.8126	2.5%
		Constant	201	1.000	.0000	0.0%
Total	1.0	bodyweight	538	80.868	7.3277	9.1%
		Constant	538	1.000	.0000	0.0%
	2.0	bodyweight	547	81.672	7.9497	9.7%
		Constant	547	1.000	.0000	0.0%
	3.0	bodyweight	546	81.747	8.4728	10.4%
		Constant	546	1.000	.0000	0.0%
	Total	bodyweight	1631	81.432	7.9385	9.7%
		Constant	1631	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6314.010
Akaike's Information Criterion (AIC)	6318.010
Hurvich and Tsai's Criterion (AICC)	6318.017
Bozdogan's Criterion (CAIC)	6330.800
Schwarz's Bayesian Criterion (BIC)	6328.800

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.000	887.546	.000
UNaV_low_mid_high	2	1619.000	45.479	.000

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	80.943146	2.706117	9.008	29.911	.000	74.822274	87.064018
[UNaV_low_mid_high=1.0]	-.882423	.099297	1619.000	-8.887	.000	-1.077188	-.687658
[UNaV_low_mid_high=2.0]	-.141132	.098886	1619.000	-1.427	.154	-.335089	.052826
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2.671790	.093906
Constant [subject = subject] Variance	73.179992	34.506654

a. Dependent Variable: bodyweight.

\*Effect of UNaV on Urine Volume (for online supplemental calculations)

```
MIXED UVol BY UNaV_low_mid_high WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UNaV_low_mid_high | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED UVol BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	Uvol	35	1720.000	368.0633	21.4%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	1785.441	270.7631	15.2%
		Constant	34	1.000	.0000	0.0%
	3.0	Uvol	35	2329.143	390.0480	16.7%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1946.394	440.6535	22.6%
		Constant	104	1.000	.0000	0.0%
12	1.0	Uvol	35	1503.486	295.0478	19.6%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	1526.588	249.7685	16.4%
		Constant	34	1.000	.0000	0.0%

	3.0	Uvol	35	1800.857	476.0321	26.4%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	1.0	Uvol	35	2162.286	483.6402	22.4%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	2128.971	454.2840	21.3%
		Constant	34	1.000	.0000	0.0%
	3.0	Uvol	35	2358.286	384.8318	16.3%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	1.0	Uvol	35	1602.286	440.3297	27.5%
		Constant	35	1.000	.0000	0.0%
	2.0	Uvol	34	1527.794	364.0142	23.8%
		Constant	34	1.000	.0000	0.0%
	3.0	Uvol	35	1926.143	347.3663	18.0%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	1.0	Uvol	68	1954.035	540.4472	27.7%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1865.090	453.5467	24.3%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	2240.329	440.4042	19.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	1.0	Uvol	68	1971.088	497.0601	25.2%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1950.106	486.7690	25.0%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	67	2170.772	379.4784	17.5%
		Constant	67	1.000	.0000	0.0%
	Total	Uvol	204	2029.574	466.4834	23.0%
		Constant	204	1.000	.0000	0.0%
53	1.0	Uvol	68	1113.028	272.5042	24.5%
		Constant	68	1.000	.0000	0.0%

	2.0	Uvol	69	1347.542	331.9573	24.6%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	1514.109	362.1696	23.9%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	1.0	Uvol	68	1922.868	491.5178	25.6%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1951.732	452.4168	23.2%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	2058.012	334.1512	16.2%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	1.0	Uvol	68	1051.847	354.6747	33.7%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1187.390	308.9666	26.0%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	67	1413.911	350.1703	24.8%
		Constant	67	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	1.0	Uvol	68	1608.293	388.7322	24.2%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	69	1673.038	321.3074	19.2%
		Constant	69	1.000	.0000	0.0%
	3.0	Uvol	68	2031.822	337.1103	16.6%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	1.0	Uvol	548	1640.184	558.2979	34.0%
		Constant	548	1.000	.0000	0.0%
	2.0	Uvol	550	1682.194	479.7681	28.5%
		Constant	550	1.000	.0000	0.0%
	3.0	Uvol	546	1956.207	489.4387	25.0%
		Constant	546	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24387.371
Akaike's Information Criterion (AIC)	24391.371
Hurvich and Tsai's Criterion (AICC)	24391.378
Bozdogan's Criterion (CAIC)	24404.177
Schwarz's Bayesian Criterion (BIC)	24402.177

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.017	303.488	.000
UNaV_low_mid_high	2	1632.019	99.675	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1975.849366	103.123493	9.358	19.160	.000	1743.921970	2207.776762
[UNaV_low_mid_high=1.0]	-315.532047	24.231212	1632.017	-13.022	.000	-363.059597	-268.004496
[UNaV_low_mid_high=2.0]	-272.379069	24.210086	1632.020	-11.251	.000	-319.865183	-224.892955
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	160584.360500	5621.548121
Constant [subject = subject] Variance	103298.115100	49161.804510

a. Dependent Variable: Uvol.

\*Effect of UNaV Excretion on Urine Osmolyte Excretion (for online supplemental calculations)

```
MIXED @2Na2KUreaV BY UNaV_low_mid_high WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UNaV_low_mid_high | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED @2Na2KUreaV BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	@2Na2KUreaV	35	742.951	83.7654	11.3%
		Constant	35	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	34	920.759	75.8551	8.2%
		Constant	34	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	35	1101.924	106.9925	9.7%
		Constant	35	1.000	.0000	0.0%
Total	@2Na2KUreaV	104	921.889	172.7222	18.7%	
	Constant	104	1.000	.0000	0.0%	
12	1.0	@2Na2KUreaV	35	843.466	109.2159	12.9%
		Constant	35	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	34	902.878	95.7288	10.6%
		Constant	34	1.000	.0000	0.0%

	3.0	@2Na2KUreaV	35	1022.140	133.7980	13.1%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	923.020	135.6682	14.7%
		Constant	104	1.000	.0000	0.0%
15	1.0	@2Na2KUreaV	35	747.918	93.0401	12.4%
		Constant	35	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	34	874.209	69.1476	7.9%
		Constant	34	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	35	975.225	87.8125	9.0%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	865.703	125.4946	14.5%
		Constant	104	1.000	.0000	0.0%
16	1.0	@2Na2KUreaV	35	792.852	70.7780	8.9%
		Constant	35	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	34	887.333	64.4791	7.3%
		Constant	34	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	35	1052.257	75.7951	7.2%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	911.040	128.8045	14.1%
		Constant	104	1.000	.0000	0.0%
51	1.0	@2Na2KUreaV	68	609.937	75.5120	12.4%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	761.564	84.3942	11.1%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	946.147	110.7776	11.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	772.496	164.8568	21.3%
		Constant	205	1.000	.0000	0.0%
52	1.0	@2Na2KUreaV	68	550.528	72.7907	13.2%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	702.164	64.1497	9.1%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	856.601	106.4811	12.4%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	703.093	149.8319	21.3%
		Constant	205	1.000	.0000	0.0%
53	1.0	@2Na2KUreaV	68	705.519	74.9661	10.6%
		Constant	68	1.000	.0000	0.0%



	2.0	@2Na2KUreaV	69	799.483	54.5927	6.8%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	955.310	108.0788	11.3%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	820.004	131.4899	16.0%
		Constant	205	1.000	.0000	0.0%
54	1.0	@2Na2KUreaV	68	588.952	79.9631	13.6%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	720.831	74.6252	10.4%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	865.743	103.9179	12.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	725.154	142.4129	19.6%
		Constant	205	1.000	.0000	0.0%
55	1.0	@2Na2KUreaV	68	677.375	100.3250	14.8%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	804.257	102.7556	12.8%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	974.040	151.6967	15.6%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	818.487	170.7473	20.9%
		Constant	205	1.000	.0000	0.0%
56	1.0	@2Na2KUreaV	68	568.246	67.9098	12.0%
		Constant	68	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	69	682.838	65.8405	9.6%
		Constant	69	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	68	827.791	97.2000	11.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	692.909	131.6873	19.0%
		Constant	205	1.000	.0000	0.0%
Total	1.0	@2Na2KUreaV	548	658.922	120.9585	18.4%
		Constant	548	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	550	782.554	108.1697	13.8%
		Constant	550	1.000	.0000	0.0%
	3.0	@2Na2KUreaV	548	938.407	136.2633	14.5%
		Constant	548	1.000	.0000	0.0%
	Total	@2Na2KUreaV	1646	793.281	167.3701	21.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	19615.431
Akaike's Information Criterion (AIC)	19619.431
Hurvich and Tsai's Criterion (AICC)	19619.438
Bozdogan's Criterion (CAIC)	19632.239
Schwarz's Bayesian Criterion (BIC)	19630.239

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.993	829.859	.000
UNaV_low_mid_high	2	1633.994	1245.762	.000

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	959.893222	28.482431	9.229	33.701	.000	895.704731	1024.081714
[UNaV_low_mid_high=1.0]	-279.484698	5.609807	1633.993	-49.821	.000	-290.487868	-268.481528
[UNaV_low_mid_high=2.0]	-154.634158	5.604870	1633.994	-27.589	.000	-165.627644	-143.640672
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	8622.761414	301.672911
Constant [subject = subject] Variance	7949.392824	3776.425101

a. Dependent Variable: @2Na2KUreaV.

\*Effect of Aldosterone Excretion on Urine Osmolality (for online supplemental calculations)

```
MIXED UOsmo BY UNaV_low_mid_high WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UNaV_low_mid_high | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:11:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UOsmo BY UNaV_low_mid_high WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UNaV_low_mid_high   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.25

### Descriptive Statistics

subject	UNaV_low_mid_high		Count	Mean	Standard Deviation	Coefficient of Variation
11	1.0	UOsmo	35	441.429	123.1845	27.9%
		Constant	35	1.000	.0000	0.0%
	2.0	UOsmo	34	503.853	83.0977	16.5%
		Constant	34	1.000	.0000	0.0%
	3.0	UOsmo	35	463.886	113.6317	24.5%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	469.394	110.2346	23.5%
		Constant	104	1.000	.0000	0.0%
12	1.0	UOsmo	35	560.886	126.1334	22.5%
		Constant	35	1.000	.0000	0.0%
	2.0	UOsmo	34	575.353	89.9781	15.6%
		Constant	34	1.000	.0000	0.0%

	3.0	UOsmo	35	570.914	172.9050	30.3%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	568.990	133.2335	23.4%
		Constant	104	1.000	.0000	0.0%
15	1.0	UOsmo	35	394.457	96.3558	24.4%
		Constant	35	1.000	.0000	0.0%
	2.0	UOsmo	34	437.794	77.4615	17.7%
		Constant	34	1.000	.0000	0.0%
	3.0	UOsmo	35	415.229	59.3029	14.3%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	415.615	80.3905	19.3%
		Constant	104	1.000	.0000	0.0%
16	1.0	UOsmo	35	513.171	175.5964	34.2%
		Constant	35	1.000	.0000	0.0%
	2.0	UOsmo	34	583.235	148.2639	25.4%
		Constant	34	1.000	.0000	0.0%
	3.0	UOsmo	35	532.000	94.4974	17.8%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	542.413	145.0733	26.7%
		Constant	104	1.000	.0000	0.0%
51	1.0	UOsmo	68	331.471	88.9112	26.8%
		Constant	68	1.000	.0000	0.0%
	2.0	UOsmo	69	408.391	106.3876	26.1%
		Constant	69	1.000	.0000	0.0%
	3.0	UOsmo	68	408.265	86.3244	21.1%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	382.834	100.6600	26.3%
		Constant	205	1.000	.0000	0.0%
52	1.0	UOsmo	68	306.941	94.8598	30.9%
		Constant	68	1.000	.0000	0.0%
	2.0	UOsmo	69	381.116	121.5713	31.9%
		Constant	69	1.000	.0000	0.0%
	3.0	UOsmo	68	389.184	80.0970	20.6%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	359.188	106.5899	29.7%
		Constant	205	1.000	.0000	0.0%
53	1.0	UOsmo	68	653.250	148.1735	22.7%
		Constant	68	1.000	.0000	0.0%

	2.0	UOsмо	69	603.522	153.3020	25.4%
		Constant	69	1.000	.0000	0.0%
	3.0	UOsмо	68	634.206	164.3609	25.9%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	630.195	156.0136	24.8%
		Constant	205	1.000	.0000	0.0%
54	1.0	UOsмо	68	353.721	109.8950	31.1%
		Constant	68	1.000	.0000	0.0%
	2.0	UOsмо	69	392.884	96.6243	24.6%
		Constant	69	1.000	.0000	0.0%
	3.0	UOsмо	68	420.250	71.4294	17.0%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	388.971	97.4666	25.1%
		Constant	205	1.000	.0000	0.0%
55	1.0	UOsмо	68	707.735	188.2051	26.6%
		Constant	68	1.000	.0000	0.0%
	2.0	UOsмо	69	728.681	179.2505	24.6%
		Constant	69	1.000	.0000	0.0%
	3.0	UOsмо	68	715.140	152.1730	21.3%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	717.241	173.2769	24.2%
		Constant	205	1.000	.0000	0.0%
56	1.0	UOsмо	68	387.118	90.2964	23.3%
		Constant	68	1.000	.0000	0.0%
	2.0	UOsмо	69	436.609	88.9227	20.4%
		Constant	69	1.000	.0000	0.0%
	3.0	UOsмо	68	413.956	66.4809	16.1%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	412.678	84.7183	20.5%
		Constant	205	1.000	.0000	0.0%
Total	1.0	UOsмо	548	462.015	190.8654	41.3%
		Constant	548	1.000	.0000	0.0%
	2.0	UOsмо	550	500.075	169.0022	33.8%
		Constant	550	1.000	.0000	0.0%
	3.0	UOsмо	548	496.495	160.1238	32.3%
		Constant	548	1.000	.0000	0.0%
	Total	UOsмо	1646	486.211	174.5454	35.9%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UNaV_low_mid_high	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20511.691
Akaike's Information Criterion (AIC)	20515.691
Hurvich and Tsai's Criterion (AICC)	20515.698
Bozdogan's Criterion (CAIC)	20528.499
Schwarz's Bayesian Criterion (BIC)	20526.499

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.025	163.633	.000
UNaV_low_mid_high	2	1634.026	16.359	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	498.997349	38.443023	9.249	12.980	.000	412.389403	585.605295
[UNaV_low_mid_high=1.0]	-34.479927	7.367777	1634.025	-4.680	.000	-48.931208	-20.028646
[UNaV_low_mid_high=2.0]	3.722053	7.361293	1634.026	.506	.613	-10.716510	18.160617
[UNaV_low_mid_high=3.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	14873.852790	520.366301
Constant [subject = subject] Variance	14497.323350	6872.098461

a. Dependent Variable: UOsmo.

\*Effect of Salt Phase on Urine Volume (for online supplemental calculations)

```
MIXED UVol BY salt WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:11:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED UVol BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	Uvol	29	1765.517	412.7658	23.4%
		Constant	29	1.000	.0000	0.0%
	9	Uvol	35	1893.571	366.4206	19.4%
		Constant	35	1.000	.0000	0.0%
	12	Uvol	40	2123.750	462.9874	21.8%
		Constant	40	1.000	.0000	0.0%
Total	Uvol	104	1946.394	440.6535	22.6%	
	Constant	104	1.000	.0000	0.0%	
12	6	Uvol	29	1601.517	261.9754	16.4%
		Constant	29	1.000	.0000	0.0%
	9	Uvol	35	1626.143	420.4026	25.9%
		Constant	35	1.000	.0000	0.0%
	12	Uvol	40	1604.925	414.1308	25.8%
		Constant	40	1.000	.0000	0.0%

	Total	Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	6	Uvol	29	2299.655	520.3003	22.6%
		Constant	29	1.000	.0000	0.0%
	9	Uvol	35	2190.571	376.6489	17.2%
		Constant	35	1.000	.0000	0.0%
	12	Uvol	40	2181.125	458.2009	21.0%
		Constant	40	1.000	.0000	0.0%
Total	Uvol	104	2217.356	450.0847	20.3%	
	Constant	104	1.000	.0000	0.0%	
16	6	Uvol	29	1856.034	366.6459	19.8%
		Constant	29	1.000	.0000	0.0%
	9	Uvol	35	1512.286	397.3892	26.3%
		Constant	35	1.000	.0000	0.0%
	12	Uvol	40	1717.125	427.1430	24.9%
		Constant	40	1.000	.0000	0.0%
Total	Uvol	104	1686.923	420.1492	24.9%	
	Constant	104	1.000	.0000	0.0%	
51	6	Uvol	48	2129.892	531.9665	25.0%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1781.603	378.0611	21.2%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	97	2111.103	513.1321	24.3%
		Constant	97	1.000	.0000	0.0%
Total	Uvol	205	2019.063	503.9312	25.0%	
	Constant	205	1.000	.0000	0.0%	
52	6	Uvol	48	2134.250	480.7036	22.5%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1934.150	473.1934	24.5%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	96	2036.875	447.5123	22.0%
		Constant	96	1.000	.0000	0.0%
Total	Uvol	204	2029.574	466.4834	23.0%	
	Constant	204	1.000	.0000	0.0%	
53	6	Uvol	48	1225.788	357.3093	29.1%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1251.705	337.5594	27.0%
		Constant	60	1.000	.0000	0.0%

	12	Uvol	97	1419.439	359.3373	25.3%
		Constant	97	1.000	.0000	0.0%
Total		Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	6	Uvol	48	2071.771	473.7380	22.9%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1939.828	452.2927	23.3%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	97	1953.965	396.4988	20.3%
		Constant	97	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	6	Uvol	48	1148.990	396.1991	34.5%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1191.157	350.2436	29.4%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	96	1266.319	361.4959	28.5%
		Constant	96	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	6	Uvol	48	1750.679	394.2220	22.5%
		Constant	48	1.000	.0000	0.0%
	9	Uvol	60	1511.617	304.6813	20.2%
		Constant	60	1.000	.0000	0.0%
	12	Uvol	97	1940.596	356.7685	18.4%
		Constant	97	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	6	Uvol	404	1782.932	572.8262	32.1%
		Constant	404	1.000	.0000	0.0%
	9	Uvol	500	1658.787	492.6102	29.7%
		Constant	500	1.000	.0000	0.0%
	12	Uvol	740	1814.079	518.6791	28.6%
		Constant	740	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24528.952
Akaike's Information Criterion (AIC)	24532.952
Hurvich and Tsai's Criterion (AICC)	24532.959
Bozdogan's Criterion (CAIC)	24545.758
Schwarz's Bayesian Criterion (BIC)	24543.758

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.027	298.404	.000

salt	2	1632.141	23.535	.000
------	---	----------	--------	------

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1841.276617	103.252619	9.254	17.833	.000	1608.675421	2073.877812
[salt=6]	-41.476604	25.942428	1632.195	-1.599	.110	-92.360562	9.407354
[salt=9]	-164.556509	24.274204	1632.182	-6.779	.000	-212.168382	-116.944636
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	175140.733500	6131.118383
Constant [subject = subject]	Variance 104055.213400	49562.071400

a. Dependent Variable: Uvol.

\*Effect of Salt Phase on Urine Osmolyte Excretion (for online supplemental calculations)

```
MIXED @2Na2KUreaV BY salt WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=salt | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

**Notes**

Output Created		23-DEC-2016 17:11:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED @2Na2KUreaV BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	@2Na2KUreaV	29	767.809	127.9553	16.7%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	907.953	131.8398	14.5%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	1045.790	135.3111	12.9%
		Constant	40	1.000	.0000	0.0%
Total	@2Na2KUreaV	104	921.889	172.7222	18.7%	
	Constant	104	1.000	.0000	0.0%	
12	6	@2Na2KUreaV	29	986.531	106.9524	10.8%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	875.706	106.8920	12.2%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	918.374	159.3935	17.4%
		Constant	40	1.000	.0000	0.0%

	Total	@2Na2KUreaV	104	923.020	135.6682	14.7%
		Constant	104	1.000	.0000	0.0%
15	6	@2Na2KUreaV	29	746.469	101.6424	13.6%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	874.268	82.3077	9.4%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	944.653	106.0182	11.2%
		Constant	40	1.000	.0000	0.0%
Total	@2Na2KUreaV	104	865.703	125.4946	14.5%	
	Constant	104	1.000	.0000	0.0%	
16	6	@2Na2KUreaV	29	804.563	81.3216	10.1%
		Constant	29	1.000	.0000	0.0%
	9	@2Na2KUreaV	35	906.756	92.8700	10.2%
		Constant	35	1.000	.0000	0.0%
	12	@2Na2KUreaV	40	991.983	127.9940	12.9%
		Constant	40	1.000	.0000	0.0%
Total	@2Na2KUreaV	104	911.040	128.8045	14.1%	
	Constant	104	1.000	.0000	0.0%	
51	6	@2Na2KUreaV	48	635.801	93.5618	14.7%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	717.868	105.6174	14.7%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	873.929	158.1381	18.1%
		Constant	97	1.000	.0000	0.0%
Total	@2Na2KUreaV	205	772.496	164.8568	21.3%	
	Constant	205	1.000	.0000	0.0%	
52	6	@2Na2KUreaV	48	541.606	75.8521	14.0%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	677.273	95.9129	14.2%
		Constant	60	1.000	.0000	0.0%
	12	@2Na2KUreaV	97	798.976	128.4130	16.1%
		Constant	97	1.000	.0000	0.0%
Total	@2Na2KUreaV	205	703.093	149.8319	21.3%	
	Constant	205	1.000	.0000	0.0%	
53	6	@2Na2KUreaV	48	710.532	85.9888	12.1%
		Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	786.971	100.1125	12.7%
		Constant	60	1.000	.0000	0.0%

	12	@2Na2KUreaV	97	894.608	121.0904	13.5%	
		Constant	97	1.000	.0000	0.0%	
	Total	@2Na2KUreaV	205	820.004	131.4899	16.0%	
		Constant	205	1.000	.0000	0.0%	
54	6	@2Na2KUreaV	48	603.741	98.0649	16.2%	
		Constant	48	1.000	.0000	0.0%	
	9	@2Na2KUreaV	60	676.104	100.2318	14.8%	
		Constant	60	1.000	.0000	0.0%	
	12	@2Na2KUreaV	97	815.575	122.8008	15.1%	
		Constant	97	1.000	.0000	0.0%	
	Total	@2Na2KUreaV	205	725.154	142.4129	19.6%	
		Constant	205	1.000	.0000	0.0%	
	55	6	@2Na2KUreaV	48	673.913	80.3412	11.9%
			Constant	48	1.000	.0000	0.0%
9		@2Na2KUreaV	60	799.205	120.4304	15.1%	
		Constant	60	1.000	.0000	0.0%	
12		@2Na2KUreaV	97	901.957	179.3234	19.9%	
		Constant	97	1.000	.0000	0.0%	
Total		@2Na2KUreaV	205	818.487	170.7473	20.9%	
		Constant	205	1.000	.0000	0.0%	
56		6	@2Na2KUreaV	48	580.947	76.9497	13.2%
			Constant	48	1.000	.0000	0.0%
	9	@2Na2KUreaV	60	644.229	90.9027	14.1%	
		Constant	60	1.000	.0000	0.0%	
	12	@2Na2KUreaV	97	778.424	117.1985	15.1%	
		Constant	97	1.000	.0000	0.0%	
	Total	@2Na2KUreaV	205	692.909	131.6873	19.0%	
		Constant	205	1.000	.0000	0.0%	
	Total	6	@2Na2KUreaV	404	682.400	146.5073	21.5%
			Constant	404	1.000	.0000	0.0%
9		@2Na2KUreaV	500	765.726	138.2679	18.1%	
		Constant	500	1.000	.0000	0.0%	
12		@2Na2KUreaV	742	872.222	155.5125	17.8%	
		Constant	742	1.000	.0000	0.0%	
Total		@2Na2KUreaV	1646	793.281	167.3701	21.1%	
		Constant	1646	1.000	.0000	0.0%	

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	20505.258
Akaike's Information Criterion (AIC)	20509.258
Hurvich and Tsai's Criterion (AICC)	20509.265
Bozdogan's Criterion (CAIC)	20522.066
Schwarz's Bayesian Criterion (BIC)	20520.066

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

## Fixed Effects

### Type III Tests of Fixed Effects<sup>a</sup>

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.995	688.612	.000

salt	2	1634.108	379.847	.000
------	---	----------	---------	------

a. Dependent Variable: @2Na2KUreaV.

### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	902.115340	30.516195	9.213	29.562	.000	833.325583	970.905097
[salt=6]	-201.413959	7.551770	1634.161	-26.671	.000	-216.226126	-186.601792
[salt=9]	-116.932400	7.065683	1634.148	-16.549	.000	-130.791148	-103.073651
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	14854.099120	519.681389
Constant [subject = subject]	Variance 9096.055954	4338.728020

a. Dependent Variable: @2Na2KUreaV.

\*Effect of Salt Phase on Urine Osmolality (for online supplemental calculations)

```
MIXED UOsmo BY salt WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=salt | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

**Notes**

Output Created		23-DEC-2016 17:11:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED UOsmo BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.08

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	UOsmo	29	443.310	117.8398	26.6%
		Constant	29	1.000	.0000	0.0%
	9	UOsmo	35	470.743	105.6652	22.4%
		Constant	35	1.000	.0000	0.0%
	12	UOsmo	40	487.125	107.5156	22.1%
		Constant	40	1.000	.0000	0.0%
Total	UOsmo	104	469.394	110.2346	23.5%	
	Constant	104	1.000	.0000	0.0%	
12	6	UOsmo	29	602.586	92.1821	15.3%
		Constant	29	1.000	.0000	0.0%
	9	UOsmo	35	543.343	137.5688	25.3%
		Constant	35	1.000	.0000	0.0%
	12	UOsmo	40	567.075	151.1565	26.7%
		Constant	40	1.000	.0000	0.0%

	Total	UOsmo	104	568.990	133.2335	23.4%
		Constant	104	1.000	.0000	0.0%
15	6	UOsmo	29	370.034	95.3192	25.8%
		Constant	29	1.000	.0000	0.0%
	9	UOsmo	35	428.886	66.3013	15.5%
		Constant	35	1.000	.0000	0.0%
	12	UOsmo	40	437.050	67.3677	15.4%
		Constant	40	1.000	.0000	0.0%
Total	UOsmo	104	415.615	80.3905	19.3%	
	Constant	104	1.000	.0000	0.0%	
16	6	UOsmo	29	418.345	79.2687	18.9%
		Constant	29	1.000	.0000	0.0%
	9	UOsmo	35	607.857	148.0614	24.4%
		Constant	35	1.000	.0000	0.0%
	12	UOsmo	40	575.100	124.8011	21.7%
		Constant	40	1.000	.0000	0.0%
Total	UOsmo	104	542.413	145.0733	26.7%	
	Constant	104	1.000	.0000	0.0%	
51	6	UOsmo	48	310.938	92.4753	29.7%
		Constant	48	1.000	.0000	0.0%
	9	UOsmo	60	400.133	70.3833	17.6%
		Constant	60	1.000	.0000	0.0%
	12	UOsmo	97	407.711	104.4184	25.6%
		Constant	97	1.000	.0000	0.0%
Total	UOsmo	205	382.834	100.6600	26.3%	
	Constant	205	1.000	.0000	0.0%	
52	6	UOsmo	48	275.208	74.8178	27.2%
		Constant	48	1.000	.0000	0.0%
	9	UOsmo	60	360.733	102.4958	28.4%
		Constant	60	1.000	.0000	0.0%
	12	UOsmo	97	399.789	98.7554	24.7%
		Constant	97	1.000	.0000	0.0%
Total	UOsmo	205	359.188	106.5899	29.7%	
	Constant	205	1.000	.0000	0.0%	
53	6	UOsmo	48	603.146	151.8590	25.2%
		Constant	48	1.000	.0000	0.0%
	9	UOsmo	60	635.617	147.8829	23.3%
		Constant	60	1.000	.0000	0.0%



	12	UOsmo	97	640.227	162.8074	25.4%
		Constant	97	1.000	.0000	0.0%
	Total	UOsmo	205	630.195	156.0136	24.8%
		Constant	205	1.000	.0000	0.0%
54	6	UOsmo	48	319.688	91.9554	28.8%
		Constant	48	1.000	.0000	0.0%
	9	UOsmo	60	384.733	92.9384	24.2%
		Constant	60	1.000	.0000	0.0%
	12	UOsmo	97	425.876	83.3733	19.6%
		Constant	97	1.000	.0000	0.0%
	Total	UOsmo	205	388.971	97.4666	25.1%
		Constant	205	1.000	.0000	0.0%
55	6	UOsmo	48	652.083	178.9557	27.4%
		Constant	48	1.000	.0000	0.0%
	9	UOsmo	60	726.433	183.3513	25.2%
		Constant	60	1.000	.0000	0.0%
	12	UOsmo	97	743.799	156.7634	21.1%
		Constant	97	1.000	.0000	0.0%
	Total	UOsmo	205	717.241	173.2769	24.2%
		Constant	205	1.000	.0000	0.0%
56	6	UOsmo	48	360.396	76.2891	21.2%
		Constant	48	1.000	.0000	0.0%
	9	UOsmo	60	447.783	90.2500	20.2%
		Constant	60	1.000	.0000	0.0%
	12	UOsmo	97	416.835	72.4010	17.4%
		Constant	97	1.000	.0000	0.0%
	Total	UOsmo	205	412.678	84.7183	20.5%
		Constant	205	1.000	.0000	0.0%
Total	6	UOsmo	404	431.248	175.4983	40.7%
		Constant	404	1.000	.0000	0.0%
	9	UOsmo	500	498.210	171.4893	34.4%
		Constant	500	1.000	.0000	0.0%
	12	UOsmo	742	508.053	169.8740	33.4%
		Constant	742	1.000	.0000	0.0%
	Total	UOsmo	1646	486.211	174.5454	35.9%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20428.399
Akaike's Information Criterion (AIC)	20432.399
Hurvich and Tsai's Criterion (AICC)	20432.407
Bozdogan's Criterion (CAIC)	20445.208
Schwarz's Bayesian Criterion (BIC)	20443.208

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.029	158.763	.000

salt	2	1634.097	59.886	.000
------	---	----------	--------	------

a. Dependent Variable: UOsмо.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	511.940042	38.399568	9.160	13.332	.000	425.304533	598.575551
[salt=6]	-78.312557	7.366884	1634.128	-10.630	.000	-92.762087	-63.863028
[salt=9]	-11.199769	6.892692	1634.121	-1.625	.104	-24.719211	2.319673
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsмо.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	14135.367770	494.530375
Constant [subject = subject]	Variance	14539.331510
		6890.059460

a. Dependent Variable: UOsмо.

```

* Encoding: UTF-8.
* ONLINE SUPPLEMENTAL STATISTICAL ANALYSIS TABLE 1

* Encoding: UTF-8.
GET
  FILE='C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav'.

*EFFECT OF DIETARY SALT INGESTION ON Na INTAKE
*Mixed linear Models

USE ALL.
MIXED NaIntake BY salt WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=salt | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:25
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

Cases Used		Statistics are based on all cases with valid data for all variables in the model.
Syntax		MIXED NaIntake BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.05

C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	Protocolled Na Intake (mmol/d)	29	100.596	13.3045	13.2%
		Constant	29	1.000	.0000	0.0%
9	9	Protocolled Na Intake (mmol/d)	35	155.274	13.6026	8.8%
		Constant	35	1.000	.0000	0.0%
12	12	Protocolled Na Intake (mmol/d)	40	209.666	18.7231	8.9%
		Constant	40	1.000	.0000	0.0%
Total	Total	Protocolled Na Intake (mmol/d)	104	160.947	46.9055	29.1%
		Constant	104	1.000	.0000	0.0%

12	6	Protocolled Na Intake (mmol/d)	29	114.394	19.3643	16.9%
		Constant	29	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	35	158.244	8.7768	5.5%
		Constant	35	1.000	.0000	0.0%
	12	Protocolled Na Intake (mmol/d)	40	208.328	8.8916	4.3%
		Constant	40	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	104	165.280	40.2841	24.4%	
	Constant	104	1.000	.0000	0.0%	
15	6	Protocolled Na Intake (mmol/d)	29	103.570	7.1785	6.9%
		Constant	29	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	35	157.189	7.5234	4.8%
		Constant	35	1.000	.0000	0.0%
	12	Protocolled Na Intake (mmol/d)	40	204.479	15.4581	7.6%
		Constant	40	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	104	160.426	42.3151	26.4%	
	Constant	104	1.000	.0000	0.0%	
16	6	Protocolled Na Intake (mmol/d)	29	108.152	6.6311	6.1%
		Constant	29	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	35	159.344	4.8942	3.1%
		Constant	35	1.000	.0000	0.0%
	12	Protocolled Na Intake (mmol/d)	40	210.352	6.4583	3.1%
		Constant	40	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	104	164.688	41.8936	25.4%	
	Constant	104	1.000	.0000	0.0%	
51	6	Protocolled Na Intake (mmol/d)	48	98.835	21.0260	21.3%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	60	147.481	17.6338	12.0%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Na Intake (mmol/d)	97	196.546	28.3870	14.4%
		Constant	97	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	205	159.307	46.1733	29.0%	
	Constant	205	1.000	.0000	0.0%	
52	6	Protocolled Na Intake (mmol/d)	48	97.168	19.1853	19.7%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	60	141.334	26.1488	18.5%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Na Intake (mmol/d)	97	191.356	22.2705	11.6%
		Constant	97	1.000	.0000	0.0%

	Total	Protocolled Na Intake (mmol/d)	205	154.662	44.5669	28.8%
		Constant	205	1.000	.0000	0.0%
53	6	Protocolled Na Intake (mmol/d)	48	95.160	20.4222	21.5%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	60	140.701	19.3190	13.7%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Na Intake (mmol/d)	97	197.409	20.0596	10.2%
		Constant	97	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	205	156.870	46.3438	29.5%
		Constant	205	1.000	.0000	0.0%
54	6	Protocolled Na Intake (mmol/d)	48	102.054	25.7084	25.2%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	60	142.298	23.2452	16.3%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Na Intake (mmol/d)	97	193.617	24.1329	12.5%
		Constant	97	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	205	157.158	44.6549	28.4%
		Constant	205	1.000	.0000	0.0%
55	6	Protocolled Na Intake (mmol/d)	48	96.937	19.4738	20.1%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	60	143.785	20.8527	14.5%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Na Intake (mmol/d)	97	192.881	23.9746	12.4%
		Constant	97	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	205	156.046	44.6663	28.6%
		Constant	205	1.000	.0000	0.0%
56	6	Protocolled Na Intake (mmol/d)	48	93.081	20.8950	22.4%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	60	139.705	24.8033	17.8%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Na Intake (mmol/d)	97	188.377	28.0351	14.9%
		Constant	97	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	205	151.818	46.2477	30.5%
		Constant	205	1.000	.0000	0.0%
Total	6	Protocolled Na Intake (mmol/d)	404	99.925	19.8040	19.8%
		Constant	404	1.000	.0000	0.0%
	9	Protocolled Na Intake (mmol/d)	500	146.740	20.5829	14.0%
		Constant	500	1.000	.0000	0.0%

12	Protocolled Na Intake (mmol/d)	742	196.565	23.5717	12.0%
	Constant	742	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	1646	157.710	44.8606	28.4%
	Constant	1646	1.000	.0000	0.0%

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	14703.444
Akaike's Information Criterion (AIC)	14707.444
Hurvich and Tsai's Criterion (AICC)	14707.452
Bozdogan's Criterion (CAIC)	14720.253
Schwarz's Bayesian Criterion (BIC)	14718.253

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

## Fixed Effects



**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.906	4199.117	.000
salt	2	1634.472	2926.981	.000

a. Dependent Variable: Protocolled Na Intake (mmol/d).

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	198.885661	2.376772	10.029	83.679	.000	193.591943	204.179379
[salt=6]	-97.539395	1.297613	1634.744	-75.168	.000	-100.084555	-94.994235
[salt=9]	-50.635007	1.214099	1634.680	-41.706	.000	-53.016361	-48.253652
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. This parameter is set to zero because it is redundant.

**Covariance Parameters**

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	438.667128	15.347661
Constant [subject = subject]	Variance	50.126656
		25.212727

a. Dependent Variable: Protocolled Na Intake (mmol/d).

\*EFFECT OF DIETARY SALT INGESTION ON PROTEIN INTAKE

\*Mixed linear Models

USE ALL.

MIXED ProteinIntake BY salt WITH Constant

```

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=salt | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:25
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED ProteinIntake BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.06

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	Protocolled Protein Intake (g/d)	29	87.5397	14.49413	16.6%
		Constant	29	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	35	101.0237	12.11508	12.0%
		Constant	35	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	40	104.6388	12.54628	12.0%
		Constant	40	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	104	98.6541	14.68872	14.9%	
	Constant	104	1.000	.0000	0.0%	
12	6	Protocolled Protein Intake (g/d)	29	99.1866	16.96841	17.1%
		Constant	29	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	35	102.5183	10.97522	10.7%
		Constant	35	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	40	102.0510	13.87442	13.6%
		Constant	40	1.000	.0000	0.0%

	Total	Protocolled Protein Intake (g/d)	104	101.4095	13.88850	13.7%
		Constant	104	1.000	.0000	0.0%
15	6	Protocolled Protein Intake (g/d)	29	91.4752	16.15437	17.7%
		Constant	29	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	35	100.9500	11.22178	11.1%
		Constant	35	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	40	99.3490	12.24854	12.3%
		Constant	40	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	104	97.6922	13.59674	13.9%	
	Constant	104	1.000	.0000	0.0%	
16	6	Protocolled Protein Intake (g/d)	29	95.4124	14.75140	15.5%
		Constant	29	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	35	104.0274	9.92668	9.5%
		Constant	35	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	40	105.0377	11.84954	11.3%
		Constant	40	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	104	102.0138	12.72973	12.5%	
	Constant	104	1.000	.0000	0.0%	
51	6	Protocolled Protein Intake (g/d)	48	92.2044	6.70658	7.3%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	60	92.4407	8.75707	9.5%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	97	92.4243	16.90821	18.3%
		Constant	97	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	205	92.3776	12.92618	14.0%	
	Constant	205	1.000	.0000	0.0%	
52	6	Protocolled Protein Intake (g/d)	48	91.7138	11.08433	12.1%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	60	92.5200	18.25307	19.7%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	97	93.5760	14.82739	15.8%
		Constant	97	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	205	92.8309	15.12321	16.3%	
	Constant	205	1.000	.0000	0.0%	
53	6	Protocolled Protein Intake (g/d)	48	89.7142	9.45773	10.5%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	60	90.9510	8.92511	9.8%
		Constant	60	1.000	.0000	0.0%

	12	Protocolled Protein Intake (g/d)	97	91.4531	16.23529	17.8%
		Constant	97	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	205	90.8990	12.96778	14.3%
		Constant	205	1.000	.0000	0.0%
54	6	Protocolled Protein Intake (g/d)	48	95.1665	10.99904	11.6%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	60	93.9310	12.02132	12.8%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	97	96.9878	16.07401	16.6%
		Constant	97	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	205	95.6667	13.89353	14.5%
		Constant	205	1.000	.0000	0.0%
55	6	Protocolled Protein Intake (g/d)	48	91.3994	13.19851	14.4%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	60	97.1472	12.77416	13.1%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	97	93.1930	15.55520	16.7%
		Constant	97	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	205	93.9303	14.35281	15.3%
		Constant	205	1.000	.0000	0.0%
56	6	Protocolled Protein Intake (g/d)	48	94.1546	9.27151	9.8%
		Constant	48	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	60	94.7552	10.44517	11.0%
		Constant	60	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	97	92.7252	15.38594	16.6%
		Constant	97	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	205	93.6540	12.79005	13.7%
		Constant	205	1.000	.0000	0.0%
Total	6	Protocolled Protein Intake (g/d)	404	92.6825	12.25865	13.2%
		Constant	404	1.000	.0000	0.0%
	9	Protocolled Protein Intake (g/d)	500	96.0058	12.59183	13.1%
		Constant	500	1.000	.0000	0.0%
	12	Protocolled Protein Intake (g/d)	742	95.4150	15.72423	16.5%
		Constant	742	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	1646	94.9238	14.07073	14.8%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	13292.598
Akaike's Information Criterion (AIC)	13296.598
Hurvich and Tsai's Criterion (AICC)	13296.606
Bozdogan's Criterion (CAIC)	13309.407
Schwarz's Bayesian Criterion (BIC)	13307.407

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Protein Intake (g/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
--------	--------------	----------------	---	------

Intercept	1	8.849	6034.456	.000
salt	2	1634.682	8.675	.000

a. Dependent Variable: Protocolled Protein Intake (g/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	96.558813	1.285266	10.531	75.127	.000	93.714525	99.403101
[salt=6]	-3.176050	.845532	1635.088	-3.756	.000	-4.834489	-1.517610
[salt=9]	.191437	.791118	1634.995	.242	.809	-1.360273	1.743148
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	186.278434	6.517480
Constant [subject = subject]	Variance	13.823094
		7.189779

a. Dependent Variable: Protocolled Protein Intake (g/d).

\*EFFECT OF DIETARY SALT INGESTION ON URINE ALDOSTERONE EXCRETION

\*Mixed linear Models

USE ALL.

MIXED UaldoV BY salt WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=salt | SSTYPE(3)

/METHOD=REML

/PRINT=DESCRIPTIVES SOLUTION

/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:24:25
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax		MIXED UAldoV BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	UAldoV	29	19.008	4.8865	25.7%
		Constant	29	1.000	.0000	0.0%
	9	UAldoV	35	16.228	4.7561	29.3%
		Constant	35	1.000	.0000	0.0%
	12	UAldoV	40	15.066	4.6350	30.8%
		Constant	40	1.000	.0000	0.0%
Total	UAldoV	104	16.556	4.9683	30.0%	
	Constant	104	1.000	.0000	0.0%	
12	6	UAldoV	29	15.842	5.8983	37.2%
		Constant	29	1.000	.0000	0.0%
	9	UAldoV	35	14.029	5.0421	35.9%
		Constant	35	1.000	.0000	0.0%
	12	UAldoV	40	7.618	3.4259	45.0%
		Constant	40	1.000	.0000	0.0%

	Total	UAldoV	104	12.069	5.9414	49.2%
		Constant	104	1.000	.0000	0.0%
15	6	UAldoV	29	10.699	2.8954	27.1%
		Constant	29	1.000	.0000	0.0%
	9	UAldoV	35	10.101	2.6767	26.5%
		Constant	35	1.000	.0000	0.0%
	12	UAldoV	39	11.635	2.7253	23.4%
		Constant	39	1.000	.0000	0.0%
Total	UAldoV	103	10.850	2.8091	25.9%	
	Constant	103	1.000	.0000	0.0%	
16	6	UAldoV	29	15.919	4.3292	27.2%
		Constant	29	1.000	.0000	0.0%
	9	UAldoV	35	14.230	4.0205	28.3%
		Constant	35	1.000	.0000	0.0%
	12	UAldoV	40	12.560	4.7260	37.6%
		Constant	40	1.000	.0000	0.0%
Total	UAldoV	104	14.059	4.5546	32.4%	
	Constant	104	1.000	.0000	0.0%	
51	6	UAldoV	48	13.757	3.1862	23.2%
		Constant	48	1.000	.0000	0.0%
	9	UAldoV	60	12.522	3.9783	31.8%
		Constant	60	1.000	.0000	0.0%
	12	UAldoV	97	9.708	2.7025	27.8%
		Constant	97	1.000	.0000	0.0%
Total	UAldoV	205	11.480	3.6585	31.9%	
	Constant	205	1.000	.0000	0.0%	
52	6	UAldoV	48	14.926	2.9797	20.0%
		Constant	48	1.000	.0000	0.0%
	9	UAldoV	60	14.870	3.0078	20.2%
		Constant	60	1.000	.0000	0.0%
	12	UAldoV	97	11.646	3.2207	27.7%
		Constant	97	1.000	.0000	0.0%
Total	UAldoV	205	13.358	3.4910	26.1%	
	Constant	205	1.000	.0000	0.0%	
53	6	UAldoV	48	17.246	5.2370	30.4%
		Constant	48	1.000	.0000	0.0%
	9	UAldoV	60	13.760	2.9629	21.5%
		Constant	60	1.000	.0000	0.0%

	12	UAldoV	96	8.365	2.2747	27.2%
		Constant	96	1.000	.0000	0.0%
	Total	UAldoV	204	12.042	4.9992	41.5%
		Constant	204	1.000	.0000	0.0%
54	6	UAldoV	48	11.087	2.4107	21.7%
		Constant	48	1.000	.0000	0.0%
	9	UAldoV	59	8.189	3.0693	37.5%
		Constant	59	1.000	.0000	0.0%
	12	UAldoV	97	5.529	1.5913	28.8%
		Constant	97	1.000	.0000	0.0%
	Total	UAldoV	204	7.606	3.2032	42.1%
		Constant	204	1.000	.0000	0.0%
55	6	UAldoV	47	21.692	4.9473	22.8%
		Constant	47	1.000	.0000	0.0%
	9	UAldoV	60	18.507	3.9481	21.3%
		Constant	60	1.000	.0000	0.0%
	12	UAldoV	97	14.723	5.6195	38.2%
		Constant	97	1.000	.0000	0.0%
	Total	UAldoV	204	17.441	5.7498	33.0%
		Constant	204	1.000	.0000	0.0%
56	6	UAldoV	48	18.221	3.9325	21.6%
		Constant	48	1.000	.0000	0.0%
	9	UAldoV	60	16.762	4.9433	29.5%
		Constant	60	1.000	.0000	0.0%
	12	UAldoV	97	13.412	4.0007	29.8%
		Constant	97	1.000	.0000	0.0%
	Total	UAldoV	205	15.518	4.7377	30.5%
		Constant	205	1.000	.0000	0.0%
Total	6	UAldoV	403	15.914	5.2491	33.0%
		Constant	403	1.000	.0000	0.0%
	9	UAldoV	499	13.986	4.8834	34.9%
		Constant	499	1.000	.0000	0.0%
	12	UAldoV	740	10.815	4.7017	43.5%
		Constant	740	1.000	.0000	0.0%
	Total	UAldoV	1642	13.030	5.3362	41.0%
		Constant	1642	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UAIdoV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	9209.876
Akaike's Information Criterion (AIC)	9213.876
Hurvich and Tsai's Criterion (AICC)	9213.883
Bozdogan's Criterion (CAIC)	9226.680
Schwarz's Bayesian Criterion (BIC)	9224.680

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UAIdoV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.035	213.916	.000

salt	2	1630.167	237.720	.000
------	---	----------	---------	------

a. Dependent Variable: UAldoV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	10.829320	.935069	9.281	11.581	.000	8.723762	12.934877
[salt=6]	5.107471	.244837	1630.228	20.861	.000	4.627242	5.587699
[salt=9]	3.157993	.229045	1630.213	13.788	.000	2.708740	3.607247
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UAldoV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	15.570869	.545420
Constant [subject = subject]	Variance	8.516042
		4.058798

a. Dependent Variable: UAldoV.

\*EFFECT OF DIETARY SALT INGESTION ON URINE CORTISONE EXCRETION

\*Mixed linear Models

USE ALL.

MIXED UCortisoneV BY salt WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=salt | SSTYPE(3)

/METHOD=REML

/PRINT=DESCRIPTIVES SOLUTION

/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:24:25
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UCortisoneV BY salt WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=salt   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	salt		Count	Mean	Standard Deviation	Coefficient of Variation
11	6	UCortisoneV	29	80.452	15.0775	18.7%
		Constant	29	1.000	.0000	0.0%
	9	UCortisoneV	35	89.270	18.6518	20.9%
		Constant	35	1.000	.0000	0.0%
	12	UCortisoneV	40	102.569	22.6767	22.1%
		Constant	40	1.000	.0000	0.0%
Total	UCortisoneV	104	91.926	21.3259	23.2%	
	Constant	104	1.000	.0000	0.0%	
12	6	UCortisoneV	29	89.488	14.7677	16.5%
		Constant	29	1.000	.0000	0.0%
	9	UCortisoneV	35	74.414	13.8542	18.6%
		Constant	35	1.000	.0000	0.0%
	12	UCortisoneV	40	71.291	18.2603	25.6%
		Constant	40	1.000	.0000	0.0%

	Total	UCortisoneV	104	77.416	17.5374	22.7%
		Constant	104	1.000	.0000	0.0%
15	6	UCortisoneV	29	50.949	16.6210	32.6%
		Constant	29	1.000	.0000	0.0%
	9	UCortisoneV	35	56.364	13.8108	24.5%
		Constant	35	1.000	.0000	0.0%
	12	UCortisoneV	40	73.962	15.0738	20.4%
		Constant	40	1.000	.0000	0.0%
Total	UCortisoneV	104	61.623	18.0195	29.2%	
	Constant	104	1.000	.0000	0.0%	
16	6	UCortisoneV	29	67.841	14.6017	21.5%
		Constant	29	1.000	.0000	0.0%
	9	UCortisoneV	35	76.765	18.7624	24.4%
		Constant	35	1.000	.0000	0.0%
	12	UCortisoneV	40	75.099	14.9012	19.8%
		Constant	40	1.000	.0000	0.0%
Total	UCortisoneV	104	73.636	16.4880	22.4%	
	Constant	104	1.000	.0000	0.0%	
51	6	UCortisoneV	48	71.498	18.1113	25.3%
		Constant	48	1.000	.0000	0.0%
	9	UCortisoneV	60	67.672	14.3963	21.3%
		Constant	60	1.000	.0000	0.0%
	12	UCortisoneV	97	79.557	18.9494	23.8%
		Constant	97	1.000	.0000	0.0%
Total	UCortisoneV	205	74.192	18.2315	24.6%	
	Constant	205	1.000	.0000	0.0%	
52	6	UCortisoneV	48	78.558	16.3145	20.8%
		Constant	48	1.000	.0000	0.0%
	9	UCortisoneV	60	76.983	17.2283	22.4%
		Constant	60	1.000	.0000	0.0%
	12	UCortisoneV	97	86.816	17.1217	19.7%
		Constant	97	1.000	.0000	0.0%
Total	UCortisoneV	205	82.004	17.5026	21.3%	
	Constant	205	1.000	.0000	0.0%	
53	6	UCortisoneV	48	68.932	15.8038	22.9%
		Constant	48	1.000	.0000	0.0%
	9	UCortisoneV	60	67.250	12.8442	19.1%
		Constant	60	1.000	.0000	0.0%



	12	UCortisoneV	97	70.720	13.9330	19.7%	
		Constant	97	1.000	.0000	0.0%	
	Total	UCortisoneV	205	69.286	14.1009	20.4%	
		Constant	205	1.000	.0000	0.0%	
54	6	UCortisoneV	48	70.693	14.4194	20.4%	
		Constant	48	1.000	.0000	0.0%	
	9	UCortisoneV	60	75.439	14.6012	19.4%	
		Constant	60	1.000	.0000	0.0%	
	12	UCortisoneV	97	85.095	16.3029	19.2%	
		Constant	97	1.000	.0000	0.0%	
	Total	UCortisoneV	205	78.897	16.5002	20.9%	
		Constant	205	1.000	.0000	0.0%	
	55	6	UCortisoneV	48	51.914	12.9496	24.9%
			Constant	48	1.000	.0000	0.0%
9		UCortisoneV	60	57.349	12.2900	21.4%	
		Constant	60	1.000	.0000	0.0%	
12		UCortisoneV	97	65.462	21.5957	33.0%	
		Constant	97	1.000	.0000	0.0%	
Total		UCortisoneV	205	59.915	18.2598	30.5%	
		Constant	205	1.000	.0000	0.0%	
56		6	UCortisoneV	48	49.646	10.3431	20.8%
			Constant	48	1.000	.0000	0.0%
	9	UCortisoneV	60	51.550	12.2814	23.8%	
		Constant	60	1.000	.0000	0.0%	
	12	UCortisoneV	97	77.544	15.3530	19.8%	
		Constant	97	1.000	.0000	0.0%	
	Total	UCortisoneV	205	63.404	18.9770	29.9%	
		Constant	205	1.000	.0000	0.0%	
	Total	6	UCortisoneV	404	67.210	19.2611	28.7%
			Constant	404	1.000	.0000	0.0%
9		UCortisoneV	500	68.326	18.0493	26.4%	
		Constant	500	1.000	.0000	0.0%	
12		UCortisoneV	742	78.222	19.6017	25.1%	
		Constant	742	1.000	.0000	0.0%	
Total		UCortisoneV	1646	72.513	19.7414	27.2%	
		Constant	1646	1.000	.0000	0.0%	

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	salt	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UCortisoneV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	13986.094
Akaike's Information Criterion (AIC)	13990.094
Hurvich and Tsai's Criterion (AICC)	13990.102
Bozdogan's Criterion (CAIC)	14002.903
Schwarz's Bayesian Criterion (BIC)	14000.903

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UCortisoneV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.979	506.073	.000

salt	2	1634.171	84.064	.000
------	---	----------	--------	------

a. Dependent Variable: UCortisoneV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	79.273592	3.235304	9.351	24.503	.000	71.996489	86.550694
[salt=6]	-11.419815	1.040082	1634.262	-10.980	.000	-13.459849	-9.379781
[salt=9]	-10.262884	.973136	1634.240	-10.546	.000	-12.171609	-8.354159
[salt=12]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UCortisoneV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	281.773630	9.858120
Constant [subject = subject]	Variance	100.571088
		48.404795

a. Dependent Variable: UCortisoneV.

\*QUANTIFICATION OF SPONTANEOUS VARIABILITY OF URINE ALDOSTERONE AND CORTISONE LEVELS AT CONSTANT SALT INTAKE LEVEL

\*EFFECT OF URINE ALDOSTERONE TERTILE

\*ON URINE ALDOSTERONE EXCRETION

\* Mixed Linear Models

EFFECT OF UAldoV TERTILE ON UAldoV AT 12 g SALT INTAKE

all subjects

USE ALL.

COMPUTE filter\_\$(salt = 12).

VARIABLE LABELS filter\_\$ 'salt = 12 (FILTER)'.  
 VALUE LABELS filter\_\$ 0 'Not Selected' 1 'Selected'.

```

FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED UAldoV BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UAldoV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UAldoV	13	9.852	.9405	9.5%
		Constant	13	1.000	.0000	0.0%
	1.0	UAldoV	14	15.046	1.4095	9.4%
		Constant	14	1.000	.0000	0.0%
	2.0	UAldoV	13	20.303	2.7603	13.6%
		Constant	13	1.000	.0000	0.0%
Total	UAldoV	40	15.066	4.6350	30.8%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UAldoV	13	4.542	1.1133	24.5%
		Constant	13	1.000	.0000	0.0%
	1.0	UAldoV	14	7.202	.4890	6.8%
		Constant	14	1.000	.0000	0.0%

	2.0	UAldoV	13	11.143	3.5679	32.0%
		Constant	13	1.000	.0000	0.0%
	Total	UAldoV	40	7.618	3.4259	45.0%
		Constant	40	1.000	.0000	0.0%
15	.0	UAldoV	13	8.732	1.0152	11.6%
		Constant	13	1.000	.0000	0.0%
	1.0	UAldoV	14	11.608	.6220	5.4%
		Constant	14	1.000	.0000	0.0%
	2.0	UAldoV	12	14.811	1.7641	11.9%
		Constant	12	1.000	.0000	0.0%
	Total	UAldoV	39	11.635	2.7253	23.4%
		Constant	39	1.000	.0000	0.0%
16	.0	UAldoV	13	7.946	1.1664	14.7%
		Constant	13	1.000	.0000	0.0%
	1.0	UAldoV	14	11.503	1.1794	10.3%
		Constant	14	1.000	.0000	0.0%
	2.0	UAldoV	13	18.312	3.0850	16.8%
		Constant	13	1.000	.0000	0.0%
	Total	UAldoV	40	12.560	4.7260	37.6%
		Constant	40	1.000	.0000	0.0%
51	.0	UAldoV	32	6.820	1.3863	20.3%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	9.632	.6360	6.6%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	12.675	1.6042	12.7%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	9.708	2.7025	27.8%
		Constant	97	1.000	.0000	0.0%
52	.0	UAldoV	32	8.086	1.6293	20.1%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	11.671	1.1247	9.6%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	15.180	1.4790	9.7%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	11.646	3.2207	27.7%
		Constant	97	1.000	.0000	0.0%
53	.0	UAldoV	32	6.062	.8231	13.6%
		Constant	32	1.000	.0000	0.0%

	1.0	UAldoV	33	8.064	.5491	6.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	31	11.064	1.4414	13.0%
		Constant	31	1.000	.0000	0.0%
	Total	UAldoV	96	8.365	2.2747	27.2%
		Constant	96	1.000	.0000	0.0%
54	.0	UAldoV	32	4.026	.4884	12.1%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	5.258	.3887	7.4%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	7.310	1.3281	18.2%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	5.529	1.5913	28.8%
		Constant	97	1.000	.0000	0.0%
55	.0	UAldoV	32	10.502	1.7978	17.1%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	13.836	.8503	6.1%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	19.859	6.8818	34.7%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	14.723	5.6195	38.2%
		Constant	97	1.000	.0000	0.0%
56	.0	UAldoV	32	9.670	1.3898	14.4%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	13.101	.8451	6.5%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	17.474	3.9125	22.4%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	13.412	4.0007	29.8%
		Constant	97	1.000	.0000	0.0%
Total	.0	UAldoV	244	7.579	2.4914	32.9%
		Constant	244	1.000	.0000	0.0%
	1.0	UAldoV	254	10.498	3.0813	29.3%
		Constant	254	1.000	.0000	0.0%
	2.0	UAldoV	242	14.411	5.2789	36.6%
		Constant	242	1.000	.0000	0.0%
	Total	UAldoV	740	10.815	4.7017	43.5%
		Constant	740	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UAldoV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3359.535
Akaike's Information Criterion (AIC)	3363.535
Hurvich and Tsai's Criterion (AICC)	3363.552
Bozdogan's Criterion (CAIC)	3374.740
Schwarz's Bayesian Criterion (BIC)	3372.740

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UAldoV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.008	122.649	.000
UAldoV_h_I_perdiet	2	728.010	553.626	.000

a. Dependent Variable: UAldoV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	14.622818	1.004270	9.271	14.561	.000	12.361077	16.884558
[UAldoV_h_I_perdiet=.0]	-6.826084	.205857	728.010	-33.159	.000	-7.230227	-6.421941
[UAldoV_h_I_perdiet=1.0]	-3.915120	.203838	728.011	-19.207	.000	-4.315300	-3.514940
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UAldoV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	5.148388	.269847
Constant [subject = subject]	Variance	9.858188
		4.684353

a. Dependent Variable: UAldoV.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON UAldoV AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UAldoV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UAldoV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.06

**Descriptive Statistics**

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UAldoV	12	11.316	2.0724	18.3%
		Constant	12	1.000	.0000	0.0%
	1.0	UAldoV	11	15.908	1.7491	11.0%
		Constant	11	1.000	.0000	0.0%
	2.0	UAldoV	12	21.432	2.6215	12.2%
		Constant	12	1.000	.0000	0.0%
Total	UAldoV	35	16.228	4.7561	29.3%	
	Constant	35	1.000	.0000	0.0%	
12	.0	UAldoV	12	8.505	2.9971	35.2%
		Constant	12	1.000	.0000	0.0%
	1.0	UAldoV	11	14.184	1.3079	9.2%
		Constant	11	1.000	.0000	0.0%

	2.0	UAldoV	12	19.411	1.7682	9.1%
		Constant	12	1.000	.0000	0.0%
Total		UAldoV	35	14.029	5.0421	35.9%
		Constant	35	1.000	.0000	0.0%
15	.0	UAldoV	12	7.440	1.5585	20.9%
		Constant	12	1.000	.0000	0.0%
	1.0	UAldoV	11	10.139	.4033	4.0%
		Constant	11	1.000	.0000	0.0%
	2.0	UAldoV	12	12.726	2.0799	16.3%
		Constant	12	1.000	.0000	0.0%
	Total	UAldoV	35	10.101	2.6767	26.5%
		Constant	35	1.000	.0000	0.0%
16	.0	UAldoV	12	10.027	2.0448	20.4%
		Constant	12	1.000	.0000	0.0%
	1.0	UAldoV	11	14.184	.3539	2.5%
		Constant	11	1.000	.0000	0.0%
	2.0	UAldoV	12	18.476	2.5939	14.0%
		Constant	12	1.000	.0000	0.0%
	Total	UAldoV	35	14.230	4.0205	28.3%
		Constant	35	1.000	.0000	0.0%
51	.0	UAldoV	20	8.577	1.4312	16.7%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	12.047	1.1642	9.7%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	16.942	2.9267	17.3%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	12.522	3.9783	31.8%
		Constant	60	1.000	.0000	0.0%
52	.0	UAldoV	20	11.731	1.9130	16.3%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	14.703	.6015	4.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	18.175	1.4730	8.1%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	14.870	3.0078	20.2%
		Constant	60	1.000	.0000	0.0%
53	.0	UAldoV	20	10.668	1.3858	13.0%
		Constant	20	1.000	.0000	0.0%

	1.0	UAldoV	20	13.550	.6767	5.0%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	17.062	1.8144	10.6%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	13.760	2.9629	21.5%
		Constant	60	1.000	.0000	0.0%
54	.0	UAldoV	20	5.414	.8935	16.5%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	7.640	.8035	10.5%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	19	11.686	2.6515	22.7%
		Constant	19	1.000	.0000	0.0%
	Total	UAldoV	59	8.189	3.0693	37.5%
		Constant	59	1.000	.0000	0.0%
55	.0	UAldoV	20	14.127	1.6711	11.8%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	18.498	1.2628	6.8%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	22.895	1.8863	8.2%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	18.507	3.9481	21.3%
		Constant	60	1.000	.0000	0.0%
56	.0	UAldoV	20	12.410	2.0285	16.3%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	15.669	.7153	4.6%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	22.208	4.3408	19.5%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	16.762	4.9433	29.5%
		Constant	60	1.000	.0000	0.0%
Total	.0	UAldoV	168	10.155	3.1137	30.7%
		Constant	168	1.000	.0000	0.0%
	1.0	UAldoV	164	13.663	3.2197	23.6%
		Constant	164	1.000	.0000	0.0%
	2.0	UAldoV	167	18.157	4.3762	24.1%
		Constant	167	1.000	.0000	0.0%
	Total	UAldoV	499	13.986	4.8834	34.9%
		Constant	499	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UAldoV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	2160.623
Akaike's Information Criterion (AIC)	2164.623
Hurvich and Tsai's Criterion (AICC)	2164.647
Bozdogan's Criterion (CAIC)	2175.036
Schwarz's Bayesian Criterion (BIC)	2173.036

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UAldoV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.014	207.178	.000
UAldoV_h_I_perdiet	2	487.017	657.396	.000

a. Dependent Variable: UAldoV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	18.069200	.975646	9.328	18.520	.000	15.873898	20.264502
[UAldoV_h_I_perdiet=.0]	-7.968196	.220257	487.015	-36.177	.000	-8.400968	-7.535424
[UAldoV_h_I_perdiet=1.0]	-4.468320	.221625	487.018	-20.162	.000	-4.903779	-4.032861
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UAldoV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	4.062770	.260355
Constant [subject = subject]	Variance	9.270492
		4.407669

a. Dependent Variable: UAldoV.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON UAldoV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UAldoV BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED UAldoV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UAldoV	10	14.187	2.0159	14.2%
		Constant	10	1.000	.0000	0.0%
	1.0	UAldoV	9	18.409	1.3844	7.5%
		Constant	9	1.000	.0000	0.0%
	2.0	UAldoV	10	24.369	3.2269	13.2%
		Constant	10	1.000	.0000	0.0%
Total	UAldoV	29	19.008	4.8865	25.7%	
	Constant	29	1.000	.0000	0.0%	
12	.0	UAldoV	10	9.540	3.2508	34.1%
		Constant	10	1.000	.0000	0.0%
	1.0	UAldoV	9	15.593	1.2941	8.3%
		Constant	9	1.000	.0000	0.0%

	2.0	UAldoV	10	22.369	2.1575	9.6%
		Constant	10	1.000	.0000	0.0%
Total		UAldoV	29	15.842	5.8983	37.2%
		Constant	29	1.000	.0000	0.0%
15	.0	UAldoV	10	7.999	.7873	9.8%
		Constant	10	1.000	.0000	0.0%
	1.0	UAldoV	9	9.846	.5161	5.2%
		Constant	9	1.000	.0000	0.0%
	2.0	UAldoV	10	14.167	1.7420	12.3%
		Constant	10	1.000	.0000	0.0%
	Total	UAldoV	29	10.699	2.8954	27.1%
		Constant	29	1.000	.0000	0.0%
16	.0	UAldoV	10	11.594	1.6734	14.4%
		Constant	10	1.000	.0000	0.0%
	1.0	UAldoV	9	16.038	.9309	5.8%
		Constant	9	1.000	.0000	0.0%
	2.0	UAldoV	10	20.137	3.7644	18.7%
		Constant	10	1.000	.0000	0.0%
	Total	UAldoV	29	15.919	4.3292	27.2%
		Constant	29	1.000	.0000	0.0%
51	.0	UAldoV	16	10.339	1.8402	17.8%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	13.650	1.0344	7.6%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	17.281	1.2787	7.4%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	13.757	3.1862	23.2%
		Constant	48	1.000	.0000	0.0%
52	.0	UAldoV	16	11.799	1.9013	16.1%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	14.968	.6668	4.5%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	18.011	1.7825	9.9%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	14.926	2.9797	20.0%
		Constant	48	1.000	.0000	0.0%
53	.0	UAldoV	16	11.847	1.6786	14.2%
		Constant	16	1.000	.0000	0.0%

	1.0	UAldoV	16	16.880	1.2079	7.2%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	23.011	3.8692	16.8%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	17.246	5.2370	30.4%
		Constant	48	1.000	.0000	0.0%
54	.0	UAldoV	16	8.783	1.1436	13.0%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	10.655	.5463	5.1%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	13.822	1.6621	12.0%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	11.087	2.4107	21.7%
		Constant	48	1.000	.0000	0.0%
55	.0	UAldoV	16	16.667	2.1722	13.0%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	21.153	1.4375	6.8%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	15	27.627	2.4949	9.0%
		Constant	15	1.000	.0000	0.0%
	Total	UAldoV	47	21.692	4.9473	22.8%
		Constant	47	1.000	.0000	0.0%
56	.0	UAldoV	16	13.934	1.7412	12.5%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	18.438	.7772	4.2%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	22.290	2.7395	12.3%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	18.221	3.9325	21.6%
		Constant	48	1.000	.0000	0.0%
Total	.0	UAldoV	136	11.817	3.1390	26.6%
		Constant	136	1.000	.0000	0.0%
	1.0	UAldoV	132	15.688	3.4986	22.3%
		Constant	132	1.000	.0000	0.0%
	2.0	UAldoV	135	20.263	4.9627	24.5%
		Constant	135	1.000	.0000	0.0%
	Total	UAldoV	403	15.914	5.2491	33.0%
		Constant	403	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UAldoV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	1805.859
Akaike's Information Criterion (AIC)	1809.859
Hurvich and Tsai's Criterion (AICC)	1809.889
Bozdogan's Criterion (CAIC)	1819.842
Schwarz's Bayesian Criterion (BIC)	1817.842

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UAldoV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.005	210.576	.000
UAldoV_h_I_perdiet	2	391.008	526.479	.000

a. Dependent Variable: UAldoV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	20.220846	1.102396	9.353	18.343	.000	17.741310	22.700383
[UAldoV_h_I_perdiet=.0]	-8.488599	.261928	391.006	-32.408	.000	-9.003563	-7.973635
[UAldoV_h_I_perdiet=1.0]	-4.634728	.263956	391.010	-17.559	.000	-5.153679	-4.115778
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UAldoV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	4.647699	.332401
Constant [subject = subject]	Variance	11.802464
		5.619807

a. Dependent Variable: UAldoV.

\*ON URINE CORTISONE EXCRETION

\* Mixed Linear Models

EFFECT OF UAldoV TERTILE ON UFEV AT 12 g SALT INTAKE  
all subjects

USE ALL.

COMPUTE filter\_\$(salt = 12).

VARIABLE LABELS filter\_\$ 'salt = 12 (FILTER)'.  
VALUE LABELS filter\_\$ 0 'Not Selected' 1 'Selected'.

```

FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED UCortisoneV BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED UCortisoneV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UCortisoneV	13	95.742	24.1815	25.3%
		Constant	13	1.000	.0000	0.0%
	1.0	UCortisoneV	14	106.226	27.1764	25.6%
		Constant	14	1.000	.0000	0.0%
	2.0	UCortisoneV	13	105.456	14.5351	13.8%
		Constant	13	1.000	.0000	0.0%
Total	UCortisoneV	40	102.569	22.6767	22.1%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UCortisoneV	13	73.631	23.6381	32.1%
		Constant	13	1.000	.0000	0.0%
	1.0	UCortisoneV	14	67.801	18.9794	28.0%
		Constant	14	1.000	.0000	0.0%

	2.0	UCortisoneV	13	72.709	10.6000	14.6%
		Constant	13	1.000	.0000	0.0%
Total		UCortisoneV	40	71.291	18.2603	25.6%
		Constant	40	1.000	.0000	0.0%
15	.0	UCortisoneV	13	69.939	19.2133	27.5%
		Constant	13	1.000	.0000	0.0%
	1.0	UCortisoneV	14	75.369	15.6831	20.8%
		Constant	14	1.000	.0000	0.0%
	2.0	UCortisoneV	13	76.471	8.7287	11.4%
		Constant	13	1.000	.0000	0.0%
Total	UCortisoneV	40	73.962	15.0738	20.4%	
	Constant	40	1.000	.0000	0.0%	
16	.0	UCortisoneV	13	77.418	17.5900	22.7%
		Constant	13	1.000	.0000	0.0%
	1.0	UCortisoneV	14	79.934	13.8045	17.3%
		Constant	14	1.000	.0000	0.0%
	2.0	UCortisoneV	13	67.574	10.5517	15.6%
		Constant	13	1.000	.0000	0.0%
Total	UCortisoneV	40	75.099	14.9012	19.8%	
	Constant	40	1.000	.0000	0.0%	
51	.0	UCortisoneV	32	85.096	23.2028	27.3%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	78.386	14.8343	18.9%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	75.226	17.1455	22.8%
		Constant	32	1.000	.0000	0.0%
Total	UCortisoneV	97	79.557	18.9494	23.8%	
	Constant	97	1.000	.0000	0.0%	
52	.0	UCortisoneV	32	92.297	19.3360	20.9%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	87.025	14.4004	16.5%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	81.118	15.9787	19.7%
		Constant	32	1.000	.0000	0.0%
Total	UCortisoneV	97	86.816	17.1217	19.7%	
	Constant	97	1.000	.0000	0.0%	
53	.0	UCortisoneV	32	66.819	13.6420	20.4%
		Constant	32	1.000	.0000	0.0%



	1.0	UCortisoneV	33	72.562	14.4202	19.9%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	72.721	13.3027	18.3%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	70.720	13.9330	19.7%
		Constant	97	1.000	.0000	0.0%
54	.0	UCortisoneV	32	81.812	16.6940	20.4%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	85.330	13.7726	16.1%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	88.136	18.1068	20.5%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	85.095	16.3029	19.2%
		Constant	97	1.000	.0000	0.0%
55	.0	UCortisoneV	32	62.993	19.7195	31.3%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	68.924	23.3127	33.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	64.361	21.7734	33.8%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	65.462	21.5957	33.0%
		Constant	97	1.000	.0000	0.0%
56	.0	UCortisoneV	32	80.070	16.9614	21.2%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	79.174	10.7121	13.5%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	73.337	17.2084	23.5%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	77.544	15.3530	19.8%
		Constant	97	1.000	.0000	0.0%
Total	.0	UCortisoneV	244	78.395	21.3380	27.2%
		Constant	244	1.000	.0000	0.0%
	1.0	UCortisoneV	254	79.397	18.6388	23.5%
		Constant	254	1.000	.0000	0.0%
	2.0	UCortisoneV	244	76.826	18.7406	24.4%
		Constant	244	1.000	.0000	0.0%
	Total	UCortisoneV	742	78.222	19.6017	25.1%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UCortisoneV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6373.994
Akaike's Information Criterion (AIC)	6377.994
Hurvich and Tsai's Criterion (AICC)	6378.010
Bozdogan's Criterion (CAIC)	6389.204
Schwarz's Bayesian Criterion (BIC)	6387.204

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UCortisoneV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.818	565.582	.000
UAldoV_h_I_perdiet	2	729.824	1.337	.263

a. Dependent Variable: UCortisoneV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	77.388681	3.437137	10.229	22.515	.000	69.753482	85.023881
[UAldoV_h_I_perdiet=.0]	1.568820	1.585766	729.822	.989	.323	-1.544387	4.682026
[UAldoV_h_I_perdiet=1.0]	2.549168	1.570120	729.826	1.624	.105	-.533323	5.631659
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UCortisoneV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	306.787702	16.059964
Constant [subject = subject] Variance	104.757252	52.216507

a. Dependent Variable: UCortisoneV.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON UFEV AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UCortisoneV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED UCortisoneV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UCortisoneV	12	84.616	17.0458	20.1%
		Constant	12	1.000	.0000	0.0%
	1.0	UCortisoneV	11	91.035	21.8469	24.0%
		Constant	11	1.000	.0000	0.0%
	2.0	UCortisoneV	12	92.306	17.7214	19.2%
		Constant	12	1.000	.0000	0.0%
Total	UCortisoneV	35	89.270	18.6518	20.9%	
	Constant	35	1.000	.0000	0.0%	
12	.0	UCortisoneV	12	73.323	16.4161	22.4%
		Constant	12	1.000	.0000	0.0%
	1.0	UCortisoneV	11	74.447	13.3718	18.0%
		Constant	11	1.000	.0000	0.0%

	2.0	UCortisoneV	12	75.476	12.5975	16.7%
		Constant	12	1.000	.0000	0.0%
Total		UCortisoneV	35	74.414	13.8542	18.6%
		Constant	35	1.000	.0000	0.0%
15	.0	UCortisoneV	12	51.940	15.8660	30.5%
		Constant	12	1.000	.0000	0.0%
	1.0	UCortisoneV	11	55.754	12.7636	22.9%
		Constant	11	1.000	.0000	0.0%
	2.0	UCortisoneV	12	61.346	11.8713	19.4%
		Constant	12	1.000	.0000	0.0%
Total		UCortisoneV	35	56.364	13.8108	24.5%
		Constant	35	1.000	.0000	0.0%
16	.0	UCortisoneV	12	84.657	16.9940	20.1%
		Constant	12	1.000	.0000	0.0%
	1.0	UCortisoneV	11	72.228	15.2060	21.1%
		Constant	11	1.000	.0000	0.0%
	2.0	UCortisoneV	12	73.033	22.0312	30.2%
		Constant	12	1.000	.0000	0.0%
Total		UCortisoneV	35	76.765	18.7624	24.4%
		Constant	35	1.000	.0000	0.0%
51	.0	UCortisoneV	20	69.501	14.0551	20.2%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	69.601	16.2258	23.3%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	63.915	12.6672	19.8%
		Constant	20	1.000	.0000	0.0%
Total		UCortisoneV	60	67.672	14.3963	21.3%
		Constant	60	1.000	.0000	0.0%
52	.0	UCortisoneV	20	80.697	17.9445	22.2%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	72.339	15.5972	21.6%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	77.912	17.8405	22.9%
		Constant	20	1.000	.0000	0.0%
Total		UCortisoneV	60	76.983	17.2283	22.4%
		Constant	60	1.000	.0000	0.0%
53	.0	UCortisoneV	20	66.532	14.6427	22.0%
		Constant	20	1.000	.0000	0.0%

	1.0	UCortisoneV	20	67.264	11.7430	17.5%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	67.955	12.6060	18.6%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	67.250	12.8442	19.1%
		Constant	60	1.000	.0000	0.0%
54	.0	UCortisoneV	20	75.760	12.3345	16.3%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	82.386	15.9017	19.3%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	68.170	12.2673	18.0%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	75.439	14.6012	19.4%
		Constant	60	1.000	.0000	0.0%
55	.0	UCortisoneV	20	58.154	13.4458	23.1%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	56.794	12.7346	22.4%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	57.098	11.1801	19.6%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	57.349	12.2900	21.4%
		Constant	60	1.000	.0000	0.0%
56	.0	UCortisoneV	20	49.072	11.2194	22.9%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	56.076	14.0495	25.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	49.503	10.6146	21.4%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	51.550	12.2814	23.8%
		Constant	60	1.000	.0000	0.0%
Total	.0	UCortisoneV	168	68.624	18.7005	27.3%
		Constant	168	1.000	.0000	0.0%
	1.0	UCortisoneV	164	69.008	17.9107	26.0%
		Constant	164	1.000	.0000	0.0%
	2.0	UCortisoneV	168	67.363	17.5823	26.1%
		Constant	168	1.000	.0000	0.0%
	Total	UCortisoneV	500	68.326	18.0493	26.4%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UCortisoneV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4132.397
Akaike's Information Criterion (AIC)	4136.397
Hurvich and Tsai's Criterion (AICC)	4136.422
Bozdogan's Criterion (CAIC)	4146.815
Schwarz's Bayesian Criterion (BIC)	4144.815

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UCortisoneV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.953	358.723	.000
UAldoV_h_I_perdiet	2	487.961	.641	.527

a. Dependent Variable: UCortisoneV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	68.262425	3.773260	10.139	18.091	.000	59.870700	76.654150
[UAldoV_h_I_perdiet=.0]	1.260382	1.611056	487.955	.782	.434	-1.905082	4.425845
[UAldoV_h_I_perdiet=1.0]	1.781893	1.621044	487.964	1.099	.272	-1.403196	4.966981
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UCortisoneV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	218.022111	13.958082
Constant [subject = subject] Variance	129.125707	63.227098

a. Dependent Variable: UCortisoneV.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON UFEV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UCortisoneV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED UCortisoneV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UCortisoneV	10	83.968	10.0040	11.9%
		Constant	10	1.000	.0000	0.0%
	1.0	UCortisoneV	9	86.090	11.5585	13.4%
		Constant	9	1.000	.0000	0.0%
	2.0	UCortisoneV	10	71.862	18.9976	26.4%
		Constant	10	1.000	.0000	0.0%
Total	UCortisoneV	29	80.452	15.0775	18.7%	
	Constant	29	1.000	.0000	0.0%	
12	.0	UCortisoneV	10	82.469	17.6730	21.4%
		Constant	10	1.000	.0000	0.0%
	1.0	UCortisoneV	9	91.096	9.1105	10.0%
		Constant	9	1.000	.0000	0.0%

	2.0	UCortisoneV	10	95.061	14.1610	14.9%
		Constant	10	1.000	.0000	0.0%
Total		UCortisoneV	29	89.488	14.7677	16.5%
		Constant	29	1.000	.0000	0.0%
15	.0	UCortisoneV	10	37.558	8.7089	23.2%
		Constant	10	1.000	.0000	0.0%
	1.0	UCortisoneV	9	47.745	9.4558	19.8%
		Constant	9	1.000	.0000	0.0%
	2.0	UCortisoneV	10	67.225	14.1527	21.1%
		Constant	10	1.000	.0000	0.0%
Total	UCortisoneV	29	50.949	16.6210	32.6%	
	Constant	29	1.000	.0000	0.0%	
16	.0	UCortisoneV	10	67.353	17.7137	26.3%
		Constant	10	1.000	.0000	0.0%
	1.0	UCortisoneV	9	71.951	15.6105	21.7%
		Constant	9	1.000	.0000	0.0%
	2.0	UCortisoneV	10	64.630	10.2139	15.8%
		Constant	10	1.000	.0000	0.0%
Total	UCortisoneV	29	67.841	14.6017	21.5%	
	Constant	29	1.000	.0000	0.0%	
51	.0	UCortisoneV	16	74.021	14.6193	19.8%
		Constant	16	1.000	.0000	0.0%
	1.0	UCortisoneV	16	76.979	20.5050	26.6%
		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	63.493	16.9240	26.7%
		Constant	16	1.000	.0000	0.0%
Total	UCortisoneV	48	71.498	18.1113	25.3%	
	Constant	48	1.000	.0000	0.0%	
52	.0	UCortisoneV	16	84.425	17.0112	20.1%
		Constant	16	1.000	.0000	0.0%
	1.0	UCortisoneV	16	78.778	15.6030	19.8%
		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	72.471	14.9953	20.7%
		Constant	16	1.000	.0000	0.0%
Total	UCortisoneV	48	78.558	16.3145	20.8%	
	Constant	48	1.000	.0000	0.0%	
53	.0	UCortisoneV	16	71.085	15.4594	21.7%
		Constant	16	1.000	.0000	0.0%

	1.0	UCortisoneV	16	70.050	14.8886	21.3%
		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	65.663	17.4424	26.6%
		Constant	16	1.000	.0000	0.0%
	Total	UCortisoneV	48	68.932	15.8038	22.9%
		Constant	48	1.000	.0000	0.0%
54	.0	UCortisoneV	16	72.031	16.8266	23.4%
		Constant	16	1.000	.0000	0.0%
	1.0	UCortisoneV	16	73.733	12.7709	17.3%
		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	66.317	13.1552	19.8%
		Constant	16	1.000	.0000	0.0%
	Total	UCortisoneV	48	70.693	14.4194	20.4%
		Constant	48	1.000	.0000	0.0%
55	.0	UCortisoneV	16	51.756	15.0405	29.1%
		Constant	16	1.000	.0000	0.0%
	1.0	UCortisoneV	16	52.637	13.1808	25.0%
		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	51.349	11.1606	21.7%
		Constant	16	1.000	.0000	0.0%
	Total	UCortisoneV	48	51.914	12.9496	24.9%
		Constant	48	1.000	.0000	0.0%
56	.0	UCortisoneV	16	52.537	9.9094	18.9%
		Constant	16	1.000	.0000	0.0%
	1.0	UCortisoneV	16	50.580	11.5369	22.8%
		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	45.822	8.8577	19.3%
		Constant	16	1.000	.0000	0.0%
	Total	UCortisoneV	48	49.646	10.3431	20.8%
		Constant	48	1.000	.0000	0.0%
Total	.0	UCortisoneV	136	67.700	20.1332	29.7%
		Constant	136	1.000	.0000	0.0%
	1.0	UCortisoneV	132	69.061	19.2480	27.9%
		Constant	132	1.000	.0000	0.0%
	2.0	UCortisoneV	136	64.924	18.2690	28.1%
		Constant	136	1.000	.0000	0.0%
	Total	UCortisoneV	404	67.210	19.2611	28.7%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UCortisoneV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3351.381
Akaike's Information Criterion (AIC)	3355.381
Hurvich and Tsai's Criterion (AICC)	3355.411
Bozdogan's Criterion (CAIC)	3365.369
Schwarz's Bayesian Criterion (BIC)	3363.369

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UCortisoneV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.954	255.456	.000
UAldoV_h_I_perdiet	2	391.962	2.849	.059

a. Dependent Variable: UCortisoneV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	65.642646	4.379520	10.056	14.989	.000	55.891775	75.393517
[UAldoV_h_I_perdiet=.0]	2.776194	1.809275	391.955	1.534	.126	-.780904	6.333291
[UAldoV_h_I_perdiet=1.0]	4.282667	1.823256	391.965	2.349	.019	.698083	7.867252
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UCortisoneV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	222.596326	15.900653
Constant [subject = subject] Variance	175.143366	85.532390

a. Dependent Variable: UCortisoneV.

```
*ON NA+ INTAKE
```

```
* Mixed Linear Models
```

```
EFFECT OF UAldoV TERTILE ON NaIntake AT 12 g SALT INTAKE
```

```
all subjects
```

```
USE ALL.
```

```
COMPUTE filter_$(= (salt = 12)).
```

```
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.  
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
```

```

FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED NaIntake BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	<pre> MIXED NaIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.07

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Protocolled Na Intake (mmol/d)	13	209.966	27.6330	13.2%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	14	215.441	7.8042	3.6%
		Constant	14	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	13	203.147	14.9894	7.4%
		Constant	13	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	40	209.666	18.7231	8.9%	
	Constant	40	1.000	.0000	0.0%	
12	.0	Protocolled Na Intake (mmol/d)	13	205.143	10.5557	5.1%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	14	209.426	8.3936	4.0%
		Constant	14	1.000	.0000	0.0%

	2.0	Protocolled Na Intake (mmol/d)	13	210.330	7.2429	3.4%
		Constant	13	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	40	208.328	8.8916	4.3%
		Constant	40	1.000	.0000	0.0%
15	.0	Protocolled Na Intake (mmol/d)	13	206.620	8.8755	4.3%
		Constant	13	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	14	207.157	8.9529	4.3%
		Constant	14	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	13	199.455	23.8812	12.0%
		Constant	13	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	40	204.479	15.4581	7.6%
		Constant	40	1.000	.0000	0.0%
16	.0	Protocolled Na Intake (mmol/d)	13	208.236	7.0234	3.4%
		Constant	13	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	14	211.785	7.4047	3.5%
		Constant	14	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	13	210.924	4.3851	2.1%
		Constant	13	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	40	210.352	6.4583	3.1%
		Constant	40	1.000	.0000	0.0%
51	.0	Protocolled Na Intake (mmol/d)	32	204.870	25.9106	12.6%
		Constant	32	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	33	188.666	29.3963	15.6%
		Constant	33	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	32	196.349	28.1853	14.4%
		Constant	32	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	97	196.546	28.3870	14.4%
		Constant	97	1.000	.0000	0.0%
52	.0	Protocolled Na Intake (mmol/d)	32	186.570	25.7705	13.8%
		Constant	32	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	33	191.092	19.9457	10.4%
		Constant	33	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	32	196.415	20.2732	10.3%
		Constant	32	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	97	191.356	22.2705	11.6%
		Constant	97	1.000	.0000	0.0%
53	.0	Protocolled Na Intake (mmol/d)	32	196.763	18.7313	9.5%
		Constant	32	1.000	.0000	0.0%

	1.0	Protocolled Na Intake (mmol/d)	33	197.886	22.9712	11.6%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	32	197.564	18.7042	9.5%
		Constant	32	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	97	197.409	20.0596	10.2%
		Constant	97	1.000	.0000	0.0%
54	.0	Protocolled Na Intake (mmol/d)	32	189.641	24.4807	12.9%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	33	189.382	23.3119	12.3%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	32	201.959	23.1523	11.5%
		Constant	32	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	97	193.617	24.1329	12.5%
		Constant	97	1.000	.0000	0.0%
55	.0	Protocolled Na Intake (mmol/d)	32	190.387	26.2207	13.8%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	33	197.010	20.9412	10.6%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	32	191.117	24.7383	12.9%
		Constant	32	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	97	192.881	23.9746	12.4%
		Constant	97	1.000	.0000	0.0%
56	.0	Protocolled Na Intake (mmol/d)	32	191.996	24.7031	12.9%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	33	186.531	35.9153	19.3%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	32	186.662	21.7262	11.6%
		Constant	32	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	97	188.377	28.0351	14.9%
		Constant	97	1.000	.0000	0.0%
Total	.0	Protocolled Na Intake (mmol/d)	244	196.380	23.8582	12.1%
		Constant	244	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	254	195.992	24.6400	12.6%
		Constant	254	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	244	197.345	22.1809	11.2%
		Constant	244	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	742	196.565	23.5717	12.0%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6750.711
Akaike's Information Criterion (AIC)	6754.711
Hurvich and Tsai's Criterion (AICC)	6754.728
Bozdogan's Criterion (CAIC)	6765.922
Schwarz's Bayesian Criterion (BIC)	6763.922

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.564	6126.962	.000
UAldoV_h_I_perdiet	2	729.615	.260	.771

a. Dependent Variable: Protocolled Na Intake (mmol/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	199.706465	2.807684	12.758	71.129	.000	193.629094	205.783836
[UAldoV_h_I_perdiet=.0]	-.964767	2.059266	729.607	-.469	.640	-5.007561	3.078028
[UAldoV_h_I_perdiet=1.0]	-1.445939	2.038944	729.619	-.709	.478	-5.448836	2.556957
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	517.350480	27.086657
Constant [subject = subject] Variance	56.402999	31.111459

a. Dependent Variable: Protocolled Na Intake (mmol/d).

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON Na INTAKE AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED NaIntake BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED NaIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Protocolled Na Intake (mmol/d)	12	152.100	14.7662	9.7%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	11	155.993	10.4507	6.7%
		Constant	11	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	12	157.790	15.3679	9.7%
		Constant	12	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	35	155.274	13.6026	8.8%	
	Constant	35	1.000	.0000	0.0%	
12	.0	Protocolled Na Intake (mmol/d)	12	160.408	7.0854	4.4%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	11	158.777	8.6544	5.5%
		Constant	11	1.000	.0000	0.0%

	2.0	Protocolled Na Intake (mmol/d)	12	155.591	10.3312	6.6%
		Constant	12	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	35	158.244	8.7768	5.5%
		Constant	35	1.000	.0000	0.0%
15	.0	Protocolled Na Intake (mmol/d)	12	159.234	7.3692	4.6%
		Constant	12	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	11	156.764	5.2940	3.4%
		Constant	11	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	12	155.534	9.3508	6.0%
		Constant	12	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	35	157.189	7.5234	4.8%
		Constant	35	1.000	.0000	0.0%
16	.0	Protocolled Na Intake (mmol/d)	12	158.156	4.3203	2.7%
		Constant	12	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	11	158.158	4.2264	2.7%
		Constant	11	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	12	161.620	5.5259	3.4%
		Constant	12	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	35	159.344	4.8942	3.1%
		Constant	35	1.000	.0000	0.0%
51	.0	Protocolled Na Intake (mmol/d)	20	147.082	13.8017	9.4%
		Constant	20	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	20	151.459	19.4645	12.9%
		Constant	20	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	20	143.901	19.1289	13.3%
		Constant	20	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	60	147.481	17.6338	12.0%
		Constant	60	1.000	.0000	0.0%
52	.0	Protocolled Na Intake (mmol/d)	20	131.808	30.4386	23.1%
		Constant	20	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	20	143.711	24.1236	16.8%
		Constant	20	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	20	148.481	21.4375	14.4%
		Constant	20	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	60	141.334	26.1488	18.5%
		Constant	60	1.000	.0000	0.0%
53	.0	Protocolled Na Intake (mmol/d)	20	141.748	17.0625	12.0%
		Constant	20	1.000	.0000	0.0%



	1.0	Protocolled Na Intake (mmol/d)	20	141.332	23.5310	16.6%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	20	139.023	17.5949	12.7%
		Constant	20	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	60	140.701	19.3190	13.7%
		Constant	60	1.000	.0000	0.0%
54	.0	Protocolled Na Intake (mmol/d)	20	142.699	20.7584	14.5%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	20	142.917	23.5460	16.5%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	20	141.279	26.2851	18.6%
		Constant	20	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	60	142.298	23.2452	16.3%
		Constant	60	1.000	.0000	0.0%
55	.0	Protocolled Na Intake (mmol/d)	20	147.828	19.0467	12.9%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	20	145.630	18.7234	12.9%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	20	137.898	24.0763	17.5%
		Constant	20	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	60	143.785	20.8527	14.5%
		Constant	60	1.000	.0000	0.0%
56	.0	Protocolled Na Intake (mmol/d)	20	142.454	27.0110	19.0%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	20	139.729	24.1924	17.3%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	20	136.932	24.0719	17.6%
		Constant	20	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	60	139.705	24.8033	17.8%
		Constant	60	1.000	.0000	0.0%
Total	.0	Protocolled Na Intake (mmol/d)	168	146.614	20.6407	14.1%
		Constant	168	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	164	147.696	20.2484	13.7%
		Constant	164	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	168	145.933	20.9311	14.3%
		Constant	168	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	500	146.740	20.5829	14.0%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4397.996
Akaike's Information Criterion (AIC)	4401.996
Hurvich and Tsai's Criterion (AICC)	4402.021
Bozdogan's Criterion (CAIC)	4412.414
Schwarz's Bayesian Criterion (BIC)	4410.414

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.744	3455.885	.000
UAldoV_h_I_perdiet	2	487.784	.444	.642

a. Dependent Variable: Protocolled Na Intake (mmol/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	147.405813	2.804367	13.349	52.563	.000	141.363404	153.448221
[UAldoV_h_I_perdiet=.0]	.681211	2.129456	487.761	.320	.749	-3.502828	4.865250
[UAldoV_h_I_perdiet=1.0]	1.987970	2.142631	487.796	.928	.354	-2.221956	6.197896
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	380.904963	24.390914
Constant [subject = subject]	Variance	55.547401
		30.403235

a. Dependent Variable: Protocolled Na Intake (mmol/d).

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON Na INTAKE AT 6 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED NaIntake BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED NaIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Protocolled Na Intake (mmol/d)	10	102.241	8.4567	8.3%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	9	95.924	9.8315	10.2%
		Constant	9	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	10	103.155	19.0042	18.4%
		Constant	10	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	29	100.596	13.3045	13.2%	
	Constant	29	1.000	.0000	0.0%	
12	.0	Protocolled Na Intake (mmol/d)	10	119.089	29.7775	25.0%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	9	110.564	9.9444	9.0%
		Constant	9	1.000	.0000	0.0%

	2.0	Protocolled Na Intake (mmol/d)	10	113.148	12.2925	10.9%
		Constant	10	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	29	114.394	19.3643	16.9%
		Constant	29	1.000	.0000	0.0%
15	.0	Protocolled Na Intake (mmol/d)	10	102.637	7.5970	7.4%
		Constant	10	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	9	101.776	9.7466	9.6%
		Constant	9	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	10	106.116	2.6025	2.5%
		Constant	10	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	29	103.570	7.1785	6.9%
		Constant	29	1.000	.0000	0.0%
16	.0	Protocolled Na Intake (mmol/d)	10	108.242	4.4093	4.1%
		Constant	10	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	9	106.127	2.7376	2.6%
		Constant	9	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	10	109.883	10.1615	9.2%
		Constant	10	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	29	108.152	6.6311	6.1%
		Constant	29	1.000	.0000	0.0%
51	.0	Protocolled Na Intake (mmol/d)	16	104.946	24.3160	23.2%
		Constant	16	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	16	94.582	16.9517	17.9%
		Constant	16	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	16	96.977	21.0662	21.7%
		Constant	16	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	48	98.835	21.0260	21.3%
		Constant	48	1.000	.0000	0.0%
52	.0	Protocolled Na Intake (mmol/d)	16	94.330	21.2458	22.5%
		Constant	16	1.000	.0000	0.0%
1.0		Protocolled Na Intake (mmol/d)	16	95.558	19.9297	20.9%
		Constant	16	1.000	.0000	0.0%
2.0		Protocolled Na Intake (mmol/d)	16	101.616	16.5005	16.2%
		Constant	16	1.000	.0000	0.0%
Total		Protocolled Na Intake (mmol/d)	48	97.168	19.1853	19.7%
		Constant	48	1.000	.0000	0.0%
53	.0	Protocolled Na Intake (mmol/d)	16	91.569	19.2084	21.0%
		Constant	16	1.000	.0000	0.0%

	1.0	Protocolled Na Intake (mmol/d)	16	100.803	20.6916	20.5%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	16	93.109	21.3891	23.0%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	48	95.160	20.4222	21.5%
		Constant	48	1.000	.0000	0.0%
54	.0	Protocolled Na Intake (mmol/d)	16	95.709	21.9636	22.9%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	16	107.483	31.9308	29.7%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	16	102.969	22.2181	21.6%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	48	102.054	25.7084	25.2%
		Constant	48	1.000	.0000	0.0%
55	.0	Protocolled Na Intake (mmol/d)	16	93.230	22.0523	23.7%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	16	96.972	21.1438	21.8%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	16	100.608	15.0282	14.9%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	48	96.937	19.4738	20.1%
		Constant	48	1.000	.0000	0.0%
56	.0	Protocolled Na Intake (mmol/d)	16	88.769	23.6736	26.7%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	16	93.020	19.1692	20.6%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	16	97.452	19.9978	20.5%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	48	93.081	20.8950	22.4%
		Constant	48	1.000	.0000	0.0%
Total	.0	Protocolled Na Intake (mmol/d)	136	98.669	21.5545	21.8%
		Constant	136	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	132	99.577	19.6730	19.8%
		Constant	132	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	136	101.520	18.0654	17.8%
		Constant	136	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	404	99.925	19.8040	19.8%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3535.937
Akaike's Information Criterion (AIC)	3539.937
Hurvich and Tsai's Criterion (AICC)	3539.967
Bozdogan's Criterion (CAIC)	3549.925
Schwarz's Bayesian Criterion (BIC)	3547.925

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.370	2625.390	.000
UAldoV_h_I_perdiet	2	391.459	.765	.466

a. Dependent Variable: Protocolled Na Intake (mmol/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	102.252066	2.378809	17.922	42.985	.000	97.252821	107.251311
[UAldoV_h_I_perdiet=.0]	-2.851285	2.330389	391.405	-1.224	.222	-7.432931	1.730361
[UAldoV_h_I_perdiet=1.0]	-1.794770	2.348295	391.486	-.764	.445	-6.411617	2.822078
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	369.288556	26.397788
Constant [subject = subject] Variance	29.067819	18.827970

a. Dependent Variable: Protocolled Na Intake (mmol/d).

\*ON PROTEIN INTAKE

\* Mixed Linear Models

EFFECT OF UAldoV TERTILE ON ProteinIntake AT 12 g SALT INTAKE  
all subjects

USE ALL.

COMPUTE filter\_\$=(salt = 12).

VARIABLE LABELS filter\_\$ 'salt = 12 (FILTER)'.  
VALUE LABELS filter\_\$ 0 'Not Selected' 1 'Selected'.  
FORMATS filter\_\$ (f1.0).

```
FILTER BY filter_$.
EXECUTE.
```

```
MIXED ProteinIntake BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED ProteinIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Protocolled Protein Intake (g/d)	13	100.4638	13.65257	13.6%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	14	110.5850	7.77646	7.0%
		Constant	14	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	13	102.4100	13.93413	13.6%
		Constant	13	1.000	.0000	0.0%
12	Total	Protocolled Protein Intake (g/d)	40	104.6388	12.54628	12.0%
		Constant	40	1.000	.0000	0.0%
	.0	Protocolled Protein Intake (g/d)	13	96.9585	9.40017	9.7%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	14	103.2336	16.54882	16.0%
		Constant	14	1.000	.0000	0.0%

	2.0	Protocolled Protein Intake (g/d)	13	105.8700	13.96597	13.2%
		Constant	13	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	40	102.0510	13.87442	13.6%
		Constant	40	1.000	.0000	0.0%
15	.0	Protocolled Protein Intake (g/d)	13	100.9115	12.59574	12.5%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	14	100.4529	10.22564	10.2%
		Constant	14	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	13	96.5977	14.26147	14.8%
		Constant	13	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	40	99.3490	12.24854	12.3%
		Constant	40	1.000	.0000	0.0%
16	.0	Protocolled Protein Intake (g/d)	13	104.4669	14.51756	13.9%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	14	104.9943	9.07794	8.6%
		Constant	14	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	13	105.6554	12.47130	11.8%
		Constant	13	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	40	105.0377	11.84954	11.3%
		Constant	40	1.000	.0000	0.0%
51	.0	Protocolled Protein Intake (g/d)	32	96.4538	14.95972	15.5%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	33	90.7230	19.52453	21.5%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	90.1494	15.58358	17.3%
		Constant	32	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	97	92.4243	16.90821	18.3%
		Constant	97	1.000	.0000	0.0%
52	.0	Protocolled Protein Intake (g/d)	32	90.6241	16.49346	18.2%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	33	94.9903	13.36915	14.1%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	95.0694	14.52135	15.3%
		Constant	32	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	97	93.5760	14.82739	15.8%
		Constant	97	1.000	.0000	0.0%
53	.0	Protocolled Protein Intake (g/d)	32	89.6519	14.20995	15.9%
		Constant	32	1.000	.0000	0.0%

	1.0	Protocolled Protein Intake (g/d)	33	96.8585	15.60378	16.1%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	87.6800	17.71608	20.2%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	97	91.4531	16.23529	17.8%
		Constant	97	1.000	.0000	0.0%
54	.0	Protocolled Protein Intake (g/d)	32	96.6163	15.87557	16.4%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	33	96.5052	18.55321	19.2%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	97.8572	13.84179	14.1%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	97	96.9878	16.07401	16.6%
		Constant	97	1.000	.0000	0.0%
55	.0	Protocolled Protein Intake (g/d)	32	93.4428	14.12051	15.1%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	33	93.0873	18.08438	19.4%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	93.0522	14.56805	15.7%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	97	93.1930	15.55520	16.7%
		Constant	97	1.000	.0000	0.0%
56	.0	Protocolled Protein Intake (g/d)	32	94.1606	12.88980	13.7%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	33	90.7497	18.21139	20.1%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	93.3269	14.76265	15.8%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	97	92.7252	15.38594	16.6%
		Constant	97	1.000	.0000	0.0%
Total	.0	Protocolled Protein Intake (g/d)	244	95.0278	14.67641	15.4%
		Constant	244	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	254	96.2436	16.85331	17.5%
		Constant	254	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	244	94.9395	15.54828	16.4%
		Constant	244	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	742	95.4150	15.72423	16.5%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6157.364
Akaike's Information Criterion (AIC)	6161.364
Hurvich and Tsai's Criterion (AICC)	6161.380
Bozdogan's Criterion (CAIC)	6172.574
Schwarz's Bayesian Criterion (BIC)	6170.574

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Protein Intake (g/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.441	3571.393	.000
UAldoV_h_I_perdiet	2	729.493	.522	.593

a. Dependent Variable: Protocolled Protein Intake (g/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	96.402412	1.807173	13.046	53.344	.000	92.499648	100.305175
[UAldoV_h_I_perdiet=.0]	.088279	1.379182	729.484	.064	.949	-2.619361	2.795918
[UAldoV_h_I_perdiet=1.0]	1.246480	1.365571	729.497	.913	.362	-1.434437	3.927397
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	232.061466	12.150947
Constant [subject = subject] Variance	22.608155	12.737779

a. Dependent Variable: Protocolled Protein Intake (g/d).

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON ProteinIntake AT 9 g SALT INTAKE  
 all subjects

```

USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED ProteinIntake BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	<pre> MIXED ProteinIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.06

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Protocolled Protein Intake (g/d)	12	97.5342	10.50137	10.8%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	11	105.0091	13.23564	12.6%
		Constant	11	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	12	100.8600	12.44737	12.3%
		Constant	12	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	35	101.0237	12.11508	12.0%	
	Constant	35	1.000	.0000	0.0%	
12	.0	Protocolled Protein Intake (g/d)	12	104.6067	7.56077	7.2%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	11	97.9509	12.98289	13.3%
		Constant	11	1.000	.0000	0.0%

	2.0	Protocolled Protein Intake (g/d)	12	104.6167	11.46723	11.0%
		Constant	12	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	35	102.5183	10.97522	10.7%
		Constant	35	1.000	.0000	0.0%
15	.0	Protocolled Protein Intake (g/d)	12	95.9275	8.98247	9.4%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	11	101.1364	10.28668	10.2%
		Constant	11	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	12	105.8017	12.61428	11.9%
		Constant	12	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	35	100.9500	11.22178	11.1%
		Constant	35	1.000	.0000	0.0%
16	.0	Protocolled Protein Intake (g/d)	12	101.2083	5.56666	5.5%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	11	106.3145	9.60556	9.0%
		Constant	11	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	12	104.7500	13.23776	12.6%
		Constant	12	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	35	104.0274	9.92668	9.5%
		Constant	35	1.000	.0000	0.0%
51	.0	Protocolled Protein Intake (g/d)	20	93.0275	6.22877	6.7%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	20	89.1025	11.23673	12.6%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	95.1920	7.28073	7.6%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	92.4407	8.75707	9.5%
		Constant	60	1.000	.0000	0.0%
52	.0	Protocolled Protein Intake (g/d)	20	86.5940	24.07448	27.8%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	20	94.9175	16.58293	17.5%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	96.0485	11.13101	11.6%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	92.5200	18.25307	19.7%
		Constant	60	1.000	.0000	0.0%
53	.0	Protocolled Protein Intake (g/d)	20	89.4730	8.46846	9.5%
		Constant	20	1.000	.0000	0.0%

	1.0	Protocolled Protein Intake (g/d)	20	90.8390	9.63311	10.6%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	92.5410	8.82452	9.5%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	90.9510	8.92511	9.8%
		Constant	60	1.000	.0000	0.0%
54	.0	Protocolled Protein Intake (g/d)	20	94.0130	15.22540	16.2%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	20	93.7710	9.87317	10.5%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	94.0090	10.92775	11.6%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	93.9310	12.02132	12.8%
		Constant	60	1.000	.0000	0.0%
55	.0	Protocolled Protein Intake (g/d)	20	99.9645	15.11945	15.1%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	20	94.4190	11.13503	11.8%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	97.0580	11.74433	12.1%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	97.1472	12.77416	13.1%
		Constant	60	1.000	.0000	0.0%
56	.0	Protocolled Protein Intake (g/d)	20	92.7165	11.96780	12.9%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	20	96.3115	9.44369	9.8%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	95.2375	9.96034	10.5%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	94.7552	10.44517	11.0%
		Constant	60	1.000	.0000	0.0%
Total	.0	Protocolled Protein Intake (g/d)	168	94.6851	13.84486	14.6%
		Constant	168	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	164	95.7423	12.32257	12.9%
		Constant	164	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	168	97.5837	11.38189	11.7%
		Constant	168	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	500	96.0058	12.59183	13.1%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3908.328
Akaike's Information Criterion (AIC)	3912.328
Hurvich and Tsai's Criterion (AICC)	3912.353
Bozdogan's Criterion (CAIC)	3922.746
Schwarz's Bayesian Criterion (BIC)	3920.746

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Protein Intake (g/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.759	4252.687	.000
UAldoV_h_I_perdiet	2	487.804	2.506	.083

a. Dependent Variable: Protocolled Protein Intake (g/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	98.408368	1.663650	13.771	59.152	.000	94.834613	101.982122
[UAldoV_h_I_perdiet=.0]	-2.898631	1.302028	487.780	-2.226	.026	-5.456907	-.340355
[UAldoV_h_I_perdiet=1.0]	-1.715721	1.310082	487.817	-1.310	.191	-4.289822	.858379
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	142.403321	9.118496
Constant [subject = subject] Variance	19.044247	10.532183

a. Dependent Variable: Protocolled Protein Intake (g/d).

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON PROTEIN INTAKE AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED ProteinIntake BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED ProteinIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Protocolled Protein Intake (g/d)	10	95.0310	9.76609	10.3%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	9	86.5556	10.99412	12.7%
		Constant	9	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	10	80.9340	18.41080	22.7%
		Constant	10	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	29	87.5397	14.49413	16.6%	
	Constant	29	1.000	.0000	0.0%	
12	.0	Protocolled Protein Intake (g/d)	10	106.3670	16.07421	15.1%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	9	95.4911	15.95163	16.7%
		Constant	9	1.000	.0000	0.0%

	2.0	Protocolled Protein Intake (g/d)	10	95.3320	17.99328	18.9%
		Constant	10	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	29	99.1866	16.96841	17.1%
		Constant	29	1.000	.0000	0.0%
15	.0	Protocolled Protein Intake (g/d)	10	86.4330	16.69268	19.3%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	9	95.0144	11.38969	12.0%
		Constant	9	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	10	93.3320	19.32160	20.7%
		Constant	10	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	29	91.4752	16.15437	17.7%
		Constant	29	1.000	.0000	0.0%
16	.0	Protocolled Protein Intake (g/d)	10	91.9820	19.05063	20.7%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	9	92.5778	8.47950	9.2%
		Constant	9	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	10	101.3940	13.75810	13.6%
		Constant	10	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	29	95.4124	14.75140	15.5%
		Constant	29	1.000	.0000	0.0%
51	.0	Protocolled Protein Intake (g/d)	16	93.6556	6.90233	7.4%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	16	90.7788	7.03290	7.7%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	92.1788	6.27796	6.8%
		Constant	16	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	48	92.2044	6.70658	7.3%
		Constant	48	1.000	.0000	0.0%
52	.0	Protocolled Protein Intake (g/d)	16	94.6263	10.74174	11.4%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	16	89.8431	11.41198	12.7%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	90.6719	11.19876	12.4%
		Constant	16	1.000	.0000	0.0%
Total		Protocolled Protein Intake (g/d)	48	91.7138	11.08433	12.1%
		Constant	48	1.000	.0000	0.0%
53	.0	Protocolled Protein Intake (g/d)	16	91.4200	7.97636	8.7%
		Constant	16	1.000	.0000	0.0%



	1.0	Protocolled Protein Intake (g/d)	16	88.6519	7.02661	7.9%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	89.0706	12.74864	14.3%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	48	89.7142	9.45773	10.5%
		Constant	48	1.000	.0000	0.0%
54	.0	Protocolled Protein Intake (g/d)	16	91.6756	8.94763	9.8%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	16	98.5188	11.39610	11.6%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	95.3050	12.00542	12.6%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	48	95.1665	10.99904	11.6%
		Constant	48	1.000	.0000	0.0%
55	.0	Protocolled Protein Intake (g/d)	16	92.6219	14.51051	15.7%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	16	91.4063	15.70373	17.2%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	90.1700	9.24448	10.3%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	48	91.3994	13.19851	14.4%
		Constant	48	1.000	.0000	0.0%
56	.0	Protocolled Protein Intake (g/d)	16	93.8519	8.46070	9.0%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	16	91.1231	9.95397	10.9%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	97.4888	8.77049	9.0%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	48	94.1546	9.27151	9.8%
		Constant	48	1.000	.0000	0.0%
Total	.0	Protocolled Protein Intake (g/d)	136	93.5570	12.21693	13.1%
		Constant	136	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	132	91.9083	11.26390	12.3%
		Constant	132	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	136	92.5594	13.22331	14.3%
		Constant	136	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	404	92.6825	12.25865	13.2%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3159.596
Akaike's Information Criterion (AIC)	3163.596
Hurvich and Tsai's Criterion (AICC)	3163.626
Bozdogan's Criterion (CAIC)	3173.584
Schwarz's Bayesian Criterion (BIC)	3171.584

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Protein Intake (g/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	7.594	9312.563	.000
UAldoV_h_I_perdiet	2	390.666	.625	.536

a. Dependent Variable: Protocolled Protein Intake (g/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	92.618270	1.278483	23.695	72.444	.000	89.977809	95.258731
[UAldoV_h_I_perdiet=.0]	.997574	1.465789	390.574	.681	.497	-1.884250	3.879397
[UAldoV_h_I_perdiet=1.0]	-.639188	1.477006	390.712	-.433	.665	-3.543061	2.264686
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	146.100470	10.454783
Constant [subject = subject] Variance	5.490722	4.705398

a. Dependent Variable: Protocolled Protein Intake (g/d).

\*QUANTIFICATION OF SPONTANEOUS VARIABILITY OF URINE ALDOSTERONE AND CORTISONE LEVELS AT CONSTANT SALT INTAKE LEVEL  
EFFECT OF URINE CORTISONE TERTILE

\* ON URINE ALDOSTERONE EXCRETION

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON UAldoV AT 12 g SALT INTAKE  
all subjects

USE ALL.

```

COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

MIXED UaldoV BY UFEV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UAldoV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.10

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UAldoV	13	14.721	4.7493	32.3%
		Constant	13	1.000	.0000	0.0%
	1.0	UAldoV	14	15.850	5.2681	33.2%
		Constant	14	1.000	.0000	0.0%
	2.0	UAldoV	13	14.568	4.0107	27.5%
		Constant	13	1.000	.0000	0.0%
Total	UAldoV	40	15.066	4.6350	30.8%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UAldoV	13	6.918	1.6577	24.0%
		Constant	13	1.000	.0000	0.0%
	1.0	UAldoV	14	7.182	2.9610	41.2%
		Constant	14	1.000	.0000	0.0%
	2.0	UAldoV	13	8.788	4.8644	55.4%

		Constant	13	1.000	.0000	0.0%
	Total	UAldoV	40	7.618	3.4259	45.0%
		Constant	40	1.000	.0000	0.0%
15	.0	UAldoV	13	10.881	3.4499	31.7%
		Constant	13	1.000	.0000	0.0%
	1.0	UAldoV	13	12.304	2.4985	20.3%
		Constant	13	1.000	.0000	0.0%
	2.0	UAldoV	13	11.719	2.0657	17.6%
		Constant	13	1.000	.0000	0.0%
	Total	UAldoV	39	11.635	2.7253	23.4%
		Constant	39	1.000	.0000	0.0%
16	.0	UAldoV	13	14.437	5.1998	36.0%
		Constant	13	1.000	.0000	0.0%
	1.0	UAldoV	14	12.438	5.1858	41.7%
		Constant	14	1.000	.0000	0.0%
	2.0	UAldoV	13	10.814	3.0464	28.2%
		Constant	13	1.000	.0000	0.0%
	Total	UAldoV	40	12.560	4.7260	37.6%
		Constant	40	1.000	.0000	0.0%
51	.0	UAldoV	32	10.018	2.6419	26.4%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	9.887	2.3232	23.5%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	9.214	3.1115	33.8%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	9.708	2.7025	27.8%
		Constant	97	1.000	.0000	0.0%
52	.0	UAldoV	32	13.076	3.4834	26.6%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	11.138	2.8523	25.6%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	10.741	2.8914	26.9%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	11.646	3.2207	27.7%
		Constant	97	1.000	.0000	0.0%
53	.0	UAldoV	31	7.807	2.1865	28.0%
		Constant	31	1.000	.0000	0.0%
	1.0	UAldoV	33	8.349	2.4657	29.5%

		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	8.922	2.0789	23.3%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	96	8.365	2.2747	27.2%
		Constant	96	1.000	.0000	0.0%
54	.0	UAldoV	32	5.052	1.1209	22.2%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	5.651	1.6471	29.1%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	5.879	1.8463	31.4%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	5.529	1.5913	28.8%
		Constant	97	1.000	.0000	0.0%
55	.0	UAldoV	32	14.802	4.6907	31.7%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	14.429	3.5381	24.5%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	14.947	7.9194	53.0%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	14.723	5.6195	38.2%
		Constant	97	1.000	.0000	0.0%
56	.0	UAldoV	32	13.789	3.4555	25.1%
		Constant	32	1.000	.0000	0.0%
	1.0	UAldoV	33	12.999	3.2215	24.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UAldoV	32	13.461	5.1558	38.3%
		Constant	32	1.000	.0000	0.0%
	Total	UAldoV	97	13.412	4.0007	29.8%
		Constant	97	1.000	.0000	0.0%
Total	.0	UAldoV	243	10.980	4.7571	43.3%
		Constant	243	1.000	.0000	0.0%
	1.0	UAldoV	253	10.741	4.2962	40.0%
		Constant	253	1.000	.0000	0.0%
	2.0	UAldoV	244	10.729	5.0508	47.1%
		Constant	244	1.000	.0000	0.0%
	Total	UAldoV	740	10.815	4.7017	43.5%
		Constant	740	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UAldoV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4031.969
Akaike's Information Criterion (AIC)	4035.969
Hurvich and Tsai's Criterion (AICC)	4035.985
Bozdogan's Criterion (CAIC)	4047.174
Schwarz's Bayesian Criterion (BIC)	4045.174

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UAldoV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.022	121.954	.000
UFEV_h_I_perdiet	2	728.025	.355	.701

a. Dependent Variable: UAldoV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	10.939438	1.015800	9.679	10.769	.000	8.665885	13.212992
[UFEV_h_I_perdiet=.0]	.240969	.326342	728.024	.738	.461	-.399715	.881653
[UFEV_h_I_perdiet=1.0]	.007077	.323100	728.026	.022	.983	-.627243	.641397
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UAldoV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	12.965999	.679592
Constant [subject = subject]	Variance	9.751727
		4.689967

a. Dependent Variable: UAldoV.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON UAldoV AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UALdoV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UAldoV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UAldoV	12	15.325	4.5432	29.6%
		Constant	12	1.000	.0000	0.0%
	1.0	UAldoV	11	16.700	5.1689	31.0%
		Constant	11	1.000	.0000	0.0%
	2.0	UAldoV	12	16.697	4.8617	29.1%
		Constant	12	1.000	.0000	0.0%
12	Total	UAldoV	35	16.228	4.7561	29.3%
		Constant	35	1.000	.0000	0.0%
	.0	UAldoV	12	11.976	5.6488	47.2%
		Constant	12	1.000	.0000	0.0%
	1.0	UAldoV	11	16.194	4.5634	28.2%
		Constant	11	1.000	.0000	0.0%
	2.0	UAldoV	12	14.097	4.2952	30.5%

		Constant	12	1.000	.0000	0.0%
	Total	UAldoV	35	14.029	5.0421	35.9%
		Constant	35	1.000	.0000	0.0%
15	.0	UAldoV	12	8.152	2.0925	25.7%
		Constant	12	1.000	.0000	0.0%
	1.0	UAldoV	11	10.953	1.8901	17.3%
		Constant	11	1.000	.0000	0.0%
	2.0	UAldoV	12	11.269	2.8563	25.3%
		Constant	12	1.000	.0000	0.0%
	Total	UAldoV	35	10.101	2.6767	26.5%
		Constant	35	1.000	.0000	0.0%
16	.0	UAldoV	12	16.819	3.7034	22.0%
		Constant	12	1.000	.0000	0.0%
	1.0	UAldoV	11	13.301	3.8753	29.1%
		Constant	11	1.000	.0000	0.0%
	2.0	UAldoV	12	12.494	3.3367	26.7%
		Constant	12	1.000	.0000	0.0%
	Total	UAldoV	35	14.230	4.0205	28.3%
		Constant	35	1.000	.0000	0.0%
51	.0	UAldoV	20	13.062	4.1650	31.9%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	12.758	3.7786	29.6%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	11.746	4.0644	34.6%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	12.522	3.9783	31.8%
		Constant	60	1.000	.0000	0.0%
52	.0	UAldoV	20	14.704	2.8536	19.4%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	15.137	2.6016	17.2%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	14.768	3.6147	24.5%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	14.870	3.0078	20.2%
		Constant	60	1.000	.0000	0.0%
53	.0	UAldoV	20	14.045	3.3510	23.9%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	14.055	2.6112	18.6%

		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	13.180	2.9463	22.4%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	13.760	2.9629	21.5%
		Constant	60	1.000	.0000	0.0%
54	.0	UAldoV	20	9.036	3.6039	39.9%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	19	7.947	1.9503	24.5%
		Constant	19	1.000	.0000	0.0%
	2.0	UAldoV	20	7.571	3.3093	43.7%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	59	8.189	3.0693	37.5%
		Constant	59	1.000	.0000	0.0%
55	.0	UAldoV	20	18.673	4.2040	22.5%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	18.475	3.9499	21.4%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	18.372	3.8832	21.1%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	18.507	3.9481	21.3%
		Constant	60	1.000	.0000	0.0%
56	.0	UAldoV	20	16.734	4.5889	27.4%
		Constant	20	1.000	.0000	0.0%
	1.0	UAldoV	20	16.545	5.6125	33.9%
		Constant	20	1.000	.0000	0.0%
	2.0	UAldoV	20	17.007	4.8177	28.3%
		Constant	20	1.000	.0000	0.0%
	Total	UAldoV	60	16.762	4.9433	29.5%
		Constant	60	1.000	.0000	0.0%
Total	.0	UAldoV	168	14.002	4.9791	35.6%
		Constant	168	1.000	.0000	0.0%
	1.0	UAldoV	163	14.227	4.7592	33.5%
		Constant	163	1.000	.0000	0.0%
	2.0	UAldoV	168	13.736	4.9227	35.8%
		Constant	168	1.000	.0000	0.0%
	Total	UAldoV	499	13.986	4.8834	34.9%
		Constant	499	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UAldoV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	2796.699
Akaike's Information Criterion (AIC)	2800.699
Hurvich and Tsai's Criterion (AICC)	2800.724
Bozdogan's Criterion (CAIC)	2811.113
Schwarz's Bayesian Criterion (BIC)	2809.113

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UAldoV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.053	204.541	.000
UFEV_h_I_perdiet	2	487.060	.564	.569

a. Dependent Variable: UAldoV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	13.686124	1.003490	10.215	13.639	.000	11.456570	15.915678
[UFEV_h_I_perdiet=.0]	.266549	.422511	487.054	.631	.528	-.563620	1.096718
[UFEV_h_I_perdiet=1.0]	.449315	.425790	487.063	1.055	.292	-.387296	1.285926
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UAldoV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	14.995297	.960907
Constant [subject = subject]	Variance	9.158627
		4.455270

a. Dependent Variable: UAldoV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON UAldoV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UAltoV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED UAldoV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UAldoV	10	21.264	5.6597	26.6%
		Constant	10	1.000	.0000	0.0%
	1.0	UAldoV	9	17.790	3.2937	18.5%
		Constant	9	1.000	.0000	0.0%
	2.0	UAldoV	10	17.849	4.8973	27.4%
		Constant	10	1.000	.0000	0.0%
12	Total	UAldoV	29	19.008	4.8865	25.7%
		Constant	29	1.000	.0000	0.0%
	.0	UAldoV	10	12.500	6.5386	52.3%
		Constant	10	1.000	.0000	0.0%
	1.0	UAldoV	9	18.145	5.2981	29.2%
		Constant	9	1.000	.0000	0.0%
	2.0	UAldoV	10	17.112	4.5851	26.8%

		Constant	10	1.000	.0000	0.0%
	Total	UAldoV	29	15.842	5.8983	37.2%
		Constant	29	1.000	.0000	0.0%
15	.0	UAldoV	10	8.465	.9973	11.8%
		Constant	10	1.000	.0000	0.0%
	1.0	UAldoV	9	9.961	1.9696	19.8%
		Constant	9	1.000	.0000	0.0%
	2.0	UAldoV	10	13.598	2.4932	18.3%
		Constant	10	1.000	.0000	0.0%
	Total	UAldoV	29	10.699	2.8954	27.1%
		Constant	29	1.000	.0000	0.0%
16	.0	UAldoV	10	17.224	6.0284	35.0%
		Constant	10	1.000	.0000	0.0%
	1.0	UAldoV	9	15.486	3.4433	22.2%
		Constant	9	1.000	.0000	0.0%
	2.0	UAldoV	10	15.005	2.9013	19.3%
		Constant	10	1.000	.0000	0.0%
	Total	UAldoV	29	15.919	4.3292	27.2%
		Constant	29	1.000	.0000	0.0%
51	.0	UAldoV	16	15.517	2.6808	17.3%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	12.892	2.9792	23.1%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	12.861	3.2848	25.5%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	13.757	3.1862	23.2%
		Constant	48	1.000	.0000	0.0%
52	.0	UAldoV	16	16.033	2.9060	18.1%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	14.967	2.6779	17.9%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	13.779	3.0810	22.4%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	14.926	2.9797	20.0%
		Constant	48	1.000	.0000	0.0%
53	.0	UAldoV	16	19.057	5.4405	28.5%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	15.731	4.4580	28.3%

		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	16.951	5.5156	32.5%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	17.246	5.2370	30.4%
		Constant	48	1.000	.0000	0.0%
54	.0	UAldoV	16	11.646	2.9224	25.1%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	10.759	2.5213	23.4%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	10.856	1.6753	15.4%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	11.087	2.4107	21.7%
		Constant	48	1.000	.0000	0.0%
55	.0	UAldoV	16	22.140	6.1086	27.6%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	22.883	3.4952	15.3%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	15	19.944	4.7149	23.6%
		Constant	15	1.000	.0000	0.0%
	Total	UAldoV	47	21.692	4.9473	22.8%
		Constant	47	1.000	.0000	0.0%
56	.0	UAldoV	16	19.833	3.1780	16.0%
		Constant	16	1.000	.0000	0.0%
	1.0	UAldoV	16	17.994	4.8399	26.9%
		Constant	16	1.000	.0000	0.0%
	2.0	UAldoV	16	16.835	3.1715	18.8%
		Constant	16	1.000	.0000	0.0%
	Total	UAldoV	48	18.221	3.9325	21.6%
		Constant	48	1.000	.0000	0.0%
Total	.0	UAldoV	136	16.633	5.9313	35.7%
		Constant	136	1.000	.0000	0.0%
	1.0	UAldoV	132	15.728	5.1176	32.5%
		Constant	132	1.000	.0000	0.0%
	2.0	UAldoV	135	15.373	4.5561	29.6%
		Constant	135	1.000	.0000	0.0%
	Total	UAldoV	403	15.914	5.2491	33.0%
		Constant	403	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UAldoV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	2310.179
Akaike's Information Criterion (AIC)	2314.179
Hurvich and Tsai's Criterion (AICC)	2314.209
Bozdogan's Criterion (CAIC)	2324.161
Schwarz's Bayesian Criterion (BIC)	2322.161

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UAldoV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.018	212.521	.000
UFEV_h_I_perdiet	2	391.029	3.242	.040

a. Dependent Variable: UAldoV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	15.333611	1.123969	10.326	13.642	.000	12.839941	17.827280
[UFEV_h_I_perdiet=.0]	1.219283	.499244	391.021	2.442	.015	.237744	2.200822
[UFEV_h_I_perdiet=1.0]	.297277	.503106	391.035	.591	.555	-.691853	1.286408
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UAldoV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	16.884964	1.207580
Constant [subject = subject]	Variance	11.361103
		5.558978

a. Dependent Variable: UAldoV.

\*ON URINE CORTISONE EXCRETION

\* Mixed Linear Models

EFFECT OF UFEV TERTILE ON UFEV AT 12 g SALT INTAKE  
all subjects

USE ALL.

COMPUTE filter\_\$(salt = 12).

VARIABLE LABELS filter\_\$ 'salt = 12 (FILTER)'.  
VALUE LABELS filter\_\$ 0 'Not Selected' 1 'Selected'.  
FORMATS filter\_\$ (f1.0).

```
FILTER BY filter_$.
EXECUTE.
```

```
MIXED UCortisoneV BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:24:26	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UCortisoneV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UCortisoneV	13	78.424	12.1400	15.5%
		Constant	13	1.000	.0000	0.0%
	1.0	UCortisoneV	14	100.839	5.9946	5.9%
		Constant	14	1.000	.0000	0.0%
	2.0	UCortisoneV	13	128.576	10.8251	8.4%
		Constant	13	1.000	.0000	0.0%
Total	UCortisoneV	40	102.569	22.6767	22.1%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UCortisoneV	13	53.047	6.9463	13.1%
		Constant	13	1.000	.0000	0.0%
	1.0	UCortisoneV	14	69.593	6.3528	9.1%
		Constant	14	1.000	.0000	0.0%
	2.0	UCortisoneV	13	91.364	13.8288	15.1%

		Constant	13	1.000	.0000	0.0%
	Total	UCortisoneV	40	71.291	18.2603	25.6%
		Constant	40	1.000	.0000	0.0%
15	.0	UCortisoneV	13	56.583	9.1017	16.1%
		Constant	13	1.000	.0000	0.0%
	1.0	UCortisoneV	14	75.061	3.0777	4.1%
		Constant	14	1.000	.0000	0.0%
	2.0	UCortisoneV	13	90.159	5.7037	6.3%
		Constant	13	1.000	.0000	0.0%
	Total	UCortisoneV	40	73.962	15.0738	20.4%
		Constant	40	1.000	.0000	0.0%
16	.0	UCortisoneV	13	59.706	6.4545	10.8%
		Constant	13	1.000	.0000	0.0%
	1.0	UCortisoneV	14	74.163	3.1675	4.3%
		Constant	14	1.000	.0000	0.0%
	2.0	UCortisoneV	13	91.502	10.9515	12.0%
		Constant	13	1.000	.0000	0.0%
	Total	UCortisoneV	40	75.099	14.9012	19.8%
		Constant	40	1.000	.0000	0.0%
51	.0	UCortisoneV	32	60.551	8.7638	14.5%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	79.035	3.6810	4.7%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	99.101	15.9283	16.1%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	79.557	18.9494	23.8%
		Constant	97	1.000	.0000	0.0%
52	.0	UCortisoneV	32	69.899	7.8120	11.2%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	86.628	4.4182	5.1%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	103.926	15.1320	14.6%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	86.816	17.1217	19.7%
		Constant	97	1.000	.0000	0.0%
53	.0	UCortisoneV	32	55.168	8.8634	16.1%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	71.203	3.9911	5.6%



		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	85.773	4.7280	5.5%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	70.720	13.9330	19.7%
		Constant	97	1.000	.0000	0.0%
54	.0	UCortisoneV	32	67.510	8.7942	13.0%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	84.603	4.0438	4.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	103.187	8.4578	8.2%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	85.095	16.3029	19.2%
		Constant	97	1.000	.0000	0.0%
55	.0	UCortisoneV	32	43.904	7.5271	17.1%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	63.015	4.4119	7.0%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	89.543	16.8171	18.8%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	65.462	21.5957	33.0%
		Constant	97	1.000	.0000	0.0%
56	.0	UCortisoneV	32	60.933	6.7155	11.0%
		Constant	32	1.000	.0000	0.0%
	1.0	UCortisoneV	33	77.404	4.4510	5.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UCortisoneV	32	94.300	9.4733	10.0%
		Constant	32	1.000	.0000	0.0%
	Total	UCortisoneV	97	77.544	15.3530	19.8%
		Constant	97	1.000	.0000	0.0%
Total	.0	UCortisoneV	244	60.147	12.0538	20.0%
		Constant	244	1.000	.0000	0.0%
	1.0	UCortisoneV	254	77.628	10.1481	13.1%
		Constant	254	1.000	.0000	0.0%
	2.0	UCortisoneV	244	96.916	15.4860	16.0%
		Constant	244	1.000	.0000	0.0%
	Total	UCortisoneV	742	78.222	19.6017	25.1%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UCortisoneV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5408.584
Akaike's Information Criterion (AIC)	5412.584
Hurvich and Tsai's Criterion (AICC)	5412.600
Bozdogan's Criterion (CAIC)	5423.794
Schwarz's Bayesian Criterion (BIC)	5421.794

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UCortisoneV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.951	557.727	.000
UFEV_h_I_perdiet	2	729.952	1009.853	.000

a. Dependent Variable: UCortisoneV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	97.506484	3.370843	9.317	28.926	.000	89.920489	105.092478
[UFEV_h_I_perdiet=.0]	-36.768954	.818514	729.951	-44.922	.000	-38.375875	-35.162032
[UFEV_h_I_perdiet=1.0]	-19.310887	.810439	729.953	-23.828	.000	-20.901956	-17.719818
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UCortisoneV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	81.735663	4.278382
Constant [subject = subject] Variance	110.051724	52.642750

a. Dependent Variable: UCortisoneV.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON UFEV AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UCortisoneV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UCortisoneV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UCortisoneV	12	71.650	9.0872	12.7%
		Constant	12	1.000	.0000	0.0%
	1.0	UCortisoneV	11	86.008	3.5562	4.1%
		Constant	11	1.000	.0000	0.0%
	2.0	UCortisoneV	12	109.880	12.9822	11.8%
		Constant	12	1.000	.0000	0.0%
Total	UCortisoneV	35	89.270	18.6518	20.9%	
	Constant	35	1.000	.0000	0.0%	
12	.0	UCortisoneV	12	60.040	5.6086	9.3%
		Constant	12	1.000	.0000	0.0%
	1.0	UCortisoneV	11	73.039	3.0524	4.2%
		Constant	11	1.000	.0000	0.0%
	2.0	UCortisoneV	12	90.049	7.7060	8.6%

		Constant	12	1.000	.0000	0.0%
	Total	UCortisoneV	35	74.414	13.8542	18.6%
		Constant	35	1.000	.0000	0.0%
15	.0	UCortisoneV	12	42.375	6.7373	15.9%
		Constant	12	1.000	.0000	0.0%
	1.0	UCortisoneV	11	55.519	3.2811	5.9%
		Constant	11	1.000	.0000	0.0%
	2.0	UCortisoneV	12	71.127	9.0783	12.8%
		Constant	12	1.000	.0000	0.0%
	Total	UCortisoneV	35	56.364	13.8108	24.5%
		Constant	35	1.000	.0000	0.0%
16	.0	UCortisoneV	12	60.324	5.1515	8.5%
		Constant	12	1.000	.0000	0.0%
	1.0	UCortisoneV	11	73.780	4.3421	5.9%
		Constant	11	1.000	.0000	0.0%
	2.0	UCortisoneV	12	95.943	18.4221	19.2%
		Constant	12	1.000	.0000	0.0%
	Total	UCortisoneV	35	76.765	18.7624	24.4%
		Constant	35	1.000	.0000	0.0%
51	.0	UCortisoneV	20	52.120	8.8157	16.9%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	68.136	3.0807	4.5%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	82.761	7.8657	9.5%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	67.672	14.3963	21.3%
		Constant	60	1.000	.0000	0.0%
52	.0	UCortisoneV	20	59.916	4.6105	7.7%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	73.919	5.7416	7.8%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	97.113	11.1550	11.5%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	76.983	17.2283	22.4%
		Constant	60	1.000	.0000	0.0%
53	.0	UCortisoneV	20	53.629	4.7452	8.8%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	66.040	4.9480	7.5%

		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	82.082	6.0737	7.4%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	67.250	12.8442	19.1%
		Constant	60	1.000	.0000	0.0%
54	.0	UCortisoneV	20	61.359	7.4008	12.1%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	74.014	3.0337	4.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	90.943	11.5856	12.7%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	75.439	14.6012	19.4%
		Constant	60	1.000	.0000	0.0%
55	.0	UCortisoneV	20	43.961	5.6929	12.9%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	56.778	3.4086	6.0%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	71.307	5.5595	7.8%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	57.349	12.2900	21.4%
		Constant	60	1.000	.0000	0.0%
56	.0	UCortisoneV	20	38.493	3.6347	9.4%
		Constant	20	1.000	.0000	0.0%
	1.0	UCortisoneV	20	51.050	3.0762	6.0%
		Constant	20	1.000	.0000	0.0%
	2.0	UCortisoneV	20	65.108	8.5133	13.1%
		Constant	20	1.000	.0000	0.0%
	Total	UCortisoneV	60	51.550	12.2814	23.8%
		Constant	60	1.000	.0000	0.0%
Total	.0	UCortisoneV	168	53.585	11.2648	21.0%
		Constant	168	1.000	.0000	0.0%
	1.0	UCortisoneV	164	66.894	10.4663	15.6%
		Constant	164	1.000	.0000	0.0%
	2.0	UCortisoneV	168	84.466	16.0294	19.0%
		Constant	168	1.000	.0000	0.0%
	Total	UCortisoneV	500	68.326	18.0493	26.4%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UCortisoneV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3447.203
Akaike's Information Criterion (AIC)	3451.203
Hurvich and Tsai's Criterion (AICC)	3451.227
Bozdogan's Criterion (CAIC)	3461.620
Schwarz's Bayesian Criterion (BIC)	3459.620

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UCortisoneV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.988	358.072	.000
UFEV_h_I_perdiet	2	487.990	752.142	.000

a. Dependent Variable: UCortisoneV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	85.385622	3.689947	9.273	23.140	.000	77.075755	93.695489
[UFEV_h_I_perdiet=.0]	-30.881119	.798379	487.989	-38.680	.000	-32.449805	-29.312434
[UFEV_h_I_perdiet=1.0]	-17.431955	.803332	487.991	-21.700	.000	-19.010372	-15.853538
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UCortisoneV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	53.542423	3.427743
Constant [subject = subject] Variance	132.901334	63.231193

a. Dependent Variable: UCortisoneV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON UFEV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UCortisoneV BY UFEV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:26
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UCortisoneV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UCortisoneV	10	64.200	11.7924	18.4%
		Constant	10	1.000	.0000	0.0%
	1.0	UCortisoneV	9	82.488	4.0089	4.9%
		Constant	9	1.000	.0000	0.0%
	2.0	UCortisoneV	10	94.872	5.0247	5.3%
		Constant	10	1.000	.0000	0.0%
Total	UCortisoneV	29	80.452	15.0775	18.7%	
	Constant	29	1.000	.0000	0.0%	
12	.0	UCortisoneV	10	72.836	7.3216	10.1%
		Constant	10	1.000	.0000	0.0%
	1.0	UCortisoneV	9	90.882	4.5715	5.0%
		Constant	9	1.000	.0000	0.0%
	2.0	UCortisoneV	10	104.886	5.7277	5.5%

		Constant	10	1.000	.0000	0.0%
	Total	UCortisoneV	29	89.488	14.7677	16.5%
15	.0	Constant	29	1.000	.0000	0.0%
		UCortisoneV	10	34.521	4.3546	12.6%
	1.0	Constant	10	1.000	.0000	0.0%
		UCortisoneV	9	48.658	6.1411	12.6%
	2.0	Constant	9	1.000	.0000	0.0%
		UCortisoneV	10	69.440	11.0426	15.9%
	Total	Constant	10	1.000	.0000	0.0%
		UCortisoneV	29	50.949	16.6210	32.6%
16	.0	Constant	29	1.000	.0000	0.0%
		UCortisoneV	10	53.473	7.1388	13.4%
	1.0	Constant	10	1.000	.0000	0.0%
		UCortisoneV	9	65.757	3.7680	5.7%
	2.0	Constant	9	1.000	.0000	0.0%
		UCortisoneV	10	84.084	8.5360	10.2%
	Total	Constant	10	1.000	.0000	0.0%
		UCortisoneV	29	67.841	14.6017	21.5%
51	.0	Constant	29	1.000	.0000	0.0%
		UCortisoneV	16	51.035	7.6026	14.9%
	1.0	Constant	16	1.000	.0000	0.0%
		UCortisoneV	16	73.062	7.0639	9.7%
	2.0	Constant	16	1.000	.0000	0.0%
		UCortisoneV	16	90.396	9.4806	10.5%
	Total	Constant	16	1.000	.0000	0.0%
		UCortisoneV	48	71.498	18.1113	25.3%
52	.0	Constant	48	1.000	.0000	0.0%
		UCortisoneV	16	59.500	6.0294	10.1%
	1.0	Constant	16	1.000	.0000	0.0%
		UCortisoneV	16	80.152	6.2135	7.8%
	2.0	Constant	16	1.000	.0000	0.0%
		UCortisoneV	16	96.021	6.6031	6.9%
	Total	Constant	16	1.000	.0000	0.0%
		UCortisoneV	48	78.558	16.3145	20.8%
53	.0	Constant	48	1.000	.0000	0.0%
		UCortisoneV	16	53.243	4.4693	8.4%
	1.0	UCortisoneV	16	65.333	4.9118	7.5%

		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	88.221	8.0786	9.2%
		Constant	16	1.000	.0000	0.0%
	Total	UCortisoneV	48	68.932	15.8038	22.9%
		Constant	48	1.000	.0000	0.0%
54	.0	UCortisoneV	16	55.997	8.5182	15.2%
		Constant	16	1.000	.0000	0.0%
	1.0	UCortisoneV	16	69.194	4.6312	6.7%
		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	86.889	6.7003	7.7%
		Constant	16	1.000	.0000	0.0%
	Total	UCortisoneV	48	70.693	14.4194	20.4%
		Constant	48	1.000	.0000	0.0%
55	.0	UCortisoneV	16	37.977	5.0155	13.2%
		Constant	16	1.000	.0000	0.0%
	1.0	UCortisoneV	16	51.409	3.6968	7.2%
		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	66.356	7.5276	11.3%
		Constant	16	1.000	.0000	0.0%
	Total	UCortisoneV	48	51.914	12.9496	24.9%
		Constant	48	1.000	.0000	0.0%
56	.0	UCortisoneV	16	39.586	2.8167	7.1%
		Constant	16	1.000	.0000	0.0%
	1.0	UCortisoneV	16	47.773	2.9541	6.2%
		Constant	16	1.000	.0000	0.0%
	2.0	UCortisoneV	16	61.580	7.4128	12.0%
		Constant	16	1.000	.0000	0.0%
	Total	UCortisoneV	48	49.646	10.3431	20.8%
		Constant	48	1.000	.0000	0.0%
Total	.0	UCortisoneV	136	51.527	12.5738	24.4%
		Constant	136	1.000	.0000	0.0%
	1.0	UCortisoneV	132	66.521	14.2613	21.4%
		Constant	132	1.000	.0000	0.0%
	2.0	UCortisoneV	136	83.561	15.3120	18.3%
		Constant	136	1.000	.0000	0.0%
	Total	UCortisoneV	404	67.210	19.2611	28.7%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UCortisoneV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	2747.154
Akaike's Information Criterion (AIC)	2751.154
Hurvich and Tsai's Criterion (AICC)	2751.184
Bozdogan's Criterion (CAIC)	2761.142
Schwarz's Bayesian Criterion (BIC)	2759.142

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UCortisoneV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.990	254.793	.000
UFEV_h_I_perdiet	2	391.992	732.871	.000

a. Dependent Variable: UCortisoneV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	84.291506	4.286101	9.221	19.666	.000	74.630977	93.952036
[UFEV_h_I_perdiet=.0]	-32.033258	.837112	391.990	-38.266	.000	-33.679050	-30.387467
[UFEV_h_I_perdiet=1.0]	-16.891562	.843585	391.992	-20.024	.000	-18.550079	-15.233044
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UCortisoneV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	47.651478	3.403720
Constant [subject = subject] Variance	180.138721	85.555849

a. Dependent Variable: UCortisoneV.

\*ON NA+ INTAKE

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON NaIntake AT 12 g SALT INTAKE  
all subjects

USE ALL.  
COMPUTE filter\_\$(salt = 12).  
VARIABLE LABELS filter\_\$ 'salt = 12 (FILTER)'.  
VALUE LABELS filter\_\$ 0 'Not Selected' 1 'Selected'.  
FORMATS filter\_\$ (f1.0).

```
FILTER BY filter_$.
EXECUTE.
```

```
MIXED NaIntake BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:24:27	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED NaIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Protocolled Na Intake (mmol/d)	13	210.509	17.8786	8.5%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	14	205.213	20.5727	10.0%
		Constant	14	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	13	213.619	17.8972	8.4%
		Constant	13	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	40	209.666	18.7231	8.9%	
	Constant	40	1.000	.0000	0.0%	
12	.0	Protocolled Na Intake (mmol/d)	13	206.214	9.6815	4.7%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	14	207.851	6.7625	3.3%
		Constant	14	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	13	210.955	10.0543	4.8%

		Constant	13	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	40	208.328	8.8916	4.3%
15	.0	Constant	40	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	13	208.475	9.9053	4.8%
	1.0	Constant	13	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	14	204.723	13.7328	6.7%
	2.0	Constant	14	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	13	200.222	20.9087	10.4%
	Total	Constant	13	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	40	204.479	15.4581	7.6%
16	.0	Constant	40	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	13	209.662	7.8098	3.7%
	1.0	Constant	13	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	14	209.917	6.5887	3.1%
	2.0	Constant	14	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	13	211.508	5.0350	2.4%
	Total	Constant	13	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	40	210.352	6.4583	3.1%
51	.0	Constant	40	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	32	199.061	29.6870	14.9%
	1.0	Constant	32	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	33	193.504	31.0847	16.1%
	2.0	Constant	33	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	32	197.168	24.4935	12.4%
	Total	Constant	32	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	97	196.546	28.3870	14.4%
52	.0	Constant	97	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	32	196.114	20.9201	10.7%
	1.0	Constant	32	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	33	193.346	16.9821	8.8%
	2.0	Constant	33	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	32	184.546	26.9280	14.6%
	Total	Constant	32	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	97	191.356	22.2705	11.6%
53	.0	Constant	97	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	32	200.026	19.9008	9.9%
	1.0	Protocolled Na Intake (mmol/d)	33	195.451	21.1132	10.8%

		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	32	196.812	19.4524	9.9%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	97	197.409	20.0596	10.2%
		Constant	97	1.000	.0000	0.0%
54	.0	Protocolled Na Intake (mmol/d)	32	188.867	21.2400	11.2%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	33	197.568	27.5074	13.9%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	32	194.291	23.0427	11.9%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	97	193.617	24.1329	12.5%
		Constant	97	1.000	.0000	0.0%
55	.0	Protocolled Na Intake (mmol/d)	32	191.464	25.8595	13.5%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	33	189.076	24.5661	13.0%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	32	198.222	21.0086	10.6%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	97	192.881	23.9746	12.4%
		Constant	97	1.000	.0000	0.0%
56	.0	Protocolled Na Intake (mmol/d)	32	190.321	23.7519	12.5%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	33	192.511	24.9359	13.0%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	32	182.170	34.1480	18.7%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	97	188.377	28.0351	14.9%
		Constant	97	1.000	.0000	0.0%
Total	.0	Protocolled Na Intake (mmol/d)	244	197.379	22.6310	11.5%
		Constant	244	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	254	196.519	23.2127	11.8%
		Constant	254	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	244	195.798	24.8975	12.7%
		Constant	244	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	742	196.565	23.5717	12.0%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6750.632
Akaike's Information Criterion (AIC)	6754.632
Hurvich and Tsai's Criterion (AICC)	6754.649
Bozdogan's Criterion (CAIC)	6765.843
Schwarz's Bayesian Criterion (BIC)	6763.843

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.563	6132.262	.000
UFEV_h_I_perdiet	2	729.615	.299	.742

a. Dependent Variable: Protocolled Na Intake (mmol/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	198.157349	2.806564	12.761	70.605	.000	192.082571	204.232127
[UFEV_h_I_perdiet=.0]	1.581411	2.059167	729.607	.768	.443	-2.461188	5.624011
[UFEV_h_I_perdiet=1.0]	.628906	2.038845	729.618	.308	.758	-3.373797	4.631610
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	517.300595	27.084051
Constant [subject = subject] Variance	56.342464	31.082306

a. Dependent Variable: Protocolled Na Intake (mmol/d).

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON Na INTAKE AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED NaIntake BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:27
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED NaIntake BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Protocolled Na Intake (mmol/d)	12	150.972	13.3392	8.8%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	11	159.436	15.6104	9.8%
		Constant	11	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	12	155.761	11.6051	7.5%
		Constant	12	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	35	155.274	13.6026	8.8%	
	Constant	35	1.000	.0000	0.0%	
12	.0	Protocolled Na Intake (mmol/d)	12	161.905	6.7853	4.2%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	11	155.758	10.9325	7.0%
		Constant	11	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	12	156.861	7.7788	5.0%

		Constant	12	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	35	158.244	8.7768	5.5%
15	.0	Constant	35	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	12	157.960	8.1960	5.2%
	1.0	Constant	12	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	11	156.497	8.7604	5.6%
	2.0	Constant	11	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	12	157.054	6.0712	3.9%
	Total	Constant	12	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	35	157.189	7.5234	4.8%
16	.0	Constant	35	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	12	160.452	5.9483	3.7%
	1.0	Constant	12	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	11	160.406	4.5276	2.8%
	2.0	Constant	11	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	12	157.264	3.5819	2.3%
	Total	Constant	12	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	35	159.344	4.8942	3.1%
51	.0	Constant	35	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	20	151.041	16.7352	11.1%
	1.0	Constant	20	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	20	141.231	16.7205	11.8%
	2.0	Constant	20	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	20	150.170	18.5439	12.3%
	Total	Constant	20	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	60	147.481	17.6338	12.0%
52	.0	Constant	60	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	20	144.168	22.2035	15.4%
	1.0	Constant	20	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	20	146.501	22.6117	15.4%
	2.0	Constant	20	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	20	133.331	31.8590	23.9%
	Total	Constant	20	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	60	141.334	26.1488	18.5%
53	.0	Constant	60	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	20	140.309	16.7794	12.0%
	1.0	Protocolled Na Intake (mmol/d)	20	141.532	21.1651	15.0%



		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	20	140.262	20.6966	14.8%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	60	140.701	19.3190	13.7%
		Constant	60	1.000	.0000	0.0%
54	.0	Protocolled Na Intake (mmol/d)	20	135.162	24.1114	17.8%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	20	145.842	21.2251	14.6%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	20	145.892	23.7825	16.3%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	60	142.298	23.2452	16.3%
		Constant	60	1.000	.0000	0.0%
55	.0	Protocolled Na Intake (mmol/d)	20	139.571	22.8468	16.4%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	20	143.087	19.6513	13.7%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	20	148.698	19.9377	13.4%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	60	143.785	20.8527	14.5%
		Constant	60	1.000	.0000	0.0%
56	.0	Protocolled Na Intake (mmol/d)	20	136.387	25.4244	18.6%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	20	139.895	25.3705	18.1%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	20	142.833	24.4618	17.1%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	60	139.705	24.8033	17.8%
		Constant	60	1.000	.0000	0.0%
Total	.0	Protocolled Na Intake (mmol/d)	168	145.882	20.5719	14.1%
		Constant	168	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	164	147.042	19.8759	13.5%
		Constant	164	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	168	147.304	21.3531	14.5%
		Constant	168	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	500	146.740	20.5829	14.0%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4398.307
Akaike's Information Criterion (AIC)	4402.307
Hurvich and Tsai's Criterion (AICC)	4402.331
Bozdogan's Criterion (CAIC)	4412.724
Schwarz's Bayesian Criterion (BIC)	4410.724

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.744	3463.634	.000
UFEV_h_I_perdiet	2	487.783	.288	.750

a. Dependent Variable: Protocolled Na Intake (mmol/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	148.774174	2.801890	13.363	53.098	.000	142.737737	154.810610
[UFEV_h_I_perdiet=.0]	-1.421517	2.130180	487.760	-.667	.505	-5.606978	2.763945
[UFEV_h_I_perdiet=1.0]	-.037979	2.143359	487.795	-.018	.986	-4.249335	4.173378
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	381.163922	24.407513
Constant [subject = subject]	Variance	55.393035
		30.333180

a. Dependent Variable: Protocolled Na Intake (mmol/d).

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON Na INTAKE AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED NaIntake BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:27
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED NaIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Protocolled Na Intake (mmol/d)	10	98.819	11.5077	11.6%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	9	105.201	14.9044	14.2%
		Constant	9	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	10	98.227	13.7789	14.0%
		Constant	10	1.000	.0000	0.0%
Total	Protocolled Na Intake (mmol/d)	29	100.596	13.3045	13.2%	
	Constant	29	1.000	.0000	0.0%	
12	.0	Protocolled Na Intake (mmol/d)	10	122.426	21.6837	17.7%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	9	107.084	15.0349	14.0%
		Constant	9	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	10	112.942	19.1836	17.0%

		Constant	10	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	29	114.394	19.3643	16.9%
15	.0	Constant	29	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	10	103.686	6.6695	6.4%
	1.0	Constant	10	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	9	100.838	9.3236	9.2%
	2.0	Constant	9	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	10	105.912	4.9992	4.7%
	Total	Constant	10	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	29	103.570	7.1785	6.9%
16	.0	Constant	29	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	10	107.892	10.0123	9.3%
	1.0	Constant	10	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	9	110.592	3.2734	3.0%
	2.0	Constant	9	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	10	106.215	4.1024	3.9%
	Total	Constant	10	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	29	108.152	6.6311	6.1%
51	.0	Constant	29	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	16	102.776	20.6868	20.1%
	1.0	Constant	16	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	16	97.724	19.8399	20.3%
	2.0	Constant	16	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	16	96.004	23.1781	24.1%
	Total	Constant	16	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	48	98.835	21.0260	21.3%
52	.0	Constant	48	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	16	107.618	14.5085	13.5%
	1.0	Constant	16	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	16	94.598	16.0398	17.0%
	2.0	Constant	16	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	16	89.289	22.2662	24.9%
	Total	Constant	16	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	48	97.168	19.1853	19.7%
53	.0	Constant	48	1.000	.0000	0.0%
		Protocolled Na Intake (mmol/d)	16	99.826	22.3806	22.4%
	1.0	Protocolled Na Intake (mmol/d)	16	93.954	18.8938	20.1%

		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	16	91.701	20.2829	22.1%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	48	95.160	20.4222	21.5%
		Constant	48	1.000	.0000	0.0%
54	.0	Protocolled Na Intake (mmol/d)	16	113.177	32.2627	28.5%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	16	95.644	20.6392	21.6%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	16	97.340	20.1134	20.7%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	48	102.054	25.7084	25.2%
		Constant	48	1.000	.0000	0.0%
55	.0	Protocolled Na Intake (mmol/d)	16	97.743	15.0115	15.4%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	16	98.068	19.2485	19.6%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	16	94.999	24.2144	25.5%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	48	96.937	19.4738	20.1%
		Constant	48	1.000	.0000	0.0%
56	.0	Protocolled Na Intake (mmol/d)	16	96.227	21.3899	22.2%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	16	97.029	20.7920	21.4%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	16	85.985	19.9319	23.2%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	48	93.081	20.8950	22.4%
		Constant	48	1.000	.0000	0.0%
Total	.0	Protocolled Na Intake (mmol/d)	136	104.457	20.5323	19.7%
		Constant	136	1.000	.0000	0.0%
	1.0	Protocolled Na Intake (mmol/d)	132	98.831	17.7099	17.9%
		Constant	132	1.000	.0000	0.0%
	2.0	Protocolled Na Intake (mmol/d)	136	96.456	20.2703	21.0%
		Constant	136	1.000	.0000	0.0%
	Total	Protocolled Na Intake (mmol/d)	404	99.925	19.8040	19.8%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3525.005
Akaike's Information Criterion (AIC)	3529.005
Hurvich and Tsai's Criterion (AICC)	3529.035
Bozdogan's Criterion (CAIC)	3538.993
Schwarz's Bayesian Criterion (BIC)	3536.993

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.388	2629.011	.000
UFEV_h_I_perdiet	2	391.474	6.329	.002

a. Dependent Variable: Protocolled Na Intake (mmol/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	97.193069	2.367248	17.666	41.057	.000	92.212910	102.173227
[UFEV_h_I_perdiet=.0]	8.000480	2.298160	391.421	3.481	.001	3.482198	12.518761
[UFEV_h_I_perdiet=1.0]	2.523979	2.315821	391.500	1.090	.276	-2.029023	7.076980
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Na Intake (mmol/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	359.144649	25.672143
Constant [subject = subject] Variance	29.271775	18.784029

a. Dependent Variable: Protocolled Na Intake (mmol/d).

\*ON PROTEIN INTAKE

\* Mixed Linear Models

EFFECT OF UFEV TERTILE ON PROTEIN INTAKE AT 12 g SALT INTAKE  
all subjects

USE ALL.

COMPUTE filter\_\$(salt = 12).

VARIABLE LABELS filter\_\$ 'salt = 12 (FILTER)'.  
VALUE LABELS filter\_\$ 0 'Not Selected' 1 'Selected'.  
FORMATS filter\_\$ (f1.0).

```
FILTER BY filter_$.
EXECUTE.
```

```
MIXED ProteinIntake BY UFEV_h_1_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_1_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:24:27	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED ProteinIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Protocolled Protein Intake (g/d)	13	105.7846	14.85538	14.0%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	14	101.9836	12.67430	12.4%
		Constant	14	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	13	106.3523	10.20022	9.6%
		Constant	13	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	40	104.6388	12.54628	12.0%	
	Constant	40	1.000	.0000	0.0%	
12	.0	Protocolled Protein Intake (g/d)	13	98.5146	12.90166	13.1%
		Constant	13	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	14	97.8414	6.84658	7.0%
		Constant	14	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	13	110.1208	17.42466	15.8%

		Constant	13	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	40	102.0510	13.87442	13.6%
15	.0	Constant	40	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	13	96.3469	11.56389	12.0%
	1.0	Constant	13	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	14	101.5836	13.84766	13.6%
	2.0	Constant	14	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	13	99.9446	11.40842	11.4%
	Total	Constant	13	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	40	99.3490	12.24854	12.3%
16	.0	Constant	40	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	13	100.4446	14.53613	14.5%
	1.0	Constant	13	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	14	108.6971	11.17273	10.3%
	2.0	Constant	14	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	13	105.6900	8.41829	8.0%
	Total	Constant	13	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	40	105.0377	11.84954	11.3%
51	.0	Constant	40	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	32	92.5238	14.25006	15.4%
	1.0	Constant	32	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	33	88.0679	20.15605	22.9%
	2.0	Constant	33	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	32	96.8175	14.92504	15.4%
	Total	Constant	32	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	97	92.4243	16.90821	18.3%
52	.0	Constant	97	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	32	95.0375	14.34694	15.1%
	1.0	Constant	32	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	33	95.7497	10.31939	10.8%
	2.0	Constant	33	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	32	89.8728	18.53860	20.6%
	Total	Constant	32	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	97	93.5760	14.82739	15.8%
53	.0	Constant	97	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	32	85.4122	17.44240	20.4%
	1.0	Protocolled Protein Intake (g/d)	33	92.2230	13.47488	14.6%

		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	96.7000	16.05854	16.6%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	97	91.4531	16.23529	17.8%
		Constant	97	1.000	.0000	0.0%
54	.0	Protocolled Protein Intake (g/d)	32	94.0600	16.17076	17.2%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	33	96.2424	14.23323	14.8%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	100.6844	17.49190	17.4%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	97	96.9878	16.07401	16.6%
		Constant	97	1.000	.0000	0.0%
55	.0	Protocolled Protein Intake (g/d)	32	87.7438	12.26900	14.0%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	33	92.3485	16.92991	18.3%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	99.5131	15.17459	15.2%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	97	93.1930	15.55520	16.7%
		Constant	97	1.000	.0000	0.0%
56	.0	Protocolled Protein Intake (g/d)	32	93.5344	15.53930	16.6%
		Constant	32	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	33	92.4039	11.74761	12.7%
		Constant	33	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	32	92.2472	18.65854	20.2%
		Constant	32	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	97	92.7252	15.38594	16.6%
		Constant	97	1.000	.0000	0.0%
Total	.0	Protocolled Protein Intake (g/d)	244	93.2793	15.37331	16.5%
		Constant	244	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	254	94.9750	14.81051	15.6%
		Constant	254	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	244	98.0087	16.66464	17.0%
		Constant	244	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	742	95.4150	15.72423	16.5%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6146.184
Akaike's Information Criterion (AIC)	6150.184
Hurvich and Tsai's Criterion (AICC)	6150.200
Bozdogan's Criterion (CAIC)	6161.394
Schwarz's Bayesian Criterion (BIC)	6159.394

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Protein Intake (g/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.454	3557.130	.000
UFEV_h_I_perdiet	2	729.504	6.164	.002

a. Dependent Variable: Protocolled Protein Intake (g/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	99.479991	1.807776	12.965	55.029	.000	95.573467	103.386515
[UFEV_h_I_perdiet=.0]	-4.729385	1.368624	729.495	-3.456	.001	-7.416296	-2.042474
[UFEV_h_I_perdiet=1.0]	-3.091614	1.355116	729.508	-2.281	.023	-5.752007	-.431221
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	228.521928	11.965521
Constant [subject = subject] Variance	22.781234	12.787695

a. Dependent Variable: Protocolled Protein Intake (g/d).

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON PROTEIN INTAKE AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED ProteinIntake BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:27
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED ProteinIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Protocolled Protein Intake (g/d)	12	99.3725	14.26161	14.4%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	11	103.7073	13.67056	13.2%
		Constant	11	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	12	100.2150	8.33612	8.3%
		Constant	12	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	35	101.0237	12.11508	12.0%	
	Constant	35	1.000	.0000	0.0%	
12	.0	Protocolled Protein Intake (g/d)	12	103.6250	12.96080	12.5%
		Constant	12	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	11	100.8645	7.78231	7.7%
		Constant	11	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	12	102.9275	12.04253	11.7%

		Constant	12	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	35	102.5183	10.97522	10.7%
15	.0	Constant	35	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	12	100.7508	12.19561	12.1%
	1.0	Constant	12	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	11	98.9764	11.54724	11.7%
	2.0	Constant	11	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	12	102.9583	10.53303	10.2%
	Total	Constant	12	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	35	100.9500	11.22178	11.1%
16	.0	Constant	35	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	12	97.7175	5.51622	5.6%
	1.0	Constant	12	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	11	108.5655	9.18312	8.5%
	2.0	Constant	11	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	12	106.1775	11.33189	10.7%
	Total	Constant	12	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	35	104.0274	9.92668	9.5%
51	.0	Constant	35	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	20	90.0035	9.45834	10.5%
	1.0	Constant	20	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	20	96.2235	5.93796	6.2%
	2.0	Constant	20	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	20	91.0950	9.49685	10.4%
	Total	Constant	20	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	60	92.4407	8.75707	9.5%
52	.0	Constant	60	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	20	91.3140	18.28847	20.0%
	1.0	Constant	20	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	20	96.9970	15.84710	16.3%
	2.0	Constant	20	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	20	89.2490	20.37411	22.8%
	Total	Constant	20	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	60	92.5200	18.25307	19.7%
53	.0	Constant	60	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	20	89.6420	8.77837	9.8%
	1.0	Protocolled Protein Intake (g/d)	20	91.7550	9.52345	10.4%

		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	91.4560	8.76636	9.6%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	90.9510	8.92511	9.8%
		Constant	60	1.000	.0000	0.0%
54	.0	Protocolled Protein Intake (g/d)	20	92.8055	12.60314	13.6%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	20	95.8100	10.44092	10.9%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	93.1775	13.23816	14.2%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	93.9310	12.02132	12.8%
		Constant	60	1.000	.0000	0.0%
55	.0	Protocolled Protein Intake (g/d)	20	93.5915	12.90384	13.8%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	20	96.0345	13.80398	14.4%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	101.8155	10.58789	10.4%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	97.1472	12.77416	13.1%
		Constant	60	1.000	.0000	0.0%
56	.0	Protocolled Protein Intake (g/d)	20	92.4045	11.04330	12.0%
		Constant	20	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	20	96.1890	9.16075	9.5%
		Constant	20	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	20	95.6720	11.13778	11.6%
		Constant	20	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	60	94.7552	10.44517	11.0%
		Constant	60	1.000	.0000	0.0%
Total	.0	Protocolled Protein Intake (g/d)	168	94.1239	12.75471	13.6%
		Constant	168	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	164	97.5209	11.57883	11.9%
		Constant	164	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	168	96.4086	13.20010	13.7%
		Constant	168	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	500	96.0058	12.59183	13.1%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3905.867
Akaike's Information Criterion (AIC)	3909.867
Hurvich and Tsai's Criterion (AICC)	3909.891
Bozdogan's Criterion (CAIC)	3920.284
Schwarz's Bayesian Criterion (BIC)	3918.284

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Protein Intake (g/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.762	4210.574	.000
UFEV_h_I_perdiet	2	487.807	3.753	.024

a. Dependent Variable: Protocolled Protein Intake (g/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	97.240393	1.669689	13.690	58.239	.000	93.651642	100.829143
[UFEV_h_I_perdiet=.0]	-2.284702	1.298624	487.783	-1.759	.079	-4.836290	.266885
[UFEV_h_I_perdiet=1.0]	1.239145	1.306657	487.819	.948	.343	-1.328226	3.806516
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	141.659612	9.070848
Constant [subject = subject] Variance	19.290207	10.640533

a. Dependent Variable: Protocolled Protein Intake (g/d).

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON PROTEIN INTAKE AT 6 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED ProteinIntake BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:24:27
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED ProteinIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.09

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Protocolled Protein Intake (g/d)	10	87.4540	19.92952	22.8%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	9	85.0944	10.62365	12.5%
		Constant	9	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	10	89.8260	12.01162	13.4%
		Constant	10	1.000	.0000	0.0%
Total	Protocolled Protein Intake (g/d)	29	87.5397	14.49413	16.6%	
	Constant	29	1.000	.0000	0.0%	
12	.0	Protocolled Protein Intake (g/d)	10	105.3900	16.17033	15.3%
		Constant	10	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	9	93.4067	17.98986	19.3%
		Constant	9	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	10	98.1850	16.41148	16.7%
		Constant	10	1.000	.0000	0.0%

		Constant	10	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	29	99.1866	16.96841	17.1%
15	.0	Constant	29	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	10	87.4720	16.38398	18.7%
	1.0	Constant	10	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	9	91.2000	10.94954	12.0%
	2.0	Constant	9	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	10	95.7260	19.97303	20.9%
	Total	Constant	10	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	29	91.4752	16.15437	17.7%
16	.0	Constant	29	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	10	98.0190	17.19168	17.5%
	1.0	Constant	10	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	9	93.8833	12.64641	13.5%
	2.0	Constant	9	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	10	94.1820	15.08990	16.0%
	Total	Constant	10	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	29	95.4124	14.75140	15.5%
51	.0	Constant	29	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	16	92.4663	6.18473	6.7%
	1.0	Constant	16	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	16	91.4256	6.84971	7.5%
	2.0	Constant	16	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	16	92.7213	7.39981	8.0%
	Total	Constant	16	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	48	92.2044	6.70658	7.3%
52	.0	Constant	48	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	16	91.9256	8.04633	8.8%
	1.0	Constant	16	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	16	90.0413	12.36661	13.7%
	2.0	Constant	16	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	16	93.1744	12.72734	13.7%
	Total	Constant	16	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	48	91.7138	11.08433	12.1%
53	.0	Constant	48	1.000	.0000	0.0%
		Protocolled Protein Intake (g/d)	16	85.5981	10.08400	11.8%
	1.0	Protocolled Protein Intake (g/d)	16	89.1463	8.79362	9.9%



		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	94.3981	7.70976	8.2%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	48	89.7142	9.45773	10.5%
		Constant	48	1.000	.0000	0.0%
54	.0	Protocolled Protein Intake (g/d)	16	98.3425	13.17507	13.4%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	16	91.7069	9.47727	10.3%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	95.4500	9.59448	10.1%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	48	95.1665	10.99904	11.6%
		Constant	48	1.000	.0000	0.0%
55	.0	Protocolled Protein Intake (g/d)	16	90.9525	11.14234	12.3%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	16	90.8325	14.99123	16.5%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	92.4131	13.97455	15.1%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	48	91.3994	13.19851	14.4%
		Constant	48	1.000	.0000	0.0%
56	.0	Protocolled Protein Intake (g/d)	16	94.6319	9.77449	10.3%
		Constant	16	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	16	94.1519	9.14875	9.7%
		Constant	16	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	16	93.6800	9.46682	10.1%
		Constant	16	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	48	94.1546	9.27151	9.8%
		Constant	48	1.000	.0000	0.0%
Total	.0	Protocolled Protein Intake (g/d)	136	92.9854	13.28864	14.3%
		Constant	136	1.000	.0000	0.0%
	1.0	Protocolled Protein Intake (g/d)	132	91.1298	11.23688	12.3%
		Constant	132	1.000	.0000	0.0%
	2.0	Protocolled Protein Intake (g/d)	136	93.8866	12.06534	12.9%
		Constant	136	1.000	.0000	0.0%
	Total	Protocolled Protein Intake (g/d)	404	92.6825	12.25865	13.2%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3157.259
Akaike's Information Criterion (AIC)	3161.259
Hurvich and Tsai's Criterion (AICC)	3161.290
Bozdogan's Criterion (CAIC)	3171.247
Schwarz's Bayesian Criterion (BIC)	3169.247

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Protocolled Protein Intake (g/d).

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	7.601	9315.954	.000
UFEV_h_I_perdiet	2	390.672	1.801	.167

a. Dependent Variable: Protocolled Protein Intake (g/d).

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	93.944111	1.276629	23.604	73.588	.000	91.306939	96.581282
[UFEV_h_I_perdiet=.0]	-.901176	1.461437	390.580	-.617	.538	-3.774445	1.972092
[UFEV_h_I_perdiet=1.0]	-2.745230	1.472622	390.718	-1.864	.063	-5.640485	.150024
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Protocolled Protein Intake (g/d).

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	145.234369	10.392723
Constant [subject = subject]	Variance	5.507254
		4.701165

a. Dependent Variable: Protocolled Protein Intake (g/d).

```

* Encoding: UTF-8.
* ONLINE SUPPLEMENTAL STATISTICAL ANALYSIS TABLE 2

* Encoding: UTF-8.
GET
  FILE='C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav'.

DATASET NAME DatenSet1 WINDOW=FRONT.
FILTER OFF.
USE ALL.
EXECUTE.

  *ANALYSIS OF WATER BALANCE IN RESPONSE TO HORMONE PROFILE
EFFECT OF ALDOSTERONE TERTILE

* ON URINE EXCRETION

*Mixed Linear Models
EFFECT OF UAldoV TERTILE ON URINE EXCRETION AT ALL SALT INTAKE LEVELS
all subjects

USE ALL.

MIXED UVol BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes	
Output Created	23-DEC-2016 17:34:47
Comments	
Input	Data C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		<pre> MIXED UVol BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

[DatenSet1] C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Uvol	35	2042.857	434.0546	21.2%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	2013.235	428.4059	21.3%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	1785.000	425.2525	23.8%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1946.394	440.6535	22.6%
		Constant	104	1.000	.0000	0.0%
12	.0	Uvol	35	1656.057	413.3614	25.0%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1581.324	394.1260	24.9%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	1595.114	324.7695	20.4%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	Uvol	35	2351.143	423.6954	18.0%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	2091.176	417.8935	20.0%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2206.143	479.7856	21.7%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	.0	Uvol	35	1844.143	307.0363	16.6%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1735.294	464.2393	26.8%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	1482.714	400.7554	27.0%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	.0	Uvol	68	2188.609	509.2211	23.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1981.232	469.1360	23.7%
		Constant	69	1.000	.0000	0.0%

	2.0	Uvol	68	1887.906	492.3650	26.1%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	.0	Uvol	67	2253.899	468.3937	20.8%
		Constant	67	1.000	.0000	0.0%
	1.0	Uvol	69	2015.758	421.7096	20.9%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1822.566	410.7245	22.5%
		Constant	68	1.000	.0000	0.0%
Total	Uvol	204	2029.574	466.4834	23.0%	
	Constant	204	1.000	.0000	0.0%	
53	.0	Uvol	68	1313.744	342.0549	26.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1392.301	397.9870	28.6%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1267.975	337.3940	26.6%
		Constant	68	1.000	.0000	0.0%
Total	Uvol	205	1325.003	362.3120	27.3%	
	Constant	205	1.000	.0000	0.0%	
54	.0	Uvol	68	2015.982	420.7232	20.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	2048.617	396.2795	19.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1866.587	464.4225	24.9%
		Constant	68	1.000	.0000	0.0%
Total	Uvol	205	1977.411	433.1564	21.9%	
	Constant	205	1.000	.0000	0.0%	
55	.0	Uvol	67	1304.690	381.7299	29.3%
		Constant	67	1.000	.0000	0.0%
	1.0	Uvol	69	1229.191	355.2615	28.9%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1117.046	348.1493	31.2%
		Constant	68	1.000	.0000	0.0%
Total	Uvol	204	1216.605	368.2299	30.3%	
	Constant	204	1.000	.0000	0.0%	
56	.0	Uvol	68	1864.606	429.1508	23.0%
		Constant	68	1.000	.0000	0.0%

	1.0	Uvol	69	1806.620	332.1448	18.4%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1639.962	389.3158	23.7%
		Constant	68	1.000	.0000	0.0%
Total		Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	.0	Uvol	546	1862.202	552.6479	29.7%
		Constant	546	1.000	.0000	0.0%
	1.0	Uvol	550	1772.730	501.6096	28.3%
		Constant	550	1.000	.0000	0.0%
	2.0	Uvol	548	1642.980	509.0607	31.0%
		Constant	548	1.000	.0000	0.0%
Total		Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

#### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

#### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	24500.173
Akaike's Information Criterion (AIC)	24504.173
Hurvich and Tsai's Criterion (AICC)	24504.180



Bozdogan's Criterion (CAIC)	24516.979
Schwarz's Bayesian Criterion (BIC)	24514.979

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

## Fixed Effects

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.018	303.058	.000
UAldoV_h_I_perdiet	2	1632.020	38.523	.000

a. Dependent Variable: Uvol.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1663.305702	103.256734	9.382	16.108	.000	1431.163744	1895.447660
[UAldoV_h_I_perdiet=.0]	218.729124	25.083168	1632.018	8.720	.000	169.530532	267.927717
[UAldoV_h_I_perdiet=1.0]	130.904296	25.038087	1632.020	5.228	.000	81.794125	180.014467
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	172074.980400	6023.796084
Constant [subject = subject] Variance	103365.266200	49226.877720

a. Dependent Variable: Uvol.

\* Mixed Linear Models

EFFECT OF UAldoV TERTILE ON URINE EXCRETION AT 12 g SALT INTAKE  
all subjects

USE ALL.

COMPUTE filter\_\$=(salt = 12).

VARIABLE LABELS filter\_\$ 'salt = 12 (FILTER)'.  
VALUE LABELS filter\_\$ 0 'Not Selected' 1 'Selected'.  
FORMATS filter\_\$ (f1.0).  
FILTER BY filter\_\$.  
EXECUTE.

MIXED UVol BY UAldoV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.00000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UAldoV\_h\_l\_perdiet | SSTYPE(3)

/METHOD=REML

/PRINT=DESCRIPTIVES SOLUTION

/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:34:47
Comments	
Input	Data
	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset
	DatenSet1

	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		<pre> MIXED UVol BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Uvol	13	2230.769	479.8170	21.5%
		Constant	13	1.000	.0000	0.0%
	1.0	Uvol	14	2196.429	482.9653	22.0%
		Constant	14	1.000	.0000	0.0%

	2.0	Uvol	13	1938.462	397.4679	20.5%
		Constant	13	1.000	.0000	0.0%
Total		Uvol	40	2123.750	462.9874	21.8%
		Constant	40	1.000	.0000	0.0%
12	.0	Uvol	13	1776.923	556.2581	31.3%
		Constant	13	1.000	.0000	0.0%
1.0		Uvol	14	1521.786	353.8666	23.3%
		Constant	14	1.000	.0000	0.0%
2.0		Uvol	13	1522.462	254.6166	16.7%
		Constant	13	1.000	.0000	0.0%
Total		Uvol	40	1604.925	414.1308	25.8%
		Constant	40	1.000	.0000	0.0%
15	.0	Uvol	13	2372.308	445.2322	18.8%
		Constant	13	1.000	.0000	0.0%
1.0		Uvol	14	2066.071	492.1662	23.8%
		Constant	14	1.000	.0000	0.0%
2.0		Uvol	13	2113.846	402.1720	19.0%
		Constant	13	1.000	.0000	0.0%
Total		Uvol	40	2181.125	458.2009	21.0%
		Constant	40	1.000	.0000	0.0%
16	.0	Uvol	13	1828.077	223.9191	12.2%
		Constant	13	1.000	.0000	0.0%
1.0		Uvol	14	1875.000	539.4085	28.8%
		Constant	14	1.000	.0000	0.0%
2.0		Uvol	13	1436.154	315.7211	22.0%
		Constant	13	1.000	.0000	0.0%
Total		Uvol	40	1717.125	427.1430	24.9%
		Constant	40	1.000	.0000	0.0%
51	.0	Uvol	32	2285.334	570.9952	25.0%
		Constant	32	1.000	.0000	0.0%
1.0		Uvol	33	2075.382	473.5026	22.8%
		Constant	33	1.000	.0000	0.0%
2.0		Uvol	32	1973.709	453.5880	23.0%
		Constant	32	1.000	.0000	0.0%
Total		Uvol	97	2111.103	513.1321	24.3%
		Constant	97	1.000	.0000	0.0%
52	.0	Uvol	31	2278.974	461.7976	20.3%
		Constant	31	1.000	.0000	0.0%

	1.0	Uvol	33	2003.282	384.1014	19.2%
		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	32	1836.984	392.4195	21.4%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	96	2036.875	447.5123	22.0%
		Constant	96	1.000	.0000	0.0%
53	.0	Uvol	32	1322.466	242.2249	18.3%
		Constant	32	1.000	.0000	0.0%
	1.0	Uvol	33	1529.248	427.6287	28.0%
		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	32	1403.172	360.0155	25.7%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	97	1419.439	359.3373	25.3%
		Constant	97	1.000	.0000	0.0%
54	.0	Uvol	32	1937.291	414.9247	21.4%
		Constant	32	1.000	.0000	0.0%
	1.0	Uvol	33	1988.655	342.5197	17.2%
		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	32	1934.866	437.7633	22.6%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	97	1953.965	396.4988	20.3%
		Constant	97	1.000	.0000	0.0%
55	.0	Uvol	31	1344.401	399.7039	29.7%
		Constant	31	1.000	.0000	0.0%
	1.0	Uvol	33	1284.227	335.2870	26.1%
		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	32	1172.209	337.9868	28.8%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	96	1266.319	361.4959	28.5%
		Constant	96	1.000	.0000	0.0%
56	.0	Uvol	32	2082.938	369.3246	17.7%
		Constant	32	1.000	.0000	0.0%
	1.0	Uvol	33	1932.555	268.4287	13.9%
		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	32	1806.547	379.2859	21.0%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	97	1940.596	356.7685	18.4%
		Constant	97	1.000	.0000	0.0%

Total	.0	Uvol	242	1913.746	566.1289	29.6%
		Constant	242	1.000	.0000	0.0%
	1.0	Uvol	254	1827.049	486.9140	26.7%
		Constant	254	1.000	.0000	0.0%
	2.0	Uvol	244	1701.728	480.3187	28.2%
		Constant	244	1.000	.0000	0.0%
Total		Uvol	740	1814.079	518.6791	28.6%
		Constant	740	1.000	.0000	0.0%

#### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

#### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	11002.842
Akaike's Information Criterion (AIC)	11006.842
Hurvich and Tsai's Criterion (AICC)	11006.858
Bozdogan's Criterion (CAIC)	11018.047
Schwarz's Bayesian Criterion (BIC)	11016.047

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

## Fixed Effects

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.045	332.208	.000
UAldoV_h_I_perdiet	2	728.049	16.377	.000

a. Dependent Variable: Uvol.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1723.115671	102.923790	9.882	16.742	.000	1493.416173	1952.815169
[UAldoV_h_I_perdiet=.0]	210.713862	37.035300	728.048	5.690	.000	138.005135	283.422588
[UAldoV_h_I_perdiet=1.0]	124.479304	36.593821	728.049	3.402	.001	52.637302	196.321307
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	166643.012500	8734.186066
Constant [subject = subject]	Variance 98653.829990	47648.752080

a. Dependent Variable: Uvol.

\* Mixed Linear Models

EFFECT OF UAldoV TERTILE ON URINE EXCRETION AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```
MIXED UVol BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.



Cases Used	Statistics are based on all cases with valid data for all variables in the model.	
Syntax	MIXED UVol BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.22

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Uvol	12	1920.833	365.2262	19.0%
		Constant	12	1.000	.0000	0.0%
	1.0	Uvol	11	1918.182	397.0345	20.7%
		Constant	11	1.000	.0000	0.0%
	2.0	Uvol	12	1843.750	366.3029	19.9%
		Constant	12	1.000	.0000	0.0%
Total	Uvol	35	1893.571	366.4206	19.4%	
	Constant	35	1.000	.0000	0.0%	
12	.0	Uvol	12	1590.833	342.1977	21.5%
		Constant	12	1.000	.0000	0.0%

	1.0	Uvol	11	1700.000	544.5181	32.0%
		Constant	11	1.000	.0000	0.0%
	2.0	Uvol	12	1593.750	389.4584	24.4%
		Constant	12	1.000	.0000	0.0%
	Total	Uvol	35	1626.143	420.4026	25.9%
		Constant	35	1.000	.0000	0.0%
15	.0	Uvol	12	2407.917	278.2286	11.6%
		Constant	12	1.000	.0000	0.0%
	1.0	Uvol	11	2068.182	343.5424	16.6%
		Constant	11	1.000	.0000	0.0%
	2.0	Uvol	12	2085.417	418.5823	20.1%
		Constant	12	1.000	.0000	0.0%
	Total	Uvol	35	2190.571	376.6489	17.2%
		Constant	35	1.000	.0000	0.0%
16	.0	Uvol	12	1743.333	266.9043	15.3%
		Constant	12	1.000	.0000	0.0%
	1.0	Uvol	11	1473.636	408.5284	27.7%
		Constant	11	1.000	.0000	0.0%
	2.0	Uvol	12	1316.667	404.5667	30.7%
		Constant	12	1.000	.0000	0.0%
	Total	Uvol	35	1512.286	397.3892	26.3%
		Constant	35	1.000	.0000	0.0%
51	.0	Uvol	20	1971.675	339.2926	17.2%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1706.460	295.4840	17.3%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	1666.675	428.4036	25.7%
		Constant	20	1.000	.0000	0.0%
	Total	Uvol	60	1781.603	378.0611	21.2%
		Constant	60	1.000	.0000	0.0%
52	.0	Uvol	20	2160.750	488.1294	22.6%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1891.100	410.5749	21.7%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	1750.600	443.8456	25.4%
		Constant	20	1.000	.0000	0.0%
	Total	Uvol	60	1934.150	473.1934	24.5%
		Constant	60	1.000	.0000	0.0%

53	.0	Uvol	20	1281.915	379.2556	29.6%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1314.415	341.0301	25.9%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	1158.785	281.9721	24.3%
		Constant	20	1.000	.0000	0.0%
Total	Uvol	60	1251.705	337.5594	27.0%	
	Constant	60	1.000	.0000	0.0%	
54	.0	Uvol	20	2060.165	392.7740	19.1%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	2002.195	356.1367	17.8%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	1757.125	547.4123	31.2%
		Constant	20	1.000	.0000	0.0%
Total	Uvol	60	1939.828	452.2927	23.3%	
	Constant	60	1.000	.0000	0.0%	
55	.0	Uvol	20	1286.485	314.6373	24.5%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1200.825	400.6791	33.4%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	1086.160	316.4102	29.1%
		Constant	20	1.000	.0000	0.0%
Total	Uvol	60	1191.157	350.2436	29.4%	
	Constant	60	1.000	.0000	0.0%	
56	.0	Uvol	20	1495.465	280.3702	18.7%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1596.985	351.6600	22.0%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	1442.400	270.1900	18.7%
		Constant	20	1.000	.0000	0.0%
Total	Uvol	60	1511.617	304.6813	20.2%	
	Constant	60	1.000	.0000	0.0%	
Total	.0	Uvol	168	1768.358	502.6381	28.4%
		Constant	168	1.000	.0000	0.0%
	1.0	Uvol	164	1664.632	465.8393	28.0%
		Constant	164	1.000	.0000	0.0%
	2.0	Uvol	168	1543.511	484.9283	31.4%
		Constant	168	1.000	.0000	0.0%

Total	Uvol	500	1658.787	492.6102	29.7%
	Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7356.515
Akaike's Information Criterion (AIC)	7360.515
Hurvich and Tsai's Criterion (AICC)	7360.539
Bozdogan's Criterion (CAIC)	7370.932
Schwarz's Bayesian Criterion (BIC)	7368.932

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.012	273.401	.000
UAldoV_h_I_perdiet	2	488.019	14.933	.000

a. Dependent Variable: Uvol.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1566.084798	104.484216	10.017	14.989	.000	1333.333316	1798.836280
[UAldoV_h_I_perdiet=.0]	224.846429	41.221226	488.013	5.455	.000	143.853441	305.839416
[UAldoV_h_I_perdiet=1.0]	124.561478	41.476827	488.021	3.003	.003	43.066280	206.056676
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

**Covariance Parameters**

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	142731.917800	9137.348651
Constant [subject = subject] Variance	100494.613100	48776.512350

a. Dependent Variable: Uvol.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON URINE EXCRETION AT 6 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
```

```

FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED UVol BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UVol BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Uvol	10	1945.000	400.3124	20.6%
		Constant	10	1.000	.0000	0.0%
	1.0	Uvol	9	1844.444	278.8867	15.1%
		Constant	9	1.000	.0000	0.0%
	2.0	Uvol	10	1515.000	434.6454	28.7%
		Constant	10	1.000	.0000	0.0%
Total	Uvol	29	1765.517	412.7658	23.4%	
	Constant	29	1.000	.0000	0.0%	
12	.0	Uvol	10	1577.200	236.9214	15.0%
		Constant	10	1.000	.0000	0.0%
	1.0	Uvol	9	1528.889	194.9003	12.7%
		Constant	9	1.000	.0000	0.0%

	2.0	Uvol	10	1691.200	329.7776	19.5%
		Constant	10	1.000	.0000	0.0%
Total		Uvol	29	1601.517	261.9754	16.4%
		Constant	29	1.000	.0000	0.0%
15	.0	Uvol	10	2255.500	551.4952	24.5%
		Constant	10	1.000	.0000	0.0%
	1.0	Uvol	9	2158.333	415.1129	19.2%
		Constant	9	1.000	.0000	0.0%
	2.0	Uvol	10	2471.000	574.5762	23.3%
		Constant	10	1.000	.0000	0.0%
	Total	Uvol	29	2299.655	520.3003	22.6%
		Constant	29	1.000	.0000	0.0%
16	.0	Uvol	10	1986.000	407.3478	20.5%
		Constant	10	1.000	.0000	0.0%
	1.0	Uvol	9	1837.778	259.7488	14.1%
		Constant	9	1.000	.0000	0.0%
	2.0	Uvol	10	1742.500	398.6174	22.9%
		Constant	10	1.000	.0000	0.0%
	Total	Uvol	29	1856.034	366.6459	19.8%
		Constant	29	1.000	.0000	0.0%
51	.0	Uvol	16	2266.325	499.4603	22.0%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	2130.513	514.6847	24.2%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	1992.837	576.5800	28.9%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	2129.892	531.9665	25.0%
		Constant	48	1.000	.0000	0.0%
52	.0	Uvol	16	2321.750	468.2153	20.2%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	2197.313	470.8704	21.4%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	1883.688	417.5937	22.2%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	2134.250	480.7036	22.5%
		Constant	48	1.000	.0000	0.0%
53	.0	Uvol	16	1336.087	465.9542	34.9%
		Constant	16	1.000	.0000	0.0%



	1.0	Uvol	16	1207.206	307.7801	25.5%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	1134.069	256.6553	22.6%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	1225.788	357.3093	29.1%
		Constant	48	1.000	.0000	0.0%
54	.0	Uvol	16	2118.138	460.9537	21.8%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	2230.319	504.9410	22.6%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	1866.856	402.3273	21.6%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	2071.771	473.7380	22.9%
		Constant	48	1.000	.0000	0.0%
55	.0	Uvol	16	1250.506	435.2047	34.8%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	1151.138	338.7346	29.4%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	1045.325	406.5049	38.9%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	1148.990	396.1991	34.5%
		Constant	48	1.000	.0000	0.0%
56	.0	Uvol	16	1889.369	396.3960	21.0%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	1808.925	310.2720	17.2%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	1553.744	409.9400	26.4%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	1750.679	394.2220	22.5%
		Constant	48	1.000	.0000	0.0%
Total	.0	Uvol	136	1886.410	576.1871	30.5%
		Constant	136	1.000	.0000	0.0%
	1.0	Uvol	132	1802.512	552.5625	30.7%
		Constant	132	1.000	.0000	0.0%
	2.0	Uvol	136	1660.451	570.0731	34.3%
		Constant	136	1.000	.0000	0.0%
	Total	Uvol	404	1782.932	572.8262	32.1%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6032.545
Akaike's Information Criterion (AIC)	6036.545
Hurvich and Tsai's Criterion (AICC)	6036.575
Bozdogan's Criterion (CAIC)	6046.533
Schwarz's Bayesian Criterion (BIC)	6044.533

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.053	215.218	.000
UAldoV_h_l_perdiet	2	392.060	9.995	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1674.546135	126.054808	10.125	13.284	.000	1394.149150	1954.943119
[UAldoV_h_l_perdiet=.0]	225.959559	51.193749	392.053	4.414	.000	125.310944	326.608174
[UAldoV_h_l_perdiet=1.0]	144.908941	51.589357	392.063	2.809	.005	43.482557	246.335326
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	178214.397500	12728.734200
Constant [subject = subject]	Variance 145560.713500	70613.492550

a. Dependent Variable: Uvol.

\*ON WATER INTAKE

\*Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON WATER INTAKE AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED WaterIntake BY UAldoV\_h\_l\_perdiet WITH Constant

```

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED WaterIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	WaterIntake	35	2604.937	399.3817	15.3%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2766.364	365.5193	13.2%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2636.388	383.4806	14.5%
		Constant	35	1.000	.0000	0.0%
Total	WaterIntake	104	2668.296	385.8569	14.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	WaterIntake	35	2612.982	540.3055	20.7%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2744.045	346.1820	12.6%
		Constant	34	1.000	.0000	0.0%

	2.0	WaterIntake	35	2706.523	353.1443	13.0%
		Constant	35	1.000	.0000	0.0%
Total		WaterIntake	104	2687.310	423.0759	15.7%
		Constant	104	1.000	.0000	0.0%
15	.0	WaterIntake	35	2462.273	399.5084	16.2%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2484.214	369.4884	14.9%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2530.194	343.3760	13.6%
		Constant	35	1.000	.0000	0.0%
Total	WaterIntake	104	2492.304	369.0019	14.8%	
	Constant	104	1.000	.0000	0.0%	
16	.0	WaterIntake	35	2738.597	382.8601	14.0%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2875.127	337.4728	11.7%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2982.704	319.2104	10.7%
		Constant	35	1.000	.0000	0.0%
Total	WaterIntake	104	2865.383	358.7209	12.5%	
	Constant	104	1.000	.0000	0.0%	
51	.0	WaterIntake	68	2626.142	405.5268	15.4%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2663.004	382.1623	14.4%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2695.963	330.9865	12.3%
		Constant	68	1.000	.0000	0.0%
Total	WaterIntake	205	2661.709	373.4804	14.0%	
	Constant	205	1.000	.0000	0.0%	
52	.0	WaterIntake	68	2632.422	538.8772	20.5%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2679.694	449.0947	16.8%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2750.510	343.5041	12.5%
		Constant	68	1.000	.0000	0.0%
Total	WaterIntake	205	2687.504	451.3423	16.8%	
	Constant	205	1.000	.0000	0.0%	
53	.0	WaterIntake	68	2361.674	371.4852	15.7%
		Constant	68	1.000	.0000	0.0%

	1.0	WaterIntake	69	2538.486	400.9752	15.8%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2523.231	400.5087	15.9%
		Constant	68	1.000	.0000	0.0%
Total		WaterIntake	205	2474.776	397.5172	16.1%
		Constant	205	1.000	.0000	0.0%
54	.0	WaterIntake	68	2856.627	678.7662	23.8%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2898.266	735.9309	25.4%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2933.455	635.6292	21.7%
		Constant	68	1.000	.0000	0.0%
Total		WaterIntake	205	2896.127	682.2961	23.6%
		Constant	205	1.000	.0000	0.0%
55	.0	WaterIntake	68	1983.969	550.4942	27.7%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2007.160	452.7203	22.6%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	1970.080	498.2199	25.3%
		Constant	68	1.000	.0000	0.0%
Total		WaterIntake	205	1987.168	499.6077	25.1%
		Constant	205	1.000	.0000	0.0%
56	.0	WaterIntake	68	2710.731	422.2677	15.6%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2771.629	414.2197	14.9%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2836.771	337.4423	11.9%
		Constant	68	1.000	.0000	0.0%
Total		WaterIntake	205	2773.037	394.7171	14.2%
		Constant	205	1.000	.0000	0.0%
Total	.0	WaterIntake	548	2548.037	546.8208	21.5%
		Constant	548	1.000	.0000	0.0%
	1.0	WaterIntake	550	2623.800	525.1389	20.0%
		Constant	550	1.000	.0000	0.0%
	2.0	WaterIntake	548	2642.763	505.3590	19.1%
		Constant	548	1.000	.0000	0.0%
Total		WaterIntake	1646	2604.889	527.3144	20.2%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24827.878
Akaike's Information Criterion (AIC)	24831.878
Hurvich and Tsai's Criterion (AICC)	24831.885
Bozdogan's Criterion (CAIC)	24844.686
Schwarz's Bayesian Criterion (BIC)	24842.686

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.067	1002.741	.000
UAldoV_h_I_perdiet	2	1634.071	6.693	.001

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2656.674232	84.214319	9.746	31.547	.000	2468.367535	2844.980929
[UAldoV_h_I_perdiet=.0]	-94.726150	27.484021	1634.068	-3.447	.001	-148.633771	-40.818529
[UAldoV_h_I_perdiet=1.0]	-18.173270	27.459821	1634.072	-.662	.508	-72.033423	35.686884
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	206971.768800	7240.875831
Constant [subject = subject] Variance	67007.817620	32125.895190

a. Dependent Variable: WaterIntake.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON WATER INTAKE AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED WaterIntake BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED WaterIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	WaterIntake	13	2430.385	467.3926	19.2%
		Constant	13	1.000	.0000	0.0%
	1.0	WaterIntake	14	2719.011	362.9705	13.3%
		Constant	14	1.000	.0000	0.0%
	2.0	WaterIntake	13	2601.490	505.1032	19.4%
		Constant	13	1.000	.0000	0.0%
Total	WaterIntake	40	2587.013	451.8143	17.5%	
	Constant	40	1.000	.0000	0.0%	
12	.0	WaterIntake	13	2375.865	333.3726	14.0%
		Constant	13	1.000	.0000	0.0%
	1.0	WaterIntake	14	2778.975	260.3020	9.4%
		Constant	14	1.000	.0000	0.0%

	2.0	WaterIntake	13	2644.025	254.3683	9.6%
		Constant	13	1.000	.0000	0.0%
Total		WaterIntake	40	2604.106	324.9052	12.5%
		Constant	40	1.000	.0000	0.0%
15	.0	WaterIntake	13	2507.340	416.5895	16.6%
		Constant	13	1.000	.0000	0.0%
	1.0	WaterIntake	14	2554.584	267.8096	10.5%
		Constant	14	1.000	.0000	0.0%
	2.0	WaterIntake	13	2439.748	322.3909	13.2%
		Constant	13	1.000	.0000	0.0%
Total	WaterIntake	40	2501.908	334.0366	13.4%	
Constant	40	1.000	.0000	0.0%		
16	.0	WaterIntake	13	2780.311	373.4291	13.4%
		Constant	13	1.000	.0000	0.0%
	1.0	WaterIntake	14	3003.759	414.4074	13.8%
		Constant	14	1.000	.0000	0.0%
	2.0	WaterIntake	13	2964.082	261.0164	8.8%
		Constant	13	1.000	.0000	0.0%
Total	WaterIntake	40	2918.243	361.6383	12.4%	
Constant	40	1.000	.0000	0.0%		
51	.0	WaterIntake	32	2457.143	324.0339	13.2%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	2618.448	468.1672	17.9%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2554.658	343.4649	13.4%
		Constant	32	1.000	.0000	0.0%
Total	WaterIntake	97	2544.190	386.6748	15.2%	
Constant	97	1.000	.0000	0.0%		
52	.0	WaterIntake	32	2588.162	487.7550	18.8%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	2513.553	414.2298	16.5%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2657.881	406.5883	15.3%
		Constant	32	1.000	.0000	0.0%
Total	WaterIntake	97	2585.780	436.9549	16.9%	
Constant	97	1.000	.0000	0.0%		
53	.0	WaterIntake	32	2290.412	345.5384	15.1%
		Constant	32	1.000	.0000	0.0%

	1.0	WaterIntake	33	2642.369	424.4732	16.1%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2406.660	473.9124	19.7%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	2448.500	439.2872	17.9%
		Constant	97	1.000	.0000	0.0%
54	.0	WaterIntake	32	2557.367	699.9039	27.4%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	2597.492	838.9903	32.3%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2614.674	632.0990	24.2%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	2589.923	722.7855	27.9%
		Constant	97	1.000	.0000	0.0%
55	.0	WaterIntake	32	1868.038	564.6712	30.2%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	1929.086	397.4674	20.6%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	1844.168	447.5049	24.3%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	1880.932	470.7375	25.0%
		Constant	97	1.000	.0000	0.0%
56	.0	WaterIntake	32	2517.467	437.9156	17.4%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	2600.329	422.8904	16.3%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2704.490	348.1564	12.9%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	2607.356	408.0867	15.7%
		Constant	97	1.000	.0000	0.0%
Total	.0	WaterIntake	244	2410.392	525.0595	21.8%
		Constant	244	1.000	.0000	0.0%
	1.0	WaterIntake	254	2545.397	543.3894	21.3%
		Constant	254	1.000	.0000	0.0%
	2.0	WaterIntake	244	2506.076	512.9389	20.5%
		Constant	244	1.000	.0000	0.0%
	Total	WaterIntake	742	2488.071	529.8344	21.3%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	11218.860
Akaike's Information Criterion (AIC)	11222.860
Hurvich and Tsai's Criterion (AICC)	11222.876
Bozdogan's Criterion (CAIC)	11234.070
Schwarz's Bayesian Criterion (BIC)	11232.070

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.105	943.463	.000
UAldoV_h_I_perdiet	2	730.117	5.423	.005

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2542.801045	85.707508	10.782	29.668	.000	2353.693679	2731.908411
[UAldoV_h_I_perdiet=.0]	-95.684139	42.092895	730.114	-2.273	.023	-178.321689	-13.046590
[UAldoV_h_I_perdiet=1.0]	37.874920	41.677587	730.118	.909	.364	-43.947288	119.697127
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	216161.044200	11313.505890
Constant [subject = subject] Variance	64033.579790	31618.967960

a. Dependent Variable: WaterIntake.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON WATER INTAKE AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED WaterIntake BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED WaterIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	WaterIntake	12	2600.684	285.1467	11.0%
		Constant	12	1.000	.0000	0.0%
	1.0	WaterIntake	11	2659.785	402.3371	15.1%
		Constant	11	1.000	.0000	0.0%
	2.0	WaterIntake	12	2633.230	235.9868	9.0%
		Constant	12	1.000	.0000	0.0%
Total	WaterIntake	35	2630.417	304.1828	11.6%	
	Constant	35	1.000	.0000	0.0%	
12	.0	WaterIntake	12	2640.672	225.5060	8.5%
		Constant	12	1.000	.0000	0.0%
	1.0	WaterIntake	11	2604.540	428.6446	16.5%
		Constant	11	1.000	.0000	0.0%

	2.0	WaterIntake	12	2679.886	395.7392	14.8%
		Constant	12	1.000	.0000	0.0%
Total		WaterIntake	35	2642.761	349.4580	13.2%
		Constant	35	1.000	.0000	0.0%
15	.0	WaterIntake	12	2440.178	322.0932	13.2%
		Constant	12	1.000	.0000	0.0%
1.0		WaterIntake	11	2314.941	323.7968	14.0%
		Constant	11	1.000	.0000	0.0%
2.0		WaterIntake	12	2498.711	369.7120	14.8%
		Constant	12	1.000	.0000	0.0%
Total		WaterIntake	35	2420.886	338.4132	14.0%
		Constant	35	1.000	.0000	0.0%
16	.0	WaterIntake	12	2611.482	311.2494	11.9%
		Constant	12	1.000	.0000	0.0%
1.0		WaterIntake	11	2696.353	213.6314	7.9%
		Constant	11	1.000	.0000	0.0%
2.0		WaterIntake	12	2868.159	288.7170	10.1%
		Constant	12	1.000	.0000	0.0%
Total		WaterIntake	35	2726.159	289.4471	10.6%
		Constant	35	1.000	.0000	0.0%
51	.0	WaterIntake	20	2765.721	466.1746	16.9%
		Constant	20	1.000	.0000	0.0%
1.0		WaterIntake	20	2606.766	288.4070	11.1%
		Constant	20	1.000	.0000	0.0%
2.0		WaterIntake	20	2809.237	272.2966	9.7%
		Constant	20	1.000	.0000	0.0%
Total		WaterIntake	60	2727.241	358.2580	13.1%
		Constant	60	1.000	.0000	0.0%
52	.0	WaterIntake	20	2503.309	678.6926	27.1%
		Constant	20	1.000	.0000	0.0%
1.0		WaterIntake	20	2797.375	507.1833	18.1%
		Constant	20	1.000	.0000	0.0%
2.0		WaterIntake	20	2808.277	221.5463	7.9%
		Constant	20	1.000	.0000	0.0%
Total		WaterIntake	60	2702.987	516.9863	19.1%
		Constant	60	1.000	.0000	0.0%
53	.0	WaterIntake	20	2275.100	447.1171	19.7%
		Constant	20	1.000	.0000	0.0%

	1.0	WaterIntake	20	2325.003	371.8658	16.0%
		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	2666.019	306.4313	11.5%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	2422.040	412.1159	17.0%
		Constant	60	1.000	.0000	0.0%
54	.0	WaterIntake	20	3017.662	587.9189	19.5%
		Constant	20	1.000	.0000	0.0%
	1.0	WaterIntake	20	3092.717	520.7162	16.8%
		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	3174.118	575.1161	18.1%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	3094.832	556.1431	18.0%
		Constant	60	1.000	.0000	0.0%
55	.0	WaterIntake	20	2066.550	524.8359	25.4%
		Constant	20	1.000	.0000	0.0%
	1.0	WaterIntake	20	2034.922	570.8776	28.1%
		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	1919.056	453.3022	23.6%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	2006.843	513.7284	25.6%
		Constant	60	1.000	.0000	0.0%
56	.0	WaterIntake	20	2806.760	387.4545	13.8%
		Constant	20	1.000	.0000	0.0%
	1.0	WaterIntake	20	2899.951	385.2974	13.3%
		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	2978.938	295.7784	9.9%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	2895.217	359.6671	12.4%
		Constant	60	1.000	.0000	0.0%
Total	.0	WaterIntake	168	2572.727	536.5601	20.9%
		Constant	168	1.000	.0000	0.0%
	1.0	WaterIntake	164	2610.771	522.9153	20.0%
		Constant	164	1.000	.0000	0.0%
	2.0	WaterIntake	168	2709.957	491.5139	18.1%
		Constant	168	1.000	.0000	0.0%
	Total	WaterIntake	500	2631.315	519.5174	19.7%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7464.501
Akaike's Information Criterion (AIC)	7468.501
Hurvich and Tsai's Criterion (AICC)	7468.525
Bozdogan's Criterion (CAIC)	7478.918
Schwarz's Bayesian Criterion (BIC)	7476.918

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.141	777.789	.000
UAldoV_h_I_perdiet	2	488.149	4.729	.009

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2705.922833	97.855379	10.646	27.652	.000	2489.668498	2922.177168
[UAldoV_h_I_perdiet=.0]	-137.229345	46.109486	488.141	-2.976	.003	-227.826908	-46.631782
[UAldoV_h_I_perdiet=1.0]	-99.800620	46.395311	488.153	-2.151	.032	-190.959775	-8.641464
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	178591.117500	11431.471740
Constant [subject = subject] Variance	84905.885570	41495.080560

a. Dependent Variable: WaterIntake.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON WATER INTAKE AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED WaterIntake BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED WaterIntake BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	WaterIntake	10	2836.958	328.7497	11.6%
		Constant	10	1.000	.0000	0.0%
	1.0	WaterIntake	9	2970.288	261.4538	8.8%
		Constant	9	1.000	.0000	0.0%
	2.0	WaterIntake	10	2685.544	377.9618	14.1%
		Constant	10	1.000	.0000	0.0%
Total	WaterIntake	29	2826.124	337.5911	11.9%	
	Constant	29	1.000	.0000	0.0%	
12	.0	WaterIntake	10	2888.005	852.1931	29.5%
		Constant	10	1.000	.0000	0.0%
	1.0	WaterIntake	9	2860.214	332.4085	11.6%
		Constant	9	1.000	.0000	0.0%

	2.0	WaterIntake	10	2819.735	415.4737	14.7%
		Constant	10	1.000	.0000	0.0%
Total		WaterIntake	29	2855.839	566.8579	19.8%
		Constant	29	1.000	.0000	0.0%
15	.0	WaterIntake	10	2430.201	489.9368	20.2%
		Constant	10	1.000	.0000	0.0%
1.0		WaterIntake	9	2581.639	506.7604	19.6%
		Constant	9	1.000	.0000	0.0%
2.0		WaterIntake	10	2685.552	315.9558	11.8%
		Constant	10	1.000	.0000	0.0%
Total		WaterIntake	29	2565.251	440.8907	17.2%
		Constant	29	1.000	.0000	0.0%
16	.0	WaterIntake	10	2836.907	463.2714	16.3%
		Constant	10	1.000	.0000	0.0%
1.0		WaterIntake	9	2893.534	245.7448	8.5%
		Constant	9	1.000	.0000	0.0%
2.0		WaterIntake	10	3144.365	381.0302	12.1%
		Constant	10	1.000	.0000	0.0%
Total		WaterIntake	29	2960.501	389.7132	13.2%
		Constant	29	1.000	.0000	0.0%
51	.0	WaterIntake	16	2789.664	356.1719	12.8%
		Constant	16	1.000	.0000	0.0%
1.0		WaterIntake	16	2825.199	229.1162	8.1%
		Constant	16	1.000	.0000	0.0%
2.0		WaterIntake	16	2836.980	265.8916	9.4%
		Constant	16	1.000	.0000	0.0%
Total		WaterIntake	48	2817.281	283.2254	10.1%
		Constant	48	1.000	.0000	0.0%
52	.0	WaterIntake	16	2882.335	359.0484	12.5%
		Constant	16	1.000	.0000	0.0%
1.0		WaterIntake	16	2875.256	320.0676	11.1%
		Constant	16	1.000	.0000	0.0%
2.0		WaterIntake	16	2863.557	294.6842	10.3%
		Constant	16	1.000	.0000	0.0%
Total		WaterIntake	48	2873.716	318.7691	11.1%
		Constant	48	1.000	.0000	0.0%
53	.0	WaterIntake	16	2612.418	168.9289	6.5%
		Constant	16	1.000	.0000	0.0%



	1.0	WaterIntake	16	2591.082	286.1404	11.0%
		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	2577.887	272.0783	10.6%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	2593.796	243.0443	9.4%
		Constant	48	1.000	.0000	0.0%
54	.0	WaterIntake	16	3253.853	462.3316	14.2%
		Constant	16	1.000	.0000	0.0%
	1.0	WaterIntake	16	3275.550	456.9934	14.0%
		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	3270.190	380.7623	11.6%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	3266.531	425.7081	13.0%
		Constant	48	1.000	.0000	0.0%
55	.0	WaterIntake	16	2112.603	538.8046	25.5%
		Constant	16	1.000	.0000	0.0%
	1.0	WaterIntake	16	2133.486	384.4988	18.0%
		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	2285.683	539.4823	23.6%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	2177.257	488.6695	22.4%
		Constant	48	1.000	.0000	0.0%
56	.0	WaterIntake	16	2977.223	205.5337	6.9%
		Constant	16	1.000	.0000	0.0%
	1.0	WaterIntake	16	2964.533	286.4559	9.7%
		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	2923.626	273.7906	9.4%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	2955.127	253.2361	8.6%
		Constant	48	1.000	.0000	0.0%
Total	.0	WaterIntake	136	2764.487	526.2890	19.0%
		Constant	136	1.000	.0000	0.0%
	1.0	WaterIntake	132	2790.854	452.7324	16.2%
		Constant	132	1.000	.0000	0.0%
	2.0	WaterIntake	136	2804.991	443.2283	15.8%
		Constant	136	1.000	.0000	0.0%
	Total	WaterIntake	404	2786.737	474.8743	17.0%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5939.665
Akaike's Information Criterion (AIC)	5943.665
Hurvich and Tsai's Criterion (AICC)	5943.695
Bozdogan's Criterion (CAIC)	5953.653
Schwarz's Bayesian Criterion (BIC)	5951.653

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.116	907.729	.000
UAldoV_h_l_perdiet	2	392.126	.405	.667

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2807.153863	96.238763	10.646	29.169	.000	2594.471374	3019.836352
[UAldoV_h_l_perdiet=.0]	-40.503456	45.768330	392.117	-.885	.377	-130.485471	49.478559
[UAldoV_h_l_perdiet=1.0]	-13.699169	46.121895	392.130	-.297	.767	-104.376294	76.977956
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	142442.322700	10172.938620
Constant [subject = subject] Variance	81961.365470	40136.042490

a. Dependent Variable: WaterIntake.

\*ON WATER BALANCE GAP

\*Mixed Linear Models

EFFECT OF UAldoV TERTILE ON WATER BALANCE GAP AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED Water\_Balance\_Gap BY UAldoV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UAldoV\_h\_l\_perdiet | SSTYPE(3)

```

/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED Water_Balance_Gap BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	35	562.080	579.7575	103.1%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	753.129	560.7683	74.5%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	851.388	537.1157	63.1%
		Constant	35	1.000	.0000	0.0%
Total	Water_Balance_GAP	104	721.901	567.1254	78.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	35	956.925	737.3253	77.1%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	1162.721	494.9852	42.6%
		Constant	34	1.000	.0000	0.0%

	2.0	Water_Balance_GAP	35	1111.409	409.1066	36.8%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	1076.194	566.5065	52.6%
		Constant	104	1.000	.0000	0.0%
15	.0	Water_Balance_GAP	35	111.130	565.2259	508.6%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	393.037	467.4736	118.9%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	324.051	499.2416	154.1%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	274.948	521.8144	189.8%
		Constant	104	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	35	894.454	373.1935	41.7%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	1139.833	346.0007	30.4%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	1499.989	431.3600	28.8%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	1178.460	456.9264	38.8%
		Constant	104	1.000	.0000	0.0%
51	.0	Water_Balance_GAP	68	437.533	743.3704	169.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	681.772	654.8244	96.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	808.057	642.3085	79.5%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	642.646	695.4008	108.2%
		Constant	205	1.000	.0000	0.0%
52	.0	Water_Balance_GAP	68	411.669	712.8377	173.2%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	663.936	661.0918	99.6%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	927.943	503.6122	54.3%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	667.830	663.5499	99.4%
		Constant	205	1.000	.0000	0.0%
53	.0	Water_Balance_GAP	68	1047.930	458.0846	43.7%
		Constant	68	1.000	.0000	0.0%

	1.0	Water_Balance_GAP	69	1146.185	527.2879	46.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	1255.256	482.8737	38.5%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1149.773	495.3241	43.1%
		Constant	205	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	68	840.645	663.3227	78.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	849.649	754.0846	88.8%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	1066.869	675.9934	63.4%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	918.716	703.6338	76.6%
		Constant	205	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	68	698.465	535.2468	76.6%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	777.969	554.3180	71.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	853.034	558.8792	65.5%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	776.497	550.5289	70.9%
		Constant	205	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	68	846.125	648.8676	76.7%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	965.009	538.1029	55.8%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	1196.810	569.8346	47.6%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1002.464	602.2082	60.1%
		Constant	205	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	548	692.631	669.6547	96.7%
		Constant	548	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	550	851.070	621.3038	73.0%
		Constant	550	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	548	999.783	606.9382	60.7%
		Constant	548	1.000	.0000	0.0%
	Total	Water_Balance_GAP	1646	847.832	645.1024	76.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	25668.230
Akaike's Information Criterion (AIC)	25672.230
Hurvich and Tsai's Criterion (AICC)	25672.238
Bozdogan's Criterion (CAIC)	25685.039
Schwarz's Bayesian Criterion (BIC)	25683.039

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.881	91.569	.000
UAldoV_h_I_perdiet	2	1633.886	37.375	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	993.261212	90.263842	9.873	11.004	.000	791.789605	1194.732818
[UAldoV_h_I_perdiet=.0]	-307.152464	35.531333	1633.881	-8.645	.000	-376.844222	-237.460705
[UAldoV_h_I_perdiet=1.0]	-149.083656	35.500035	1633.888	-4.200	.000	-218.714026	-79.453285
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	345918.316500	12102.589130
Constant [subject = subject] Variance	74938.783650	36666.847520

a. Dependent Variable: Water\_Balance\_GAP.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON WATER BALANCE GAP AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED water_balance_gap BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:34:47	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED water_balance_gap BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	13	199.616	691.3744	346.4%
		Constant	13	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	14	522.582	595.7925	114.0%
		Constant	14	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	13	663.028	543.7422	82.0%
		Constant	13	1.000	.0000	0.0%
Total	Water_Balance_GAP	40	463.263	627.7782	135.5%	
	Constant	40	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	13	598.942	643.6154	107.5%
		Constant	13	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	14	1257.189	413.7092	32.9%
		Constant	14	1.000	.0000	0.0%

	2.0	Water_Balance_GAP	13	1121.564	310.3894	27.7%
		Constant	13	1.000	.0000	0.0%
Total		Water_Balance_GAP	40	999.181	544.4629	54.5%
		Constant	40	1.000	.0000	0.0%
15	.0	Water_Balance_GAP	13	135.032	653.4173	483.9%
		Constant	13	1.000	.0000	0.0%
1.0		Water_Balance_GAP	14	488.512	510.3932	104.5%
		Constant	14	1.000	.0000	0.0%
2.0		Water_Balance_GAP	13	325.902	607.8451	186.5%
		Constant	13	1.000	.0000	0.0%
Total		Water_Balance_GAP	40	320.783	594.5569	185.3%
		Constant	40	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	13	952.234	346.9046	36.4%
		Constant	13	1.000	.0000	0.0%
1.0		Water_Balance_GAP	14	1128.759	390.0450	34.6%
		Constant	14	1.000	.0000	0.0%
2.0		Water_Balance_GAP	13	1527.928	365.8642	23.9%
		Constant	13	1.000	.0000	0.0%
Total		Water_Balance_GAP	40	1201.118	432.4996	36.0%
		Constant	40	1.000	.0000	0.0%
51	.0	Water_Balance_GAP	32	171.809	728.4998	424.0%
		Constant	32	1.000	.0000	0.0%
1.0		Water_Balance_GAP	33	543.066	765.0101	140.9%
		Constant	33	1.000	.0000	0.0%
2.0		Water_Balance_GAP	32	580.949	586.8282	101.0%
		Constant	32	1.000	.0000	0.0%
Total		Water_Balance_GAP	97	433.087	715.4431	165.2%
		Constant	97	1.000	.0000	0.0%
52	.0	Water_Balance_GAP	32	380.406	592.2672	155.7%
		Constant	32	1.000	.0000	0.0%
1.0		Water_Balance_GAP	33	510.272	620.3322	121.6%
		Constant	33	1.000	.0000	0.0%
2.0		Water_Balance_GAP	32	820.897	529.8599	64.5%
		Constant	32	1.000	.0000	0.0%
Total		Water_Balance_GAP	97	569.904	605.3051	106.2%
		Constant	97	1.000	.0000	0.0%
53	.0	Water_Balance_GAP	32	967.946	367.1341	37.9%
		Constant	32	1.000	.0000	0.0%

	1.0	Water_Balance_GAP	33	1113.121	566.9609	50.9%
		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	1003.488	411.9077	41.0%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	1029.061	457.5521	44.5%
		Constant	97	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	32	620.077	683.4706	110.2%
		Constant	32	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	33	608.838	919.2080	151.0%
		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	679.808	677.0178	99.6%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	635.958	762.5485	119.9%
		Constant	97	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	32	565.650	461.9515	81.7%
		Constant	32	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	33	644.858	487.9896	75.7%
		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	671.959	568.3895	84.6%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	627.668	504.6278	80.4%
		Constant	97	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	32	434.530	556.4307	128.1%
		Constant	32	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	33	667.775	506.1406	75.8%
		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	897.943	511.3944	57.0%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	666.760	552.8251	82.9%
		Constant	97	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	244	512.332	631.0718	123.2%
		Constant	244	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	254	718.347	666.3303	92.8%
		Constant	254	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	244	804.348	585.4052	72.8%
		Constant	244	1.000	.0000	0.0%
	Total	Water_Balance_GAP	742	678.882	639.8664	94.3%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	11559.470
Akaike's Information Criterion (AIC)	11563.470
Hurvich and Tsai's Criterion (AICC)	11563.487
Bozdogan's Criterion (CAIC)	11574.681
Schwarz's Bayesian Criterion (BIC)	11572.681

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.637	60.215	.000
UAldoV_h_I_perdiet	2	729.645	15.980	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	818.956606	94.436541	10.813	8.672	.000	610.664768	1027.248443
[UAldoV_h_I_perdiet=.0]	-292.015779	53.098479	729.641	-5.500	.000	-396.259805	-187.771752
[UAldoV_h_I_perdiet=1.0]	-86.575693	52.574555	729.647	-1.647	.100	-189.791140	16.639753
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	343972.713400	18008.784260
Constant [subject = subject] Variance	74205.980020	38318.604690

a. Dependent Variable: Water\_Balance\_GAP.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON WATER BALANCE GAP AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED water_balance_gap BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	<pre> MIXED water_balance_gap BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	12	679.851	399.6978	58.8%
		Constant	12	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	11	741.603	555.6190	74.9%
		Constant	11	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	12	789.480	437.8497	55.5%
		Constant	12	1.000	.0000	0.0%
Total	Water_Balance_GAP	35	736.846	454.5773	61.7%	
	Constant	35	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	12	1049.839	426.3520	40.6%
		Constant	12	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	11	904.540	646.9735	71.5%
		Constant	11	1.000	.0000	0.0%

	2.0	Water_Balance_GAP	12	1086.136	406.1584	37.4%
		Constant	12	1.000	.0000	0.0%
Total		Water_Balance_GAP	35	1016.618	491.3758	48.3%
		Constant	35	1.000	.0000	0.0%
15	.0	Water_Balance_GAP	12	32.261	487.3716	1510.7%
		Constant	12	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	11	246.759	516.5715	209.3%
		Constant	11	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	12	413.294	403.4364	97.6%
		Constant	12	1.000	.0000	0.0%
Total		Water_Balance_GAP	35	230.315	483.4658	209.9%
		Constant	35	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	12	868.148	314.9572	36.3%
		Constant	12	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	11	1222.716	338.2450	27.7%
		Constant	11	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	12	1551.492	369.1589	23.8%
		Constant	12	1.000	.0000	0.0%
Total		Water_Balance_GAP	35	1213.873	438.4916	36.1%
		Constant	35	1.000	.0000	0.0%
51	.0	Water_Balance_GAP	20	794.046	618.3710	77.9%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	900.305	376.1885	41.8%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	1142.562	557.4563	48.8%
		Constant	20	1.000	.0000	0.0%
Total		Water_Balance_GAP	60	945.638	538.9064	57.0%
		Constant	60	1.000	.0000	0.0%
52	.0	Water_Balance_GAP	20	342.559	929.0367	271.2%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	906.275	701.0019	77.3%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	1057.677	460.8363	43.6%
		Constant	20	1.000	.0000	0.0%
Total		Water_Balance_GAP	60	768.837	775.1588	100.8%
		Constant	60	1.000	.0000	0.0%
53	.0	Water_Balance_GAP	20	993.185	474.6843	47.8%
		Constant	20	1.000	.0000	0.0%

	1.0	Water_Balance_GAP	20	1010.588	457.8315	45.3%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	1507.234	441.9211	29.3%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	1170.335	510.6062	43.6%
		Constant	60	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	20	957.497	553.8722	57.8%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	1090.522	455.0452	41.7%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	1416.993	523.5895	37.0%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	1155.004	540.0541	46.8%
		Constant	60	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	20	780.065	531.9057	68.2%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	834.097	680.7080	81.6%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	832.896	480.6312	57.7%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	815.686	561.5755	68.8%
		Constant	60	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	20	1311.295	496.4430	37.9%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	1302.966	441.0366	33.8%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	1536.538	396.9388	25.8%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	1383.600	452.3846	32.7%
		Constant	60	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	168	804.370	647.4542	80.5%
		Constant	168	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	164	946.139	573.4404	60.6%
		Constant	164	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	168	1166.445	561.2954	48.1%
		Constant	168	1.000	.0000	0.0%
	Total	Water_Balance_GAP	500	972.528	612.8252	63.0%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7677.384
Akaike's Information Criterion (AIC)	7681.384
Hurvich and Tsai's Criterion (AICC)	7681.408
Bozdogan's Criterion (CAIC)	7691.801
Schwarz's Bayesian Criterion (BIC)	7689.801

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.861	84.387	.000
UAldoV_h_I_perdiet	2	487.873	20.370	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1140.569764	108.028378	10.769	10.558	.000	902.177305	1378.962224
[UAldoV_h_I_perdiet=.0]	-362.075774	57.254617	487.863	-6.324	.000	-474.571846	-249.579702
[UAldoV_h_I_perdiet=1.0]	-224.250554	57.609428	487.878	-3.893	.000	-337.443765	-111.057344
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	275359.657900	17630.567760
Constant [subject = subject] Variance	99975.903540	50280.811400

a. Dependent Variable: Water\_Balance\_GAP.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON WATER BALANCE GAP AT 6 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED water_balance_gap BY UAldoV_h_1_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED water_balance_gap BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	10	891.958	328.6571	36.8%
		Constant	10	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	9	1125.843	291.4758	25.9%
		Constant	9	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	10	1170.544	540.1894	46.1%
		Constant	10	1.000	.0000	0.0%
Total	Water_Balance_GAP	29	1060.607	410.6456	38.7%	
	Constant	29	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	10	1310.805	971.3535	74.1%
		Constant	10	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	9	1331.326	264.7063	19.9%
		Constant	9	1.000	.0000	0.0%

	2.0	Water_Balance_GAP	10	1128.535	548.5202	48.6%
		Constant	10	1.000	.0000	0.0%
Total		Water_Balance_GAP	29	1254.322	654.7537	52.2%
		Constant	29	1.000	.0000	0.0%
15	.0	Water_Balance_GAP	10	174.701	577.6921	330.7%
		Constant	10	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	9	423.306	313.3155	74.0%
		Constant	9	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	10	214.552	475.4691	221.6%
		Constant	10	1.000	.0000	0.0%
Total		Water_Balance_GAP	29	265.596	468.8911	176.5%
		Constant	29	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	10	850.907	486.4079	57.2%
		Constant	10	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	9	1055.757	293.2341	27.8%
		Constant	9	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	10	1401.865	585.2658	41.7%
		Constant	10	1.000	.0000	0.0%
Total		Water_Balance_GAP	29	1104.467	515.7791	46.7%
		Constant	29	1.000	.0000	0.0%
51	.0	Water_Balance_GAP	16	523.339	747.7746	142.9%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	694.687	640.2510	92.2%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	844.142	690.5338	81.8%
		Constant	16	1.000	.0000	0.0%
Total		Water_Balance_GAP	48	687.390	692.1055	100.7%
		Constant	48	1.000	.0000	0.0%
52	.0	Water_Balance_GAP	16	560.585	647.5768	115.5%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	677.944	638.2947	94.2%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	979.869	483.6058	49.4%
		Constant	16	1.000	.0000	0.0%
Total		Water_Balance_GAP	48	739.466	608.5733	82.3%
		Constant	48	1.000	.0000	0.0%
53	.0	Water_Balance_GAP	16	1276.331	547.7506	42.9%
		Constant	16	1.000	.0000	0.0%



	1.0	Water_Balance_GAP	16	1383.876	471.1432	34.0%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	1443.818	430.8721	29.8%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	1368.008	480.3660	35.1%
		Constant	48	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	16	1135.716	629.6573	55.4%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	1045.231	516.9920	49.5%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	1403.334	377.8783	26.9%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	1194.760	530.1081	44.4%
		Constant	48	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	16	862.097	636.5426	73.8%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	982.348	458.5497	46.7%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	1240.358	452.0575	36.4%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	1028.268	535.7916	52.1%
		Constant	48	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	16	1087.854	465.0810	42.8%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	1155.608	366.5354	31.7%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	1369.882	577.8645	42.2%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	1204.448	482.9477	40.1%
		Constant	48	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	136	878.077	687.4957	78.3%
		Constant	136	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	132	988.342	535.3838	54.2%
		Constant	132	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	136	1144.540	601.0799	52.5%
		Constant	136	1.000	.0000	0.0%
	Total	Water_Balance_GAP	404	1003.805	620.1882	61.8%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6221.284
Akaike's Information Criterion (AIC)	6225.284
Hurvich and Tsai's Criterion (AICC)	6225.314
Bozdogan's Criterion (CAIC)	6235.272
Schwarz's Bayesian Criterion (BIC)	6233.272

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.865	89.854	.000
UAldoV_h_l_perdiet	2	391.883	8.407	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1133.158948	111.143474	11.298	10.195	.000	889.318633	1376.999262
[UAldoV_h_l_perdiet=.0]	-266.463015	65.365542	391.869	-4.077	.000	-394.974034	-137.951996
[UAldoV_h_l_perdiet=1.0]	-158.496753	65.870150	391.891	-2.406	.017	-287.999825	-28.993681
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	290540.480400	20756.369510
Constant [subject = subject] Variance	101801.514100	51955.901900

a. Dependent Variable: Water\_Balance\_GAP.

\*ON BODY WEIGHT

\*Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON BODY WEIGHT AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED Bodyweight BY UAldoV\_h\_l\_perdiet WITH Constant

```

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED Bodyweight BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	bodyweight	35	70.806	1.4707	2.1%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	71.000	1.0899	1.5%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	70.846	1.3446	1.9%
		Constant	35	1.000	.0000	0.0%
Total	bodyweight	104	70.883	1.3032	1.8%	
	Constant	104	1.000	.0000	0.0%	
12	.0	bodyweight	35	85.714	2.5887	3.0%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	85.691	2.6252	3.1%
		Constant	34	1.000	.0000	0.0%

	2.0	bodyweight	35	85.874	2.5507	3.0%
		Constant	35	1.000	.0000	0.0%
Total		bodyweight	104	85.761	2.5641	3.0%
		Constant	104	1.000	.0000	0.0%
15	.0	bodyweight	35	66.623	.3889	0.6%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	66.521	.5558	0.8%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	66.677	.5364	0.8%
		Constant	35	1.000	.0000	0.0%
	Total	bodyweight	104	66.608	.4981	0.7%
		Constant	104	1.000	.0000	0.0%
16	.0	bodyweight	35	84.877	1.4951	1.8%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	84.779	1.1430	1.3%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	34	85.171	1.1345	1.3%
		Constant	34	1.000	.0000	0.0%
	Total	bodyweight	103	84.942	1.2696	1.5%
		Constant	103	1.000	.0000	0.0%
51	.0	bodyweight	67	84.107	.8305	1.0%
		Constant	67	1.000	.0000	0.0%
	1.0	bodyweight	69	84.170	.9558	1.1%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	67	84.019	.6968	0.8%
		Constant	67	1.000	.0000	0.0%
	Total	bodyweight	203	84.100	.8339	1.0%
		Constant	203	1.000	.0000	0.0%
52	.0	bodyweight	65	94.037	2.4310	2.6%
		Constant	65	1.000	.0000	0.0%
	1.0	bodyweight	67	95.903	2.9315	3.1%
		Constant	67	1.000	.0000	0.0%
	2.0	bodyweight	66	96.500	2.5943	2.7%
		Constant	66	1.000	.0000	0.0%
	Total	bodyweight	198	95.489	2.8489	3.0%
		Constant	198	1.000	.0000	0.0%
53	.0	bodyweight	68	80.035	.7928	1.0%
		Constant	68	1.000	.0000	0.0%

	1.0	bodyweight	69	79.670	1.2578	1.6%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	79.879	1.1236	1.4%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	79.860	1.0822	1.4%
		Constant	205	1.000	.0000	0.0%
54	.0	bodyweight	67	84.775	1.7864	2.1%
		Constant	67	1.000	.0000	0.0%
	1.0	bodyweight	69	84.600	1.8480	2.2%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	84.254	1.8355	2.2%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	204	84.542	1.8276	2.2%
		Constant	204	1.000	.0000	0.0%
55	.0	bodyweight	68	81.637	1.0528	1.3%
		Constant	68	1.000	.0000	0.0%
	1.0	bodyweight	69	81.779	.9178	1.1%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	81.793	1.0970	1.3%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	81.736	1.0223	1.3%
		Constant	205	1.000	.0000	0.0%
56	.0	bodyweight	67	71.446	1.8008	2.5%
		Constant	67	1.000	.0000	0.0%
	1.0	bodyweight	68	72.228	1.8609	2.6%
		Constant	68	1.000	.0000	0.0%
	2.0	bodyweight	66	72.686	1.5624	2.1%
		Constant	66	1.000	.0000	0.0%
	Total	bodyweight	201	72.118	1.8126	2.5%
		Constant	201	1.000	.0000	0.0%
Total	.0	bodyweight	542	81.160	7.7346	9.5%
		Constant	542	1.000	.0000	0.0%
	1.0	bodyweight	547	81.524	8.0127	9.8%
		Constant	547	1.000	.0000	0.0%
	2.0	bodyweight	542	81.611	8.0709	9.9%
		Constant	542	1.000	.0000	0.0%
	Total	bodyweight	1631	81.432	7.9385	9.7%
		Constant	1631	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6385.666
Akaike's Information Criterion (AIC)	6389.666
Hurvich and Tsai's Criterion (AICC)	6389.674
Bozdogan's Criterion (CAIC)	6402.456
Schwarz's Bayesian Criterion (BIC)	6400.456

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.000	887.485	.000
UAldoV_h_I_perdiet	2	1619.000	8.463	.000

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	80.783818	2.706318	9.008	29.850	.000	74.662538	86.905099
[UAldoV_h_I_perdiet=.0]	-.408741	.101515	1619.000	-4.026	.000	-.607856	-.209625
[UAldoV_h_I_perdiet=1.0]	-.130252	.101285	1619.000	-1.286	.199	-.328916	.068413
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2.792696	.098156
Constant [subject = subject] Variance	73.188186	34.510938

a. Dependent Variable: bodyweight.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON BODY WEIGHT AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED bodyweight BY UAldoV_h_1_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED bodyweight BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	bodyweight	13	69.669	1.8195	2.6%
		Constant	13	1.000	.0000	0.0%
	1.0	bodyweight	14	70.121	1.1389	1.6%
		Constant	14	1.000	.0000	0.0%
	2.0	bodyweight	13	69.762	1.6450	2.4%
		Constant	13	1.000	.0000	0.0%
	Total	bodyweight	40	69.858	1.5243	2.2%
		Constant	40	1.000	.0000	0.0%
12	.0	bodyweight	13	88.292	1.8218	2.1%
		Constant	13	1.000	.0000	0.0%
	1.0	bodyweight	14	88.000	1.8397	2.1%
		Constant	14	1.000	.0000	0.0%

	2.0	bodyweight	13	88.162	2.2262	2.5%
		Constant	13	1.000	.0000	0.0%
	Total	bodyweight	40	88.148	1.9207	2.2%
		Constant	40	1.000	.0000	0.0%
15	.0	bodyweight	13	66.585	.4240	0.6%
		Constant	13	1.000	.0000	0.0%
	1.0	bodyweight	14	66.121	.4246	0.6%
		Constant	14	1.000	.0000	0.0%
	2.0	bodyweight	13	66.377	.6559	1.0%
		Constant	13	1.000	.0000	0.0%
	Total	bodyweight	40	66.355	.5339	0.8%
		Constant	40	1.000	.0000	0.0%
16	.0	bodyweight	13	86.369	1.1629	1.3%
		Constant	13	1.000	.0000	0.0%
	1.0	bodyweight	14	85.800	.6872	0.8%
		Constant	14	1.000	.0000	0.0%
	2.0	bodyweight	13	86.054	.9422	1.1%
		Constant	13	1.000	.0000	0.0%
	Total	bodyweight	40	86.068	.9501	1.1%
		Constant	40	1.000	.0000	0.0%
51	.0	bodyweight	32	83.997	1.0085	1.2%
		Constant	32	1.000	.0000	0.0%
	1.0	bodyweight	33	84.073	1.1920	1.4%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	83.950	.8901	1.1%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	84.007	1.0298	1.2%
		Constant	97	1.000	.0000	0.0%
52	.0	bodyweight	30	93.730	2.9418	3.1%
		Constant	30	1.000	.0000	0.0%
	1.0	bodyweight	32	97.316	3.2097	3.3%
		Constant	32	1.000	.0000	0.0%
	2.0	bodyweight	32	98.422	1.7647	1.8%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	94	96.548	3.3381	3.5%
		Constant	94	1.000	.0000	0.0%
53	.0	bodyweight	32	79.853	.9291	1.2%
		Constant	32	1.000	.0000	0.0%

	1.0	bodyweight	33	79.082	1.5049	1.9%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	79.278	1.1398	1.4%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	79.401	1.2495	1.6%
		Constant	97	1.000	.0000	0.0%
54	.0	bodyweight	32	85.297	1.9315	2.3%
		Constant	32	1.000	.0000	0.0%
	1.0	bodyweight	33	85.100	2.1160	2.5%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	84.700	2.4306	2.9%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	85.033	2.1602	2.5%
		Constant	97	1.000	.0000	0.0%
55	.0	bodyweight	32	81.606	1.2391	1.5%
		Constant	32	1.000	.0000	0.0%
	1.0	bodyweight	33	81.938	.9786	1.2%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	81.997	1.2825	1.6%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	81.848	1.1730	1.4%
		Constant	97	1.000	.0000	0.0%
56	.0	bodyweight	32	71.222	2.2234	3.1%
		Constant	32	1.000	.0000	0.0%
	1.0	bodyweight	33	72.430	2.2573	3.1%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	73.266	1.5545	2.1%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	72.307	2.1861	3.0%
		Constant	97	1.000	.0000	0.0%
Total	.0	bodyweight	242	81.475	7.8784	9.7%
		Constant	242	1.000	.0000	0.0%
	1.0	bodyweight	253	81.981	8.5271	10.4%
		Constant	253	1.000	.0000	0.0%
	2.0	bodyweight	244	82.320	8.6170	10.5%
		Constant	244	1.000	.0000	0.0%
	Total	bodyweight	739	81.928	8.3466	10.2%
		Constant	739	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3092.881
Akaike's Information Criterion (AIC)	3096.881
Hurvich and Tsai's Criterion (AICC)	3096.897
Bozdogan's Criterion (CAIC)	3108.083
Schwarz's Bayesian Criterion (BIC)	3106.083

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.998	775.179	.000
UAldoV_h_I_perdiet	2	726.998	9.483	.000

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	81.277805	2.909341	9.019	27.937	.000	74.698518	87.857091
[UAldoV_h_I_perdiet=.0]	-.725171	.169630	726.998	-4.275	.000	-1.058194	-.392147
[UAldoV_h_I_perdiet=1.0]	-.240607	.167769	726.998	-1.434	.152	-.569978	.088763
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3.495765	.183354
Constant [subject = subject]	Variance	84.489645
		39.859132

a. Dependent Variable: bodyweight.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON BODY WEIGHT AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED bodyweight BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax		MIXED bodyweight BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	bodyweight	12	71.108	.5299	0.7%
		Constant	12	1.000	.0000	0.0%
	1.0	bodyweight	11	71.336	.3854	0.5%
		Constant	11	1.000	.0000	0.0%
	2.0	bodyweight	12	71.167	.3798	0.5%
		Constant	12	1.000	.0000	0.0%
Total	bodyweight	35	71.200	.4366	0.6%	
	Constant	35	1.000	.0000	0.0%	
12	.0	bodyweight	12	85.375	.9928	1.2%
		Constant	12	1.000	.0000	0.0%
	1.0	bodyweight	11	85.291	.8227	1.0%
		Constant	11	1.000	.0000	0.0%

	2.0	bodyweight	12	85.775	.9107	1.1%
		Constant	12	1.000	.0000	0.0%
	Total	bodyweight	35	85.486	.9124	1.1%
		Constant	35	1.000	.0000	0.0%
15	.0	bodyweight	12	66.525	.3415	0.5%
		Constant	12	1.000	.0000	0.0%
	1.0	bodyweight	11	66.736	.4945	0.7%
		Constant	11	1.000	.0000	0.0%
	2.0	bodyweight	12	66.842	.3825	0.6%
		Constant	12	1.000	.0000	0.0%
	Total	bodyweight	35	66.700	.4187	0.6%
		Constant	35	1.000	.0000	0.0%
16	.0	bodyweight	12	84.633	.3627	0.4%
		Constant	12	1.000	.0000	0.0%
	1.0	bodyweight	11	84.582	.6539	0.8%
		Constant	11	1.000	.0000	0.0%
	2.0	bodyweight	12	85.200	.6453	0.8%
		Constant	12	1.000	.0000	0.0%
	Total	bodyweight	35	84.811	.6201	0.7%
		Constant	35	1.000	.0000	0.0%
51	.0	bodyweight	20	84.595	.5577	0.7%
		Constant	20	1.000	.0000	0.0%
	1.0	bodyweight	20	84.750	.4936	0.6%
		Constant	20	1.000	.0000	0.0%
	2.0	bodyweight	20	84.360	.4235	0.5%
		Constant	20	1.000	.0000	0.0%
	Total	bodyweight	60	84.568	.5124	0.6%
		Constant	60	1.000	.0000	0.0%
52	.0	bodyweight	20	95.530	1.5928	1.7%
		Constant	20	1.000	.0000	0.0%
	1.0	bodyweight	20	95.925	1.4567	1.5%
		Constant	20	1.000	.0000	0.0%
	2.0	bodyweight	18	96.133	1.2020	1.3%
		Constant	18	1.000	.0000	0.0%
	Total	bodyweight	58	95.853	1.4308	1.5%
		Constant	58	1.000	.0000	0.0%
53	.0	bodyweight	20	80.665	.4120	0.5%
		Constant	20	1.000	.0000	0.0%

	1.0	bodyweight	20	80.665	.4171	0.5%	
		Constant	20	1.000	.0000	0.0%	
	2.0	bodyweight	20	81.030	.5222	0.6%	
		Constant	20	1.000	.0000	0.0%	
	Total	bodyweight	60	80.787	.4782	0.6%	
		Constant	60	1.000	.0000	0.0%	
54	.0	bodyweight	20	85.445	.7543	0.9%	
		Constant	20	1.000	.0000	0.0%	
	1.0	bodyweight	20	85.210	.8065	0.9%	
		Constant	20	1.000	.0000	0.0%	
	2.0	bodyweight	20	84.510	.4833	0.6%	
		Constant	20	1.000	.0000	0.0%	
	Total	bodyweight	60	85.055	.7926	0.9%	
		Constant	60	1.000	.0000	0.0%	
	55	.0	bodyweight	20	82.285	.5204	0.6%
			Constant	20	1.000	.0000	0.0%
1.0		bodyweight	20	82.230	.4975	0.6%	
		Constant	20	1.000	.0000	0.0%	
2.0		bodyweight	20	82.215	.5905	0.7%	
		Constant	20	1.000	.0000	0.0%	
Total		bodyweight	60	82.243	.5293	0.6%	
		Constant	60	1.000	.0000	0.0%	
56		.0	bodyweight	19	72.726	.6136	0.8%
			Constant	19	1.000	.0000	0.0%
	1.0	bodyweight	20	73.110	.6043	0.8%	
		Constant	20	1.000	.0000	0.0%	
	2.0	bodyweight	19	73.268	.5313	0.7%	
		Constant	19	1.000	.0000	0.0%	
	Total	bodyweight	58	73.036	.6178	0.8%	
		Constant	58	1.000	.0000	0.0%	
	Total	.0	bodyweight	167	81.700	7.8784	9.6%
			Constant	167	1.000	.0000	0.0%
1.0		bodyweight	164	81.861	7.8102	9.5%	
		Constant	164	1.000	.0000	0.0%	
2.0		bodyweight	165	81.652	7.7330	9.5%	
		Constant	165	1.000	.0000	0.0%	
Total		bodyweight	496	81.737	7.7924	9.5%	
		Constant	496	1.000	.0000	0.0%	

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	1211.332
Akaike's Information Criterion (AIC)	1215.332
Hurvich and Tsai's Criterion (AICC)	1215.357
Bozdogan's Criterion (CAIC)	1225.733
Schwarz's Bayesian Criterion (BIC)	1223.733

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.000	907.868	.000
UAldoV_h_I_perdiet	2	484.000	1.248	.288

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	81.023402	2.687854	9.005	30.144	.000	74.943617	87.103188
[UAldoV_h_I_perdiet=.0]	-.122778	.082509	484.000	-1.488	.137	-.284899	.039343
[UAldoV_h_I_perdiet=1.0]	-.023724	.082901	484.000	-.286	.775	-.186614	.139166
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	.564921	.036314
Constant [subject = subject]	Variance	72.210657
		34.046567

a. Dependent Variable: bodyweight.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON BODY WEIGHT AT 6 g SALT INTAKE  
 all subjects

```

USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED bodyweight BY UAldoV_h_1_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED bodyweight BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	bodyweight	71.920	.2150	0.3%
		Constant	1.000	.0000	0.0%
	1.0	bodyweight	71.956	.2698	0.4%
		Constant	1.000	.0000	0.0%
	2.0	bodyweight	71.870	.2111	0.3%
		Constant	1.000	.0000	0.0%
Total	bodyweight	29	71.914	.2263	0.3%
	Constant	29	1.000	.0000	0.0%
12	.0	bodyweight	82.770	.5478	0.7%
		Constant	1.000	.0000	0.0%
	1.0	bodyweight	82.589	1.3062	1.6%
		Constant	1.000	.0000	0.0%

	2.0	bodyweight	10	83.020	.5789	0.7%
		Constant	10	1.000	.0000	0.0%
	Total	bodyweight	29	82.800	.8506	1.0%
		Constant	29	1.000	.0000	0.0%
15	.0	bodyweight	10	66.790	.3784	0.6%
		Constant	10	1.000	.0000	0.0%
	1.0	bodyweight	9	66.878	.4353	0.7%
		Constant	9	1.000	.0000	0.0%
	2.0	bodyweight	10	66.870	.3561	0.5%
		Constant	10	1.000	.0000	0.0%
	Total	bodyweight	29	66.845	.3776	0.6%
		Constant	29	1.000	.0000	0.0%
16	.0	bodyweight	10	83.230	.4138	0.5%
		Constant	10	1.000	.0000	0.0%
	1.0	bodyweight	9	83.433	.4153	0.5%
		Constant	9	1.000	.0000	0.0%
	2.0	bodyweight	9	83.856	.4362	0.5%
		Constant	9	1.000	.0000	0.0%
	Total	bodyweight	28	83.496	.4849	0.6%
		Constant	28	1.000	.0000	0.0%
51	.0	bodyweight	15	83.693	.1624	0.2%
		Constant	15	1.000	.0000	0.0%
	1.0	bodyweight	16	83.644	.1931	0.2%
		Constant	16	1.000	.0000	0.0%
	2.0	bodyweight	15	83.713	.1187	0.1%
		Constant	15	1.000	.0000	0.0%
	Total	bodyweight	46	83.683	.1610	0.2%
		Constant	46	1.000	.0000	0.0%
52	.0	bodyweight	15	92.660	.4793	0.5%
		Constant	15	1.000	.0000	0.0%
	1.0	bodyweight	15	92.860	.5816	0.6%
		Constant	15	1.000	.0000	0.0%
	2.0	bodyweight	16	93.069	.7012	0.8%
		Constant	16	1.000	.0000	0.0%
	Total	bodyweight	46	92.867	.6077	0.7%
		Constant	46	1.000	.0000	0.0%
53	.0	bodyweight	16	79.613	.1360	0.2%
		Constant	16	1.000	.0000	0.0%



	1.0	bodyweight	16	79.638	.1962	0.2%
		Constant	16	1.000	.0000	0.0%
	2.0	bodyweight	16	79.644	.1153	0.1%
		Constant	16	1.000	.0000	0.0%
	Total	bodyweight	48	79.631	.1504	0.2%
		Constant	48	1.000	.0000	0.0%
54	.0	bodyweight	15	82.767	.6532	0.8%
		Constant	15	1.000	.0000	0.0%
	1.0	bodyweight	16	82.806	.7920	1.0%
		Constant	16	1.000	.0000	0.0%
	2.0	bodyweight	16	83.044	.6850	0.8%
		Constant	16	1.000	.0000	0.0%
	Total	bodyweight	47	82.874	.7091	0.9%
		Constant	47	1.000	.0000	0.0%
55	.0	bodyweight	16	80.888	.5227	0.6%
		Constant	16	1.000	.0000	0.0%
	1.0	bodyweight	16	80.888	.5365	0.7%
		Constant	16	1.000	.0000	0.0%
	2.0	bodyweight	16	80.856	.5215	0.6%
		Constant	16	1.000	.0000	0.0%
	Total	bodyweight	48	80.877	.5158	0.6%
		Constant	48	1.000	.0000	0.0%
56	.0	bodyweight	16	70.375	.4389	0.6%
		Constant	16	1.000	.0000	0.0%
	1.0	bodyweight	15	70.607	.6375	0.9%
		Constant	15	1.000	.0000	0.0%
	2.0	bodyweight	15	70.713	.4719	0.7%
		Constant	15	1.000	.0000	0.0%
	Total	bodyweight	46	70.561	.5298	0.8%
		Constant	46	1.000	.0000	0.0%
Total	.0	bodyweight	133	79.909	7.1887	9.0%
		Constant	133	1.000	.0000	0.0%
	1.0	bodyweight	130	80.210	7.0944	8.8%
		Constant	130	1.000	.0000	0.0%
	2.0	bodyweight	133	80.259	7.2948	9.1%
		Constant	133	1.000	.0000	0.0%
	Total	bodyweight	396	80.126	7.1773	9.0%
		Constant	396	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	670.100
Akaike's Information Criterion (AIC)	674.100
Hurvich and Tsai's Criterion (AICC)	674.131
Bozdogan's Criterion (CAIC)	684.048
Schwarz's Bayesian Criterion (BIC)	682.048

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.000	1066.945	.000
UAldoV_h_l_perdiet	2	384.000	4.796	.009

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	79.658729	2.435800	9.004	32.703	.000	74.148916	85.168542
[UAldoV_h_l_perdiet=.0]	-.187414	.061559	384.000	-3.044	.002	-.308450	-.066378
[UAldoV_h_l_perdiet=1.0]	-.124216	.061917	384.000	-2.006	.046	-.245954	-.002478
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	.251911	.018180
Constant [subject = subject]	Variance	59.311910
		27.963185

a. Dependent Variable: bodyweight.

\*ON URINE OSMOLALITY

\*Mixed Linear Models

EFFECT OF UAldoV TERTILE ON URINE OSMOLALITY AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED UOsmo BY UAldoV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

```

/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UOsmo BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.06

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UOsmo	35	436.800	89.1399	20.4%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	450.265	85.2385	18.9%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	520.571	132.8868	25.5%
		Constant	35	1.000	.0000	0.0%
Total	UOsmo	104	469.394	110.2346	23.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	UOsmo	35	551.029	139.6202	25.3%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	560.618	129.9995	23.2%
		Constant	34	1.000	.0000	0.0%

	2.0	UOsмо	35	595.086	129.5214	21.8%
		Constant	35	1.000	.0000	0.0%
	Total	UOsмо	104	568.990	133.2335	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	UOsмо	35	406.286	78.8851	19.4%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsмо	34	430.529	76.9416	17.9%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsмо	35	410.457	85.2630	20.8%
		Constant	35	1.000	.0000	0.0%
	Total	UOsмо	104	415.615	80.3905	19.3%
		Constant	104	1.000	.0000	0.0%
16	.0	UOsмо	35	497.714	101.9500	20.5%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsмо	34	527.324	129.6061	24.6%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsмо	35	601.771	176.4903	29.3%
		Constant	35	1.000	.0000	0.0%
	Total	UOsмо	104	542.413	145.0733	26.7%
		Constant	104	1.000	.0000	0.0%
51	.0	UOsмо	68	373.265	105.0823	28.2%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsмо	69	385.971	103.2585	26.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsмо	68	389.221	94.0360	24.2%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	382.834	100.6600	26.3%
		Constant	205	1.000	.0000	0.0%
52	.0	UOsмо	68	310.978	93.5186	30.1%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsмо	69	362.899	97.9386	27.0%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsмо	68	403.632	108.3245	26.8%
		Constant	68	1.000	.0000	0.0%
	Total	UOsмо	205	359.188	106.5899	29.7%
		Constant	205	1.000	.0000	0.0%
53	.0	UOsмо	68	648.191	157.8445	24.4%
		Constant	68	1.000	.0000	0.0%

	1.0	UOsmo	69	604.174	161.8589	26.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	638.603	146.6584	23.0%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	630.195	156.0136	24.8%
		Constant	205	1.000	.0000	0.0%
54	.0	UOsmo	68	378.956	92.8665	24.5%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	374.145	87.0313	23.3%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	414.029	107.9231	26.1%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	388.971	97.4666	25.1%
		Constant	205	1.000	.0000	0.0%
55	.0	UOsmo	68	649.713	158.3643	24.4%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	717.420	170.6293	23.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	784.588	166.0104	21.2%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	717.241	173.2769	24.2%
		Constant	205	1.000	.0000	0.0%
56	.0	UOsmo	68	402.044	86.0086	21.4%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	397.174	74.6429	18.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	439.044	87.9368	20.0%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	412.678	84.7183	20.5%
		Constant	205	1.000	.0000	0.0%
Total	.0	UOsmo	548	463.701	166.9781	36.0%
		Constant	548	1.000	.0000	0.0%
	1.0	UOsmo	550	478.218	169.3466	35.4%
		Constant	550	1.000	.0000	0.0%
	2.0	UOsmo	548	516.745	182.8946	35.4%
		Constant	548	1.000	.0000	0.0%
	Total	UOsmo	1646	486.211	174.5454	35.9%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20488.954
Akaike's Information Criterion (AIC)	20492.954
Hurvich and Tsai's Criterion (AICC)	20492.962
Bozdogan's Criterion (CAIC)	20505.763
Schwarz's Bayesian Criterion (BIC)	20503.763

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.024	163.659	.000
UAldoV_h_I_perdiet	2	1634.025	28.036	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	519.202132	38.435268	9.246	13.508	.000	432.606942	605.797323
[UAldoV_h_I_perdiet=.0]	-53.043796	7.316700	1634.024	-7.250	.000	-67.394894	-38.692697
[UAldoV_h_I_perdiet=1.0]	-38.386876	7.310261	1634.026	-5.251	.000	-52.725345	-24.048407
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	14668.343400	513.176544
Constant [subject = subject] Variance	14495.247640	6870.592142

a. Dependent Variable: UOsmo.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON URINE OSMOLALITY AT 12 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UOsmo BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UOsmo BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UOsmo	13	457.077	99.5577	21.8%
		Constant	13	1.000	.0000	0.0%
	1.0	UOsmo	14	466.214	75.3996	16.2%
		Constant	14	1.000	.0000	0.0%
	2.0	UOsmo	13	539.692	130.4463	24.2%
		Constant	13	1.000	.0000	0.0%
Total	UOsmo	40	487.125	107.5156	22.1%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UOsmo	13	486.846	106.9936	22.0%
		Constant	13	1.000	.0000	0.0%
	1.0	UOsmo	14	566.929	159.9906	28.2%
		Constant	14	1.000	.0000	0.0%

	2.0	UOsмо	13	647.462	145.2777	22.4%
		Constant	13	1.000	.0000	0.0%
	Total	UOsмо	40	567.075	151.1565	26.7%
		Constant	40	1.000	.0000	0.0%
15	.0	UOsмо	13	418.846	63.4598	15.2%
		Constant	13	1.000	.0000	0.0%
	1.0	UOsмо	14	451.071	84.3021	18.7%
		Constant	14	1.000	.0000	0.0%
	2.0	UOsмо	13	440.154	49.2423	11.2%
		Constant	13	1.000	.0000	0.0%
	Total	UOsмо	40	437.050	67.3677	15.4%
		Constant	40	1.000	.0000	0.0%
16	.0	UOsмо	13	549.000	69.0736	12.6%
		Constant	13	1.000	.0000	0.0%
	1.0	UOsмо	14	542.143	126.8299	23.4%
		Constant	14	1.000	.0000	0.0%
	2.0	UOsмо	13	636.692	149.3566	23.5%
		Constant	13	1.000	.0000	0.0%
	Total	UOsмо	40	575.100	124.8011	21.7%
		Constant	40	1.000	.0000	0.0%
51	.0	UOsмо	32	405.875	114.1588	28.1%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsмо	33	414.485	116.7918	28.2%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsмо	32	402.563	81.0710	20.1%
		Constant	32	1.000	.0000	0.0%
	Total	UOsмо	97	407.711	104.4184	25.6%
		Constant	97	1.000	.0000	0.0%
52	.0	UOsмо	32	336.328	87.4419	26.0%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsмо	33	415.818	86.6370	20.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsмо	32	446.719	90.0187	20.2%
		Constant	32	1.000	.0000	0.0%
	Total	UOsмо	97	399.789	98.7554	24.7%
		Constant	97	1.000	.0000	0.0%
53	.0	UOsмо	32	693.531	138.7946	20.0%
		Constant	32	1.000	.0000	0.0%

	1.0	UOsmo	33	603.576	178.9967	29.7%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	624.719	158.5414	25.4%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	640.227	162.8074	25.4%
		Constant	97	1.000	.0000	0.0%
54	.0	UOsmo	32	421.906	91.5012	21.7%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsmo	33	420.545	70.6055	16.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	435.344	88.7049	20.4%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	425.876	83.3733	19.6%
		Constant	97	1.000	.0000	0.0%
55	.0	UOsmo	32	680.234	145.2654	21.4%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsmo	33	733.152	163.5751	22.3%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	818.344	131.7303	16.1%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	743.799	156.7634	21.1%
		Constant	97	1.000	.0000	0.0%
56	.0	UOsmo	32	391.406	62.8756	16.1%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsmo	33	409.364	56.4490	13.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	449.969	84.4407	18.8%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	416.835	72.4010	17.4%
		Constant	97	1.000	.0000	0.0%
Total	.0	UOsmo	244	486.025	165.8379	34.1%
		Constant	244	1.000	.0000	0.0%
	1.0	UOsmo	254	501.055	163.5467	32.6%
		Constant	254	1.000	.0000	0.0%
	2.0	UOsmo	244	537.365	176.7624	32.9%
		Constant	244	1.000	.0000	0.0%
	Total	UOsmo	742	508.053	169.8740	33.4%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	9179.110
Akaike's Information Criterion (AIC)	9183.110
Hurvich and Tsai's Criterion (AICC)	9183.127
Bozdogan's Criterion (CAIC)	9194.321
Schwarz's Bayesian Criterion (BIC)	9192.321

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.075	188.325	.000
UAldoV_h_I_perdiet	2	730.076	12.637	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	539.379732	37.670159	9.569	14.318	.000	454.930443	623.829020
[UAldoV_h_I_perdiet=.0]	-51.340164	10.512544	730.075	-4.884	.000	-71.978586	-30.701742
[UAldoV_h_I_perdiet=1.0]	-36.388966	10.408834	730.076	-3.496	.001	-56.823782	-15.954149
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	13482.656590	705.678321
Constant [subject = subject] Variance	13601.014520	6487.024658

a. Dependent Variable: UOsmo.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON URINE OSMOLALITY AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UOsmo BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED UOsmo BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UOsmo	12	429.333	106.5955	24.8%
		Constant	12	1.000	.0000	0.0%
	1.0	UOsmo	11	470.636	105.1953	22.4%
		Constant	11	1.000	.0000	0.0%
	2.0	UOsmo	12	512.250	96.6316	18.9%
		Constant	12	1.000	.0000	0.0%
Total	UOsmo	35	470.743	105.6652	22.4%	
	Constant	35	1.000	.0000	0.0%	
12	.0	UOsmo	12	546.583	160.8017	29.4%
		Constant	12	1.000	.0000	0.0%
	1.0	UOsmo	11	531.182	122.7223	23.1%
		Constant	11	1.000	.0000	0.0%

	2.0	UOsмо	12	551.250	136.8198	24.8%
		Constant	12	1.000	.0000	0.0%
	Total	UOsмо	35	543.343	137.5688	25.3%
		Constant	35	1.000	.0000	0.0%
15	.0	UOsмо	12	406.750	58.0613	14.3%
		Constant	12	1.000	.0000	0.0%
	1.0	UOsмо	11	435.727	69.4681	15.9%
		Constant	11	1.000	.0000	0.0%
	2.0	UOsмо	12	444.750	70.5203	15.9%
		Constant	12	1.000	.0000	0.0%
	Total	UOsмо	35	428.886	66.3013	15.5%
		Constant	35	1.000	.0000	0.0%
16	.0	UOsмо	12	532.167	102.2064	19.2%
		Constant	12	1.000	.0000	0.0%
	1.0	UOsмо	11	598.273	128.8620	21.5%
		Constant	11	1.000	.0000	0.0%
	2.0	UOsмо	12	692.333	167.6031	24.2%
		Constant	12	1.000	.0000	0.0%
	Total	UOsмо	35	607.857	148.0614	24.4%
		Constant	35	1.000	.0000	0.0%
51	.0	UOsмо	20	380.600	48.7360	12.8%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsмо	20	403.550	52.3083	13.0%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsмо	20	416.250	97.8989	23.5%
		Constant	20	1.000	.0000	0.0%
	Total	UOsмо	60	400.133	70.3833	17.6%
		Constant	60	1.000	.0000	0.0%
52	.0	UOsмо	20	323.150	101.3708	31.4%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsмо	20	358.250	75.8210	21.2%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsмо	20	400.800	115.8186	28.9%
		Constant	20	1.000	.0000	0.0%
	Total	UOsмо	60	360.733	102.4958	28.4%
		Constant	60	1.000	.0000	0.0%
53	.0	UOsмо	20	639.300	151.4210	23.7%
		Constant	20	1.000	.0000	0.0%

	1.0	UOsmo	20	599.350	138.8336	23.2%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	668.200	152.2849	22.8%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	635.617	147.8829	23.3%
		Constant	60	1.000	.0000	0.0%
54	.0	UOsmo	20	366.600	58.8499	16.1%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsmo	20	354.300	54.7204	15.4%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	433.300	128.6869	29.7%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	384.733	92.9384	24.2%
		Constant	60	1.000	.0000	0.0%
55	.0	UOsmo	20	647.350	150.6370	23.3%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsmo	20	745.500	191.7714	25.7%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	786.450	184.8417	23.5%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	726.433	183.3513	25.2%
		Constant	60	1.000	.0000	0.0%
56	.0	UOsmo	20	467.550	87.8033	18.8%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsmo	20	420.950	89.8311	21.3%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	454.850	91.0588	20.0%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	447.783	90.2500	20.2%
		Constant	60	1.000	.0000	0.0%
Total	.0	UOsmo	168	473.030	156.1381	33.0%
		Constant	168	1.000	.0000	0.0%
	1.0	UOsmo	164	488.000	167.9996	34.4%
		Constant	164	1.000	.0000	0.0%
	2.0	UOsmo	168	533.357	184.2924	34.6%
		Constant	168	1.000	.0000	0.0%
	Total	UOsmo	500	498.210	171.4893	34.4%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6201.133
Akaike's Information Criterion (AIC)	6205.133
Hurvich and Tsai's Criterion (AICC)	6205.158
Bozdogan's Criterion (CAIC)	6215.550
Schwarz's Bayesian Criterion (BIC)	6213.550

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.050	166.729	.000
UAldoV_h_I_perdiet	2	488.054	11.906	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	535.576210	39.456232	9.720	13.574	.000	447.317587	623.834833
[UAldoV_h_I_perdiet=.0]	-60.327381	12.845100	488.051	-4.697	.000	-85.565903	-35.088859
[UAldoV_h_I_perdiet=1.0]	-45.018870	12.924766	488.056	-3.483	.001	-70.413922	-19.623819
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	13859.713320	887.231235
Constant [subject = subject] Variance	14725.388520	7061.524184

a. Dependent Variable: UOsmo.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON URINE OSMOLALITY AT 6 g SALT INTAKE  
 all subjects

```

USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED UOsmo BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UOsmo BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UOsmo	10	419.400	43.7041	10.4%
		Constant	10	1.000	.0000	0.0%
	1.0	UOsmo	9	400.556	55.7138	13.9%
		Constant	9	1.000	.0000	0.0%
	2.0	UOsmo	10	505.700	178.1691	35.2%
		Constant	10	1.000	.0000	0.0%
Total	UOsmo	29	443.310	117.8398	26.6%	
	Constant	29	1.000	.0000	0.0%	
12	.0	UOsmo	10	639.800	109.7450	17.2%
		Constant	10	1.000	.0000	0.0%
	1.0	UOsmo	9	586.778	85.2053	14.5%
		Constant	9	1.000	.0000	0.0%

	2.0	UOsмо	10	579.600	74.5910	12.9%
		Constant	10	1.000	.0000	0.0%
Total		UOsмо	29	602.586	92.1821	15.3%
		Constant	29	1.000	.0000	0.0%
15	.0	UOsмо	10	389.400	116.0768	29.8%
		Constant	10	1.000	.0000	0.0%
	1.0	UOsмо	9	392.222	66.4281	16.9%
		Constant	9	1.000	.0000	0.0%
	2.0	UOsмо	10	330.700	90.7880	27.5%
		Constant	10	1.000	.0000	0.0%
Total	UOsмо	29	370.034	95.3192	25.8%	
	Constant	29	1.000	.0000	0.0%	
16	.0	UOsмо	10	389.700	42.3217	10.9%
		Constant	10	1.000	.0000	0.0%
	1.0	UOsмо	9	417.556	39.1603	9.4%
		Constant	9	1.000	.0000	0.0%
	2.0	UOsмо	10	447.700	120.5184	26.9%
		Constant	10	1.000	.0000	0.0%
Total	UOsмо	29	418.345	79.2687	18.9%	
	Constant	29	1.000	.0000	0.0%	
51	.0	UOsмо	16	298.875	105.5329	35.3%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsмо	16	305.188	81.2955	26.6%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsмо	16	328.750	92.3049	28.1%
		Constant	16	1.000	.0000	0.0%
Total	UOsмо	48	310.938	92.4753	29.7%	
	Constant	48	1.000	.0000	0.0%	
52	.0	UOsмо	16	245.063	63.5846	25.9%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsмо	16	259.563	51.0777	19.7%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsмо	16	321.000	86.1417	26.8%
		Constant	16	1.000	.0000	0.0%
Total	UOsмо	48	275.208	74.8178	27.2%	
	Constant	48	1.000	.0000	0.0%	
53	.0	UOsмо	16	568.625	176.6012	31.1%
		Constant	16	1.000	.0000	0.0%



	1.0	UOsmo	16	611.438	160.9695	26.3%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	629.375	114.3713	18.2%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	603.146	151.8590	25.2%
		Constant	48	1.000	.0000	0.0%
54	.0	UOsmo	16	308.500	86.0085	27.9%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsmo	16	303.250	96.3684	31.8%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	347.313	92.6000	26.7%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	319.688	91.9554	28.8%
		Constant	48	1.000	.0000	0.0%
55	.0	UOsmo	16	591.625	184.5896	31.2%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsmo	16	649.875	147.8458	22.7%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	714.750	190.5800	26.7%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	652.083	178.9557	27.4%
		Constant	48	1.000	.0000	0.0%
56	.0	UOsmo	16	341.438	72.2892	21.2%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsmo	16	342.313	62.8275	18.4%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	397.438	82.8693	20.9%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	360.396	76.2891	21.2%
		Constant	48	1.000	.0000	0.0%
Total	.0	UOsmo	136	412.125	172.1099	41.8%
		Constant	136	1.000	.0000	0.0%
	1.0	UOsmo	132	422.121	170.6120	40.4%
		Constant	132	1.000	.0000	0.0%
	2.0	UOsmo	136	459.228	181.2081	39.5%
		Constant	136	1.000	.0000	0.0%
	Total	UOsmo	404	431.248	175.4983	40.7%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4965.425
Akaike's Information Criterion (AIC)	4969.425
Hurvich and Tsai's Criterion (AICC)	4969.455
Bozdogan's Criterion (CAIC)	4979.412
Schwarz's Bayesian Criterion (BIC)	4977.412

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.033	101.301	.000
UAldoV_h_I_perdiet	2	392.037	6.728	.001

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	463.178317	43.941512	9.619	10.541	.000	364.741762	561.614871
[UAldoV_h_I_perdiet=.0]	-47.102941	13.442314	392.033	-3.504	.001	-73.530983	-20.674900
[UAldoV_h_I_perdiet=1.0]	-36.308673	13.546230	392.039	-2.680	.008	-62.941016	-9.676331
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	12287.315430	877.627985
Constant [subject = subject] Variance	18388.736610	8804.319030

a. Dependent Variable: UOsmo.

\*ON CALCULATED FREE WATER CLEARANCE

\*Mixed Linear Models

EFFECT OF UAldoV TERTILE ON CALCULATED FREE WATER CLEARANCE AT ALL SALT INTAKE LEVELS

all subjects

USE ALL.

```

MIXED free_water_clearance BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED free_water_clearance BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	free_water_clearance	35	-861.6952	471.35054	-54.7%
		Constant	35	1.000	.0000	0.0%
	1.0	free_water_clearance	34	-937.1127	453.57093	-48.4%
		Constant	34	1.000	.0000	0.0%
	2.0	free_water_clearance	35	-1179.1876	474.51059	-40.2%
		Constant	35	1.000	.0000	0.0%
Total	free_water_clearance	104	-993.1994	481.91750	-48.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	free_water_clearance	35	-1283.1230	614.14141	-47.9%
		Constant	35	1.000	.0000	0.0%
	1.0	free_water_clearance	34	-1273.4583	483.63203	-38.0%
		Constant	34	1.000	.0000	0.0%

	2.0	free_water_clearance	35	-1469.7293	459.92845	-31.3%
		Constant	35	1.000	.0000	0.0%
Total		free_water_clearance	104	-1342.7636	526.82087	-39.2%
		Constant	104	1.000	.0000	0.0%
15	.0	free_water_clearance	35	-744.3714	438.05546	-58.8%
		Constant	35	1.000	.0000	0.0%
	1.0	free_water_clearance	34	-830.0931	407.99803	-49.2%
		Constant	34	1.000	.0000	0.0%
	2.0	free_water_clearance	35	-721.5190	583.22500	-80.8%
		Constant	35	1.000	.0000	0.0%
	Total	free_water_clearance	104	-764.7051	480.77478	-62.9%
		Constant	104	1.000	.0000	0.0%
16	.0	free_water_clearance	35	-1156.8333	541.62615	-46.8%
		Constant	35	1.000	.0000	0.0%
	1.0	free_water_clearance	34	-1151.6652	371.56817	-32.3%
		Constant	34	1.000	.0000	0.0%
	2.0	free_water_clearance	35	-1278.7357	520.03336	-40.7%
		Constant	35	1.000	.0000	0.0%
	Total	free_water_clearance	104	-1196.1686	483.56642	-40.4%
		Constant	104	1.000	.0000	0.0%
51	.0	free_water_clearance	68	-408.1298	548.18169	-134.3%
		Constant	68	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-460.7890	564.60282	-122.5%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-439.8831	524.87173	-119.3%
		Constant	68	1.000	.0000	0.0%
	Total	free_water_clearance	205	-436.3869	543.97128	-124.7%
		Constant	205	1.000	.0000	0.0%
52	.0	free_water_clearance	67	20.8989	598.46533	2863.6%
		Constant	67	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-325.9219	566.42955	-173.8%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-516.8350	514.05298	-99.5%
		Constant	68	1.000	.0000	0.0%
	Total	free_water_clearance	204	-275.6527	600.42143	-217.8%
		Constant	204	1.000	.0000	0.0%
53	.0	free_water_clearance	68	-1381.3204	430.24837	-31.1%
		Constant	68	1.000	.0000	0.0%

	1.0	free_water_clearance	69	-1232.1994	397.27925	-32.2%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-1296.6196	362.06768	-27.9%
		Constant	68	1.000	.0000	0.0%
Total		free_water_clearance	205	-1303.0325	400.27016	-30.7%
		Constant	205	1.000	.0000	0.0%
54	.0	free_water_clearance	68	-437.7544	479.24189	-109.5%
		Constant	68	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-429.6361	508.72136	-118.4%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-588.0287	487.35809	-82.9%
		Constant	68	1.000	.0000	0.0%
Total		free_water_clearance	205	-484.8690	494.99997	-102.1%
		Constant	205	1.000	.0000	0.0%
55	.0	free_water_clearance	67	-1364.2578	438.21684	-32.1%
		Constant	67	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-1544.1054	404.02483	-26.2%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-1671.6961	503.17265	-30.1%
		Constant	68	1.000	.0000	0.0%
Total		free_water_clearance	204	-1527.5681	465.32933	-30.5%
		Constant	204	1.000	.0000	0.0%
56	.0	free_water_clearance	68	-542.7147	415.15925	-76.5%
		Constant	68	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-538.4742	391.37864	-72.7%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-681.7182	369.34690	-54.2%
		Constant	68	1.000	.0000	0.0%
Total		free_water_clearance	205	-587.3959	396.11968	-67.4%
		Constant	205	1.000	.0000	0.0%
Total	.0	free_water_clearance	546	-769.1765	688.48670	-89.5%
		Constant	546	1.000	.0000	0.0%
	1.0	free_water_clearance	550	-827.6125	631.15780	-76.3%
		Constant	550	1.000	.0000	0.0%
	2.0	free_water_clearance	548	-941.5440	644.59260	-68.5%
		Constant	548	1.000	.0000	0.0%
Total		free_water_clearance	1644	-846.1821	658.63173	-77.8%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	25017.395
Akaike's Information Criterion (AIC)	25021.395
Hurvich and Tsai's Criterion (AICC)	25021.402
Bozdogan's Criterion (CAIC)	25034.201
Schwarz's Bayesian Criterion (BIC)	25032.201

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.022	40.915	.000
UAldoV_h_I_perdiet	2	1632.023	17.723	.000

a. Dependent Variable: free\_water\_clearance.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-985.202880	140.264451	9.290	-7.024	.000	-1300.999804	-669.405955
[UAldoV_h_I_perdiet=.0]	172.168779	29.340133	1632.022	5.868	.000	114.620495	229.717063
[UAldoV_h_I_perdiet=1.0]	111.453810	29.287405	1632.024	3.806	.000	54.008948	168.898672
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	235438.308000	8241.933650
Constant [subject = subject] Variance	192288.048600	91285.015650

a. Dependent Variable: free\_water\_clearance.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON CALCULATED FREE WATER CLEARANCE AT 12 g SALT INTAKE  
 all subjects

```

USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED free_water_clearance BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED free_water_clearance BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	free_water_clearance	-1052.7692	496.77180	-47.2%
		Constant	1.000	.0000	0.0%
	1.0	free_water_clearance	-1124.2857	396.83899	-35.3%
		Constant	1.000	.0000	0.0%
	2.0	free_water_clearance	-1424.1410	450.40415	-31.6%
		Constant	1.000	.0000	0.0%
Total	free_water_clearance	40	-1198.4958	465.69729	-38.9%
	Constant	40	1.000	.0000	0.0%
12	.0	free_water_clearance	-971.0000	368.99164	-38.0%
		Constant	1.000	.0000	0.0%
	1.0	free_water_clearance	-1247.5012	540.03330	-43.3%
		Constant	1.000	.0000	0.0%

	2.0	free_water_clearance	13	-1672.9933	578.38016	-34.6%
		Constant	13	1.000	.0000	0.0%
Total		free_water_clearance	40	-1295.9233	570.49405	-44.0%
		Constant	40	1.000	.0000	0.0%
15	.0	free_water_clearance	13	-865.5872	374.59641	-43.3%
		Constant	13	1.000	.0000	0.0%
1.0		free_water_clearance	14	-941.5524	437.90662	-46.5%
		Constant	14	1.000	.0000	0.0%
2.0		free_water_clearance	13	-982.9462	433.11999	-44.1%
		Constant	13	1.000	.0000	0.0%
Total		free_water_clearance	40	-930.3167	408.88020	-44.0%
		Constant	40	1.000	.0000	0.0%
16	.0	free_water_clearance	13	-1491.2538	320.45507	-21.5%
		Constant	13	1.000	.0000	0.0%
1.0		free_water_clearance	14	-1318.7440	264.27574	-20.0%
		Constant	14	1.000	.0000	0.0%
2.0		free_water_clearance	13	-1479.8333	435.33218	-29.4%
		Constant	13	1.000	.0000	0.0%
Total		free_water_clearance	40	-1427.1638	345.98196	-24.2%
		Constant	40	1.000	.0000	0.0%
51	.0	free_water_clearance	32	-636.4920	496.10046	-77.9%
		Constant	32	1.000	.0000	0.0%
1.0		free_water_clearance	33	-664.6896	590.80686	-88.9%
		Constant	33	1.000	.0000	0.0%
2.0		free_water_clearance	32	-585.8637	427.91886	-73.0%
		Constant	32	1.000	.0000	0.0%
Total		free_water_clearance	97	-629.3829	505.99720	-80.4%
		Constant	97	1.000	.0000	0.0%
52	.0	free_water_clearance	31	-173.1460	532.63294	-307.6%
		Constant	31	1.000	.0000	0.0%
1.0		free_water_clearance	33	-685.7116	353.94206	-51.6%
		Constant	33	1.000	.0000	0.0%
2.0		free_water_clearance	32	-804.5237	386.05310	-48.0%
		Constant	32	1.000	.0000	0.0%
Total		free_water_clearance	96	-559.7997	504.86125	-90.2%
		Constant	96	1.000	.0000	0.0%
53	.0	free_water_clearance	32	-1645.5213	375.48911	-22.8%
		Constant	32	1.000	.0000	0.0%

	1.0	free_water_clearance	33	-1327.2576	448.32379	-33.8%
		Constant	33	1.000	.0000	0.0%
	2.0	free_water_clearance	32	-1352.9016	394.20703	-29.1%
		Constant	32	1.000	.0000	0.0%
Total		free_water_clearance	97	-1440.7117	428.58485	-29.7%
		Constant	97	1.000	.0000	0.0%
54	.0	free_water_clearance	32	-678.7379	398.38871	-58.7%
		Constant	32	1.000	.0000	0.0%
	1.0	free_water_clearance	33	-746.9399	344.39788	-46.1%
		Constant	33	1.000	.0000	0.0%
	2.0	free_water_clearance	32	-771.9711	390.53045	-50.6%
		Constant	32	1.000	.0000	0.0%
Total		free_water_clearance	97	-732.6980	376.28662	-51.4%
		Constant	97	1.000	.0000	0.0%
55	.0	free_water_clearance	31	-1556.9142	434.39284	-27.9%
		Constant	31	1.000	.0000	0.0%
	1.0	free_water_clearance	33	-1700.8247	361.33108	-21.2%
		Constant	33	1.000	.0000	0.0%
	2.0	free_water_clearance	32	-1933.5765	497.36694	-25.7%
		Constant	32	1.000	.0000	0.0%
Total		free_water_clearance	96	-1731.9375	456.41702	-26.4%
		Constant	96	1.000	.0000	0.0%
56	.0	free_water_clearance	32	-573.8719	341.64034	-59.5%
		Constant	32	1.000	.0000	0.0%
	1.0	free_water_clearance	33	-682.7636	350.19477	-51.3%
		Constant	33	1.000	.0000	0.0%
	2.0	free_water_clearance	32	-817.4278	358.49078	-43.9%
		Constant	32	1.000	.0000	0.0%
Total		free_water_clearance	97	-691.2659	360.54557	-52.2%
		Constant	97	1.000	.0000	0.0%
Total	.0	free_water_clearance	242	-924.3295	649.73923	-70.3%
		Constant	242	1.000	.0000	0.0%
	1.0	free_water_clearance	254	-1009.9187	553.15554	-54.8%
		Constant	254	1.000	.0000	0.0%
	2.0	free_water_clearance	244	-1118.0301	613.99914	-54.9%
		Constant	244	1.000	.0000	0.0%
Total		free_water_clearance	740	-1017.5762	610.40268	-60.0%
		Constant	740	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	11112.100
Akaike's Information Criterion (AIC)	11116.100
Hurvich and Tsai's Criterion (AICC)	11116.116
Bozdogan's Criterion (CAIC)	11127.305
Schwarz's Bayesian Criterion (BIC)	11125.305

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.075	67.137	.000
UAldoV_h_I_perdiet	2	728.076	11.802	.000

a. Dependent Variable: free\_water\_clearance.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-1163.573874	131.727655	9.655	-8.833	.000	-1458.507411	-868.640336
[UAldoV_h_I_perdiet=.0]	192.652288	39.796490	728.076	4.841	.000	114.522720	270.781856
[UAldoV_h_I_perdiet=1.0]	109.904496	39.322103	728.077	2.795	.005	32.706259	187.102734
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	192417.626100	10084.902980
Constant [subject = subject] Variance	165111.546200	78967.652840

a. Dependent Variable: free\_water\_clearance.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON CALCULATED FREE WATER CLEARANCE AT 9 g SALT INTAKE  
 all subjects

```

USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED free_water_clearance BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED free_water_clearance BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	free_water_clearance	12	-747.2361	554.05791	-74.1%
		Constant	12	1.000	.0000	0.0%
	1.0	free_water_clearance	11	-990.7424	504.46304	-50.9%
		Constant	11	1.000	.0000	0.0%
	2.0	free_water_clearance	12	-1206.4778	358.01514	-29.7%
		Constant	12	1.000	.0000	0.0%
Total	free_water_clearance	35	-981.2210	502.88598	-51.3%	
	Constant	35	1.000	.0000	0.0%	
12	.0	free_water_clearance	12	-1226.2083	685.15238	-55.9%
		Constant	12	1.000	.0000	0.0%
	1.0	free_water_clearance	11	-1162.5000	443.07432	-38.1%
		Constant	11	1.000	.0000	0.0%

	2.0	free_water_clearance	12	-1203.5375	287.24552	-23.9%
		Constant	12	1.000	.0000	0.0%
	Total	free_water_clearance	35	-1198.4129	486.83562	-40.6%
		Constant	35	1.000	.0000	0.0%
15	.0	free_water_clearance	12	-815.4667	393.40167	-48.2%
		Constant	12	1.000	.0000	0.0%
	1.0	free_water_clearance	11	-876.3652	378.75688	-43.2%
		Constant	11	1.000	.0000	0.0%
	2.0	free_water_clearance	12	-926.4847	323.21653	-34.9%
		Constant	12	1.000	.0000	0.0%
	Total	free_water_clearance	35	-872.6695	358.11224	-41.0%
		Constant	35	1.000	.0000	0.0%
16	.0	free_water_clearance	12	-1302.5097	530.05900	-40.7%
		Constant	12	1.000	.0000	0.0%
	1.0	free_water_clearance	11	-1313.6576	294.13117	-22.4%
		Constant	11	1.000	.0000	0.0%
	2.0	free_water_clearance	12	-1522.8333	302.54599	-19.9%
		Constant	12	1.000	.0000	0.0%
	Total	free_water_clearance	35	-1381.5529	395.85342	-28.7%
		Constant	35	1.000	.0000	0.0%
51	.0	free_water_clearance	20	-485.7717	290.90418	-59.9%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-551.6232	225.31950	-40.8%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-534.2170	473.68452	-88.7%
		Constant	20	1.000	.0000	0.0%
	Total	free_water_clearance	60	-523.8706	341.53758	-65.2%
		Constant	60	1.000	.0000	0.0%
52	.0	free_water_clearance	20	-64.3550	510.67968	-793.5%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-283.8385	432.91652	-152.5%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-443.2290	424.54261	-95.8%
		Constant	20	1.000	.0000	0.0%
	Total	free_water_clearance	60	-263.8075	476.35592	-180.6%
		Constant	60	1.000	.0000	0.0%
53	.0	free_water_clearance	20	-1280.2149	241.29656	-18.8%
		Constant	20	1.000	.0000	0.0%

	1.0	free_water_clearance	20	-1173.2382	306.35650	-26.1%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-1300.5828	314.35619	-24.2%
		Constant	20	1.000	.0000	0.0%
Total		free_water_clearance	60	-1251.3453	289.77592	-23.2%
		Constant	60	1.000	.0000	0.0%
54	.0	free_water_clearance	20	-413.4435	389.53068	-94.2%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-328.6371	324.85924	-98.9%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-610.9198	538.35964	-88.1%
		Constant	20	1.000	.0000	0.0%
Total		free_water_clearance	60	-451.0001	436.35678	-96.8%
		Constant	60	1.000	.0000	0.0%
55	.0	free_water_clearance	20	-1374.0306	360.56349	-26.2%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-1560.0717	391.86168	-25.1%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-1588.9399	301.54250	-19.0%
		Constant	20	1.000	.0000	0.0%
Total		free_water_clearance	60	-1507.6807	360.30836	-23.9%
		Constant	60	1.000	.0000	0.0%
56	.0	free_water_clearance	20	-778.6748	326.82549	-42.0%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-563.6194	349.75534	-62.1%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-683.0446	276.92874	-40.5%
		Constant	20	1.000	.0000	0.0%
Total		free_water_clearance	60	-675.1129	326.12794	-48.3%
		Constant	60	1.000	.0000	0.0%
Total	.0	free_water_clearance	168	-815.6361	602.33469	-73.8%
		Constant	168	1.000	.0000	0.0%
	1.0	free_water_clearance	164	-835.3444	561.73690	-67.2%
		Constant	164	1.000	.0000	0.0%
	2.0	free_water_clearance	168	-961.4920	553.45879	-57.6%
		Constant	168	1.000	.0000	0.0%
Total		free_water_clearance	500	-871.1080	575.51440	-66.1%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7395.645
Akaike's Information Criterion (AIC)	7399.645
Hurvich and Tsai's Criterion (AICC)	7399.670
Bozdogan's Criterion (CAIC)	7410.063
Schwarz's Bayesian Criterion (BIC)	7408.063

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.038	45.853	.000
UAldoV_h_I_perdiet	2	488.041	6.653	.001

a. Dependent Variable: free\_water\_clearance.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-998.306452	136.540706	9.652	-7.311	.000	-1304.033555	-692.579348
[UAldoV_h_I_perdiet=.0]	145.855950	42.688370	488.038	3.417	.001	61.980275	229.731625
[UAldoV_h_I_perdiet=1.0]	120.535688	42.953135	488.043	2.806	.005	36.139794	204.931581
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	153072.940300	9799.111098
Constant [subject = subject] Variance	177127.749100	84864.572310

a. Dependent Variable: free\_water\_clearance.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON CALCULATED FREE WATER CLEARANCE AT 6 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED free_water_clearance BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED free_water_clearance BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	free_water_clearance	10	-750.6500	226.20416	-30.1%
		Constant	10	1.000	.0000	0.0%
	1.0	free_water_clearance	9	-580.4074	257.30202	-44.3%
		Constant	9	1.000	.0000	0.0%
	2.0	free_water_clearance	10	-828.0000	445.82848	-53.8%
		Constant	10	1.000	.0000	0.0%
Total	free_water_clearance	29	-724.4885	331.65395	-45.8%	
	Constant	29	1.000	.0000	0.0%	
12	.0	free_water_clearance	10	-1757.1807	524.24456	-29.8%
		Constant	10	1.000	.0000	0.0%
	1.0	free_water_clearance	9	-1449.4519	438.84171	-30.3%
		Constant	9	1.000	.0000	0.0%

	2.0	free_water_clearance	10	-1524.9163	307.75248	-20.2%
		Constant	10	1.000	.0000	0.0%
Total		free_water_clearance	29	-1581.5875	437.69429	-27.7%
		Constant	29	1.000	.0000	0.0%
15	.0	free_water_clearance	10	-501.4767	505.13138	-100.7%
		Constant	10	1.000	.0000	0.0%
	1.0	free_water_clearance	9	-600.1574	334.00454	-55.7%
		Constant	9	1.000	.0000	0.0%
	2.0	free_water_clearance	10	-135.7050	609.23346	-448.9%
		Constant	10	1.000	.0000	0.0%
Total		free_water_clearance	29	-405.9736	524.07763	-129.1%
		Constant	29	1.000	.0000	0.0%
16	.0	free_water_clearance	10	-547.2750	158.87160	-29.0%
		Constant	10	1.000	.0000	0.0%
	1.0	free_water_clearance	9	-693.7741	164.52688	-23.7%
		Constant	9	1.000	.0000	0.0%
	2.0	free_water_clearance	10	-724.3917	421.64167	-58.2%
		Constant	10	1.000	.0000	0.0%
Total		free_water_clearance	29	-653.8149	281.66841	-43.1%
		Constant	29	1.000	.0000	0.0%
51	.0	free_water_clearance	16	145.6471	529.16297	363.3%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	73.2986	478.99171	653.5%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	-30.0046	575.62853	-1918.5%
		Constant	16	1.000	.0000	0.0%
Total		free_water_clearance	48	62.9804	523.11066	830.6%
		Constant	48	1.000	.0000	0.0%
52	.0	free_water_clearance	16	503.4285	585.07063	116.2%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	363.5400	394.51407	108.5%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	-33.4650	459.34502	-1372.6%
		Constant	16	1.000	.0000	0.0%
Total		free_water_clearance	48	277.8345	528.27560	190.1%
		Constant	48	1.000	.0000	0.0%
53	.0	free_water_clearance	16	-979.3003	356.04934	-36.4%
		Constant	16	1.000	.0000	0.0%



	1.0	free_water_clearance	16	-1109.8433	356.85599	-32.2%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	-1179.1017	343.08731	-29.1%
		Constant	16	1.000	.0000	0.0%
Total		free_water_clearance	48	-1089.4151	354.50816	-32.5%
		Constant	48	1.000	.0000	0.0%
54	.0	free_water_clearance	16	13.8242	404.31650	2924.7%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	98.5543	503.80535	511.2%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	-191.5300	371.51945	-194.0%
		Constant	16	1.000	.0000	0.0%
Total		free_water_clearance	48	-26.3839	438.60919	-1662.4%
		Constant	48	1.000	.0000	0.0%
55	.0	free_water_clearance	16	-978.7702	259.88239	-26.6%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	-1200.9141	294.89861	-24.6%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	-1251.3805	400.73296	-32.0%
		Constant	16	1.000	.0000	0.0%
Total		free_water_clearance	48	-1143.6883	338.94362	-29.6%
		Constant	48	1.000	.0000	0.0%
56	.0	free_water_clearance	16	-185.4503	425.31354	-229.3%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	-209.4458	340.15675	-162.4%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	-408.6409	357.42971	-87.5%
		Constant	16	1.000	.0000	0.0%
Total		free_water_clearance	48	-267.8457	381.64478	-142.5%
		Constant	48	1.000	.0000	0.0%
Total	.0	free_water_clearance	136	-435.7041	743.84443	-170.7%
		Constant	136	1.000	.0000	0.0%
	1.0	free_water_clearance	132	-467.2052	700.35206	-149.9%
		Constant	132	1.000	.0000	0.0%
	2.0	free_water_clearance	136	-600.2654	672.23660	-112.0%
		Constant	136	1.000	.0000	0.0%
Total		free_water_clearance	404	-501.3934	708.03278	-141.2%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6038.448
Akaike's Information Criterion (AIC)	6042.448
Hurvich and Tsai's Criterion (AICC)	6042.478
Bozdogan's Criterion (CAIC)	6052.435
Schwarz's Bayesian Criterion (BIC)	6050.435

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.006	8.677	.016
UAldoV_h_I_perdiet	2	392.009	5.606	.004

a. Dependent Variable: free\_water\_clearance.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-649.944433	190.373688	9.450	-3.414	.007	-1077.491991	-222.396875
[UAldoV_h_I_perdiet=.0]	164.561297	51.075965	392.006	3.222	.001	64.144213	264.978380
[UAldoV_h_I_perdiet=1.0]	123.024045	51.470851	392.011	2.390	.017	21.830605	224.217485
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	177395.283600	12670.988460
Constant [subject = subject] Variance	349140.516400	166724.752100

a. Dependent Variable: free\_water\_clearance.

\*ANALYSIS OF WATER BALANCE IN RESPONSE TO HORMONE PROFILE  
RESPONSE TO CORTISONE TERTILE

\*ON URINE EXCRETION

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON URINE EXCRETION AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

```
MIXED UVol BY UFEV_h_l_perdiet WITH Constant  
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)  
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)  
/METHOD=REML  
/PRINT=DESCRIPTIVES SOLUTION  
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UVol BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.05

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Uvol	35	1655.714	405.6171	24.5%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1939.118	323.9376	16.7%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2244.143	378.9042	16.9%
		Constant	35	1.000	.0000	0.0%
Total	Uvol	104	1946.394	440.6535	22.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	Uvol	35	1379.343	288.4937	20.9%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1649.324	252.0536	15.3%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	1805.771	435.5284	24.1%

		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1611.115	376.9004	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	Uvol	35	2039.286	470.2129	23.1%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	2163.088	410.7790	19.0%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2448.143	372.0138	15.2%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	2217.356	450.0847	20.3%
		Constant	104	1.000	.0000	0.0%
16	.0	Uvol	35	1350.571	307.7952	22.8%
		Constant	35	1.000	.0000	0.0%
	1.0	Uvol	34	1686.618	315.1688	18.7%
		Constant	34	1.000	.0000	0.0%
	2.0	Uvol	35	2023.571	332.4078	16.4%
		Constant	35	1.000	.0000	0.0%
	Total	Uvol	104	1686.923	420.1492	24.9%
		Constant	104	1.000	.0000	0.0%
51	.0	Uvol	68	1609.190	368.6891	22.9%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	2052.686	376.0201	18.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	2394.821	422.8577	17.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	2019.063	503.9312	25.0%
		Constant	205	1.000	.0000	0.0%
52	.0	Uvol	68	1641.132	341.8793	20.8%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	2024.958	346.9955	17.1%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	67	2428.566	330.9240	13.6%
		Constant	67	1.000	.0000	0.0%
	Total	Uvol	204	2029.574	466.4834	23.0%
		Constant	204	1.000	.0000	0.0%
53	.0	Uvol	68	1006.918	201.4104	20.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1349.786	287.6003	21.3%

		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	1617.943	291.1318	18.0%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1325.003	362.3120	27.3%
		Constant	205	1.000	.0000	0.0%
54	.0	Uvol	68	1663.397	388.2356	23.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1991.357	308.4031	15.5%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	2277.275	363.9758	16.0%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1977.411	433.1564	21.9%
		Constant	205	1.000	.0000	0.0%
55	.0	Uvol	68	913.625	226.8684	24.8%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	68	1181.190	263.1330	22.3%
		Constant	68	1.000	.0000	0.0%
	2.0	Uvol	68	1555.001	281.8826	18.1%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	204	1216.605	368.2299	30.3%
		Constant	204	1.000	.0000	0.0%
56	.0	Uvol	68	1501.040	290.4314	19.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Uvol	69	1772.152	336.2516	19.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Uvol	68	2038.503	360.0474	17.7%
		Constant	68	1.000	.0000	0.0%
	Total	Uvol	205	1770.573	395.1118	22.3%
		Constant	205	1.000	.0000	0.0%
Total	.0	Uvol	548	1444.658	453.6101	31.4%
		Constant	548	1.000	.0000	0.0%
	1.0	Uvol	549	1762.099	453.4754	25.7%
		Constant	549	1.000	.0000	0.0%
	2.0	Uvol	547	2071.393	482.0170	23.3%
		Constant	547	1.000	.0000	0.0%
	Total	Uvol	1644	1759.195	528.9175	30.1%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	23831.139
Akaike's Information Criterion (AIC)	23835.139
Hurvich and Tsai's Criterion (AICC)	23835.147
Bozdogan's Criterion (CAIC)	23847.946
Schwarz's Bayesian Criterion (BIC)	23845.946

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.012	302.998	.000
UFEV_h_I_perdiet	2	1632.013	471.544	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2092.263364	102.935203	9.253	20.326	.000	1860.374554	2324.152174
[UFEV_h_I_perdiet=.0]	-627.228694	20.425072	1632.012	-30.709	.000	-667.290811	-587.166577
[UFEV_h_I_perdiet=1.0]	-309.612141	20.416431	1632.014	-15.165	.000	-349.657310	-269.566972
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	114203.462700	3997.906295
Constant [subject = subject] Variance	103793.095800	49260.581860

a. Dependent Variable: Uvol.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON URINE EXCRETION AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UVol BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED UVol BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Uvol	13	1784.615	460.2466	25.8%
		Constant	13	1.000	.0000	0.0%
	1.0	Uvol	14	2092.857	322.7628	15.4%
		Constant	14	1.000	.0000	0.0%
	2.0	Uvol	13	2496.154	309.8800	12.4%
		Constant	13	1.000	.0000	0.0%
Total	Uvol	40	2123.750	462.9874	21.8%	
	Constant	40	1.000	.0000	0.0%	
12	.0	Uvol	13	1284.615	286.0541	22.3%
		Constant	13	1.000	.0000	0.0%
	1.0	Uvol	14	1667.286	220.1801	13.2%
		Constant	14	1.000	.0000	0.0%
	2.0	Uvol	13	1858.077	487.7821	26.3%

		Constant	13	1.000	.0000	0.0%
	Total	Uvol	40	1604.925	414.1308	25.8%
		Constant	40	1.000	.0000	0.0%
15	.0	Uvol	13	1869.615	440.4281	23.6%
		Constant	13	1.000	.0000	0.0%
	1.0	Uvol	14	2263.929	466.1800	20.6%
		Constant	14	1.000	.0000	0.0%
	2.0	Uvol	13	2403.462	293.6720	12.2%
		Constant	13	1.000	.0000	0.0%
	Total	Uvol	40	2181.125	458.2009	21.0%
		Constant	40	1.000	.0000	0.0%
16	.0	Uvol	13	1334.231	259.6139	19.5%
		Constant	13	1.000	.0000	0.0%
	1.0	Uvol	14	1681.786	279.5092	16.6%
		Constant	14	1.000	.0000	0.0%
	2.0	Uvol	13	2138.077	297.7942	13.9%
		Constant	13	1.000	.0000	0.0%
	Total	Uvol	40	1717.125	427.1430	24.9%
		Constant	40	1.000	.0000	0.0%
51	.0	Uvol	32	1673.522	379.7701	22.7%
		Constant	32	1.000	.0000	0.0%
	1.0	Uvol	33	2115.939	323.5108	15.3%
		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	32	2543.697	415.0676	16.3%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	97	2111.103	513.1321	24.3%
		Constant	97	1.000	.0000	0.0%
52	.0	Uvol	32	1636.250	355.1430	21.7%
		Constant	32	1.000	.0000	0.0%
	1.0	Uvol	33	2071.155	288.0428	13.9%
		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	31	2413.932	309.7495	12.8%
		Constant	31	1.000	.0000	0.0%
	Total	Uvol	96	2036.875	447.5123	22.0%
		Constant	96	1.000	.0000	0.0%
53	.0	Uvol	32	1091.837	212.0605	19.4%
		Constant	32	1.000	.0000	0.0%
	1.0	Uvol	33	1504.406	294.9191	19.6%

		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	32	1659.419	295.2882	17.8%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	97	1419.439	359.3373	25.3%
		Constant	97	1.000	.0000	0.0%
54	.0	Uvol	32	1666.759	333.6509	20.0%
		Constant	32	1.000	.0000	0.0%
	1.0	Uvol	33	1987.791	305.8694	15.4%
		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	32	2206.288	356.1807	16.1%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	97	1953.965	396.4988	20.3%
		Constant	97	1.000	.0000	0.0%
55	.0	Uvol	32	987.653	231.6930	23.5%
		Constant	32	1.000	.0000	0.0%
	1.0	Uvol	32	1221.601	244.1780	20.0%
		Constant	32	1.000	.0000	0.0%
	2.0	Uvol	32	1589.703	311.4316	19.6%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	96	1266.319	361.4959	28.5%
		Constant	96	1.000	.0000	0.0%
56	.0	Uvol	32	1673.122	254.9587	15.2%
		Constant	32	1.000	.0000	0.0%
	1.0	Uvol	33	1939.661	304.4485	15.7%
		Constant	33	1.000	.0000	0.0%
	2.0	Uvol	32	2209.034	291.9786	13.2%
		Constant	32	1.000	.0000	0.0%
	Total	Uvol	97	1940.596	356.7685	18.4%
		Constant	97	1.000	.0000	0.0%
Total	.0	Uvol	244	1479.027	427.3820	28.9%
		Constant	244	1.000	.0000	0.0%
	1.0	Uvol	253	1835.568	435.8606	23.7%
		Constant	253	1.000	.0000	0.0%
	2.0	Uvol	243	2128.137	477.0646	22.4%
		Constant	243	1.000	.0000	0.0%
	Total	Uvol	740	1814.079	518.6791	28.6%
		Constant	740	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	10654.570
Akaike's Information Criterion (AIC)	10658.570
Hurvich and Tsai's Criterion (AICC)	10658.586
Bozdogan's Criterion (CAIC)	10669.775
Schwarz's Bayesian Criterion (BIC)	10667.775

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.028	332.286	.000
UFEV_h_I_perdiet	2	728.030	249.733	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2150.650365	102.084171	9.544	21.067	.000	1921.712331	2379.588400
[UFEV_h_I_perdiet=0]	-650.033125	29.126038	728.029	-22.318	.000	-707.214173	-592.852077
[UFEV_h_I_perdiet=1.0]	-296.484852	28.867477	728.031	-10.271	.000	-353.158285	-239.811418
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	103281.365100	5413.308127
Constant [subject = subject]	Variance	99681.952410
		47701.429810

a. Dependent Variable: Uvol.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON URINE EXCRETION AT 9 g SALT INTAKE  
 all subjects

```

USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED UVol BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax		MIXED UVol BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Uvol	12	1616.667	235.8094	14.6%
		Constant	12	1.000	.0000	0.0%
	1.0	Uvol	11	1875.455	338.1232	18.0%
		Constant	11	1.000	.0000	0.0%
	2.0	Uvol	12	2187.083	278.3920	12.7%
		Constant	12	1.000	.0000	0.0%
Total	Uvol	35	1893.571	366.4206	19.4%	
	Constant	35	1.000	.0000	0.0%	
12	.0	Uvol	12	1358.333	316.8261	23.3%
		Constant	12	1.000	.0000	0.0%
	1.0	Uvol	11	1654.091	310.4579	18.8%
		Constant	11	1.000	.0000	0.0%
	2.0	Uvol	12	1868.333	463.9717	24.8%

		Constant	12	1.000	.0000	0.0%
	Total	Uvol	35	1626.143	420.4026	25.9%
		Constant	35	1.000	.0000	0.0%
15	.0	Uvol	12	2163.750	367.3376	17.0%
		Constant	12	1.000	.0000	0.0%
	1.0	Uvol	11	2005.000	357.0364	17.8%
		Constant	11	1.000	.0000	0.0%
	2.0	Uvol	12	2387.500	331.8714	13.9%
		Constant	12	1.000	.0000	0.0%
	Total	Uvol	35	2190.571	376.6489	17.2%
		Constant	35	1.000	.0000	0.0%
16	.0	Uvol	12	1221.667	350.0931	28.7%
		Constant	12	1.000	.0000	0.0%
	1.0	Uvol	11	1490.909	307.0571	20.6%
		Constant	11	1.000	.0000	0.0%
	2.0	Uvol	12	1822.500	286.8045	15.7%
		Constant	12	1.000	.0000	0.0%
	Total	Uvol	35	1512.286	397.3892	26.3%
		Constant	35	1.000	.0000	0.0%
51	.0	Uvol	20	1504.955	296.2027	19.7%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1787.210	354.3847	19.8%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	2052.645	269.4176	13.1%
		Constant	20	1.000	.0000	0.0%
	Total	Uvol	60	1781.603	378.0611	21.2%
		Constant	60	1.000	.0000	0.0%
52	.0	Uvol	20	1624.850	369.5373	22.7%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1800.300	319.8817	17.8%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	2377.300	360.7567	15.2%
		Constant	20	1.000	.0000	0.0%
	Total	Uvol	60	1934.150	473.1934	24.5%
		Constant	60	1.000	.0000	0.0%
53	.0	Uvol	20	929.675	168.5498	18.1%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1262.210	211.1367	16.7%

		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	1563.230	263.4625	16.9%
		Constant	20	1.000	.0000	0.0%
	Total	Uvol	60	1251.705	337.5594	27.0%
		Constant	60	1.000	.0000	0.0%
54	.0	Uvol	20	1635.055	425.6061	26.0%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1949.125	327.5848	16.8%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	2235.305	396.2566	17.7%
		Constant	20	1.000	.0000	0.0%
	Total	Uvol	60	1939.828	452.2927	23.3%
		Constant	60	1.000	.0000	0.0%
55	.0	Uvol	20	891.355	198.5761	22.3%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1188.180	282.8247	23.8%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	1493.935	265.2952	17.8%
		Constant	20	1.000	.0000	0.0%
	Total	Uvol	60	1191.157	350.2436	29.4%
		Constant	60	1.000	.0000	0.0%
56	.0	Uvol	20	1287.240	182.6270	14.2%
		Constant	20	1.000	.0000	0.0%
	1.0	Uvol	20	1498.080	269.3418	18.0%
		Constant	20	1.000	.0000	0.0%
	2.0	Uvol	20	1749.530	263.8121	15.1%
		Constant	20	1.000	.0000	0.0%
	Total	Uvol	60	1511.617	304.6813	20.2%
		Constant	60	1.000	.0000	0.0%
Total	.0	Uvol	168	1391.593	453.3130	32.6%
		Constant	168	1.000	.0000	0.0%
	1.0	Uvol	164	1627.940	406.5109	25.0%
		Constant	164	1.000	.0000	0.0%
	2.0	Uvol	168	1956.095	443.4261	22.7%
		Constant	168	1.000	.0000	0.0%
	Total	Uvol	500	1658.787	492.6102	29.7%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7164.028
Akaike's Information Criterion (AIC)	7168.028
Hurvich and Tsai's Criterion (AICC)	7168.052
Bozdogan's Criterion (CAIC)	7178.445
Schwarz's Bayesian Criterion (BIC)	7176.445

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.008	273.775	.000
UFEV_h_I_perdiet	2	488.012	140.139	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	1978.799375	103.526184	9.681	19.114	.000	1747.093041	2210.505708
[UFEV_h_I_perdiet=.0]	-564.501786	33.843518	488.009	-16.680	.000	-630.998781	-498.004790
[UFEV_h_I_perdiet=1.0]	-324.693922	34.053416	488.014	-9.535	.000	-391.603332	-257.784511
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	96212.230040	6159.301080
Constant [subject = subject]	Variance	101327.838000
		48713.274500

a. Dependent Variable: Uvol.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON URINE EXCRETION AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UVol BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:34:48	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UVol BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	Uvol	10	1535.000	478.4524	31.2%
		Constant	10	1.000	.0000	0.0%
	1.0	Uvol	9	1777.778	210.8185	11.9%
		Constant	9	1.000	.0000	0.0%
	2.0	Uvol	10	1985.000	385.8972	19.4%
		Constant	10	1.000	.0000	0.0%
Total	Uvol	29	1765.517	412.7658	23.4%	
	Constant	29	1.000	.0000	0.0%	
12	.0	Uvol	10	1527.700	211.2492	13.8%
		Constant	10	1.000	.0000	0.0%
	1.0	Uvol	9	1615.556	246.8355	15.3%
		Constant	9	1.000	.0000	0.0%
	2.0	Uvol	10	1662.700	322.9923	19.4%

		Constant	10	1.000	.0000	0.0%
	Total	Uvol	29	1601.517	261.9754	16.4%
		Constant	29	1.000	.0000	0.0%
15	.0	Uvol	10	2110.500	586.3752	27.8%
		Constant	10	1.000	.0000	0.0%
	1.0	Uvol	9	2199.444	360.4289	16.4%
		Constant	9	1.000	.0000	0.0%
	2.0	Uvol	10	2579.000	496.3914	19.2%
		Constant	10	1.000	.0000	0.0%
	Total	Uvol	29	2299.655	520.3003	22.6%
		Constant	29	1.000	.0000	0.0%
16	.0	Uvol	10	1526.500	247.5889	16.2%
		Constant	10	1.000	.0000	0.0%
	1.0	Uvol	9	1933.333	209.1650	10.8%
		Constant	9	1.000	.0000	0.0%
	2.0	Uvol	10	2116.000	341.0425	16.1%
		Constant	10	1.000	.0000	0.0%
	Total	Uvol	29	1856.034	366.6459	19.8%
		Constant	29	1.000	.0000	0.0%
51	.0	Uvol	16	1610.819	417.9054	25.9%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	2254.069	335.5447	14.9%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	2524.788	359.5495	14.2%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	2129.892	531.9665	25.0%
		Constant	48	1.000	.0000	0.0%
52	.0	Uvol	16	1671.250	295.0660	17.7%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	2210.500	361.2735	16.3%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	2521.000	334.7331	13.3%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	2134.250	480.7036	22.5%
		Constant	48	1.000	.0000	0.0%
53	.0	Uvol	16	933.631	152.3315	16.3%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	1140.350	152.7810	13.4%



		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	1603.381	320.2679	20.0%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	1225.788	357.3093	29.1%
		Constant	48	1.000	.0000	0.0%
54	.0	Uvol	16	1692.100	460.1745	27.2%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	2051.500	298.9944	14.6%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	2471.713	277.9090	11.2%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	2071.771	473.7380	22.9%
		Constant	48	1.000	.0000	0.0%
55	.0	Uvol	16	793.406	203.0711	25.6%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	1091.631	269.4847	24.7%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	1561.931	240.2582	15.4%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	1148.990	396.1991	34.5%
		Constant	48	1.000	.0000	0.0%
56	.0	Uvol	16	1424.125	264.0964	18.5%
		Constant	16	1.000	.0000	0.0%
	1.0	Uvol	16	1769.256	247.0675	14.0%
		Constant	16	1.000	.0000	0.0%
	2.0	Uvol	16	2058.656	375.3358	18.2%
		Constant	16	1.000	.0000	0.0%
	Total	Uvol	48	1750.679	394.2220	22.5%
		Constant	48	1.000	.0000	0.0%
Total	.0	Uvol	136	1448.546	495.0573	34.2%
		Constant	136	1.000	.0000	0.0%
	1.0	Uvol	132	1787.969	505.5073	28.3%
		Constant	132	1.000	.0000	0.0%
	2.0	Uvol	136	2112.430	514.2376	24.3%
		Constant	136	1.000	.0000	0.0%
	Total	Uvol	404	1782.932	572.8262	32.1%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Uvol.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5846.332
Akaike's Information Criterion (AIC)	5850.332
Hurvich and Tsai's Criterion (AICC)	5850.362
Bozdogan's Criterion (CAIC)	5860.320
Schwarz's Bayesian Criterion (BIC)	5858.320

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Uvol.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.033	215.749	.000
UFEV_h_I_perdiet	2	392.037	135.250	.000

a. Dependent Variable: Uvol.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2126.662378	124.601137	9.693	17.068	.000	1847.838617	2405.486139
[UFEV_h_I_perdiet=.0]	-663.883824	40.371702	392.033	-16.444	.000	-743.255946	-584.511701
[UFEV_h_I_perdiet=1.0]	-321.586010	40.683778	392.039	-7.905	.000	-401.571680	-241.600339
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Uvol.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	110831.455600	7916.198156
Constant [subject = subject] Variance	146957.949900	70519.011230

a. Dependent Variable: Uvol.

\*ON WATER INTAKE

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON WATER INTAKE AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

```

MIXED WaterIntake BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED WaterIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	WaterIntake	35	2554.982	366.2643	14.3%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2745.643	416.5211	15.2%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2706.471	357.4892	13.2%
		Constant	35	1.000	.0000	0.0%
Total	WaterIntake	104	2668.296	385.8569	14.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	WaterIntake	35	2700.631	394.6250	14.6%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2639.700	397.7300	15.1%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2720.238	478.9709	17.6%

		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2687.310	423.0759	15.7%
		Constant	104	1.000	.0000	0.0%
15	.0	WaterIntake	35	2519.989	381.5091	15.1%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2454.219	357.0692	14.5%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2501.616	375.3208	15.0%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2492.304	369.0019	14.8%
		Constant	104	1.000	.0000	0.0%
16	.0	WaterIntake	35	2859.049	394.4850	13.8%
		Constant	35	1.000	.0000	0.0%
	1.0	WaterIntake	34	2821.171	324.3075	11.5%
		Constant	34	1.000	.0000	0.0%
	2.0	WaterIntake	35	2914.665	357.2537	12.3%
		Constant	35	1.000	.0000	0.0%
	Total	WaterIntake	104	2865.383	358.7209	12.5%
		Constant	104	1.000	.0000	0.0%
51	.0	WaterIntake	68	2698.147	315.6463	11.7%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2656.204	441.8934	16.6%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2630.858	352.9119	13.4%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2661.709	373.4804	14.0%
		Constant	205	1.000	.0000	0.0%
52	.0	WaterIntake	68	2705.800	421.7865	15.6%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2727.523	358.8024	13.2%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2628.599	553.3316	21.1%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2687.504	451.3423	16.8%
		Constant	205	1.000	.0000	0.0%
53	.0	WaterIntake	68	2409.971	424.7703	17.6%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2494.716	425.6144	17.1%

		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2519.349	331.9125	13.2%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2474.776	397.5172	16.1%
		Constant	205	1.000	.0000	0.0%
54	.0	WaterIntake	68	2897.106	639.2335	22.1%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2897.822	670.2557	23.1%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2893.427	743.5387	25.7%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2896.127	682.2961	23.6%
		Constant	205	1.000	.0000	0.0%
55	.0	WaterIntake	68	1938.361	400.5121	20.7%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	1956.806	546.0784	27.9%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2066.782	535.8521	25.9%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	1987.168	499.6077	25.1%
		Constant	205	1.000	.0000	0.0%
56	.0	WaterIntake	68	2841.571	327.1821	11.5%
		Constant	68	1.000	.0000	0.0%
	1.0	WaterIntake	69	2738.102	432.3474	15.8%
		Constant	69	1.000	.0000	0.0%
	2.0	WaterIntake	68	2739.952	412.8968	15.1%
		Constant	68	1.000	.0000	0.0%
	Total	WaterIntake	205	2773.037	394.7171	14.2%
		Constant	205	1.000	.0000	0.0%
Total	.0	WaterIntake	548	2601.456	510.7332	19.6%
		Constant	548	1.000	.0000	0.0%
	1.0	WaterIntake	550	2599.956	536.0554	20.6%
		Constant	550	1.000	.0000	0.0%
	2.0	WaterIntake	548	2613.274	535.5870	20.5%
		Constant	548	1.000	.0000	0.0%
	Total	WaterIntake	1646	2604.889	527.3144	20.2%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24840.949
Akaike's Information Criterion (AIC)	24844.949
Hurvich and Tsai's Criterion (AICC)	24844.956
Bozdogan's Criterion (CAIC)	24857.758
Schwarz's Bayesian Criterion (BIC)	24855.758

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.068	1002.925	.000
UFEV_h_I_perdiet	2	1634.071	.130	.878

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2627.134387	84.218108	9.752	31.194	.000	2438.836223	2815.432551
[UFEV_h_I_perdiet=.0]	-11.818558	27.594189	1634.068	-.428	.668	-65.942264	42.305147
[UFEV_h_I_perdiet=1.0]	-12.531911	27.569891	1634.073	-.455	.649	-66.607959	41.544137
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	208634.357200	7299.039923
Constant [subject = subject] Variance	66982.795150	32118.355430

a. Dependent Variable: WaterIntake.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON WATER INTAKE AT 12 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED WaterIntake BY UFEV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED WaterIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	WaterIntake	13	2361.805	403.8239	17.1%
		Constant	13	1.000	.0000	0.0%
	1.0	WaterIntake	14	2688.081	499.8038	18.6%
		Constant	14	1.000	.0000	0.0%
	2.0	WaterIntake	13	2703.379	384.9881	14.2%
		Constant	13	1.000	.0000	0.0%
Total	WaterIntake	40	2587.013	451.8143	17.5%	
	Constant	40	1.000	.0000	0.0%	
12	.0	WaterIntake	13	2619.303	321.6508	12.3%
		Constant	13	1.000	.0000	0.0%
	1.0	WaterIntake	14	2530.001	352.6587	13.9%
		Constant	14	1.000	.0000	0.0%
	2.0	WaterIntake	13	2668.714	306.1218	11.5%

		Constant	13	1.000	.0000	0.0%
	Total	WaterIntake	40	2604.106	324.9052	12.5%
		Constant	40	1.000	.0000	0.0%
15	.0	WaterIntake	13	2601.579	361.2662	13.9%
		Constant	13	1.000	.0000	0.0%
	1.0	WaterIntake	14	2448.414	338.1531	13.8%
		Constant	14	1.000	.0000	0.0%
	2.0	WaterIntake	13	2459.846	303.6927	12.3%
		Constant	13	1.000	.0000	0.0%
	Total	WaterIntake	40	2501.908	334.0366	13.4%
		Constant	40	1.000	.0000	0.0%
16	.0	WaterIntake	13	2900.058	389.1811	13.4%
		Constant	13	1.000	.0000	0.0%
	1.0	WaterIntake	14	2817.763	269.0779	9.5%
		Constant	14	1.000	.0000	0.0%
	2.0	WaterIntake	13	3044.638	407.0620	13.4%
		Constant	13	1.000	.0000	0.0%
	Total	WaterIntake	40	2918.243	361.6383	12.4%
		Constant	40	1.000	.0000	0.0%
51	.0	WaterIntake	32	2614.505	290.8871	11.1%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	2476.067	482.5047	19.5%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2544.128	357.8291	14.1%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	2544.190	386.6748	15.2%
		Constant	97	1.000	.0000	0.0%
52	.0	WaterIntake	32	2597.100	423.8184	16.3%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	2577.356	367.9024	14.3%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2583.146	521.2585	20.2%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	2585.780	436.9549	16.9%
		Constant	97	1.000	.0000	0.0%
53	.0	WaterIntake	32	2321.972	491.8665	21.2%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	2518.185	429.5318	17.1%

		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2503.164	374.7441	15.0%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	2448.500	439.2872	17.9%
		Constant	97	1.000	.0000	0.0%
54	.0	WaterIntake	32	2676.808	735.2500	27.5%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	2626.505	714.6975	27.2%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2465.313	724.3657	29.4%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	2589.923	722.7855	27.9%
		Constant	97	1.000	.0000	0.0%
55	.0	WaterIntake	32	1857.903	416.9967	22.4%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	1847.122	530.0649	28.7%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	1938.829	465.9215	24.0%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	1880.932	470.7375	25.0%
		Constant	97	1.000	.0000	0.0%
56	.0	WaterIntake	32	2677.936	309.3718	11.6%
		Constant	32	1.000	.0000	0.0%
	1.0	WaterIntake	33	2560.817	450.0994	17.6%
		Constant	33	1.000	.0000	0.0%
	2.0	WaterIntake	32	2584.769	450.4560	17.4%
		Constant	32	1.000	.0000	0.0%
	Total	WaterIntake	97	2607.356	408.0867	15.7%
		Constant	97	1.000	.0000	0.0%
Total	.0	WaterIntake	244	2492.438	524.9557	21.1%
		Constant	244	1.000	.0000	0.0%
	1.0	WaterIntake	254	2475.509	539.1636	21.8%
		Constant	254	1.000	.0000	0.0%
	2.0	WaterIntake	244	2496.782	526.8182	21.1%
		Constant	244	1.000	.0000	0.0%
	Total	WaterIntake	742	2488.071	529.8344	21.3%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	11229.293
Akaike's Information Criterion (AIC)	11233.293
Hurvich and Tsai's Criterion (AICC)	11233.309
Bozdogan's Criterion (CAIC)	11244.503
Schwarz's Bayesian Criterion (BIC)	11242.503

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.106	942.553	.000
UFEV_h_I_perdiet	2	730.118	.166	.847

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2533.659929	85.829968	10.805	29.520	.000	2344.332053	2722.987804
[UFEV_h_I_perdiet=.0]	-4.343770	42.394288	730.115	-.102	.918	-87.573019	78.885478
[UFEV_h_I_perdiet=1.0]	-22.724210	41.976005	730.119	-.541	.588	-105.132276	59.683857
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	219267.627300	11476.091490
Constant [subject = subject] Variance	64108.661410	31675.546880

a. Dependent Variable: WaterIntake.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON WATER INTAKE AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED WaterIntake BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED WaterIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.08

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	WaterIntake	12	2556.683	235.8537	9.2%
		Constant	12	1.000	.0000	0.0%
	1.0	WaterIntake	11	2777.556	341.6142	12.3%
		Constant	11	1.000	.0000	0.0%
	2.0	WaterIntake	12	2569.274	304.3284	11.8%
		Constant	12	1.000	.0000	0.0%
Total	WaterIntake	35	2630.417	304.1828	11.6%	
	Constant	35	1.000	.0000	0.0%	
12	.0	WaterIntake	12	2652.648	312.7562	11.8%
		Constant	12	1.000	.0000	0.0%
	1.0	WaterIntake	11	2576.034	361.1115	14.0%
		Constant	11	1.000	.0000	0.0%
	2.0	WaterIntake	12	2694.041	392.0119	14.6%

		Constant	12	1.000	.0000	0.0%
	Total	WaterIntake	35	2642.761	349.4580	13.2%
		Constant	35	1.000	.0000	0.0%
15	.0	WaterIntake	12	2461.644	315.4331	12.8%
		Constant	12	1.000	.0000	0.0%
	1.0	WaterIntake	11	2470.681	337.6615	13.7%
		Constant	11	1.000	.0000	0.0%
	2.0	WaterIntake	12	2334.483	372.0181	15.9%
		Constant	12	1.000	.0000	0.0%
	Total	WaterIntake	35	2420.886	338.4132	14.0%
		Constant	35	1.000	.0000	0.0%
16	.0	WaterIntake	12	2748.316	264.9712	9.6%
		Constant	12	1.000	.0000	0.0%
	1.0	WaterIntake	11	2714.533	358.5345	13.2%
		Constant	11	1.000	.0000	0.0%
	2.0	WaterIntake	12	2714.660	266.5887	9.8%
		Constant	12	1.000	.0000	0.0%
	Total	WaterIntake	35	2726.159	289.4471	10.6%
		Constant	35	1.000	.0000	0.0%
51	.0	WaterIntake	20	2664.553	366.6930	13.8%
		Constant	20	1.000	.0000	0.0%
	1.0	WaterIntake	20	2813.787	365.8632	13.0%
		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	2703.384	342.9534	12.7%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	2727.241	358.2580	13.1%
		Constant	60	1.000	.0000	0.0%
52	.0	WaterIntake	20	2687.965	472.7159	17.6%
		Constant	20	1.000	.0000	0.0%
	1.0	WaterIntake	20	2816.473	274.1672	9.7%
		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	2604.524	712.2718	27.3%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	2702.987	516.9863	19.1%
		Constant	60	1.000	.0000	0.0%
53	.0	WaterIntake	20	2363.956	393.8618	16.7%
		Constant	20	1.000	.0000	0.0%
	1.0	WaterIntake	20	2375.394	511.6022	21.5%

		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	2526.772	305.1964	12.1%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	2422.040	412.1159	17.0%
		Constant	60	1.000	.0000	0.0%
54	.0	WaterIntake	20	3092.072	541.2111	17.5%
		Constant	20	1.000	.0000	0.0%
	1.0	WaterIntake	20	3010.431	525.6161	17.5%
		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	3181.995	612.9906	19.3%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	3094.832	556.1431	18.0%
		Constant	60	1.000	.0000	0.0%
55	.0	WaterIntake	20	1944.312	440.8135	22.7%
		Constant	20	1.000	.0000	0.0%
	1.0	WaterIntake	20	1925.614	597.8510	31.0%
		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	2150.603	484.7400	22.5%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	2006.843	513.7284	25.6%
		Constant	60	1.000	.0000	0.0%
56	.0	WaterIntake	20	2943.149	337.2569	11.5%
		Constant	20	1.000	.0000	0.0%
	1.0	WaterIntake	20	2829.846	414.1721	14.6%
		Constant	20	1.000	.0000	0.0%
	2.0	WaterIntake	20	2912.654	330.4252	11.3%
		Constant	20	1.000	.0000	0.0%
	Total	WaterIntake	60	2895.217	359.6671	12.4%
		Constant	60	1.000	.0000	0.0%
Total	.0	WaterIntake	168	2612.807	503.8274	19.3%
		Constant	168	1.000	.0000	0.0%
	1.0	WaterIntake	164	2630.230	531.5444	20.2%
		Constant	164	1.000	.0000	0.0%
	2.0	WaterIntake	168	2650.882	525.4690	19.8%
		Constant	168	1.000	.0000	0.0%
	Total	WaterIntake	500	2631.315	519.5174	19.7%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7473.195
Akaike's Information Criterion (AIC)	7477.195
Hurvich and Tsai's Criterion (AICC)	7477.220
Bozdogan's Criterion (CAIC)	7487.612
Schwarz's Bayesian Criterion (BIC)	7485.612

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.143	777.796	.000
UFEV_h_I_perdiet	2	488.151	.336	.715

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2646.911230	97.927243	10.677	27.029	.000	2430.576818	2863.245641
[UFEV_h_I_perdiet=.0]	-38.074583	46.522019	488.144	-.818	.414	-129.482704	53.333537
[UFEV_h_I_perdiet=1.0]	-21.256848	46.810395	488.155	-.454	.650	-113.231575	70.717880
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	181801.051500	11636.907260
Constant [subject = subject] Variance	84851.751670	41495.916280

a. Dependent Variable: WaterIntake.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON WATER INTAKE AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED WaterIntake BY UFEV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED WaterIntake BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	WaterIntake	10	2804.073	313.8785	11.2%
		Constant	10	1.000	.0000	0.0%
	1.0	WaterIntake	9	2796.178	392.1320	14.0%
		Constant	9	1.000	.0000	0.0%
	2.0	WaterIntake	10	2875.128	339.4986	11.8%
		Constant	10	1.000	.0000	0.0%
Total	WaterIntake	29	2826.124	337.5911	11.9%	
	Constant	29	1.000	.0000	0.0%	
12	.0	WaterIntake	10	2863.937	537.1726	18.8%
		Constant	10	1.000	.0000	0.0%
	1.0	WaterIntake	9	2888.157	437.4359	15.1%
		Constant	9	1.000	.0000	0.0%
	2.0	WaterIntake	10	2818.655	733.7504	26.0%

		Constant	10	1.000	.0000	0.0%
	Total	WaterIntake	29	2855.839	566.8579	19.8%
		Constant	29	1.000	.0000	0.0%
15	.0	WaterIntake	10	2483.936	488.4949	19.7%
		Constant	10	1.000	.0000	0.0%
	1.0	WaterIntake	9	2443.129	443.8776	18.2%
		Constant	9	1.000	.0000	0.0%
	2.0	WaterIntake	10	2756.476	357.9090	13.0%
		Constant	10	1.000	.0000	0.0%
	Total	WaterIntake	29	2565.251	440.8907	17.2%
		Constant	29	1.000	.0000	0.0%
16	.0	WaterIntake	10	2938.619	523.7534	17.8%
		Constant	10	1.000	.0000	0.0%
	1.0	WaterIntake	9	2956.808	345.1903	11.7%
		Constant	9	1.000	.0000	0.0%
	2.0	WaterIntake	10	2985.707	301.6924	10.1%
		Constant	10	1.000	.0000	0.0%
	Total	WaterIntake	29	2960.501	389.7132	13.2%
		Constant	29	1.000	.0000	0.0%
51	.0	WaterIntake	16	2907.425	191.5368	6.6%
		Constant	16	1.000	.0000	0.0%
	1.0	WaterIntake	16	2830.761	286.3726	10.1%
		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	2713.658	335.1637	12.4%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	2817.281	283.2254	10.1%
		Constant	48	1.000	.0000	0.0%
52	.0	WaterIntake	16	2945.495	231.2010	7.8%
		Constant	16	1.000	.0000	0.0%
	1.0	WaterIntake	16	2926.054	312.1731	10.7%
		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	2749.599	377.6691	13.7%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	2873.716	318.7691	11.1%
		Constant	48	1.000	.0000	0.0%
53	.0	WaterIntake	16	2643.486	178.6716	6.8%
		Constant	16	1.000	.0000	0.0%
	1.0	WaterIntake	16	2595.461	255.0543	9.8%



		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	2542.439	287.5089	11.3%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	2593.796	243.0443	9.4%
		Constant	48	1.000	.0000	0.0%
54	.0	WaterIntake	16	3093.997	375.9751	12.2%
		Constant	16	1.000	.0000	0.0%
	1.0	WaterIntake	16	3316.651	480.5866	14.5%
		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	3388.945	380.9315	11.2%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	3266.531	425.7081	13.0%
		Constant	48	1.000	.0000	0.0%
55	.0	WaterIntake	16	2091.840	268.3561	12.8%
		Constant	16	1.000	.0000	0.0%
	1.0	WaterIntake	16	2222.019	443.7525	20.0%
		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	2217.913	683.8269	30.8%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	2177.257	488.6695	22.4%
		Constant	48	1.000	.0000	0.0%
56	.0	WaterIntake	16	3041.868	150.3262	4.9%
		Constant	16	1.000	.0000	0.0%
	1.0	WaterIntake	16	2989.072	224.4171	7.5%
		Constant	16	1.000	.0000	0.0%
	2.0	WaterIntake	16	2834.441	321.2230	11.3%
		Constant	16	1.000	.0000	0.0%
	Total	WaterIntake	48	2955.127	253.2361	8.6%
		Constant	48	1.000	.0000	0.0%
Total	.0	WaterIntake	136	2783.025	438.1928	15.7%
		Constant	136	1.000	.0000	0.0%
	1.0	WaterIntake	132	2801.809	468.0273	16.7%
		Constant	132	1.000	.0000	0.0%
	2.0	WaterIntake	136	2775.821	517.9265	18.7%
		Constant	136	1.000	.0000	0.0%
	Total	WaterIntake	404	2786.737	474.8743	17.0%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: WaterIntake.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5940.125
Akaike's Information Criterion (AIC)	5944.125
Hurvich and Tsai's Criterion (AICC)	5944.155
Bozdogan's Criterion (CAIC)	5954.113
Schwarz's Bayesian Criterion (BIC)	5952.113

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: WaterIntake.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.116	907.767	.000
UFEV_h_l_perdiet	2	392.126	.175	.840

a. Dependent Variable: WaterIntake.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	2778.021386	96.245844	10.648	28.864	.000	2565.328034	2990.714737
[UFEV_h_l_perdiet=.0]	7.204706	45.795149	392.117	.157	.875	-82.830036	97.239448
[UFEV_h_l_perdiet=1.0]	26.432666	46.148920	392.130	.573	.567	-64.297592	117.162924
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: WaterIntake.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	142609.305900	10184.862690
Constant [subject = subject]	Variance 81962.512430	40138.360180

a. Dependent Variable: WaterIntake.

\*ON WATER BALANCE GAP

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON WATER BALANCE GAP AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED Water\_Balance\_Gap BY UFEV\_h\_l\_perdiet WITH Constant

```

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
	Missing Value Handling	Definition of Missing
Cases Used		Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED Water_Balance_Gap BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	35	899.268	571.4514	63.5%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	806.525	564.8227	70.0%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	462.329	478.8006	103.6%
		Constant	35	1.000	.0000	0.0%
Total	Water_Balance_GAP	104	721.901	567.1254	78.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	35	1321.288	448.2668	33.9%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	990.376	458.6918	46.3%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	914.466	686.2558	75.0%
		Constant	35	1.000	.0000	0.0%

		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	1076.194	566.5065	52.6%
		Constant	104	1.000	.0000	0.0%
15	.0	Water_Balance_GAP	35	480.703	490.5514	102.0%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	291.131	588.6552	202.2%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	53.473	391.8917	732.9%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	274.948	521.8144	189.8%
		Constant	104	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	35	1508.478	461.9995	30.6%
		Constant	35	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	34	1134.553	300.8930	26.5%
		Constant	34	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	35	891.094	363.4798	40.8%
		Constant	35	1.000	.0000	0.0%
	Total	Water_Balance_GAP	104	1178.460	456.9264	38.8%
		Constant	104	1.000	.0000	0.0%
51	.0	Water_Balance_GAP	68	1088.957	544.6950	50.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	603.519	653.5269	108.3%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	236.037	608.8456	257.9%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	642.646	695.4008	108.2%
		Constant	205	1.000	.0000	0.0%
52	.0	Water_Balance_GAP	68	1064.668	557.2889	52.3%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	702.565	533.6345	76.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	235.747	624.8745	265.1%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	667.830	663.5499	99.4%
		Constant	205	1.000	.0000	0.0%
53	.0	Water_Balance_GAP	68	1403.053	462.7743	33.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	1144.930	484.9058	42.4%

		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	901.406	408.0212	45.3%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1149.773	495.3241	43.1%
		Constant	205	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	68	1233.709	648.0967	52.5%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	906.465	683.1239	75.4%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	616.152	648.1129	105.2%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	918.716	703.6338	76.6%
		Constant	205	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	68	1024.736	426.1809	41.6%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	792.734	546.9158	69.0%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	511.781	551.0636	107.7%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	776.497	550.5289	70.9%
		Constant	205	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	68	1340.531	482.2898	36.0%
		Constant	68	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	69	965.950	570.7091	59.1%
		Constant	69	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	68	701.449	575.9325	82.1%
		Constant	68	1.000	.0000	0.0%
	Total	Water_Balance_GAP	205	1002.464	602.2082	60.1%
		Constant	205	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	548	1156.798	568.5190	49.1%
		Constant	548	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	550	841.060	600.0010	71.3%
		Constant	550	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	548	545.662	616.3026	112.9%
		Constant	548	1.000	.0000	0.0%
	Total	Water_Balance_GAP	1646	847.832	645.1024	76.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	25430.545
Akaike's Information Criterion (AIC)	25434.545
Hurvich and Tsai's Criterion (AICC)	25434.552
Bozdogan's Criterion (CAIC)	25447.354
Schwarz's Bayesian Criterion (BIC)	25445.354

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.897	91.392	.000
UFEV_h_I_perdiet	2	1633.901	171.149	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	539.087627	90.027465	9.752	5.988	.000	337.799540	740.375713
[UFEV_h_I_perdiet=.0]	611.136369	33.038674	1633.897	18.498	.000	546.333754	675.938983
[UFEV_h_I_perdiet=1.0]	295.025576	33.009576	1633.903	8.938	.000	230.280034	359.771118
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	299085.784400	10464.015390
Constant [subject = subject] Variance	75396.668550	36702.105740

a. Dependent Variable: Water\_Balance\_GAP.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON WATER BALANCE GAP AT 12 g SALT INTAKE  
 all subjects

```

USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.

```

EXECUTE.

```
MIXED water_balance_gap BY UFEV_h_l_perdiet WITH Constant  
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)  
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)  
/METHOD=REML  
/PRINT=DESCRIPTIVES SOLUTION  
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED water_balance_gap BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	13	577.189	632.4279	109.6%
		Constant	13	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	14	595.224	717.4035	120.5%
		Constant	14	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	13	207.225	466.8253	225.3%
		Constant	13	1.000	.0000	0.0%
Total	Water_Balance_GAP	40	463.263	627.7782	135.5%	
	Constant	40	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	13	1334.688	423.2806	31.7%
		Constant	13	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	14	862.715	451.8889	52.4%
		Constant	14	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	13	810.637	617.1380	76.1%

		Constant	13	1.000	.0000	0.0%
	Total	Water_Balance_GAP	40	999.181	544.4629	54.5%
		Constant	40	1.000	.0000	0.0%
15	.0	Water_Balance_GAP	13	731.964	431.0041	58.9%
		Constant	13	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	14	184.485	718.9524	389.7%
		Constant	14	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	13	56.385	350.1038	620.9%
		Constant	13	1.000	.0000	0.0%
	Total	Water_Balance_GAP	40	320.783	594.5569	185.3%
		Constant	40	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	13	1565.827	426.1355	27.2%
		Constant	13	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	14	1135.977	294.5623	25.9%
		Constant	14	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	13	906.562	298.8333	33.0%
		Constant	13	1.000	.0000	0.0%
	Total	Water_Balance_GAP	40	1201.118	432.4996	36.0%
		Constant	40	1.000	.0000	0.0%
51	.0	Water_Balance_GAP	32	940.983	545.0792	57.9%
		Constant	32	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	33	360.127	648.4623	180.1%
		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	.431	623.5033	144580.5%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	433.087	715.4431	165.2%
		Constant	97	1.000	.0000	0.0%
52	.0	Water_Balance_GAP	32	960.850	575.6191	59.9%
		Constant	32	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	33	506.202	522.8519	103.3%
		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	244.649	499.8178	204.3%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	569.904	605.3051	106.2%
		Constant	97	1.000	.0000	0.0%
53	.0	Water_Balance_GAP	32	1230.135	481.1042	39.1%
		Constant	32	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	33	1013.779	420.7388	41.5%

		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	843.746	395.8485	46.9%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	1029.061	457.5521	44.5%
		Constant	97	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	32	1010.048	766.7566	75.9%
		Constant	32	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	33	638.715	683.6536	107.0%
		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	259.026	662.7303	255.9%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	635.958	762.5485	119.9%
		Constant	97	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	32	870.250	405.5237	46.6%
		Constant	32	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	33	662.539	450.0670	67.9%
		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	349.126	522.4175	149.6%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	627.668	504.6278	80.4%
		Constant	97	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	32	1004.814	426.5004	42.4%
		Constant	32	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	33	621.156	538.6657	86.7%
		Constant	33	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	32	375.735	507.3369	135.0%
		Constant	32	1.000	.0000	0.0%
	Total	Water_Balance_GAP	97	666.760	552.8251	82.9%
		Constant	97	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	244	1013.411	567.3116	56.0%
		Constant	244	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	254	647.168	598.6079	92.5%
		Constant	254	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	244	377.366	590.6593	156.5%
		Constant	244	1.000	.0000	0.0%
	Total	Water_Balance_GAP	742	678.882	639.8664	94.3%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	11437.071
Akaike's Information Criterion (AIC)	11441.071
Hurvich and Tsai's Criterion (AICC)	11441.087
Bozdogan's Criterion (CAIC)	11452.281
Schwarz's Bayesian Criterion (BIC)	11450.281

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.694	60.034	.000
UFEV_h_I_perdiet	2	729.700	85.531	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	392.364166	93.953184	10.517	4.176	.002	184.410367	600.317966
[UFEV_h_I_perdiet=.0]	636.044754	48.826407	729.696	13.027	.000	540.187760	731.901748
[UFEV_h_I_perdiet=1.0]	269.211765	48.344652	729.702	5.569	.000	174.300563	364.122967
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	290850.193400	15226.960570
Constant [subject = subject] Variance	75597.908840	38468.298320

a. Dependent Variable: Water\_Balance\_GAP.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON WATER BALANCE GAP AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED water_balance_gap BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED water_balance_gap BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	12	940.016	331.3947	35.3%
		Constant	12	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	11	902.102	426.2052	47.2%
		Constant	11	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	12	382.191	392.6735	102.7%
		Constant	12	1.000	.0000	0.0%
Total	Water_Balance_GAP	35	736.846	454.5773	61.7%	
	Constant	35	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	12	1294.315	354.9812	27.4%
		Constant	12	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	11	921.943	414.7390	45.0%
		Constant	11	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	12	825.708	575.3851	69.7%

		Constant	12	1.000	.0000	0.0%
	Total	Water_Balance_GAP	35	1016.618	491.3758	48.3%
		Constant	35	1.000	.0000	0.0%
15	.0	Water_Balance_GAP	12	297.894	505.0645	169.5%
		Constant	12	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	11	465.681	411.2229	88.3%
		Constant	11	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	12	-53.018	407.0511	-767.8%
		Constant	12	1.000	.0000	0.0%
	Total	Water_Balance_GAP	35	230.315	483.4658	209.9%
		Constant	35	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	12	1526.649	390.9646	25.6%
		Constant	12	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	11	1223.624	323.4312	26.4%
		Constant	11	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	12	892.160	355.8472	39.9%
		Constant	12	1.000	.0000	0.0%
	Total	Water_Balance_GAP	35	1213.873	438.4916	36.1%
		Constant	35	1.000	.0000	0.0%
51	.0	Water_Balance_GAP	20	1159.597	563.0442	48.6%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	1026.577	532.5684	51.9%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	650.739	393.1366	60.4%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	945.638	538.9064	57.0%
		Constant	60	1.000	.0000	0.0%
52	.0	Water_Balance_GAP	20	1063.115	619.4256	58.3%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	1016.172	505.1228	49.7%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	227.224	873.3211	384.3%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	768.837	775.1588	100.8%
		Constant	60	1.000	.0000	0.0%
53	.0	Water_Balance_GAP	20	1434.280	442.2623	30.8%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	1113.184	619.1671	55.6%

		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	963.541	329.9242	34.2%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	1170.335	510.6062	43.6%
		Constant	60	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	20	1457.017	438.7577	30.1%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	1061.306	555.2607	52.3%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	946.690	503.9059	53.2%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	1155.004	540.0541	46.8%
		Constant	60	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	20	1052.957	451.4781	42.9%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	737.434	654.0773	88.7%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	656.668	505.2963	76.9%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	815.686	561.5755	68.8%
		Constant	60	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	20	1655.909	360.4436	21.8%
		Constant	20	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	20	1331.767	440.4605	33.1%
		Constant	20	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	20	1163.124	423.6999	36.4%
		Constant	20	1.000	.0000	0.0%
	Total	Water_Balance_GAP	60	1383.600	452.3846	32.7%
		Constant	60	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	168	1221.214	565.5490	46.3%
		Constant	168	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	164	1002.290	549.7359	54.8%
		Constant	164	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	168	694.787	605.5270	87.2%
		Constant	168	1.000	.0000	0.0%
	Total	Water_Balance_GAP	500	972.528	612.8252	63.0%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7630.777
Akaike's Information Criterion (AIC)	7634.777
Hurvich and Tsai's Criterion (AICC)	7634.801
Bozdogan's Criterion (CAIC)	7645.194
Schwarz's Bayesian Criterion (BIC)	7643.194

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.873	84.514	.000
UFEV_h_I_perdiet	2	487.884	46.863	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	668.930152	107.544173	10.603	6.220	.000	431.142555	906.717749
[UFEV_h_I_perdiet=.0]	526.427202	54.585081	487.875	9.644	.000	419.176343	633.678062
[UFEV_h_I_perdiet=1.0]	303.561814	54.923387	487.889	5.527	.000	195.646246	411.477383
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	250280.613800	16024.623260
Constant [subject = subject] Variance	100453.597600	50220.639250

a. Dependent Variable: Water\_Balance\_GAP.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON WATER BALANCE GAP AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED water_balance_gap BY UFEV_h_1_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_1_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC)

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED water_balance_gap BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC)

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.10

**Descriptive Statistics**

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	Water_Balance_GAP	10	1269.073	511.9968	40.3%
		Constant	10	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	9	1018.400	333.7380	32.8%
		Constant	9	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	10	890.128	284.8148	32.0%
		Constant	10	1.000	.0000	0.0%
Total	Water_Balance_GAP	29	1060.607	410.6456	38.7%	
	Constant	29	1.000	.0000	0.0%	
12	.0	Water_Balance_GAP	10	1336.237	603.9353	45.2%
		Constant	10	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	9	1272.601	443.2651	34.8%
		Constant	9	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	10	1155.955	880.8005	76.2%

		Constant	10	1.000	.0000	0.0%
	Total	Water_Balance_GAP	29	1254.322	654.7537	52.2%
15		Constant	29	1.000	.0000	0.0%
	.0	Water_Balance_GAP	10	373.436	448.4304	120.1%
		Constant	10	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	9	243.684	560.1019	229.8%
		Constant	9	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	10	177.476	426.6485	240.4%
		Constant	10	1.000	.0000	0.0%
	Total	Water_Balance_GAP	29	265.596	468.8911	176.5%
		Constant	29	1.000	.0000	0.0%
16	.0	Water_Balance_GAP	10	1412.119	601.5745	42.6%
		Constant	10	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	9	1023.474	277.3347	27.1%
		Constant	9	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	10	869.707	473.7302	54.5%
		Constant	10	1.000	.0000	0.0%
	Total	Water_Balance_GAP	29	1104.467	515.7791	46.7%
			Constant	29	1.000	.0000
51	.0	Water_Balance_GAP	16	1296.606	458.5650	35.4%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	576.692	556.8712	96.6%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	188.871	553.5907	293.1%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	687.390	692.1055	100.7%
			Constant	48	1.000	.0000
52	.0	Water_Balance_GAP	16	1274.245	382.8851	30.0%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	715.554	410.3778	57.4%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	228.599	511.2791	223.7%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	739.466	608.5733	82.3%
			Constant	48	1.000	.0000
53	.0	Water_Balance_GAP	16	1709.855	254.9161	14.9%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	1455.111	246.7455	17.0%



		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	939.058	517.8306	55.1%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	1368.008	480.3660	35.1%
		Constant	48	1.000	.0000	0.0%
54	.0	Water_Balance_GAP	16	1401.897	462.4738	33.0%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	1265.151	633.2338	50.1%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	917.233	363.9199	39.7%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	1194.760	530.1081	44.4%
		Constant	48	1.000	.0000	0.0%
55	.0	Water_Balance_GAP	16	1298.434	285.2208	22.0%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	1130.388	467.9598	41.4%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	655.982	601.9477	91.8%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	1028.268	535.7916	52.1%
		Constant	48	1.000	.0000	0.0%
56	.0	Water_Balance_GAP	16	1617.743	208.4182	12.9%
		Constant	16	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	16	1219.816	321.0632	26.3%
		Constant	16	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	16	775.785	453.6956	58.5%
		Constant	16	1.000	.0000	0.0%
	Total	Water_Balance_GAP	48	1204.448	482.9477	40.1%
		Constant	48	1.000	.0000	0.0%
Total	.0	Water_Balance_GAP	136	1334.479	510.4011	38.2%
		Constant	136	1.000	.0000	0.0%
	1.0	Water_Balance_GAP	132	1013.840	552.3715	54.5%
		Constant	132	1.000	.0000	0.0%
	2.0	Water_Balance_GAP	136	663.390	603.8414	91.0%
		Constant	136	1.000	.0000	0.0%
	Total	Water_Balance_GAP	404	1003.805	620.1882	61.8%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: Water\_Balance\_GAP.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6120.794
Akaike's Information Criterion (AIC)	6124.794
Hurvich and Tsai's Criterion (AICC)	6124.824
Bozdogan's Criterion (CAIC)	6134.782
Schwarz's Bayesian Criterion (BIC)	6132.782

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: Water\_Balance\_GAP.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.895	89.615	.000
UFEV_h_l_perdiet	2	391.909	68.138	.000

a. Dependent Variable: Water\_Balance\_GAP.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	651.882092	109.841464	10.753	5.935	.000	409.443608	894.320575
[UFEV_h_l_perdiet=.0]	671.088529	57.500101	391.897	11.671	.000	558.041277	784.135782
[UFEV_h_l_perdiet=1.0]	348.124349	57.944176	391.914	6.008	.000	234.204047	462.044652
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: Water\_Balance\_GAP.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	224825.792200	16061.090940
Constant [subject = subject] Variance	103833.247800	52022.718880

a. Dependent Variable: Water\_Balance\_GAP.

\*ON BODY WEIGHT

\* Mixed Linear Models

EFFECT OF UFEV TERTILE ON BODY WEIGHT AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED Bodyweight BY UFEV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UFEV\_h\_l\_perdiet | SSTYPE(3)

```

/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED Bodyweight BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	bodyweight	35	70.931	1.4628	2.1%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	70.921	1.1047	1.6%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	70.797	1.3450	1.9%
		Constant	35	1.000	.0000	0.0%
Total	bodyweight	104	70.883	1.3032	1.8%	
	Constant	104	1.000	.0000	0.0%	
12	.0	bodyweight	35	85.751	2.7178	3.2%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	86.165	2.3473	2.7%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	85.377	2.6206	3.1%

		Constant	35	1.000	.0000	0.0%
	Total	bodyweight	104	85.761	2.5641	3.0%
		Constant	104	1.000	.0000	0.0%
15	.0	bodyweight	35	66.794	.5017	0.8%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	34	66.603	.4123	0.6%
		Constant	34	1.000	.0000	0.0%
	2.0	bodyweight	35	66.426	.5147	0.8%
		Constant	35	1.000	.0000	0.0%
	Total	bodyweight	104	66.608	.4981	0.7%
		Constant	104	1.000	.0000	0.0%
16	.0	bodyweight	35	85.283	1.4486	1.7%
		Constant	35	1.000	.0000	0.0%
	1.0	bodyweight	33	84.852	1.1023	1.3%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	35	84.686	1.1825	1.4%
		Constant	35	1.000	.0000	0.0%
	Total	bodyweight	103	84.942	1.2696	1.5%
		Constant	103	1.000	.0000	0.0%
51	.0	bodyweight	67	84.048	.9159	1.1%
		Constant	67	1.000	.0000	0.0%
	1.0	bodyweight	68	84.166	.7158	0.9%
		Constant	68	1.000	.0000	0.0%
	2.0	bodyweight	68	84.084	.8662	1.0%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	203	84.100	.8339	1.0%
		Constant	203	1.000	.0000	0.0%
52	.0	bodyweight	65	95.709	2.7111	2.8%
		Constant	65	1.000	.0000	0.0%
	1.0	bodyweight	68	95.326	2.8463	3.0%
		Constant	68	1.000	.0000	0.0%
	2.0	bodyweight	65	95.440	3.0118	3.2%
		Constant	65	1.000	.0000	0.0%
	Total	bodyweight	198	95.489	2.8489	3.0%
		Constant	198	1.000	.0000	0.0%
53	.0	bodyweight	68	79.891	.9773	1.2%
		Constant	68	1.000	.0000	0.0%
	1.0	bodyweight	69	79.951	1.0978	1.4%

		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	79.738	1.1675	1.5%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	79.860	1.0822	1.4%
		Constant	205	1.000	.0000	0.0%
54	.0	bodyweight	68	84.113	1.6679	2.0%
		Constant	68	1.000	.0000	0.0%
	1.0	bodyweight	69	84.288	1.8334	2.2%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	67	85.239	1.7992	2.1%
		Constant	67	1.000	.0000	0.0%
	Total	bodyweight	204	84.542	1.8276	2.2%
		Constant	204	1.000	.0000	0.0%
55	.0	bodyweight	68	81.300	1.0117	1.2%
		Constant	68	1.000	.0000	0.0%
	1.0	bodyweight	69	81.865	1.0073	1.2%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	68	82.042	.9074	1.1%
		Constant	68	1.000	.0000	0.0%
	Total	bodyweight	205	81.736	1.0223	1.3%
		Constant	205	1.000	.0000	0.0%
56	.0	bodyweight	66	71.948	1.7224	2.4%
		Constant	66	1.000	.0000	0.0%
	1.0	bodyweight	69	72.229	1.8148	2.5%
		Constant	69	1.000	.0000	0.0%
	2.0	bodyweight	66	72.171	1.9110	2.6%
		Constant	66	1.000	.0000	0.0%
	Total	bodyweight	201	72.118	1.8126	2.5%
		Constant	201	1.000	.0000	0.0%
Total	.0	bodyweight	542	81.344	7.9582	9.8%
		Constant	542	1.000	.0000	0.0%
	1.0	bodyweight	547	81.492	7.8951	9.7%
		Constant	547	1.000	.0000	0.0%
	2.0	bodyweight	542	81.461	7.9763	9.8%
		Constant	542	1.000	.0000	0.0%
	Total	bodyweight	1631	81.432	7.9385	9.7%
		Constant	1631	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6401.060
Akaike's Information Criterion (AIC)	6405.060
Hurvich and Tsai's Criterion (AICC)	6405.067
Bozdogan's Criterion (CAIC)	6417.850
Schwarz's Bayesian Criterion (BIC)	6415.850

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.000	887.407	.000
UFEV_h_I_perdiet	2	1619.000	.723	.485

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	80.653297	2.706439	9.008	29.801	.000	74.531749	86.774845
[UFEV_h_I_perdiet=.0]	-.117884	.101998	1619.000	-1.156	.248	-.317947	.082179
[UFEV_h_I_perdiet=1.0]	-.029712	.101773	1619.000	-.292	.770	-.229332	.169908
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2.819375	.099093
Constant [subject = subject]	Variance	73.194280
		34.513902

a. Dependent Variable: bodyweight.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON BODY WEIGHT AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED bodyweight BY UFEV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED bodyweight BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	bodyweight	13	69.892	1.9670	2.8%
		Constant	13	1.000	.0000	0.0%
	1.0	bodyweight	14	70.000	1.0742	1.5%
		Constant	14	1.000	.0000	0.0%
	2.0	bodyweight	13	69.669	1.5391	2.2%
		Constant	13	1.000	.0000	0.0%
Total	bodyweight	40	69.858	1.5243	2.2%	
	Constant	40	1.000	.0000	0.0%	
12	.0	bodyweight	13	88.692	1.0859	1.2%
		Constant	13	1.000	.0000	0.0%
	1.0	bodyweight	14	88.371	1.2566	1.4%
		Constant	14	1.000	.0000	0.0%
	2.0	bodyweight	13	87.362	2.8374	3.2%

		Constant	13	1.000	.0000	0.0%
	Total	bodyweight	40	88.148	1.9207	2.2%
		Constant	40	1.000	.0000	0.0%
15	.0	bodyweight	13	66.685	.5742	0.9%
		Constant	13	1.000	.0000	0.0%
	1.0	bodyweight	14	66.379	.2860	0.4%
		Constant	14	1.000	.0000	0.0%
	2.0	bodyweight	13	66.000	.5033	0.8%
		Constant	13	1.000	.0000	0.0%
	Total	bodyweight	40	66.355	.5339	0.8%
		Constant	40	1.000	.0000	0.0%
16	.0	bodyweight	13	86.669	1.0144	1.2%
		Constant	13	1.000	.0000	0.0%
	1.0	bodyweight	14	85.664	.9245	1.1%
		Constant	14	1.000	.0000	0.0%
	2.0	bodyweight	13	85.900	.6055	0.7%
		Constant	13	1.000	.0000	0.0%
	Total	bodyweight	40	86.068	.9501	1.1%
		Constant	40	1.000	.0000	0.0%
51	.0	bodyweight	32	83.909	1.1882	1.4%
		Constant	32	1.000	.0000	0.0%
	1.0	bodyweight	33	84.191	.8251	1.0%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	83.916	1.0559	1.3%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	84.007	1.0298	1.2%
		Constant	97	1.000	.0000	0.0%
52	.0	bodyweight	30	97.130	3.0691	3.2%
		Constant	30	1.000	.0000	0.0%
	1.0	bodyweight	32	96.331	3.3659	3.5%
		Constant	32	1.000	.0000	0.0%
	2.0	bodyweight	32	96.219	3.5777	3.7%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	94	96.548	3.3381	3.5%
		Constant	94	1.000	.0000	0.0%
53	.0	bodyweight	32	79.569	1.2137	1.5%
		Constant	32	1.000	.0000	0.0%
	1.0	bodyweight	33	79.542	1.3000	1.6%

		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	79.088	1.2106	1.5%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	79.401	1.2495	1.6%
		Constant	97	1.000	.0000	0.0%
54	.0	bodyweight	32	84.153	2.0629	2.5%
		Constant	32	1.000	.0000	0.0%
	1.0	bodyweight	33	84.555	2.2331	2.6%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	86.406	1.4348	1.7%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	85.033	2.1602	2.5%
		Constant	97	1.000	.0000	0.0%
55	.0	bodyweight	32	81.209	1.1674	1.4%
		Constant	32	1.000	.0000	0.0%
	1.0	bodyweight	33	82.073	1.1735	1.4%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	82.255	.9115	1.1%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	81.848	1.1730	1.4%
		Constant	97	1.000	.0000	0.0%
56	.0	bodyweight	32	71.994	2.2428	3.1%
		Constant	32	1.000	.0000	0.0%
	1.0	bodyweight	33	72.691	2.1455	3.0%
		Constant	33	1.000	.0000	0.0%
	2.0	bodyweight	32	72.225	2.1801	3.0%
		Constant	32	1.000	.0000	0.0%
	Total	bodyweight	97	72.307	2.1861	3.0%
		Constant	97	1.000	.0000	0.0%
Total	.0	bodyweight	242	81.801	8.4299	10.3%
		Constant	242	1.000	.0000	0.0%
	1.0	bodyweight	253	81.933	8.2179	10.0%
		Constant	253	1.000	.0000	0.0%
	2.0	bodyweight	244	82.047	8.4281	10.3%
		Constant	244	1.000	.0000	0.0%
	Total	bodyweight	739	81.928	8.3466	10.2%
		Constant	739	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3110.959
Akaike's Information Criterion (AIC)	3114.959
Hurvich and Tsai's Criterion (AICC)	3114.975
Bozdogan's Criterion (CAIC)	3126.161
Schwarz's Bayesian Criterion (BIC)	3124.161

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.998	775.027	.000
UFEV_h_I_perdiet	2	726.998	.323	.724

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	81.004607	2.909719	9.019	27.839	.000	74.424517	87.584696
[UFEV_h_I_perdiet=.0]	-.126352	.171752	726.998	-.736	.462	-.463541	.210838
[UFEV_h_I_perdiet=1.0]	-.015453	.169868	726.998	-.091	.928	-.348943	.318037
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3.583772	.187970
Constant [subject = subject]	Variance	84.507801
		39.868452

a. Dependent Variable: bodyweight.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON BODY WEIGHT AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED bodyweight BY UFEV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED bodyweight BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	bodyweight	12	71.342	.4542	0.6%
		Constant	12	1.000	.0000	0.0%
	1.0	bodyweight	11	71.200	.4171	0.6%
		Constant	11	1.000	.0000	0.0%
	2.0	bodyweight	12	71.058	.4252	0.6%
		Constant	12	1.000	.0000	0.0%
Total	bodyweight	35	71.200	.4366	0.6%	
	Constant	35	1.000	.0000	0.0%	
12	.0	bodyweight	12	85.267	1.1163	1.3%
		Constant	12	1.000	.0000	0.0%
	1.0	bodyweight	11	85.764	.6932	0.8%
		Constant	11	1.000	.0000	0.0%
	2.0	bodyweight	12	85.450	.8713	1.0%

		Constant	12	1.000	.0000	0.0%
	Total	bodyweight	35	85.486	.9124	1.1%
		Constant	35	1.000	.0000	0.0%
15	.0	bodyweight	12	66.783	.4707	0.7%
		Constant	12	1.000	.0000	0.0%
	1.0	bodyweight	11	66.727	.4735	0.7%
		Constant	11	1.000	.0000	0.0%
	2.0	bodyweight	12	66.592	.3088	0.5%
		Constant	12	1.000	.0000	0.0%
	Total	bodyweight	35	66.700	.4187	0.6%
		Constant	35	1.000	.0000	0.0%
16	.0	bodyweight	12	85.150	.6488	0.8%
		Constant	12	1.000	.0000	0.0%
	1.0	bodyweight	11	84.809	.3833	0.5%
		Constant	11	1.000	.0000	0.0%
	2.0	bodyweight	12	84.475	.6210	0.7%
		Constant	12	1.000	.0000	0.0%
	Total	bodyweight	35	84.811	.6201	0.7%
		Constant	35	1.000	.0000	0.0%
51	.0	bodyweight	20	84.540	.4535	0.5%
		Constant	20	1.000	.0000	0.0%
	1.0	bodyweight	20	84.500	.5610	0.7%
		Constant	20	1.000	.0000	0.0%
	2.0	bodyweight	20	84.665	.5284	0.6%
		Constant	20	1.000	.0000	0.0%
	Total	bodyweight	60	84.568	.5124	0.6%
		Constant	60	1.000	.0000	0.0%
52	.0	bodyweight	19	95.584	1.3061	1.4%
		Constant	19	1.000	.0000	0.0%
	1.0	bodyweight	20	95.805	1.4558	1.5%
		Constant	20	1.000	.0000	0.0%
	2.0	bodyweight	19	96.174	1.5336	1.6%
		Constant	19	1.000	.0000	0.0%
	Total	bodyweight	58	95.853	1.4308	1.5%
		Constant	58	1.000	.0000	0.0%
53	.0	bodyweight	20	80.620	.3955	0.5%
		Constant	20	1.000	.0000	0.0%
	1.0	bodyweight	20	80.870	.4318	0.5%

		Constant	20	1.000	.0000	0.0%
	2.0	bodyweight	20	80.870	.5686	0.7%
		Constant	20	1.000	.0000	0.0%
	Total	bodyweight	60	80.787	.4782	0.6%
		Constant	60	1.000	.0000	0.0%
54	.0	bodyweight	20	84.945	.7149	0.8%
		Constant	20	1.000	.0000	0.0%
	1.0	bodyweight	20	85.055	.8470	1.0%
		Constant	20	1.000	.0000	0.0%
	2.0	bodyweight	20	85.165	.8349	1.0%
		Constant	20	1.000	.0000	0.0%
	Total	bodyweight	60	85.055	.7926	0.9%
		Constant	60	1.000	.0000	0.0%
55	.0	bodyweight	20	82.015	.4545	0.6%
		Constant	20	1.000	.0000	0.0%
	1.0	bodyweight	20	82.220	.5064	0.6%
		Constant	20	1.000	.0000	0.0%
	2.0	bodyweight	20	82.495	.5336	0.6%
		Constant	20	1.000	.0000	0.0%
	Total	bodyweight	60	82.243	.5293	0.6%
		Constant	60	1.000	.0000	0.0%
56	.0	bodyweight	19	72.711	.4677	0.6%
		Constant	19	1.000	.0000	0.0%
	1.0	bodyweight	20	72.900	.5487	0.8%
		Constant	20	1.000	.0000	0.0%
	2.0	bodyweight	19	73.505	.5542	0.8%
		Constant	19	1.000	.0000	0.0%
	Total	bodyweight	58	73.036	.6178	0.8%
		Constant	58	1.000	.0000	0.0%
Total	.0	bodyweight	166	81.581	7.7554	9.5%
		Constant	166	1.000	.0000	0.0%
	1.0	bodyweight	164	81.832	7.8236	9.6%
		Constant	164	1.000	.0000	0.0%
	2.0	bodyweight	166	81.799	7.8431	9.6%
		Constant	166	1.000	.0000	0.0%
	Total	bodyweight	496	81.737	7.7924	9.5%
		Constant	496	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	1206.815
Akaike's Information Criterion (AIC)	1210.815
Hurvich and Tsai's Criterion (AICC)	1210.840
Bozdogan's Criterion (CAIC)	1221.216
Schwarz's Bayesian Criterion (BIC)	1219.216

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.000	907.901	.000
UFEV_h_I_perdiet	2	484.000	3.529	.030

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	81.084762	2.687783	9.005	30.168	.000	75.005127	87.164397
[UFEV_h_I_perdiet=.0]	-.218072	.082116	484.000	-2.656	.008	-.379420	-.056724
[UFEV_h_I_perdiet=1.0]	-.113825	.082384	484.000	-1.382	.168	-.275699	.048049
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	.559673	.035977
Constant [subject = subject]	Variance	72.207359
		34.044955

a. Dependent Variable: bodyweight.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON BODY WEIGHT AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED bodyweight BY UFEV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UFEV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED bodyweight BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	bodyweight	10	71.790	.2644	0.4%
		Constant	10	1.000	.0000	0.0%
	1.0	bodyweight	9	72.011	.1167	0.2%
		Constant	9	1.000	.0000	0.0%
	2.0	bodyweight	10	71.950	.2224	0.3%
		Constant	10	1.000	.0000	0.0%
Total	bodyweight	29	71.914	.2263	0.3%	
	Constant	29	1.000	.0000	0.0%	
12	.0	bodyweight	10	82.510	.5744	0.7%
		Constant	10	1.000	.0000	0.0%
	1.0	bodyweight	9	83.222	1.0378	1.2%
		Constant	9	1.000	.0000	0.0%
	2.0	bodyweight	10	82.710	.8266	1.0%
		Constant	10	1.000	.0000	0.0%

		Constant	10	1.000	.0000	0.0%
	Total	bodyweight	29	82.800	.8506	1.0%
		Constant	29	1.000	.0000	0.0%
15	.0	bodyweight	10	66.950	.4428	0.7%
		Constant	10	1.000	.0000	0.0%
	1.0	bodyweight	9	66.800	.3674	0.6%
		Constant	9	1.000	.0000	0.0%
	2.0	bodyweight	10	66.780	.3293	0.5%
		Constant	10	1.000	.0000	0.0%
	Total	bodyweight	29	66.845	.3776	0.6%
		Constant	29	1.000	.0000	0.0%
16	.0	bodyweight	10	83.640	.4926	0.6%
		Constant	10	1.000	.0000	0.0%
	1.0	bodyweight	8	83.488	.5540	0.7%
		Constant	8	1.000	.0000	0.0%
	2.0	bodyweight	10	83.360	.4248	0.5%
		Constant	10	1.000	.0000	0.0%
	Total	bodyweight	28	83.496	.4849	0.6%
		Constant	28	1.000	.0000	0.0%
51	.0	bodyweight	15	83.687	.1407	0.2%
		Constant	15	1.000	.0000	0.0%
	1.0	bodyweight	15	83.667	.2024	0.2%
		Constant	15	1.000	.0000	0.0%
	2.0	bodyweight	16	83.694	.1436	0.2%
		Constant	16	1.000	.0000	0.0%
	Total	bodyweight	46	83.683	.1610	0.2%
		Constant	46	1.000	.0000	0.0%
52	.0	bodyweight	16	93.194	.5434	0.6%
		Constant	16	1.000	.0000	0.0%
	1.0	bodyweight	16	92.719	.6134	0.7%
		Constant	16	1.000	.0000	0.0%
	2.0	bodyweight	14	92.664	.5486	0.6%
		Constant	14	1.000	.0000	0.0%
	Total	bodyweight	46	92.867	.6077	0.7%
		Constant	46	1.000	.0000	0.0%
53	.0	bodyweight	16	79.625	.1342	0.2%
		Constant	16	1.000	.0000	0.0%
	1.0	bodyweight	16	79.644	.1672	0.2%



		Constant	16	1.000	.0000	0.0%
	2.0	bodyweight	16	79.625	.1571	0.2%
		Constant	16	1.000	.0000	0.0%
	Total	bodyweight	48	79.631	.1504	0.2%
		Constant	48	1.000	.0000	0.0%
54	.0	bodyweight	16	82.994	.8489	1.0%
		Constant	16	1.000	.0000	0.0%
	1.0	bodyweight	16	82.781	.5730	0.7%
		Constant	16	1.000	.0000	0.0%
	2.0	bodyweight	15	82.847	.7080	0.9%
		Constant	15	1.000	.0000	0.0%
	Total	bodyweight	47	82.874	.7091	0.9%
		Constant	47	1.000	.0000	0.0%
55	.0	bodyweight	16	80.588	.5032	0.6%
		Constant	16	1.000	.0000	0.0%
	1.0	bodyweight	16	80.994	.5144	0.6%
		Constant	16	1.000	.0000	0.0%
	2.0	bodyweight	16	81.050	.4243	0.5%
		Constant	16	1.000	.0000	0.0%
	Total	bodyweight	48	80.877	.5158	0.6%
		Constant	48	1.000	.0000	0.0%
56	.0	bodyweight	15	70.887	.5939	0.8%
		Constant	15	1.000	.0000	0.0%
	1.0	bodyweight	16	70.438	.4856	0.7%
		Constant	16	1.000	.0000	0.0%
	2.0	bodyweight	15	70.367	.3539	0.5%
		Constant	15	1.000	.0000	0.0%
	Total	bodyweight	46	70.561	.5298	0.8%
		Constant	46	1.000	.0000	0.0%
Total	.0	bodyweight	134	80.223	7.2465	9.0%
		Constant	134	1.000	.0000	0.0%
	1.0	bodyweight	130	80.203	7.2355	9.0%
		Constant	130	1.000	.0000	0.0%
	2.0	bodyweight	132	79.950	7.1002	8.9%
		Constant	132	1.000	.0000	0.0%
	Total	bodyweight	396	80.126	7.1773	9.0%
		Constant	396	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: bodyweight.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	677.614
Akaike's Information Criterion (AIC)	681.614
Hurvich and Tsai's Criterion (AICC)	681.645
Bozdogan's Criterion (CAIC)	691.562
Schwarz's Bayesian Criterion (BIC)	689.562

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: bodyweight.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.000	1066.937	.000
UFEV_h_l_perdiet	2	384.000	.982	.375

a. Dependent Variable: bodyweight.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	79.510403	2.435814	9.004	32.642	.000	74.000567	85.020239
[UFEV_h_l_perdiet=.0]	.087092	.062169	384.000	1.401	.162	-.035142	.209326
[UFEV_h_l_perdiet=1.0]	.046033	.062674	384.000	.734	.463	-.077194	.169261
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: bodyweight.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	.256889	.018539
Constant [subject = subject]	Variance	59.312143
		27.963359

a. Dependent Variable: bodyweight.

\*ON URINE OSMOLALITY

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON URINE URINE OSMOLALITY AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED UOsmo BY UFEV\_h\_l\_perdiet WITH Constant

```

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UOsmo BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UOsmo	35	523.971	148.3901	28.3%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	456.088	74.5054	16.3%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	427.743	66.1502	15.5%
		Constant	35	1.000	.0000	0.0%
Total	UOsmo	104	469.394	110.2346	23.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	UOsmo	35	617.086	163.8115	26.5%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	532.912	90.7295	17.0%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	555.943	122.8560	22.1%

		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	568.990	133.2335	23.4%
		Constant	104	1.000	.0000	0.0%
15	.0	UOsmo	35	440.200	83.8110	19.0%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	428.118	71.3832	16.7%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	378.886	73.7614	19.5%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	415.615	80.3905	19.3%
		Constant	104	1.000	.0000	0.0%
16	.0	UOsmo	35	628.629	161.6241	25.7%
		Constant	35	1.000	.0000	0.0%
	1.0	UOsmo	34	533.088	124.3802	23.3%
		Constant	34	1.000	.0000	0.0%
	2.0	UOsmo	35	465.257	93.5585	20.1%
		Constant	35	1.000	.0000	0.0%
	Total	UOsmo	104	542.413	145.0733	26.7%
		Constant	104	1.000	.0000	0.0%
51	.0	UOsmo	68	441.059	110.2270	25.0%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	374.725	87.6299	23.4%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	332.838	69.7284	20.9%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	382.834	100.6600	26.3%
		Constant	205	1.000	.0000	0.0%
52	.0	UOsmo	68	415.838	119.7832	28.8%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	357.725	93.2990	26.1%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	304.022	71.1493	23.4%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	359.188	106.5899	29.7%
		Constant	205	1.000	.0000	0.0%
53	.0	UOsmo	68	770.000	130.4722	16.9%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	597.159	117.8968	19.7%

		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	523.912	102.7361	19.6%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	630.195	156.0136	24.8%
		Constant	205	1.000	.0000	0.0%
54	.0	UOsmo	68	432.794	111.9730	25.9%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	379.971	81.5125	21.5%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	354.279	79.9320	22.6%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	388.971	97.4666	25.1%
		Constant	205	1.000	.0000	0.0%
55	.0	UOsmo	68	846.456	138.1012	16.3%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	723.283	145.4276	20.1%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	581.897	123.7238	21.3%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	717.241	173.2769	24.2%
		Constant	205	1.000	.0000	0.0%
56	.0	UOsmo	68	471.162	84.5364	17.9%
		Constant	68	1.000	.0000	0.0%
	1.0	UOsmo	69	400.957	69.8775	17.4%
		Constant	69	1.000	.0000	0.0%
	2.0	UOsmo	68	366.088	62.7287	17.1%
		Constant	68	1.000	.0000	0.0%
	Total	UOsmo	205	412.678	84.7183	20.5%
		Constant	205	1.000	.0000	0.0%
Total	.0	UOsmo	548	560.224	199.2588	35.6%
		Constant	548	1.000	.0000	0.0%
	1.0	UOsmo	550	476.074	157.7223	33.1%
		Constant	550	1.000	.0000	0.0%
	2.0	UOsmo	548	422.373	131.4372	31.1%
		Constant	548	1.000	.0000	0.0%
	Total	UOsmo	1646	486.211	174.5454	35.9%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20151.882
Akaike's Information Criterion (AIC)	20155.882
Hurvich and Tsai's Criterion (AICC)	20155.889
Bozdogan's Criterion (CAIC)	20168.690
Schwarz's Bayesian Criterion (BIC)	20166.690

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.020	163.746	.000
UFEV_h_I_perdiet	2	1634.021	221.638	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	424.829881	38.382079	9.200	11.068	.000	338.290481	511.369280
[UFEV_h_I_perdiet=.0]	137.851277	6.599655	1634.020	20.888	.000	124.906603	150.795952
[UFEV_h_I_perdiet=1.0]	53.839878	6.593847	1634.021	8.165	.000	40.906594	66.773161
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	11934.192800	417.522016
Constant [subject = subject] Variance	14506.093470	6868.724436

a. Dependent Variable: UOsmo.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON URINE OSMOLALITY AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UOsmo BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UOsmo BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UOsmo	13	546.538	151.6578	27.7%
		Constant	13	1.000	.0000	0.0%
	1.0	UOsmo	14	480.429	36.9755	7.7%
		Constant	14	1.000	.0000	0.0%
	2.0	UOsmo	13	434.923	79.1133	18.2%
		Constant	13	1.000	.0000	0.0%
Total	UOsmo	40	487.125	107.5156	22.1%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UOsmo	13	622.846	174.8799	28.1%
		Constant	13	1.000	.0000	0.0%
	1.0	UOsmo	14	517.286	113.9895	22.0%
		Constant	14	1.000	.0000	0.0%
	2.0	UOsmo	13	564.923	152.7440	27.0%

		Constant	13	1.000	.0000	0.0%
	Total	UOsmo	40	567.075	151.1565	26.7%
		Constant	40	1.000	.0000	0.0%
15	.0	UOsmo	13	472.077	70.9583	15.0%
		Constant	13	1.000	.0000	0.0%
	1.0	UOsmo	14	431.571	66.0591	15.3%
		Constant	14	1.000	.0000	0.0%
	2.0	UOsmo	13	407.923	52.0007	12.7%
		Constant	13	1.000	.0000	0.0%
	Total	UOsmo	40	437.050	67.3677	15.4%
		Constant	40	1.000	.0000	0.0%
16	.0	UOsmo	13	674.000	144.2093	21.4%
		Constant	13	1.000	.0000	0.0%
	1.0	UOsmo	14	577.000	63.4823	11.0%
		Constant	14	1.000	.0000	0.0%
	2.0	UOsmo	13	474.154	61.7884	13.0%
		Constant	13	1.000	.0000	0.0%
	Total	UOsmo	40	575.100	124.8011	21.7%
		Constant	40	1.000	.0000	0.0%
51	.0	UOsmo	32	469.469	124.1118	26.4%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsmo	33	399.152	82.7595	20.7%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	354.781	66.2117	18.7%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	407.711	104.4184	25.6%
		Constant	97	1.000	.0000	0.0%
52	.0	UOsmo	32	465.469	116.0620	24.9%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsmo	33	391.485	71.8423	18.4%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	342.672	59.2411	17.3%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	399.789	98.7554	24.7%
		Constant	97	1.000	.0000	0.0%
53	.0	UOsmo	32	786.656	139.1686	17.7%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsmo	33	587.091	126.3078	21.5%

		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	548.594	111.5411	20.3%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	640.227	162.8074	25.4%
		Constant	97	1.000	.0000	0.0%
54	.0	UOsmo	32	460.531	92.2070	20.0%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsmo	33	416.303	71.2572	17.1%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	401.094	76.2315	19.0%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	425.876	83.3733	19.6%
		Constant	97	1.000	.0000	0.0%
55	.0	UOsmo	32	855.125	132.4432	15.5%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsmo	33	742.742	141.0645	19.0%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	633.563	112.6129	17.8%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	743.799	156.7634	21.1%
		Constant	97	1.000	.0000	0.0%
56	.0	UOsmo	32	477.500	68.0844	14.3%
		Constant	32	1.000	.0000	0.0%
	1.0	UOsmo	33	402.939	45.2355	11.2%
		Constant	33	1.000	.0000	0.0%
	2.0	UOsmo	32	370.500	57.1365	15.4%
		Constant	32	1.000	.0000	0.0%
	Total	UOsmo	97	416.835	72.4010	17.4%
		Constant	97	1.000	.0000	0.0%
Total	.0	UOsmo	244	584.316	193.4327	33.1%
		Constant	244	1.000	.0000	0.0%
	1.0	UOsmo	254	492.514	149.5755	30.4%
		Constant	254	1.000	.0000	0.0%
	2.0	UOsmo	244	447.965	132.5484	29.6%
		Constant	244	1.000	.0000	0.0%
	Total	UOsmo	742	508.053	169.8740	33.4%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	9011.305
Akaike's Information Criterion (AIC)	9015.305
Hurvich and Tsai's Criterion (AICC)	9015.322
Bozdogan's Criterion (CAIC)	9026.516
Schwarz's Bayesian Criterion (BIC)	9024.516

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.060	188.744	.000
UFEV_h_I_perdiet	2	730.060	110.231	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	450.011338	37.538405	9.452	11.988	.000	365.707992	534.314683
[UFEV_h_I_perdiet=.0]	136.350410	9.371231	730.060	14.550	.000	117.952634	154.748186
[UFEV_h_I_perdiet=1.0]	44.468058	9.278781	730.061	4.792	.000	26.251780	62.684335
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	10714.036370	560.775384
Constant [subject = subject] Variance	13622.841710	6481.852037

a. Dependent Variable: UOsmo.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON URINE OSMOLALITY AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UOsmo BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:34:49	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED UOsmo BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UOsmo	12	511.333	125.9707	24.6%
		Constant	12	1.000	.0000	0.0%
	1.0	UOsmo	11	468.273	106.8982	22.8%
		Constant	11	1.000	.0000	0.0%
	2.0	UOsmo	12	432.417	69.6243	16.1%
		Constant	12	1.000	.0000	0.0%
Total	UOsmo	35	470.743	105.6652	22.4%	
	Constant	35	1.000	.0000	0.0%	
12	.0	UOsmo	12	610.167	197.7174	32.4%
		Constant	12	1.000	.0000	0.0%
	1.0	UOsmo	11	528.182	67.5838	12.8%
		Constant	11	1.000	.0000	0.0%
	2.0	UOsmo	12	490.417	84.2285	17.2%

		Constant	12	1.000	.0000	0.0%
	Total	UOsmo	35	543.343	137.5688	25.3%
		Constant	35	1.000	.0000	0.0%
15	.0	UOsmo	12	429.500	54.8941	12.8%
		Constant	12	1.000	.0000	0.0%
	1.0	UOsmo	11	468.182	62.5249	13.4%
		Constant	11	1.000	.0000	0.0%
	2.0	UOsmo	12	392.250	63.3334	16.1%
		Constant	12	1.000	.0000	0.0%
	Total	UOsmo	35	428.886	66.3013	15.5%
		Constant	35	1.000	.0000	0.0%
16	.0	UOsmo	12	701.083	152.7734	21.8%
		Constant	12	1.000	.0000	0.0%
	1.0	UOsmo	11	597.182	133.3700	22.3%
		Constant	11	1.000	.0000	0.0%
	2.0	UOsmo	12	524.417	105.1609	20.1%
		Constant	12	1.000	.0000	0.0%
	Total	UOsmo	35	607.857	148.0614	24.4%
		Constant	35	1.000	.0000	0.0%
51	.0	UOsmo	20	436.300	65.5632	15.0%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsmo	20	401.100	81.8689	20.4%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	363.000	39.4021	10.9%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	400.133	70.3833	17.6%
		Constant	60	1.000	.0000	0.0%
52	.0	UOsmo	20	398.450	118.6993	29.8%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsmo	20	383.650	97.8077	25.5%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	300.100	55.1905	18.4%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	360.733	102.4958	28.4%
		Constant	60	1.000	.0000	0.0%
53	.0	UOsmo	20	773.750	110.9110	14.3%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsmo	20	614.250	128.1113	20.9%

		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	518.850	65.4115	12.6%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	635.617	147.8829	23.3%
		Constant	60	1.000	.0000	0.0%
54	.0	UOsmo	20	431.700	115.0602	26.7%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsmo	20	380.550	76.5537	20.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	341.950	58.7828	17.2%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	384.733	92.9384	24.2%
		Constant	60	1.000	.0000	0.0%
55	.0	UOsmo	20	869.600	144.5390	16.6%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsmo	20	731.050	146.6135	20.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	578.650	131.9754	22.8%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	726.433	183.3513	25.2%
		Constant	60	1.000	.0000	0.0%
56	.0	UOsmo	20	511.000	90.5178	17.7%
		Constant	20	1.000	.0000	0.0%
	1.0	UOsmo	20	437.200	87.7608	20.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UOsmo	20	395.150	46.4376	11.8%
		Constant	20	1.000	.0000	0.0%
	Total	UOsmo	60	447.783	90.2500	20.2%
		Constant	60	1.000	.0000	0.0%
Total	.0	UOsmo	168	568.101	201.9157	35.5%
		Constant	168	1.000	.0000	0.0%
	1.0	UOsmo	164	497.780	155.8146	31.3%
		Constant	164	1.000	.0000	0.0%
	2.0	UOsmo	168	428.738	116.7798	27.2%
		Constant	168	1.000	.0000	0.0%
	Total	UOsmo	500	498.210	171.4893	34.4%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6096.842
Akaike's Information Criterion (AIC)	6100.842
Hurvich and Tsai's Criterion (AICC)	6100.866
Bozdogan's Criterion (CAIC)	6111.259
Schwarz's Bayesian Criterion (BIC)	6109.259

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.041	166.957	.000
UFEV_h_I_perdiet	2	488.044	72.879	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	430.997812	39.306046	9.580	10.965	.000	342.894607	519.101017
[UFEV_h_I_perdiet=.0]	139.363095	11.543408	488.041	12.073	.000	116.682183	162.044007
[UFEV_h_I_perdiet=1.0]	69.386862	11.615007	488.045	5.974	.000	46.565270	92.208454
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	11193.023380	716.529878
Constant [subject = subject] Variance	14769.150450	7059.114988

a. Dependent Variable: UOsmo.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON URINE OSMOLALITY AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UOsmo BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UOsmo BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UOsmo	10	509.800	178.7505	35.1%
		Constant	10	1.000	.0000	0.0%
	1.0	UOsmo	9	403.333	44.9500	11.1%
		Constant	9	1.000	.0000	0.0%
	2.0	UOsmo	10	412.800	43.6954	10.6%
		Constant	10	1.000	.0000	0.0%
Total	UOsmo	29	443.310	117.8398	26.6%	
	Constant	29	1.000	.0000	0.0%	
12	.0	UOsmo	10	617.900	112.7144	18.2%
		Constant	10	1.000	.0000	0.0%
	1.0	UOsmo	9	563.000	75.2047	13.4%
		Constant	9	1.000	.0000	0.0%
	2.0	UOsmo	10	622.900	80.1172	12.9%

		Constant	10	1.000	.0000	0.0%
	Total	UOsmo	29	602.586	92.1821	15.3%
		Constant	29	1.000	.0000	0.0%
15	.0	UOsmo	10	411.600	116.6640	28.3%
		Constant	10	1.000	.0000	0.0%
	1.0	UOsmo	9	373.778	59.0884	15.8%
		Constant	9	1.000	.0000	0.0%
	2.0	UOsmo	10	325.100	85.8816	26.4%
		Constant	10	1.000	.0000	0.0%
	Total	UOsmo	29	370.034	95.3192	25.8%
		Constant	29	1.000	.0000	0.0%
16	.0	UOsmo	10	482.700	93.7835	19.4%
		Constant	10	1.000	.0000	0.0%
	1.0	UOsmo	9	386.444	42.6266	11.0%
		Constant	9	1.000	.0000	0.0%
	2.0	UOsmo	10	382.700	45.9034	12.0%
		Constant	10	1.000	.0000	0.0%
	Total	UOsmo	29	418.345	79.2687	18.9%
		Constant	29	1.000	.0000	0.0%
51	.0	UOsmo	16	390.188	111.7063	28.6%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsmo	16	291.375	45.3826	15.6%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	251.250	36.7396	14.6%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	310.938	92.4753	29.7%
		Constant	48	1.000	.0000	0.0%
52	.0	UOsmo	16	338.313	79.5828	23.5%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsmo	16	255.688	42.7063	16.7%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	231.625	51.9806	22.4%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	275.208	74.8178	27.2%
		Constant	48	1.000	.0000	0.0%
53	.0	UOsmo	16	732.000	135.1907	18.5%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsmo	16	596.563	87.0364	14.6%



		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	480.875	112.7078	23.4%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	603.146	151.8590	25.2%
		Constant	48	1.000	.0000	0.0%
54	.0	UOsmo	16	378.688	129.9886	34.3%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsmo	16	304.313	53.4325	17.6%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	276.063	27.3410	9.9%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	319.688	91.9554	28.8%
		Constant	48	1.000	.0000	0.0%
55	.0	UOsmo	16	800.188	138.9807	17.4%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsmo	16	673.438	150.4438	22.3%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	482.625	62.3088	12.9%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	652.083	178.9557	27.4%
		Constant	48	1.000	.0000	0.0%
56	.0	UOsmo	16	408.688	74.8142	18.3%
		Constant	16	1.000	.0000	0.0%
	1.0	UOsmo	16	351.563	60.4317	17.2%
		Constant	16	1.000	.0000	0.0%
	2.0	UOsmo	16	320.938	68.9594	21.5%
		Constant	16	1.000	.0000	0.0%
	Total	UOsmo	48	360.396	76.2891	21.2%
		Constant	48	1.000	.0000	0.0%
Total	.0	UOsmo	136	507.272	197.8407	39.0%
		Constant	136	1.000	.0000	0.0%
	1.0	UOsmo	132	417.470	162.0518	38.8%
		Constant	132	1.000	.0000	0.0%
	2.0	UOsmo	136	368.596	131.7444	35.7%
		Constant	136	1.000	.0000	0.0%
	Total	UOsmo	404	431.248	175.4983	40.7%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UOsmo.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4855.617
Akaike's Information Criterion (AIC)	4859.617
Hurvich and Tsai's Criterion (AICC)	4859.647
Bozdogan's Criterion (CAIC)	4869.605
Schwarz's Bayesian Criterion (BIC)	4867.605

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UOsmo.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.025	101.390	.000
UFEV_h_l_perdiet	2	392.028	72.266	.000

a. Dependent Variable: UOsmo.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	372.548017	43.752276	9.466	8.515	.000	274.311244	470.784791
[UFEV_h_l_perdiet=.0]	138.676471	11.685621	392.025	11.867	.000	115.702146	161.650795
[UFEV_h_l_perdiet=1.0]	49.672579	11.775967	392.029	4.218	.000	26.520633	72.824526
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UOsmo.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	9285.653756	663.239611
Constant [subject = subject] Variance	18447.434490	8798.852604

a. Dependent Variable: UOsmo.

\*ON CALCULATED FREE WATER CLEARANCE

\*Mixed Linear Models

EFFECT OF UCortisoneV TERTILE ON CALCULATED FREE WATER CLEARANCE AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED free\_water\_clearance BY UFEV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.00000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

```

/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED free_water_clearance BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	free_water_clearance	35	-1087.0810	563.31848	-51.8%
		Constant	35	1.000	.0000	0.0%
	1.0	free_water_clearance	34	-974.8324	429.91385	-44.1%
		Constant	34	1.000	.0000	0.0%
	2.0	free_water_clearance	35	-917.1600	437.58908	-47.7%
		Constant	35	1.000	.0000	0.0%
Total	free_water_clearance	104	-993.1994	481.91750	-48.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	free_water_clearance	35	-1362.3088	592.93687	-43.5%
		Constant	35	1.000	.0000	0.0%
	1.0	free_water_clearance	34	-1234.1607	416.22292	-33.7%
		Constant	34	1.000	.0000	0.0%
	2.0	free_water_clearance	35	-1428.7185	548.88063	-38.4%
		Constant	35	1.000	.0000	0.0%

		Constant	35	1.000	.0000	0.0%
	Total	free_water_clearance	104	-1342.7636	526.82087	-39.2%
		Constant	104	1.000	.0000	0.0%
15	.0	free_water_clearance	35	-841.3481	347.48947	-41.3%
		Constant	35	1.000	.0000	0.0%
	1.0	free_water_clearance	34	-870.7559	477.96976	-54.9%
		Constant	34	1.000	.0000	0.0%
	2.0	free_water_clearance	35	-585.0414	554.27853	-94.7%
		Constant	35	1.000	.0000	0.0%
	Total	free_water_clearance	104	-764.7051	480.77478	-62.9%
		Constant	104	1.000	.0000	0.0%
16	.0	free_water_clearance	35	-1338.7638	430.50133	-32.2%
		Constant	35	1.000	.0000	0.0%
	1.0	free_water_clearance	34	-1197.9657	465.55567	-38.9%
		Constant	34	1.000	.0000	0.0%
	2.0	free_water_clearance	35	-1051.8276	519.91009	-49.4%
		Constant	35	1.000	.0000	0.0%
	Total	free_water_clearance	104	-1196.1686	483.56642	-40.4%
		Constant	104	1.000	.0000	0.0%
51	.0	free_water_clearance	68	-667.8992	459.02444	-68.7%
		Constant	68	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-435.8717	541.35076	-124.2%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-205.3974	533.17437	-259.6%
		Constant	68	1.000	.0000	0.0%
	Total	free_water_clearance	205	-436.3869	543.97128	-124.7%
		Constant	205	1.000	.0000	0.0%
52	.0	free_water_clearance	68	-531.8561	510.66408	-96.0%
		Constant	68	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-313.8520	572.38420	-182.4%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	67	23.7141	588.57020	2481.9%
		Constant	67	1.000	.0000	0.0%
	Total	free_water_clearance	204	-275.6527	600.42143	-217.8%
		Constant	204	1.000	.0000	0.0%
53	.0	free_water_clearance	68	-1516.7062	331.87510	-21.9%
		Constant	68	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-1254.3779	375.71137	-30.0%

		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-1138.7290	397.79530	-34.9%
		Constant	68	1.000	.0000	0.0%
	Total	free_water_clearance	205	-1303.0325	400.27016	-30.7%
		Constant	205	1.000	.0000	0.0%
54	.0	free_water_clearance	68	-625.8106	440.12190	-70.3%
		Constant	68	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-483.1882	476.79964	-98.7%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-345.6328	530.81815	-153.6%
		Constant	68	1.000	.0000	0.0%
	Total	free_water_clearance	205	-484.8690	494.99997	-102.1%
		Constant	205	1.000	.0000	0.0%
55	.0	free_water_clearance	68	-1605.0820	377.86383	-23.5%
		Constant	68	1.000	.0000	0.0%
	1.0	free_water_clearance	68	-1568.8408	400.28203	-25.5%
		Constant	68	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-1408.7814	575.24185	-40.8%
		Constant	68	1.000	.0000	0.0%
	Total	free_water_clearance	204	-1527.5681	465.32933	-30.5%
		Constant	204	1.000	.0000	0.0%
56	.0	free_water_clearance	68	-810.4893	345.16199	-42.6%
		Constant	68	1.000	.0000	0.0%
	1.0	free_water_clearance	69	-548.9164	330.97522	-60.3%
		Constant	69	1.000	.0000	0.0%
	2.0	free_water_clearance	68	-403.3479	401.27825	-99.5%
		Constant	68	1.000	.0000	0.0%
	Total	free_water_clearance	205	-587.3959	396.11968	-67.4%
		Constant	205	1.000	.0000	0.0%
Total	.0	free_water_clearance	548	-1010.1568	588.99602	-58.3%
		Constant	548	1.000	.0000	0.0%
	1.0	free_water_clearance	549	-840.8410	626.68283	-74.5%
		Constant	549	1.000	.0000	0.0%
	2.0	free_water_clearance	547	-687.2682	715.06881	-104.0%
		Constant	547	1.000	.0000	0.0%
	Total	free_water_clearance	1644	-846.1821	658.63173	-77.8%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	24928.435
Akaike's Information Criterion (AIC)	24932.435
Hurvich and Tsai's Criterion (AICC)	24932.442
Bozdogan's Criterion (CAIC)	24945.241
Schwarz's Bayesian Criterion (BIC)	24943.241

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.021	40.894	.000
UFEV_h_I_perdiet	2	1632.022	64.431	.000

a. Dependent Variable: free\_water\_clearance.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-729.940758	140.254409	9.275	-5.204	.001	-1045.790534	-414.090982
[UFEV_h_I_perdiet=.0]	-323.928064	28.538106	1632.021	-11.351	.000	-379.903236	-267.952892
[UFEV_h_I_perdiet=1.0]	-158.330566	28.526032	1632.023	-5.550	.000	-214.282056	-102.379075
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	222947.368500	7804.669089
Constant [subject = subject] Variance	192489.555500	91346.106990

a. Dependent Variable: free\_water\_clearance.

\* Mixed Linear Models  
 EFFECT OF UCortisoneV TERTILE ON CALCULATED FREE WATER CLEARANCE AT 12 g SALT INTAKE  
 all subjects

```

USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED free_water_clearance BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED free_water_clearance BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	free_water_clearance	13	-1296.4487	598.34113	-46.2%
		Constant	13	1.000	.0000	0.0%
	1.0	free_water_clearance	14	-1240.3333	226.25105	-18.2%
		Constant	14	1.000	.0000	0.0%
	2.0	free_water_clearance	13	-1055.4872	506.73539	-48.0%
		Constant	13	1.000	.0000	0.0%
Total	free_water_clearance	40	-1198.4958	465.69729	-38.9%	
	Constant	40	1.000	.0000	0.0%	
12	.0	free_water_clearance	13	-1286.1795	602.53647	-46.8%
		Constant	13	1.000	.0000	0.0%
	1.0	free_water_clearance	14	-1146.4105	490.48422	-42.8%
		Constant	14	1.000	.0000	0.0%
	2.0	free_water_clearance	13	-1466.6808	613.44342	-41.8%

		Constant	13	1.000	.0000	0.0%
	Total	free_water_clearance	40	-1295.9233	570.49405	-44.0%
		Constant	40	1.000	.0000	0.0%
15	.0	free_water_clearance	13	-987.5833	245.91224	-24.9%
		Constant	13	1.000	.0000	0.0%
	1.0	free_water_clearance	14	-961.3024	530.04833	-55.1%
		Constant	14	1.000	.0000	0.0%
	2.0	free_water_clearance	13	-839.6808	406.12291	-48.4%
		Constant	13	1.000	.0000	0.0%
	Total	free_water_clearance	40	-930.3167	408.88020	-44.0%
		Constant	40	1.000	.0000	0.0%
16	.0	free_water_clearance	13	-1567.1026	412.00220	-26.3%
		Constant	13	1.000	.0000	0.0%
	1.0	free_water_clearance	14	-1501.9821	134.61454	-9.0%
		Constant	14	1.000	.0000	0.0%
	2.0	free_water_clearance	13	-1206.6513	345.30569	-28.6%
		Constant	13	1.000	.0000	0.0%
	Total	free_water_clearance	40	-1427.1638	345.98196	-24.2%
		Constant	40	1.000	.0000	0.0%
51	.0	free_water_clearance	32	-837.5663	472.04516	-56.4%
		Constant	32	1.000	.0000	0.0%
	1.0	free_water_clearance	33	-645.0261	489.45670	-75.9%
		Constant	33	1.000	.0000	0.0%
	2.0	free_water_clearance	32	-405.0674	475.19990	-117.3%
		Constant	32	1.000	.0000	0.0%
	Total	free_water_clearance	97	-629.3829	505.99720	-80.4%
		Constant	97	1.000	.0000	0.0%
52	.0	free_water_clearance	32	-784.5779	481.51334	-61.4%
		Constant	32	1.000	.0000	0.0%
	1.0	free_water_clearance	33	-583.2851	458.43009	-78.6%
		Constant	33	1.000	.0000	0.0%
	2.0	free_water_clearance	31	-302.7699	469.69819	-155.1%
		Constant	31	1.000	.0000	0.0%
	Total	free_water_clearance	96	-559.7997	504.86125	-90.2%
		Constant	96	1.000	.0000	0.0%
53	.0	free_water_clearance	32	-1692.6358	333.60581	-19.7%
		Constant	32	1.000	.0000	0.0%
	1.0	free_water_clearance	33	-1337.5887	434.62788	-32.5%

		Constant	33	1.000	.0000	0.0%
	2.0	free_water_clearance	32	-1295.1331	404.76265	-31.3%
		Constant	32	1.000	.0000	0.0%
	Total	free_water_clearance	97	-1440.7117	428.58485	-29.7%
		Constant	97	1.000	.0000	0.0%
54	.0	free_water_clearance	32	-805.0812	313.89802	-39.0%
		Constant	32	1.000	.0000	0.0%
	1.0	free_water_clearance	33	-714.3109	366.30659	-51.3%
		Constant	33	1.000	.0000	0.0%
	2.0	free_water_clearance	32	-679.2765	439.00143	-64.6%
		Constant	32	1.000	.0000	0.0%
	Total	free_water_clearance	97	-732.6980	376.28662	-51.4%
		Constant	97	1.000	.0000	0.0%
55	.0	free_water_clearance	32	-1770.9273	360.58180	-20.4%
		Constant	32	1.000	.0000	0.0%
	1.0	free_water_clearance	32	-1707.4208	389.37514	-22.8%
		Constant	32	1.000	.0000	0.0%
	2.0	free_water_clearance	32	-1717.4645	595.27397	-34.7%
		Constant	32	1.000	.0000	0.0%
	Total	free_water_clearance	96	-1731.9375	456.41702	-26.4%
		Constant	96	1.000	.0000	0.0%
56	.0	free_water_clearance	32	-950.2877	271.36396	-28.6%
		Constant	32	1.000	.0000	0.0%
	1.0	free_water_clearance	33	-634.8717	252.51059	-39.8%
		Constant	33	1.000	.0000	0.0%
	2.0	free_water_clearance	32	-490.4005	385.76160	-78.7%
		Constant	32	1.000	.0000	0.0%
	Total	free_water_clearance	97	-691.2659	360.54557	-52.2%
		Constant	97	1.000	.0000	0.0%
Total	.0	free_water_clearance	244	-1170.8997	557.72386	-47.6%
		Constant	244	1.000	.0000	0.0%
	1.0	free_water_clearance	253	-995.0023	565.40133	-56.8%
		Constant	253	1.000	.0000	0.0%
	2.0	free_water_clearance	243	-887.1247	671.74157	-75.7%
		Constant	243	1.000	.0000	0.0%
	Total	free_water_clearance	740	-1017.5762	610.40268	-60.0%
		Constant	740	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	11082.582
Akaike's Information Criterion (AIC)	11086.582
Hurvich and Tsai's Criterion (AICC)	11086.599
Bozdogan's Criterion (CAIC)	11097.788
Schwarz's Bayesian Criterion (BIC)	11095.788

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.072	67.121	.000
UFEV_h_I_perdiet	2	728.074	27.353	.000

a. Dependent Variable: free\_water\_clearance.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-930.869035	131.705324	9.631	-7.068	.000	-1225.856117	-635.881954
[UFEV_h_I_perdiet=.0]	-285.638864	38.957086	728.073	-7.332	.000	-362.120492	-209.157237
[UFEV_h_I_perdiet=1.0]	-110.732706	38.611250	728.075	-2.868	.004	-186.535378	-34.930034
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	184770.265400	9684.113006
Constant [subject = subject] Variance	165359.825800	79039.659900

a. Dependent Variable: free\_water\_clearance.

\* Mixed Linear Models

EFFECT OF UCortisoneV TERTILE ON CALCULATED FREE WATER CLEARANCE AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED free_water_clearance BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED free_water_clearance BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	free_water_clearance	12	-1060.6528	551.32641	-52.0%
		Constant	12	1.000	.0000	0.0%
	1.0	free_water_clearance	11	-951.2091	528.78526	-55.6%
		Constant	11	1.000	.0000	0.0%
	2.0	free_water_clearance	12	-929.3000	461.29549	-49.6%
		Constant	12	1.000	.0000	0.0%
Total	free_water_clearance	35	-981.2210	502.88598	-51.3%	
	Constant	35	1.000	.0000	0.0%	
12	.0	free_water_clearance	12	-1250.0139	635.90610	-50.9%
		Constant	12	1.000	.0000	0.0%
	1.0	free_water_clearance	11	-1237.4318	432.86820	-35.0%
		Constant	11	1.000	.0000	0.0%
	2.0	free_water_clearance	12	-1111.0444	380.92162	-34.3%
		Constant	12	1.000	.0000	0.0%

		Constant	12	1.000	.0000	0.0%
	Total	free_water_clearance	35	-1198.4129	486.83562	-40.6%
		Constant	35	1.000	.0000	0.0%
15	.0	free_water_clearance	12	-880.9736	241.03528	-27.4%
		Constant	12	1.000	.0000	0.0%
	1.0	free_water_clearance	11	-1070.3667	292.27054	-27.3%
		Constant	11	1.000	.0000	0.0%
	2.0	free_water_clearance	12	-683.1431	426.95681	-62.5%
		Constant	12	1.000	.0000	0.0%
	Total	free_water_clearance	35	-872.6695	358.11224	-41.0%
		Constant	35	1.000	.0000	0.0%
16	.0	free_water_clearance	12	-1478.5194	235.27279	-15.9%
		Constant	12	1.000	.0000	0.0%
	1.0	free_water_clearance	11	-1355.6288	322.43964	-23.8%
		Constant	11	1.000	.0000	0.0%
	2.0	free_water_clearance	12	-1308.3500	563.64976	-43.1%
		Constant	12	1.000	.0000	0.0%
	Total	free_water_clearance	35	-1381.5529	395.85342	-28.7%
		Constant	35	1.000	.0000	0.0%
51	.0	free_water_clearance	20	-642.8930	246.44656	-38.3%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-523.6195	446.37977	-85.2%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-405.0994	269.20373	-66.5%
		Constant	20	1.000	.0000	0.0%
	Total	free_water_clearance	60	-523.8706	341.53758	-65.2%
		Constant	60	1.000	.0000	0.0%
52	.0	free_water_clearance	20	-426.3223	435.54933	-102.2%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-415.3803	421.79075	-101.5%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	50.2802	425.66674	846.6%
		Constant	20	1.000	.0000	0.0%
	Total	free_water_clearance	60	-263.8075	476.35592	-180.6%
		Constant	60	1.000	.0000	0.0%
53	.0	free_water_clearance	20	-1415.4334	216.13413	-15.3%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-1243.8705	330.50287	-26.6%

		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-1094.7319	224.90799	-20.5%
		Constant	20	1.000	.0000	0.0%
	Total	free_water_clearance	60	-1251.3453	289.77592	-23.2%
		Constant	60	1.000	.0000	0.0%
54	.0	free_water_clearance	20	-597.5384	380.41673	-63.7%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-497.9365	454.06404	-91.2%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-257.5255	419.58113	-162.9%
		Constant	20	1.000	.0000	0.0%
	Total	free_water_clearance	60	-451.0001	436.35678	-96.8%
		Constant	60	1.000	.0000	0.0%
55	.0	free_water_clearance	20	-1625.3115	310.99222	-19.1%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-1591.4585	269.15641	-16.9%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-1306.2722	411.48109	-31.5%
		Constant	20	1.000	.0000	0.0%
	Total	free_water_clearance	60	-1507.6807	360.30836	-23.9%
		Constant	60	1.000	.0000	0.0%
56	.0	free_water_clearance	20	-867.1731	287.76367	-33.2%
		Constant	20	1.000	.0000	0.0%
	1.0	free_water_clearance	20	-628.3831	355.05116	-56.5%
		Constant	20	1.000	.0000	0.0%
	2.0	free_water_clearance	20	-529.7826	240.92548	-45.5%
		Constant	20	1.000	.0000	0.0%
	Total	free_water_clearance	60	-675.1129	326.12794	-48.3%
		Constant	60	1.000	.0000	0.0%
Total	.0	free_water_clearance	168	-997.2342	539.20472	-54.1%
		Constant	168	1.000	.0000	0.0%
	1.0	free_water_clearance	164	-907.1583	562.29253	-62.0%
		Constant	164	1.000	.0000	0.0%
	2.0	free_water_clearance	168	-709.7897	588.96811	-83.0%
		Constant	168	1.000	.0000	0.0%
	Total	free_water_clearance	500	-871.1080	575.51440	-66.1%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7359.793
Akaike's Information Criterion (AIC)	7363.793
Hurvich and Tsai's Criterion (AICC)	7363.818
Bozdogan's Criterion (CAIC)	7374.210
Schwarz's Bayesian Criterion (BIC)	7372.210

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.035	45.864	.000
UFEV_h_I_perdiet	2	488.038	25.761	.000

a. Dependent Variable: free\_water\_clearance.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-746.887301	136.494803	9.603	-5.472	.000	-1052.727763	-441.046840
[UFEV_h_I_perdiet=.0]	-287.444492	41.148086	488.035	-6.986	.000	-368.293763	-206.595221
[UFEV_h_I_perdiet=1.0]	-203.023707	41.403306	488.039	-4.904	.000	-284.374441	-121.672973
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	142225.861200	9104.751724
Constant [subject = subject] Variance	177661.584900	85020.207650

a. Dependent Variable: free\_water\_clearance.

\* Mixed Linear Models

EFFECT OF UCortisoneV TERTILE ON CALCULATED FREE WATER CLEARANCE AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED free_water_clearance BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:34:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Active Dataset	DatenSet1
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED free_water_clearance BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	free_water_clearance	10	-846.6167	470.57442	-55.6%
		Constant	10	1.000	.0000	0.0%
	1.0	free_water_clearance	9	-590.7037	198.95033	-33.7%
		Constant	9	1.000	.0000	0.0%
	2.0	free_water_clearance	10	-722.7667	226.06817	-31.3%
		Constant	10	1.000	.0000	0.0%
Total	free_water_clearance	29	-724.4885	331.65395	-45.8%	
	Constant	29	1.000	.0000	0.0%	
12	.0	free_water_clearance	10	-1596.0307	513.79320	-32.2%
		Constant	10	1.000	.0000	0.0%
	1.0	free_water_clearance	9	-1366.6630	237.12299	-17.4%
		Constant	9	1.000	.0000	0.0%
	2.0	free_water_clearance	10	-1760.5763	447.24806	-25.4%

		Constant	10	1.000	.0000	0.0%
	Total	free_water_clearance	29	-1581.5875	437.69429	-27.7%
		Constant	29	1.000	.0000	0.0%
15	.0	free_water_clearance	10	-603.6917	456.92960	-75.7%
		Constant	10	1.000	.0000	0.0%
	1.0	free_water_clearance	9	-485.9370	378.58139	-77.9%
		Constant	9	1.000	.0000	0.0%
	2.0	free_water_clearance	10	-136.2883	622.62705	-456.8%
		Constant	10	1.000	.0000	0.0%
	Total	free_water_clearance	29	-405.9736	524.07763	-129.1%
		Constant	29	1.000	.0000	0.0%
16	.0	free_water_clearance	10	-874.2167	254.99670	-29.2%
		Constant	10	1.000	.0000	0.0%
	1.0	free_water_clearance	9	-532.3519	200.76957	-37.7%
		Constant	9	1.000	.0000	0.0%
	2.0	free_water_clearance	10	-542.7300	252.06128	-46.4%
		Constant	10	1.000	.0000	0.0%
	Total	free_water_clearance	29	-653.8149	281.66841	-43.1%
		Constant	29	1.000	.0000	0.0%
51	.0	free_water_clearance	16	-359.8228	490.11957	-136.2%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	105.1938	382.49034	363.6%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	443.5701	351.87825	79.3%
		Constant	16	1.000	.0000	0.0%
	Total	free_water_clearance	48	62.9804	523.11066	830.6%
		Constant	48	1.000	.0000	0.0%
52	.0	free_water_clearance	16	-158.3298	381.34490	-240.9%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	368.7640	375.58019	101.8%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	623.0694	499.07587	80.1%
		Constant	16	1.000	.0000	0.0%
	Total	free_water_clearance	48	277.8345	528.27560	190.1%
		Constant	48	1.000	.0000	0.0%
53	.0	free_water_clearance	16	-1291.4381	262.59155	-20.3%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	-1095.8898	237.48151	-21.7%



		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	-880.9173	422.47461	-48.0%
		Constant	16	1.000	.0000	0.0%
	Total	free_water_clearance	48	-1089.4151	354.50816	-32.5%
		Constant	48	1.000	.0000	0.0%
54	.0	free_water_clearance	16	-302.6096	545.19317	-180.2%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	11.9376	322.32108	2700.0%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	211.5204	241.52120	114.2%
		Constant	16	1.000	.0000	0.0%
	Total	free_water_clearance	48	-26.3839	438.60919	-1662.4%
		Constant	48	1.000	.0000	0.0%
55	.0	free_water_clearance	16	-1248.1046	226.69643	-18.2%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	-1263.4086	411.60389	-32.6%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	-919.5516	242.18273	-26.3%
		Constant	16	1.000	.0000	0.0%
	Total	free_water_clearance	48	-1143.6883	338.94362	-29.6%
		Constant	48	1.000	.0000	0.0%
56	.0	free_water_clearance	16	-460.0377	313.18863	-68.1%
		Constant	16	1.000	.0000	0.0%
	1.0	free_water_clearance	16	-272.3002	307.58393	-113.0%
		Constant	16	1.000	.0000	0.0%
	2.0	free_water_clearance	16	-71.1991	427.80167	-600.9%
		Constant	16	1.000	.0000	0.0%
	Total	free_water_clearance	48	-267.8457	381.64478	-142.5%
		Constant	48	1.000	.0000	0.0%
Total	.0	free_water_clearance	136	-737.7282	603.67159	-81.8%
		Constant	136	1.000	.0000	0.0%
	1.0	free_water_clearance	132	-462.9708	662.74849	-143.2%
		Constant	132	1.000	.0000	0.0%
	2.0	free_water_clearance	136	-302.3510	779.89819	-257.9%
		Constant	136	1.000	.0000	0.0%
	Total	free_water_clearance	404	-501.3934	708.03278	-141.2%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: free\_water\_clearance.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5970.296
Akaike's Information Criterion (AIC)	5974.296
Hurvich and Tsai's Criterion (AICC)	5974.326
Bozdogan's Criterion (CAIC)	5984.284
Schwarz's Bayesian Criterion (BIC)	5982.284

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: free\_water\_clearance.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.005	8.681	.016
UFEV_h_I_perdiet	2	392.008	43.887	.000

a. Dependent Variable: free\_water\_clearance.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	-352.131651	189.992051	9.378	-1.853	.095	-779.298822	75.035520
[UFEV_h_I_perdiet=.0]	-435.377181	46.823652	392.005	-9.298	.000	-527.434075	-343.320288
[UFEV_h_I_perdiet=1.0]	-170.676493	47.185683	392.009	-3.617	.000	-263.445148	-77.907838
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: free\_water\_clearance.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	149086.900000	10648.991690
Constant [subject = subject] Variance	349807.772000	166698.473000

a. Dependent Variable: free\_water\_clearance.

```

* Encoding: UTF-8.
* ONLINE SUPPLEMENTAL STATISTICAL ANALYSIS TABLE 3

* Encoding: UTF-8.
GET
  FILE='C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav'.

FILTER OFF.
USE ALL.
EXECUTE.

*ANALYSIS OF EXCRETION DATA FOR FREE WATER EXCRETION CALCULATIONS
RESPONSE TO ALDOSTERONE TERTILE

*ON SODIUM EXCRETION

* Mixed Linear Models
EFFECT OF UAldoV TERTILE ON 2UNaV AT ALL LEVELS OF SALT INTAKE
all subjects

USE ALL.

MIXED @2NaV BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes	
Output Created	23-DEC-2016 17:42:46
Comments	
Input	Data C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		<pre> MIXED @2NaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
---------	---------------------	-------	------	--------------------	--------------------------

11	.0	@2NaV	35	328.538	109.1784	33.2%
		Constant	35	1.000	.0000	0.0%
	1.0	@2NaV	34	300.516	109.6333	36.5%
		Constant	34	1.000	.0000	0.0%
	2.0	@2NaV	35	263.503	87.7160	33.3%
		Constant	35	1.000	.0000	0.0%
Total	@2NaV	104	297.490	105.1119	35.3%	
	Constant	104	1.000	.0000	0.0%	
12	.0	@2NaV	35	345.270	68.6455	19.9%
		Constant	35	1.000	.0000	0.0%
	1.0	@2NaV	34	313.787	66.3716	21.2%
		Constant	34	1.000	.0000	0.0%
	2.0	@2NaV	35	305.704	82.0619	26.8%
		Constant	35	1.000	.0000	0.0%
Total	@2NaV	104	321.662	74.0688	23.0%	
	Constant	104	1.000	.0000	0.0%	
15	.0	@2NaV	35	318.548	108.6181	34.1%
		Constant	35	1.000	.0000	0.0%
	1.0	@2NaV	34	300.710	93.4241	31.1%
		Constant	34	1.000	.0000	0.0%
	2.0	@2NaV	35	282.253	87.8795	31.1%
		Constant	35	1.000	.0000	0.0%
Total	@2NaV	104	300.501	97.2828	32.4%	
	Constant	104	1.000	.0000	0.0%	
16	.0	@2NaV	35	344.493	98.4664	28.6%
		Constant	35	1.000	.0000	0.0%
	1.0	@2NaV	34	298.007	96.2488	32.3%
		Constant	34	1.000	.0000	0.0%
	2.0	@2NaV	35	240.874	76.0519	31.6%
		Constant	35	1.000	.0000	0.0%
Total	@2NaV	104	294.424	99.5404	33.8%	
	Constant	104	1.000	.0000	0.0%	
51	.0	@2NaV	68	368.088	136.4012	37.1%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	303.320	114.2683	37.7%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	246.303	100.7416	40.9%
		Constant	68	1.000	.0000	0.0%

	Total	@2NaV	205	305.891	127.5597	41.7%
		Constant	205	1.000	.0000	0.0%
52	.0	@2NaV	68	280.166	97.3156	34.7%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	271.804	107.9249	39.7%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	249.068	96.4540	38.7%
		Constant	68	1.000	.0000	0.0%
Total	@2NaV	205	267.036	101.1002	37.9%	
	Constant	205	1.000	.0000	0.0%	
53	.0	@2NaV	68	333.309	106.4351	31.9%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	294.219	104.3408	35.5%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	268.422	98.5628	36.7%
		Constant	68	1.000	.0000	0.0%
Total	@2NaV	205	298.628	106.0746	35.5%	
	Constant	205	1.000	.0000	0.0%	
54	.0	@2NaV	68	294.419	86.4695	29.4%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	288.086	97.8683	34.0%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	258.984	108.6364	41.9%
		Constant	68	1.000	.0000	0.0%
Total	@2NaV	205	280.534	98.8073	35.2%	
	Constant	205	1.000	.0000	0.0%	
55	.0	@2NaV	68	304.647	95.9371	31.5%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	299.345	98.2017	32.8%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	268.627	110.1075	41.0%
		Constant	68	1.000	.0000	0.0%
Total	@2NaV	205	290.914	102.3311	35.2%	
	Constant	205	1.000	.0000	0.0%	
56	.0	@2NaV	68	307.146	84.8128	27.6%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	273.240	100.6554	36.8%
		Constant	69	1.000	.0000	0.0%

	2.0	@2NaV	68	247.878	91.4815	36.9%
		Constant	68	1.000	.0000	0.0%
	Total	@2NaV	205	276.074	95.2774	34.5%
		Constant	205	1.000	.0000	0.0%
Total	.0	@2NaV	548	319.632	104.1266	32.6%
		Constant	548	1.000	.0000	0.0%
	1.0	@2NaV	550	292.025	101.3643	34.7%
		Constant	550	1.000	.0000	0.0%
	2.0	@2NaV	548	260.772	97.6120	37.4%
		Constant	548	1.000	.0000	0.0%
	Total	@2NaV	1646	290.811	103.8293	35.7%
		Constant	1646	1.000	.0000	0.0%

#### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2NaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

#### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	19834.966
Akaike's Information Criterion (AIC)	19838.966
Hurvich and Tsai's Criterion (AICC)	19838.974
Bozdogan's Criterion (CAIC)	19851.775
Schwarz's Bayesian Criterion (BIC)	19849.775



The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2NaV.

## Fixed Effects

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.965	3459.350	.000
UAldoV_h_I_perdiet	2	1634.163	47.281	.000

a. Dependent Variable: @2NaV.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	262.494999	6.079672	19.992	43.176	.000	249.812687	275.177311
[UAldoV_h_I_perdiet=.0]	58.860498	6.057254	1634.126	9.717	.000	46.979698	70.741298
[UAldoV_h_I_perdiet=1.0]	31.351081	6.051871	1634.181	5.180	.000	19.480840	43.221322
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2NaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	10053.149960	351.701622
Constant [subject = subject]	Variance 181.441140	115.944796

a. Dependent Variable: @2NaV.

```
* Mixed Linear Models
EFFECT OF UAldoV TERTILE ON 2UNaV AT 12 g SALT INTAKE
all subjects

USE ALL.
COMPUTE filter_$(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

MIXED @2NaV BY UAldoV_h_l_perdiet WITH Constant
  /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
  /FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES SOLUTION
  /RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes	
Output Created	23-DEC-2016 17:42:46
Comments	
Input	Data
	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter
	salt = 12 (FILTER)
	Weight
	<none>
	Split File
	<none>
	N of Rows in Working Data File
	742

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		<pre> MIXED @2NaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	@2NaV	13	422.420	82.8611	19.6%
	Constant	13	1.000	.0000	0.0%
1.0	@2NaV	14	376.796	93.1061	24.7%
	Constant	14	1.000	.0000	0.0%
2.0	@2NaV	13	335.925	54.1159	16.1%
	Constant	13	1.000	.0000	0.0%
Total	@2NaV	40	378.341	84.5664	22.4%
	Constant	40	1.000	.0000	0.0%

12	.0	@2NaV	13	358.230	80.3515	22.4%
		Constant	13	1.000	.0000	0.0%
	1.0	@2NaV	14	348.513	64.6455	18.5%
		Constant	14	1.000	.0000	0.0%
	2.0	@2NaV	13	377.695	72.2979	19.1%
		Constant	13	1.000	.0000	0.0%
Total	@2NaV	40	361.155	71.6889	19.8%	
	Constant	40	1.000	.0000	0.0%	
15	.0	@2NaV	13	407.086	85.5205	21.0%
		Constant	13	1.000	.0000	0.0%
	1.0	@2NaV	14	379.138	53.0007	14.0%
		Constant	14	1.000	.0000	0.0%
	2.0	@2NaV	13	363.710	59.1132	16.3%
		Constant	13	1.000	.0000	0.0%
Total	@2NaV	40	383.207	67.7101	17.7%	
	Constant	40	1.000	.0000	0.0%	
16	.0	@2NaV	13	432.870	69.9504	16.2%
		Constant	13	1.000	.0000	0.0%
	1.0	@2NaV	14	382.537	79.1394	20.7%
		Constant	14	1.000	.0000	0.0%
	2.0	@2NaV	13	290.214	65.0932	22.4%
		Constant	13	1.000	.0000	0.0%
Total	@2NaV	40	368.890	91.6058	24.8%	
	Constant	40	1.000	.0000	0.0%	
51	.0	@2NaV	32	467.095	109.4617	23.4%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	385.154	87.7638	22.8%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	323.036	75.0869	23.2%
		Constant	32	1.000	.0000	0.0%
Total	@2NaV	97	391.693	108.3436	27.7%	
	Constant	97	1.000	.0000	0.0%	
52	.0	@2NaV	32	346.935	72.7677	21.0%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	360.549	63.0983	17.5%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	325.620	71.2670	21.9%
		Constant	32	1.000	.0000	0.0%

	Total	@2NaV	97	344.535	69.9031	20.3%
		Constant	97	1.000	.0000	0.0%
53	.0	@2NaV	32	419.161	76.1747	18.2%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	383.363	58.7946	15.3%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	350.928	48.9150	13.9%
		Constant	32	1.000	.0000	0.0%
Total	@2NaV	97	384.473	67.6407	17.6%	
	Constant	97	1.000	.0000	0.0%	
54	.0	@2NaV	32	364.472	49.6733	13.6%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	365.452	65.7369	18.0%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	353.786	74.9967	21.2%
		Constant	32	1.000	.0000	0.0%
Total	@2NaV	97	361.280	63.8872	17.7%	
	Constant	97	1.000	.0000	0.0%	
55	.0	@2NaV	32	365.580	80.5498	22.0%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	374.857	60.9401	16.3%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	351.106	90.7660	25.9%
		Constant	32	1.000	.0000	0.0%
Total	@2NaV	97	363.961	78.0396	21.4%	
	Constant	97	1.000	.0000	0.0%	
56	.0	@2NaV	32	373.898	48.5198	13.0%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	347.660	82.6095	23.8%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	326.700	57.5284	17.6%
		Constant	32	1.000	.0000	0.0%
Total	@2NaV	97	349.401	66.9069	19.1%	
	Constant	97	1.000	.0000	0.0%	
Total	.0	@2NaV	244	392.854	84.8599	21.6%
		Constant	244	1.000	.0000	0.0%
	1.0	@2NaV	254	370.000	71.4001	19.3%
		Constant	254	1.000	.0000	0.0%

2.0	@2NaV	244	339.245	70.9375	20.9%
	Constant	244	1.000	.0000	0.0%
Total	@2NaV	742	367.402	78.9243	21.5%
	Constant	742	1.000	.0000	0.0%

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2NaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

### Information Criteria<sup>a</sup>

-2 Restricted Log Likelihood	8499.383
Akaike's Information Criterion (AIC)	8503.383
Hurvich and Tsai's Criterion (AICC)	8503.399
Bozdogan's Criterion (CAIC)	8514.594
Schwarz's Bayesian Criterion (BIC)	8512.594

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2NaV.

## Fixed Effects

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.930	4916.844	.000
UAldoV_h_I_perdiet	2	731.178	31.673	.000

a. Dependent Variable: @2NaV.

**Estimates of Fixed Effects<sup>a</sup>**

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	340.080236	6.552196	23.911	51.903	.000	326.554508	353.605964
[UAldoV_h_I_perdiet=.0]	53.609391	6.760305	731.163	7.930	.000	40.337467	66.881316
[UAldoV_h_I_perdiet=1.0]	30.722372	6.693551	731.186	4.590	.000	17.581501	43.863244
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2NaV.

b. This parameter is set to zero because it is redundant.

**Covariance Parameters**

**Estimates of Covariance Parameters<sup>a</sup>**

Parameter	Estimate	Std. Error
Residual	5575.610434	291.608579
Constant [subject = subject] Variance	190.848571	121.543077

a. Dependent Variable: @2NaV.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON 2UNaV AT 9 g SALT INTAKE  
 all subjects

USE ALL.  
 COMPUTE filter\_\$(salt = 9).  
 VARIABLE LABELS filter\_\$ 'salt = 9 (FILTER)'.  
 .

```

VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.

```

```

MIXED @2NaV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:46	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED @2NaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	@2NaV	12	288.874	66.6233	23.1%
		Constant	12	1.000	.0000	0.0%
	1.0	@2NaV	11	293.425	80.8542	27.6%
		Constant	11	1.000	.0000	0.0%
	2.0	@2NaV	12	273.196	53.5989	19.6%
		Constant	12	1.000	.0000	0.0%
Total	@2NaV	35	284.929	66.0733	23.2%	
	Constant	35	1.000	.0000	0.0%	
12	.0	@2NaV	12	324.504	56.2190	17.3%
		Constant	12	1.000	.0000	0.0%
	1.0	@2NaV	11	304.653	71.2253	23.4%
		Constant	11	1.000	.0000	0.0%

	2.0	@2NaV	12	265.983	51.7964	19.5%
		Constant	12	1.000	.0000	0.0%
	Total	@2NaV	35	298.201	63.2977	21.2%
		Constant	35	1.000	.0000	0.0%
15	.0	@2NaV	12	328.499	50.4374	15.4%
		Constant	12	1.000	.0000	0.0%
	1.0	@2NaV	11	289.782	52.2998	18.0%
		Constant	11	1.000	.0000	0.0%
	2.0	@2NaV	12	275.463	41.6230	15.1%
		Constant	12	1.000	.0000	0.0%
	Total	@2NaV	35	298.147	52.1290	17.5%
		Constant	35	1.000	.0000	0.0%
16	.0	@2NaV	12	337.947	39.3893	11.7%
		Constant	12	1.000	.0000	0.0%
	1.0	@2NaV	11	272.313	35.7652	13.1%
		Constant	11	1.000	.0000	0.0%
	2.0	@2NaV	12	256.239	54.5990	21.3%
		Constant	12	1.000	.0000	0.0%
	Total	@2NaV	35	289.305	56.1873	19.4%
		Constant	35	1.000	.0000	0.0%
51	.0	@2NaV	20	333.228	73.2139	22.0%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	278.125	69.0096	24.8%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	205.005	67.5940	33.0%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	272.119	86.8111	31.9%
		Constant	60	1.000	.0000	0.0%
52	.0	@2NaV	20	268.263	61.6070	23.0%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	234.906	57.3467	24.4%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	214.837	46.2538	21.5%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	239.335	58.8561	24.6%
		Constant	60	1.000	.0000	0.0%
53	.0	@2NaV	20	286.147	57.6882	20.2%
		Constant	20	1.000	.0000	0.0%

	1.0	@2NaV	20	253.663	40.6083	16.0%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	232.619	61.2534	26.3%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	257.476	57.4808	22.3%
		Constant	60	1.000	.0000	0.0%
54	.0	@2NaV	20	263.618	46.1142	17.5%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	252.096	56.4845	22.4%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	199.681	44.9444	22.5%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	238.465	56.1257	23.5%
		Constant	60	1.000	.0000	0.0%
55	.0	@2NaV	20	296.504	59.9244	20.2%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	275.179	61.9038	22.5%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	231.584	40.0747	17.3%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	267.756	60.4152	22.6%
		Constant	60	1.000	.0000	0.0%
56	.0	@2NaV	20	279.191	57.0240	20.4%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	239.736	51.0058	21.3%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	201.329	45.2215	22.5%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	240.085	59.7589	24.9%
		Constant	60	1.000	.0000	0.0%
Total	.0	@2NaV	168	297.005	62.4787	21.0%
		Constant	168	1.000	.0000	0.0%
	1.0	@2NaV	164	264.854	60.6321	22.9%
		Constant	164	1.000	.0000	0.0%
	2.0	@2NaV	168	229.474	56.9961	24.8%
		Constant	168	1.000	.0000	0.0%
	Total	@2NaV	500	263.769	66.0510	25.0%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2NaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5454.807
Akaike's Information Criterion (AIC)	5458.807
Hurvich and Tsai's Criterion (AICC)	5458.831
Bozdogan's Criterion (CAIC)	5469.224
Schwarz's Bayesian Criterion (BIC)	5467.224

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2NaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.882	1264.463	.000
UAldoV_h_I_perdiet	2	487.922	60.129	.000

a. Dependent Variable: @2NaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	233.457623	8.328052	13.241	28.033	.000	215.499203	251.416044
[UAldoV_h_I_perdiet=.0]	67.531168	6.162496	487.901	10.958	.000	55.422861	79.639475
[UAldoV_h_I_perdiet=1.0]	35.986676	6.200631	487.933	5.804	.000	23.803442	48.169910
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2NaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3190.014089	204.240452
Constant [subject = subject]	Variance	500.093158
		269.230047

a. Dependent Variable: @2NaV.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON 2UNaV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2NaV BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED @2NaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	@2NaV	10	254.088	97.2818	38.3%
		Constant	10	1.000	.0000	0.0%
	1.0	@2NaV	9	190.526	58.8227	30.9%
		Constant	9	1.000	.0000	0.0%
	2.0	@2NaV	10	157.724	38.9470	24.7%
		Constant	10	1.000	.0000	0.0%
Total	@2NaV	29	201.133	78.9223	39.2%	
	Constant	29	1.000	.0000	0.0%	
12	.0	@2NaV	10	353.341	66.6357	18.9%
		Constant	10	1.000	.0000	0.0%
	1.0	@2NaV	9	270.931	27.3476	10.1%
		Constant	9	1.000	.0000	0.0%

	2.0	@2NaV	10	259.780	57.0845	22.0%
		Constant	10	1.000	.0000	0.0%
	Total	@2NaV	29	295.503	67.3270	22.8%
		Constant	29	1.000	.0000	0.0%
15	.0	@2NaV	10	191.508	48.1828	25.2%
		Constant	10	1.000	.0000	0.0%
	1.0	@2NaV	9	192.066	61.7422	32.1%
		Constant	9	1.000	.0000	0.0%
	2.0	@2NaV	10	184.506	46.2227	25.1%
		Constant	10	1.000	.0000	0.0%
	Total	@2NaV	29	189.267	50.3443	26.6%
		Constant	29	1.000	.0000	0.0%
16	.0	@2NaV	10	237.459	64.3378	27.1%
		Constant	10	1.000	.0000	0.0%
	1.0	@2NaV	9	197.919	41.8928	21.2%
		Constant	9	1.000	.0000	0.0%
	2.0	@2NaV	10	158.295	33.8984	21.4%
		Constant	10	1.000	.0000	0.0%
	Total	@2NaV	29	197.890	57.6227	29.1%
		Constant	29	1.000	.0000	0.0%
51	.0	@2NaV	16	213.650	59.8204	28.0%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	166.031	32.3161	19.5%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	144.461	44.6534	30.9%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	174.714	54.4525	31.2%
		Constant	48	1.000	.0000	0.0%
52	.0	@2NaV	16	161.506	42.7982	26.5%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	134.891	31.7374	23.5%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	138.751	36.1007	26.0%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	145.049	38.2467	26.4%
		Constant	48	1.000	.0000	0.0%
53	.0	@2NaV	16	220.555	46.2859	21.0%
		Constant	16	1.000	.0000	0.0%



	1.0	@2NaV	16	161.055	36.0622	22.4%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	148.165	45.1391	30.5%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	176.592	52.5767	29.8%
		Constant	48	1.000	.0000	0.0%
54	.0	@2NaV	16	192.815	53.4630	27.7%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	173.506	35.5250	20.5%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	143.509	21.1347	14.7%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	169.943	43.3341	25.5%
		Constant	48	1.000	.0000	0.0%
55	.0	@2NaV	16	192.961	42.8817	22.2%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	173.810	28.4285	16.4%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	149.972	61.0908	40.7%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	172.248	48.4943	28.2%
		Constant	48	1.000	.0000	0.0%
56	.0	@2NaV	16	208.585	47.2860	22.7%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	161.629	33.2723	20.6%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	148.421	35.4497	23.9%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	172.879	46.3544	26.8%
		Constant	48	1.000	.0000	0.0%
Total	.0	@2NaV	136	216.214	70.9828	32.8%
		Constant	136	1.000	.0000	0.0%
	1.0	@2NaV	132	175.740	47.9717	27.3%
		Constant	132	1.000	.0000	0.0%
	2.0	@2NaV	136	158.643	51.7066	32.6%
		Constant	136	1.000	.0000	0.0%
	Total	@2NaV	404	183.610	62.6172	34.1%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2NaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4271.563
Akaike's Information Criterion (AIC)	4275.563
Hurvich and Tsai's Criterion (AICC)	4275.593
Bozdogan's Criterion (CAIC)	4285.551
Schwarz's Bayesian Criterion (BIC)	4283.551

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2NaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.872	222.278	.000
UAldoV_h_l_perdiet	2	391.879	53.159	.000

a. Dependent Variable: @2NaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	163.943945	13.106720	10.096	12.508	.000	134.778066	193.109825
[UAldoV_h_l_perdiet=.0]	57.570774	5.706100	391.871	10.089	.000	46.352376	68.789172
[UAldoV_h_l_perdiet=1.0]	18.167819	5.750189	391.883	3.160	.002	6.862742	29.472897
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2NaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2214.050993	158.172458
Constant [subject = subject] Variance	1552.179467	764.519950

a. Dependent Variable: @2NaV.

\*ON POTASSIUM EXCRETION

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON 2UKV AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED @2KV BY UAldoV\_h\_l\_perdiet WITH Constant  
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)  
/FIXED=UAldoV\_h\_l\_perdiet | SSTYPE(3)

```

/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED @2KV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	@2KV	35	202.378	38.4792	19.0%
		Constant	35	1.000	.0000	0.0%
	1.0	@2KV	34	221.521	35.9830	16.2%
		Constant	34	1.000	.0000	0.0%
	2.0	@2KV	35	231.227	41.5480	18.0%
		Constant	35	1.000	.0000	0.0%
Total	@2KV	104	218.345	40.2462	18.4%	
	Constant	104	1.000	.0000	0.0%	
12	.0	@2KV	35	159.362	44.3165	27.8%
		Constant	35	1.000	.0000	0.0%
	1.0	@2KV	34	177.969	48.1596	27.1%
		Constant	34	1.000	.0000	0.0%

	2.0	@2KV	35	201.864	40.4507	20.0%
		Constant	35	1.000	.0000	0.0%
Total		@2KV	104	179.749	47.3283	26.3%
		Constant	104	1.000	.0000	0.0%
15	.0	@2KV	35	192.087	27.8787	14.5%
		Constant	35	1.000	.0000	0.0%
	1.0	@2KV	34	180.550	26.0612	14.4%
		Constant	34	1.000	.0000	0.0%
	2.0	@2KV	35	198.742	28.3914	14.3%
		Constant	35	1.000	.0000	0.0%
	Total	@2KV	104	190.555	28.2287	14.8%
		Constant	104	1.000	.0000	0.0%
16	.0	@2KV	35	189.980	28.0475	14.8%
		Constant	35	1.000	.0000	0.0%
	1.0	@2KV	34	202.954	34.0583	16.8%
		Constant	34	1.000	.0000	0.0%
	2.0	@2KV	35	208.507	33.3651	16.0%
		Constant	35	1.000	.0000	0.0%
	Total	@2KV	104	200.457	32.5602	16.2%
		Constant	104	1.000	.0000	0.0%
51	.0	@2KV	68	162.090	32.4787	20.0%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	165.227	40.1984	24.3%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	174.367	38.6328	22.2%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	167.218	37.4488	22.4%
		Constant	205	1.000	.0000	0.0%
52	.0	@2KV	68	129.016	30.5257	23.7%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	151.919	37.9922	25.0%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	162.059	33.5685	20.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	147.686	36.7202	24.9%
		Constant	205	1.000	.0000	0.0%
53	.0	@2KV	68	167.786	32.1696	19.2%
		Constant	68	1.000	.0000	0.0%

	1.0	@2KV	69	176.937	30.0266	17.0%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	184.451	32.1238	17.4%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	176.394	32.0278	18.2%
		Constant	205	1.000	.0000	0.0%
54	.0	@2KV	68	149.176	23.9367	16.0%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	162.678	34.4291	21.2%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	163.734	39.3375	24.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	158.550	33.6977	21.3%
		Constant	205	1.000	.0000	0.0%
55	.0	@2KV	68	162.294	28.2076	17.4%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	182.748	31.6616	17.3%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	195.048	44.5200	22.8%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	180.043	37.8018	21.0%
		Constant	205	1.000	.0000	0.0%
56	.0	@2KV	68	129.725	25.4144	19.6%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	142.809	32.8231	23.0%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	152.736	26.3882	17.3%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	141.762	29.8121	21.0%
		Constant	205	1.000	.0000	0.0%
Total	.0	@2KV	548	159.196	37.7151	23.7%
		Constant	548	1.000	.0000	0.0%
	1.0	@2KV	550	171.640	40.4066	23.5%
		Constant	550	1.000	.0000	0.0%
	2.0	@2KV	548	181.779	41.9857	23.1%
		Constant	548	1.000	.0000	0.0%
	Total	@2KV	1646	170.872	41.1010	24.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2KV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	16337.378
Akaike's Information Criterion (AIC)	16341.378
Hurvich and Tsai's Criterion (AICC)	16341.385
Bozdogan's Criterion (CAIC)	16354.186
Schwarz's Bayesian Criterion (BIC)	16352.186

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2KV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.977	559.845	.000
UAldoV_h_I_perdiet	2	1633.980	59.684	.000

a. Dependent Variable: @2KV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	186.803843	7.533525	9.447	24.796	.000	169.884057	203.723628
[UAldoV_h_I_perdiet=.0]	-22.583131	2.072591	1633.978	-10.896	.000	-26.648347	-18.517915
[UAldoV_h_I_perdiet=1.0]	-9.854132	2.070767	1633.981	-4.759	.000	-13.915769	-5.792494
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2KV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	1177.004024	41.178438
Constant [subject = subject] Variance	545.283835	261.122983

a. Dependent Variable: @2KV.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON 2UKV AT 12 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2KV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED @2KV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	@2KV	13	215.199	37.1998	17.3%
		Constant	13	1.000	.0000	0.0%
	1.0	@2KV	14	240.164	37.1725	15.5%
		Constant	14	1.000	.0000	0.0%
	2.0	@2KV	13	247.769	35.8020	14.4%
		Constant	13	1.000	.0000	0.0%
Total	@2KV	40	234.522	38.4079	16.4%	
	Constant	40	1.000	.0000	0.0%	
12	.0	@2KV	13	126.429	42.3812	33.5%
		Constant	13	1.000	.0000	0.0%
	1.0	@2KV	14	143.541	43.0625	30.0%
		Constant	14	1.000	.0000	0.0%

	2.0	@2KV	13	174.506	41.6446	23.9%
		Constant	13	1.000	.0000	0.0%
	Total	@2KV	40	148.043	45.8349	31.0%
		Constant	40	1.000	.0000	0.0%
15	.0	@2KV	13	194.201	29.6124	15.2%
		Constant	13	1.000	.0000	0.0%
	1.0	@2KV	14	184.836	20.9905	11.4%
		Constant	14	1.000	.0000	0.0%
	2.0	@2KV	13	194.877	21.6774	11.1%
		Constant	13	1.000	.0000	0.0%
	Total	@2KV	40	191.143	24.1519	12.6%
		Constant	40	1.000	.0000	0.0%
16	.0	@2KV	13	191.924	31.4395	16.4%
		Constant	13	1.000	.0000	0.0%
	1.0	@2KV	14	206.338	32.7726	15.9%
		Constant	14	1.000	.0000	0.0%
	2.0	@2KV	13	211.793	24.1033	11.4%
		Constant	13	1.000	.0000	0.0%
	Total	@2KV	40	203.426	30.1893	14.8%
		Constant	40	1.000	.0000	0.0%
51	.0	@2KV	32	177.398	31.3877	17.7%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	183.585	45.4755	24.8%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	195.093	41.5183	21.3%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	185.341	40.2231	21.7%
		Constant	97	1.000	.0000	0.0%
52	.0	@2KV	32	137.181	33.1377	24.2%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	174.588	30.7194	17.6%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	180.859	30.4277	16.8%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	164.316	36.6204	22.3%
		Constant	97	1.000	.0000	0.0%
53	.0	@2KV	32	181.612	32.4503	17.9%
		Constant	32	1.000	.0000	0.0%

	1.0	@2KV	33	188.321	33.4662	17.8%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	203.128	29.7189	14.6%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	190.992	32.8550	17.2%
		Constant	97	1.000	.0000	0.0%
54	.0	@2KV	32	152.469	25.7172	16.9%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	169.120	37.9270	22.4%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	186.773	40.2658	21.6%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	169.451	37.5872	22.2%
		Constant	97	1.000	.0000	0.0%
55	.0	@2KV	32	167.699	27.6838	16.5%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	195.032	29.1681	15.0%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	209.744	43.3252	20.7%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	190.868	37.9590	19.9%
		Constant	97	1.000	.0000	0.0%
56	.0	@2KV	32	131.818	26.6504	20.2%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	152.404	41.0333	26.9%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	163.573	26.6122	16.3%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	149.297	34.5309	23.1%
		Constant	97	1.000	.0000	0.0%
Total	.0	@2KV	244	163.125	39.2735	24.1%
		Constant	244	1.000	.0000	0.0%
	1.0	@2KV	254	180.823	41.7233	23.1%
		Constant	254	1.000	.0000	0.0%
	2.0	@2KV	244	193.565	39.6896	20.5%
		Constant	244	1.000	.0000	0.0%
	Total	@2KV	742	179.193	42.0798	23.5%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2KV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7372.526
Akaike's Information Criterion (AIC)	7376.526
Hurvich and Tsai's Criterion (AICC)	7376.542
Bozdogan's Criterion (CAIC)	7387.736
Schwarz's Bayesian Criterion (BIC)	7385.736

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2KV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.856	495.181	.000
UAldoV_h_I_perdiet	2	729.859	48.367	.000

a. Dependent Variable: @2KV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	197.036328	8.401208	9.731	23.453	.000	178.246950	215.825705
[UAldoV_h_I_perdiet=.0]	-30.439819	3.107468	729.857	-9.796	.000	-36.540461	-24.339177
[UAldoV_h_I_perdiet=1.0]	-12.878543	3.076811	729.860	-4.186	.000	-18.918998	-6.838089
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2KV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	1178.075595	61.669336
Constant [subject = subject]	Variance	654.351468
		319.924298

a. Dependent Variable: @2KV.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON 2UKV AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2KV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED @2KV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2KV	12	191.387	33.8064	17.7%
	Constant	12	1.000	.0000	0.0%
	1.0 @2KV	11	221.664	18.1896	8.2%
	Constant	11	1.000	.0000	0.0%
	2.0 @2KV	12	242.400	38.7782	16.0%
	Constant	12	1.000	.0000	0.0%
12	Total @2KV	35	218.393	37.6546	17.2%
	Constant	35	1.000	.0000	0.0%
	.0 @2KV	12	171.037	31.0049	18.1%
	Constant	12	1.000	.0000	0.0%
1.0	@2KV	11	200.321	43.3873	21.7%
	Constant	11	1.000	.0000	0.0%

	2.0	@2KV	12	208.818	32.7343	15.7%
		Constant	12	1.000	.0000	0.0%
	Total	@2KV	35	193.194	38.5643	20.0%
		Constant	35	1.000	.0000	0.0%
15	.0	@2KV	12	193.428	31.5479	16.3%
		Constant	12	1.000	.0000	0.0%
	1.0	@2KV	11	175.600	27.7659	15.8%
		Constant	11	1.000	.0000	0.0%
	2.0	@2KV	12	201.945	33.1988	16.4%
		Constant	12	1.000	.0000	0.0%
Total	@2KV	35	190.745	32.0366	16.8%	
	Constant	35	1.000	.0000	0.0%	
16	.0	@2KV	12	187.768	23.3195	12.4%
		Constant	12	1.000	.0000	0.0%
	1.0	@2KV	11	202.224	44.9800	22.2%
		Constant	11	1.000	.0000	0.0%
	2.0	@2KV	12	213.432	42.8589	20.1%
		Constant	12	1.000	.0000	0.0%
Total	@2KV	35	201.110	38.4980	19.1%	
	Constant	35	1.000	.0000	0.0%	
51	.0	@2KV	20	150.381	30.7464	20.4%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	149.850	27.7348	18.5%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	161.449	26.8440	16.6%
		Constant	20	1.000	.0000	0.0%
Total	@2KV	60	153.893	28.5180	18.5%	
	Constant	60	1.000	.0000	0.0%	
52	.0	@2KV	20	131.529	28.2125	21.4%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	140.814	33.5652	23.8%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	156.644	27.1053	17.3%
		Constant	20	1.000	.0000	0.0%
Total	@2KV	60	142.996	31.0654	21.7%	
	Constant	60	1.000	.0000	0.0%	
53	.0	@2KV	20	159.235	30.1690	18.9%
		Constant	20	1.000	.0000	0.0%

	1.0	@2KV	20	166.755	25.8078	15.5%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	169.070	28.8421	17.1%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	165.020	28.1675	17.1%
		Constant	60	1.000	.0000	0.0%
54	.0	@2KV	20	149.565	18.4072	12.3%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	164.818	33.4112	20.3%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	146.817	26.6116	18.1%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	153.733	27.5757	17.9%
		Constant	60	1.000	.0000	0.0%
55	.0	@2KV	20	164.232	30.8757	18.8%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	179.603	33.4009	18.6%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	184.190	24.9135	13.5%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	176.008	30.6633	17.4%
		Constant	60	1.000	.0000	0.0%
56	.0	@2KV	20	130.129	28.2813	21.7%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	136.018	21.1293	15.5%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	144.653	25.4785	17.6%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	136.933	25.4278	18.6%
		Constant	60	1.000	.0000	0.0%
Total	.0	@2KV	168	158.481	34.9691	22.1%
		Constant	168	1.000	.0000	0.0%
	1.0	@2KV	164	168.019	39.2475	23.4%
		Constant	164	1.000	.0000	0.0%
	2.0	@2KV	168	176.521	41.1722	23.3%
		Constant	168	1.000	.0000	0.0%
	Total	@2KV	500	167.671	39.1736	23.4%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2KV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4847.877
Akaike's Information Criterion (AIC)	4851.877
Hurvich and Tsai's Criterion (AICC)	4851.902
Bozdogan's Criterion (CAIC)	4862.294
Schwarz's Bayesian Criterion (BIC)	4860.294

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2KV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.962	410.748	.000
UAldoV_h_I_perdiet	2	487.968	15.032	.000

a. Dependent Variable: @2KV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	181.635288	8.747050	9.870	20.765	.000	162.110821	201.159754
[UAldoV_h_I_perdiet=.0]	-18.040215	3.301341	487.963	-5.465	.000	-24.526814	-11.553616
[UAldoV_h_I_perdiet=1.0]	-7.723227	3.321813	487.970	-2.325	.020	-14.250050	-1.196404
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2KV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	915.503803	58.611367
Constant [subject = subject] Variance	709.463368	344.391198

a. Dependent Variable: @2KV.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON 2UKV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2KV BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED @2KV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	@2KV	10	198.901	44.0417	22.1%
		Constant	10	1.000	.0000	0.0%
	1.0	@2KV	9	192.344	33.4066	17.4%
		Constant	9	1.000	.0000	0.0%
	2.0	@2KV	10	196.313	32.5304	16.6%
		Constant	10	1.000	.0000	0.0%
Total	@2KV	29	195.974	35.9138	18.3%	
	Constant	29	1.000	.0000	0.0%	
12	.0	@2KV	10	188.167	34.3416	18.3%
		Constant	10	1.000	.0000	0.0%
	1.0	@2KV	9	204.207	25.7912	12.6%
		Constant	9	1.000	.0000	0.0%

	2.0	@2KV	10	229.084	24.3025	10.6%
		Constant	10	1.000	.0000	0.0%
	Total	@2KV	29	207.254	32.5923	15.7%
		Constant	29	1.000	.0000	0.0%
15	.0	@2KV	10	187.731	22.8169	12.2%
		Constant	10	1.000	.0000	0.0%
	1.0	@2KV	9	179.935	32.4919	18.1%
		Constant	9	1.000	.0000	0.0%
	2.0	@2KV	10	199.925	32.1671	16.1%
		Constant	10	1.000	.0000	0.0%
	Total	@2KV	29	189.516	29.5111	15.6%
		Constant	29	1.000	.0000	0.0%
16	.0	@2KV	10	190.106	31.2614	16.4%
		Constant	10	1.000	.0000	0.0%
	1.0	@2KV	9	198.584	21.6401	10.9%
		Constant	9	1.000	.0000	0.0%
	2.0	@2KV	10	198.324	31.9791	16.1%
		Constant	10	1.000	.0000	0.0%
	Total	@2KV	29	195.571	28.1589	14.4%
		Constant	29	1.000	.0000	0.0%
51	.0	@2KV	16	146.109	22.8711	15.7%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	146.586	22.6266	15.4%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	149.063	19.2180	12.9%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	147.253	21.2113	14.4%
		Constant	48	1.000	.0000	0.0%
52	.0	@2KV	16	109.546	18.1517	16.6%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	119.047	25.6057	21.5%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	131.229	19.5514	14.9%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	119.941	22.7341	19.0%
		Constant	48	1.000	.0000	0.0%
53	.0	@2KV	16	150.825	21.9364	14.5%
		Constant	16	1.000	.0000	0.0%



	1.0	@2KV	16	166.186	17.5401	10.6%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	166.322	17.8924	10.8%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	161.111	20.1982	12.5%
		Constant	48	1.000	.0000	0.0%
54	.0	@2KV	16	142.106	26.2027	18.4%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	146.714	22.8402	15.6%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	138.803	22.0708	15.9%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	142.541	23.4910	16.5%
		Constant	48	1.000	.0000	0.0%
55	.0	@2KV	16	149.062	22.5502	15.1%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	161.343	21.9646	13.6%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	179.229	57.4694	32.1%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	163.211	39.0769	23.9%
		Constant	48	1.000	.0000	0.0%
56	.0	@2KV	16	125.036	19.2617	15.4%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	131.506	18.0623	13.7%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	141.168	18.5479	13.1%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	132.570	19.4216	14.7%
		Constant	48	1.000	.0000	0.0%
Total	.0	@2KV	136	153.029	37.5178	24.5%
		Constant	136	1.000	.0000	0.0%
	1.0	@2KV	132	158.468	34.7690	21.9%
		Constant	132	1.000	.0000	0.0%
	2.0	@2KV	136	167.128	41.3338	24.7%
		Constant	136	1.000	.0000	0.0%
	Total	@2KV	404	159.552	38.3526	24.0%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2KV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3821.483
Akaike's Information Criterion (AIC)	3825.483
Hurvich and Tsai's Criterion (AICC)	3825.513
Bozdogan's Criterion (CAIC)	3835.471
Schwarz's Bayesian Criterion (BIC)	3833.471

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2KV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.979	300.983	.000
UAldoV_h_l_perdiet	2	391.983	9.514	.000

a. Dependent Variable: @2KV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	172.574526	9.710850	9.675	17.771	.000	150.838431	194.310620
[UAldoV_h_l_perdiet=.0]	-14.099144	3.234992	391.979	-4.358	.000	-20.459250	-7.739038
[UAldoV_h_l_perdiet=1.0]	-7.560480	3.259998	391.986	-2.319	.021	-13.969747	-1.151212
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2KV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	711.631773	50.832204
Constant [subject = subject] Variance	889.736861	428.739077

a. Dependent Variable: @2KV.

\*ON UREA EXCRETION

\* Mixed Linear Models

EFFECT OF UAldoV TERTILE ON UreaV AT ALL LEVELS OF SALT INTAKE  
all subjects

USE ALL.

MIXED UreaV BY UAldoV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UAldoV\_h\_l\_perdiet | SSTYPE(3)

/METHOD=REML

```

/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED UreaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UreaV	35	386.989	66.9986	17.3%
		Constant	35	1.000	.0000	0.0%
	1.0	UreaV	34	407.036	54.5913	13.4%
		Constant	34	1.000	.0000	0.0%
	2.0	UreaV	35	424.164	64.0750	15.1%
		Constant	35	1.000	.0000	0.0%
Total	UreaV	104	406.053	63.4593	15.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	UreaV	35	414.764	64.9394	15.7%
		Constant	35	1.000	.0000	0.0%
	1.0	UreaV	34	406.289	92.6644	22.8%
		Constant	34	1.000	.0000	0.0%

	2.0	UreaV	35	443.336	74.1046	16.7%
		Constant	35	1.000	.0000	0.0%
Total		UreaV	104	421.609	78.8015	18.7%
		Constant	104	1.000	.0000	0.0%
15	.0	UreaV	35	373.799	42.8494	11.5%
		Constant	35	1.000	.0000	0.0%
	1.0	UreaV	34	376.072	46.3737	12.3%
		Constant	34	1.000	.0000	0.0%
	2.0	UreaV	34	385.111	42.6792	11.1%
		Constant	34	1.000	.0000	0.0%
	Total	UreaV	103	378.284	43.8311	11.6%
		Constant	103	1.000	.0000	0.0%
16	.0	UreaV	35	409.462	42.1664	10.3%
		Constant	35	1.000	.0000	0.0%
	1.0	UreaV	34	418.179	40.3462	9.6%
		Constant	34	1.000	.0000	0.0%
	2.0	UreaV	35	420.894	45.1840	10.7%
		Constant	35	1.000	.0000	0.0%
	Total	UreaV	104	416.159	42.5039	10.2%
		Constant	104	1.000	.0000	0.0%
51	.0	UreaV	68	294.865	47.7340	16.2%
		Constant	68	1.000	.0000	0.0%
	1.0	UreaV	69	294.113	43.3828	14.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UreaV	68	309.258	77.9669	25.2%
		Constant	68	1.000	.0000	0.0%
	Total	UreaV	205	299.386	58.4883	19.5%
		Constant	205	1.000	.0000	0.0%
52	.0	UreaV	67	266.585	46.5005	17.4%
		Constant	67	1.000	.0000	0.0%
	1.0	UreaV	69	291.861	37.2170	12.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UreaV	68	310.537	51.9800	16.7%
		Constant	68	1.000	.0000	0.0%
	Total	UreaV	204	289.785	48.8070	16.8%
		Constant	204	1.000	.0000	0.0%
53	.0	UreaV	68	344.607	47.7135	13.8%
		Constant	68	1.000	.0000	0.0%

	1.0	UreaV	69	345.705	44.5109	12.9%
		Constant	69	1.000	.0000	0.0%
	2.0	UreaV	67	349.766	66.5953	19.0%
		Constant	67	1.000	.0000	0.0%
	Total	UreaV	204	346.672	53.4962	15.4%
		Constant	204	1.000	.0000	0.0%
54	.0	UreaV	67	274.723	48.1116	17.5%
		Constant	67	1.000	.0000	0.0%
	1.0	UreaV	69	298.338	44.2918	14.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UreaV	67	293.326	41.5145	14.2%
		Constant	67	1.000	.0000	0.0%
	Total	UreaV	203	288.889	45.6442	15.8%
		Constant	203	1.000	.0000	0.0%
55	.0	UreaV	66	339.567	69.2517	20.4%
		Constant	66	1.000	.0000	0.0%
	1.0	UreaV	69	355.357	57.4478	16.2%
		Constant	69	1.000	.0000	0.0%
	2.0	UreaV	66	368.372	73.7404	20.0%
		Constant	66	1.000	.0000	0.0%
	Total	UreaV	201	354.446	67.7149	19.1%
		Constant	201	1.000	.0000	0.0%
56	.0	UreaV	67	274.019	41.3598	15.1%
		Constant	67	1.000	.0000	0.0%
	1.0	UreaV	69	270.707	36.8485	13.6%
		Constant	69	1.000	.0000	0.0%
	2.0	UreaV	68	284.586	35.0189	12.3%
		Constant	68	1.000	.0000	0.0%
	Total	UreaV	204	276.421	38.0931	13.8%
		Constant	204	1.000	.0000	0.0%
Total	.0	UreaV	543	324.121	72.7343	22.4%
		Constant	543	1.000	.0000	0.0%
	1.0	UreaV	550	332.231	68.9400	20.8%
		Constant	550	1.000	.0000	0.0%
	2.0	UreaV	543	344.540	78.4123	22.8%
		Constant	543	1.000	.0000	0.0%
	Total	UreaV	1636	333.625	73.8784	22.1%
		Constant	1636	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	17720.033
Akaike's Information Criterion (AIC)	17724.033
Hurvich and Tsai's Criterion (AICC)	17724.040
Bozdogan's Criterion (CAIC)	17736.829
Schwarz's Bayesian Criterion (BIC)	17734.829

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.992	378.380	.000
UAldoV_h_I_perdiet	2	1623.994	20.158	.000

a. Dependent Variable: UreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	358.455644	17.973114	9.194	19.944	.000	317.928045	398.983242
[UAldoV_h_I_perdiet=.0]	-20.710034	3.269891	1623.993	-6.334	.000	-27.123682	-14.296385
[UAldoV_h_I_perdiet=1.0]	-11.623365	3.259578	1623.994	-3.566	.000	-18.016785	-5.229944
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2902.864014	101.870799
Constant [subject = subject] Variance	3174.935945	1506.631897

a. Dependent Variable: UreaV.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON UreaV AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UreaV BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED UreaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UreaV	13	409.604	62.2544	15.2%
		Constant	13	1.000	.0000	0.0%
	1.0	UreaV	14	426.981	53.9523	12.6%
		Constant	14	1.000	.0000	0.0%
	2.0	UreaV	13	462.653	60.4528	13.1%
		Constant	13	1.000	.0000	0.0%
Total	UreaV	40	432.927	61.4476	14.2%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UreaV	13	392.032	67.8156	17.3%
		Constant	13	1.000	.0000	0.0%
	1.0	UreaV	14	401.506	61.4017	15.3%
		Constant	14	1.000	.0000	0.0%

	2.0	UreaV	13	434.580	63.2739	14.6%
		Constant	13	1.000	.0000	0.0%
	Total	UreaV	40	409.176	65.0989	15.9%
		Constant	40	1.000	.0000	0.0%
15	.0	UreaV	13	383.549	31.8502	8.3%
		Constant	13	1.000	.0000	0.0%
	1.0	UreaV	14	376.908	45.9490	12.2%
		Constant	14	1.000	.0000	0.0%
	2.0	UreaV	12	379.106	38.4535	10.1%
		Constant	12	1.000	.0000	0.0%
	Total	UreaV	39	379.798	38.4541	10.1%
		Constant	39	1.000	.0000	0.0%
16	.0	UreaV	13	422.786	52.5670	12.4%
		Constant	13	1.000	.0000	0.0%
	1.0	UreaV	14	424.768	44.9686	10.6%
		Constant	14	1.000	.0000	0.0%
	2.0	UreaV	13	411.053	49.0420	11.9%
		Constant	13	1.000	.0000	0.0%
	Total	UreaV	40	419.667	47.9755	11.4%
		Constant	40	1.000	.0000	0.0%
51	.0	UreaV	32	290.285	41.7037	14.4%
		Constant	32	1.000	.0000	0.0%
	1.0	UreaV	33	294.907	50.0843	17.0%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	32	305.554	99.9906	32.7%
		Constant	32	1.000	.0000	0.0%
	Total	UreaV	97	296.895	68.3172	23.0%
		Constant	97	1.000	.0000	0.0%
52	.0	UreaV	31	256.968	40.5029	15.8%
		Constant	31	1.000	.0000	0.0%
	1.0	UreaV	33	300.812	43.2268	14.4%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	32	320.290	66.9150	20.9%
		Constant	32	1.000	.0000	0.0%
	Total	UreaV	96	293.147	57.4827	19.6%
		Constant	96	1.000	.0000	0.0%
53	.0	UreaV	32	329.841	45.6954	13.9%
		Constant	32	1.000	.0000	0.0%

	1.0	UreaV	33	320.348	43.7541	13.7%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	31	317.112	52.9218	16.7%
		Constant	31	1.000	.0000	0.0%
	Total	UreaV	96	322.468	47.3275	14.7%
		Constant	96	1.000	.0000	0.0%
54	.0	UreaV	31	276.750	43.5380	15.7%
		Constant	31	1.000	.0000	0.0%
	1.0	UreaV	33	295.099	46.7585	15.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	32	291.012	43.4158	14.9%
		Constant	32	1.000	.0000	0.0%
	Total	UreaV	96	287.811	44.8549	15.6%
		Constant	96	1.000	.0000	0.0%
55	.0	UreaV	31	336.645	89.3289	26.5%
		Constant	31	1.000	.0000	0.0%
	1.0	UreaV	33	350.929	51.3792	14.6%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	31	375.958	97.7686	26.0%
		Constant	31	1.000	.0000	0.0%
	Total	UreaV	95	354.435	82.2039	23.2%
		Constant	95	1.000	.0000	0.0%
56	.0	UreaV	31	282.362	37.8242	13.4%
		Constant	31	1.000	.0000	0.0%
	1.0	UreaV	33	276.810	40.0586	14.5%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	32	288.920	37.0937	12.8%
		Constant	32	1.000	.0000	0.0%
	Total	UreaV	96	282.639	38.2939	13.5%
		Constant	96	1.000	.0000	0.0%
Total	.0	UreaV	240	318.675	73.1916	23.0%
		Constant	240	1.000	.0000	0.0%
	1.0	UreaV	254	328.764	66.7410	20.3%
		Constant	254	1.000	.0000	0.0%
	2.0	UreaV	241	338.701	84.6583	25.0%
		Constant	241	1.000	.0000	0.0%
	Total	UreaV	735	328.728	75.4242	22.9%
		Constant	735	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	8050.718
Akaike's Information Criterion (AIC)	8054.718
Hurvich and Tsai's Criterion (AICC)	8054.735
Bozdogan's Criterion (CAIC)	8065.910
Schwarz's Bayesian Criterion (BIC)	8063.910

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.963	348.028	.000
UAldoV_h_I_perdiet	2	722.967	7.956	.000

a. Dependent Variable: UreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	358.133689	18.873368	9.439	18.976	.000	315.740128	400.527250
[UAldoV_h_I_perdiet=.0]	-20.714261	5.196333	722.967	-3.986	.000	-30.915965	-10.512557
[UAldoV_h_I_perdiet=1.0]	-10.985867	5.124108	722.968	-2.144	.032	-21.045776	-.925958
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3246.523555	170.755707
Constant [subject = subject] Variance	3418.224981	1639.544500

a. Dependent Variable: UreaV.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON UreaV AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UreaV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:46	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	<pre> MIXED UreaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UreaV	12	363.869	74.3585	20.4%
		Constant	12	1.000	.0000	0.0%
	1.0	UreaV	11	414.312	58.5587	14.1%
		Constant	11	1.000	.0000	0.0%
	2.0	UreaV	12	436.519	48.7963	11.2%
		Constant	12	1.000	.0000	0.0%
Total	UreaV	35	404.631	67.4046	16.7%	
	Constant	35	1.000	.0000	0.0%	
12	.0	UreaV	12	393.870	41.6634	10.6%
		Constant	12	1.000	.0000	0.0%
	1.0	UreaV	11	357.371	124.1038	34.7%
		Constant	11	1.000	.0000	0.0%

	2.0	UreaV	12	399.447	63.3337	15.9%
		Constant	12	1.000	.0000	0.0%
	Total	UreaV	35	384.311	82.0802	21.4%
		Constant	35	1.000	.0000	0.0%
15	.0	UreaV	12	378.421	37.0689	9.8%
		Constant	12	1.000	.0000	0.0%
	1.0	UreaV	11	378.306	43.0065	11.4%
		Constant	11	1.000	.0000	0.0%
	2.0	UreaV	12	398.812	49.9277	12.5%
		Constant	12	1.000	.0000	0.0%
	Total	UreaV	35	385.376	43.4971	11.3%
		Constant	35	1.000	.0000	0.0%
16	.0	UreaV	12	411.868	25.9296	6.3%
		Constant	12	1.000	.0000	0.0%
	1.0	UreaV	11	412.537	35.1315	8.5%
		Constant	11	1.000	.0000	0.0%
	2.0	UreaV	12	424.300	50.9985	12.0%
		Constant	12	1.000	.0000	0.0%
	Total	UreaV	35	416.341	38.1586	9.2%
		Constant	35	1.000	.0000	0.0%
51	.0	UreaV	20	283.820	21.6569	7.6%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	20	284.828	25.7440	9.0%
		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	20	306.919	45.2399	14.7%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	60	291.856	33.7506	11.6%
		Constant	60	1.000	.0000	0.0%
52	.0	UreaV	20	283.279	53.6874	19.0%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	20	293.295	32.0955	10.9%
		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	20	308.251	32.4530	10.5%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	60	294.942	41.3059	14.0%
		Constant	60	1.000	.0000	0.0%
53	.0	UreaV	20	361.938	38.1473	10.5%
		Constant	20	1.000	.0000	0.0%

	1.0	UreaV	20	358.603	26.4296	7.4%
		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	20	372.883	56.9599	15.3%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	60	364.475	42.1454	11.6%
		Constant	60	1.000	.0000	0.0%
54	.0	UreaV	20	271.058	50.8647	18.8%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	20	299.881	36.8053	12.3%
		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	19	295.557	46.8060	15.8%
		Constant	19	1.000	.0000	0.0%
	Total	UreaV	59	288.718	46.2282	16.0%
		Constant	59	1.000	.0000	0.0%
55	.0	UreaV	19	339.828	51.2070	15.1%
		Constant	19	1.000	.0000	0.0%
	1.0	UreaV	20	366.236	66.1848	18.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	20	377.252	40.9903	10.9%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	59	361.466	55.1934	15.3%
		Constant	59	1.000	.0000	0.0%
56	.0	UreaV	20	258.275	41.8248	16.2%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	20	259.205	32.7969	12.7%
		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	20	284.150	37.9175	13.3%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	60	267.210	38.9717	14.6%
		Constant	60	1.000	.0000	0.0%
Total	.0	UreaV	167	324.554	68.1330	21.0%
		Constant	167	1.000	.0000	0.0%
	1.0	UreaV	164	331.883	70.4589	21.2%
		Constant	164	1.000	.0000	0.0%
	2.0	UreaV	167	350.381	69.4162	19.8%
		Constant	167	1.000	.0000	0.0%
	Total	UreaV	498	335.628	70.0505	20.9%
		Constant	498	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5283.188
Akaike's Information Criterion (AIC)	5287.188
Hurvich and Tsai's Criterion (AICC)	5287.213
Bozdogan's Criterion (CAIC)	5297.597
Schwarz's Bayesian Criterion (BIC)	5295.597

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.996	399.358	.000
UAldoV_h_I_perdiet	2	486.001	12.245	.000

a. Dependent Variable: UreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	359.769605	17.558514	9.546	20.490	.000	320.393058	399.146152
[UAldoV_h_I_perdiet=.0]	-25.399887	5.217679	485.998	-4.868	.000	-35.651882	-15.147892
[UAldoV_h_I_perdiet=1.0]	-16.747267	5.242108	486.002	-3.195	.001	-27.047261	-6.447273
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2272.991226	145.813010
Constant [subject = subject] Variance	2944.084804	1411.146607

a. Dependent Variable: UreaV.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON UreaV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UreaV BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED UreaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UreaV	10	385.333	59.8152	15.5%
		Constant	10	1.000	.0000	0.0%
	1.0	UreaV	9	367.116	26.7414	7.3%
		Constant	9	1.000	.0000	0.0%
	2.0	UreaV	10	359.301	26.6279	7.4%
		Constant	10	1.000	.0000	0.0%
Total	UreaV	29	370.703	41.3432	11.2%	
	Constant	29	1.000	.0000	0.0%	
12	.0	UreaV	10	469.390	55.0796	11.7%
		Constant	10	1.000	.0000	0.0%
	1.0	UreaV	9	473.519	40.3263	8.5%
		Constant	9	1.000	.0000	0.0%

	2.0	UreaV	10	507.388	57.1609	11.3%
		Constant	10	1.000	.0000	0.0%
	Total	UreaV	29	483.774	52.8852	10.9%
		Constant	29	1.000	.0000	0.0%
15	.0	UreaV	10	355.579	58.0480	16.3%
		Constant	10	1.000	.0000	0.0%
	1.0	UreaV	9	372.041	55.6928	15.0%
		Constant	9	1.000	.0000	0.0%
	2.0	UreaV	10	375.875	37.8381	10.1%
		Constant	10	1.000	.0000	0.0%
	Total	UreaV	29	367.686	50.1185	13.6%
		Constant	29	1.000	.0000	0.0%
16	.0	UreaV	10	389.252	38.6369	9.9%
		Constant	10	1.000	.0000	0.0%
	1.0	UreaV	9	414.824	41.8751	10.1%
		Constant	9	1.000	.0000	0.0%
	2.0	UreaV	10	429.600	32.9770	7.7%
		Constant	10	1.000	.0000	0.0%
	Total	UreaV	29	411.102	40.3429	9.8%
		Constant	29	1.000	.0000	0.0%
51	.0	UreaV	16	317.830	72.2430	22.7%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	304.082	46.0314	15.1%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	319.590	61.2088	19.2%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	313.834	59.8889	19.1%
		Constant	48	1.000	.0000	0.0%
52	.0	UreaV	16	264.350	44.8790	17.0%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	271.609	19.2770	7.1%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	293.890	31.2297	10.6%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	276.616	35.1283	12.7%
		Constant	48	1.000	.0000	0.0%
53	.0	UreaV	16	352.475	55.4833	15.7%
		Constant	16	1.000	.0000	0.0%



	1.0	UreaV	16	381.879	31.3138	8.2%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	384.134	75.0105	19.5%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	372.829	57.4765	15.4%
		Constant	48	1.000	.0000	0.0%
54	.0	UreaV	16	275.376	55.5847	20.2%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	303.089	49.6275	16.4%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	295.305	32.1995	10.9%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	291.257	47.3506	16.3%
		Constant	48	1.000	.0000	0.0%
55	.0	UreaV	16	344.918	40.3438	11.7%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	350.890	59.6552	17.0%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	15	340.856	37.8381	11.1%
		Constant	15	1.000	.0000	0.0%
	Total	UreaV	47	345.655	46.3053	13.4%
		Constant	47	1.000	.0000	0.0%
56	.0	UreaV	16	277.534	44.2961	16.0%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	272.498	33.2843	12.2%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	276.463	26.4975	9.6%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	275.498	34.7657	12.6%
		Constant	48	1.000	.0000	0.0%
Total	.0	UreaV	136	333.200	76.8865	23.1%
		Constant	136	1.000	.0000	0.0%
	1.0	UreaV	132	339.335	71.1601	21.0%
		Constant	132	1.000	.0000	0.0%
	2.0	UreaV	135	347.738	77.1319	22.2%
		Constant	135	1.000	.0000	0.0%
	Total	UreaV	403	340.080	75.1954	22.1%
		Constant	403	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4271.862
Akaike's Information Criterion (AIC)	4275.862
Hurvich and Tsai's Criterion (AICC)	4275.892
Bozdogan's Criterion (CAIC)	4285.845
Schwarz's Bayesian Criterion (BIC)	4283.845

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.979	287.498	.000
UAldoV_h_l_perdiet	2	390.982	3.249	.040

a. Dependent Variable: UreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	357.755136	20.948682	9.442	17.078	.000	310.702282	404.807990
[UAldoV_h_l_perdiet=.0]	-14.574895	5.732005	390.979	-2.543	.011	-25.844303	-3.305487
[UAldoV_h_l_perdiet=1.0]	-6.423976	5.776374	390.985	-1.112	.267	-17.780614	4.932663
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2225.802080	159.193360
Constant [subject = subject] Variance	4220.723977	2019.666430

a. Dependent Variable: UreaV.

\*ON OSMOLYTE EXCRETION

\* Mixed Linear Models

EFFECT OF UAldoV TERTILE ON U2Na2KUreaV AT ALL LEVELS OF SALT INTAKE

all subjects

USE ALL.

MIXED @2Na2KUreaV BY UAldoV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UAldoV\_h\_l\_perdiet | SSTYPE(3)

/METHOD=REML

/PRINT=DESCRIPTIVES SOLUTION

/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED @2Na2KUreaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	@2Na2KUreaV	35	917.905	178.6761	19.5%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	929.072	175.6389	18.9%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	918.894	168.6188	18.4%
		Constant	35	1.000	.0000	0.0%
Total	@2Na2KUreaV	104	921.889	172.7222	18.7%	
	Constant	104	1.000	.0000	0.0%	
12	.0	@2Na2KUreaV	35	919.397	146.2868	15.9%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	898.045	119.6986	13.3%
		Constant	34	1.000	.0000	0.0%

	2.0	@2Na2KUreaV	35	950.903	137.8954	14.5%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	923.020	135.6682	14.7%
		Constant	104	1.000	.0000	0.0%
15	.0	@2Na2KUreaV	35	884.435	140.2292	15.9%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	857.332	128.7251	15.0%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	855.103	106.8455	12.5%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	865.703	125.4946	14.5%
		Constant	104	1.000	.0000	0.0%
16	.0	@2Na2KUreaV	35	943.934	136.9204	14.5%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	919.141	135.6684	14.8%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	870.275	103.7202	11.9%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	911.040	128.8045	14.1%
		Constant	104	1.000	.0000	0.0%
51	.0	@2Na2KUreaV	68	825.043	164.2520	19.9%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	762.661	164.6158	21.6%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	729.928	153.3873	21.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	772.496	164.8568	21.3%
		Constant	205	1.000	.0000	0.0%
52	.0	@2Na2KUreaV	68	671.847	136.9274	20.4%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	715.585	157.0362	21.9%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	721.664	151.9040	21.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	703.093	149.8319	21.3%
		Constant	205	1.000	.0000	0.0%
53	.0	@2Na2KUreaV	68	845.702	140.7043	16.6%
		Constant	68	1.000	.0000	0.0%

	1.0	@2Na2KUreaV	69	816.861	118.0375	14.5%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	797.495	132.3247	16.6%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	820.004	131.4899	16.0%
		Constant	205	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	68	714.278	128.6334	18.0%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	749.102	138.6868	18.5%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	711.730	157.4522	22.1%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	725.154	142.4129	19.6%
		Constant	205	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	68	796.521	168.1077	21.1%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	837.450	146.8004	17.5%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	821.213	194.3440	23.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	818.487	170.7473	20.9%
		Constant	205	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	68	706.860	124.7625	17.7%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	686.756	146.3607	21.3%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	685.201	123.2779	18.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	692.909	131.6873	19.0%
		Constant	205	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	548	799.992	170.5255	21.3%
		Constant	548	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	550	795.896	163.0109	20.5%
		Constant	550	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	548	783.947	168.3900	21.5%
		Constant	548	1.000	.0000	0.0%
	Total	@2Na2KUreaV	1646	793.281	167.3701	21.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	21125.096
Akaike's Information Criterion (AIC)	21129.096
Hurvich and Tsai's Criterion (AICC)	21129.104
Bozdogan's Criterion (CAIC)	21141.905
Schwarz's Bayesian Criterion (BIC)	21139.905

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.981	828.764	.000
UAldoV_h_I_perdiet	2	1633.984	1.846	.158

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	805.188105	28.769706	9.582	27.987	.000	740.703878	869.672332
[UAldoV_h_I_perdiet=.0]	16.044888	8.903714	1633.981	1.802	.072	-1.419006	33.508783
[UAldoV_h_I_perdiet=1.0]	13.154183	8.895874	1633.985	1.479	.139	-4.294335	30.602701
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	21721.656120	759.948896
Constant [subject = subject] Variance	7866.287651	3781.347651

a. Dependent Variable: @2Na2KUreaV.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON U2Na2KUreaV AT 12 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2Na2KUreaV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:46	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED @2Na2KUreaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	@2Na2KUreaV	13	1047.223	140.4972	13.4%
		Constant	13	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	14	1043.941	155.1300	14.9%
		Constant	14	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	13	1046.348	116.9950	11.2%
		Constant	13	1.000	.0000	0.0%
12	Total	@2Na2KUreaV	40	1045.790	135.3111	12.9%
		Constant	40	1.000	.0000	0.0%
	.0	@2Na2KUreaV	13	876.691	174.6546	19.9%
		Constant	13	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	14	893.560	150.4197	16.8%
		Constant	14	1.000	.0000	0.0%

	2.0	@2Na2KUreaV	13	986.780	141.0128	14.3%
		Constant	13	1.000	.0000	0.0%
	Total	@2Na2KUreaV	40	918.374	159.3935	17.4%
		Constant	40	1.000	.0000	0.0%
15	.0	@2Na2KUreaV	13	984.836	116.0445	11.8%
		Constant	13	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	14	940.882	102.4586	10.9%
		Constant	14	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	13	908.531	92.2569	10.2%
		Constant	13	1.000	.0000	0.0%
	Total	@2Na2KUreaV	40	944.653	106.0182	11.2%
		Constant	40	1.000	.0000	0.0%
16	.0	@2Na2KUreaV	13	1047.580	116.7438	11.1%
		Constant	13	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	14	1013.643	133.7645	13.2%
		Constant	14	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	13	913.061	97.9084	10.7%
		Constant	13	1.000	.0000	0.0%
	Total	@2Na2KUreaV	40	991.983	127.9940	12.9%
		Constant	40	1.000	.0000	0.0%
51	.0	@2Na2KUreaV	32	934.777	143.4334	15.3%
		Constant	32	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	33	863.647	162.8805	18.9%
		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	823.683	151.4712	18.4%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	873.929	158.1381	18.1%
		Constant	97	1.000	.0000	0.0%
52	.0	@2Na2KUreaV	32	733.054	121.4809	16.6%
		Constant	32	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	33	835.948	108.3960	13.0%
		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	826.769	132.0633	16.0%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	798.976	128.4130	16.1%
		Constant	97	1.000	.0000	0.0%
53	.0	@2Na2KUreaV	32	930.614	129.6955	13.9%
		Constant	32	1.000	.0000	0.0%

	1.0	@2Na2KUreaV	33	892.032	114.7875	12.9%
		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	861.259	111.7685	13.0%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	894.608	121.0904	13.5%
		Constant	97	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	32	785.043	110.7434	14.1%
		Constant	32	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	33	829.672	125.6921	15.1%
		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	831.571	129.1871	15.5%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	815.575	122.8008	15.1%
		Constant	97	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	32	859.403	188.6391	22.0%
		Constant	32	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	33	920.818	110.1998	12.0%
		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	925.060	220.5974	23.8%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	901.957	179.3234	19.9%
		Constant	97	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	32	779.254	103.9982	13.3%
		Constant	32	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	33	776.875	147.9076	19.0%
		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	779.193	95.5711	12.3%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	778.424	117.1985	15.1%
		Constant	97	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	244	869.430	166.0931	19.1%
		Constant	244	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	254	879.587	146.9690	16.7%
		Constant	254	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	244	867.346	153.5663	17.7%
		Constant	244	1.000	.0000	0.0%
	Total	@2Na2KUreaV	742	872.222	155.5125	17.8%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	9430.870
Akaike's Information Criterion (AIC)	9434.870
Hurvich and Tsai's Criterion (AICC)	9434.886
Bozdogan's Criterion (CAIC)	9446.081
Schwarz's Bayesian Criterion (BIC)	9444.081

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.901	1126.428	.000
UAldoV_h_I_perdiet	2	729.909	.474	.623

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	890.608490	27.643368	10.274	32.218	.000	829.236789	951.980191
[UAldoV_h_I_perdiet=.0]	2.083889	12.542221	729.907	.166	.868	-22.539242	26.707021
[UAldoV_h_I_perdiet=1.0]	11.324998	12.418477	729.911	.912	.362	-13.055196	35.705192
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	19191.491510	1004.592751
Constant [subject = subject] Variance	6804.341558	3370.300001

a. Dependent Variable: @2Na2KUreaV.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON U2Na2KUreaV AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2Na2KUreaV BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	<pre> MIXED @2Na2KUreaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.06

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation		
11	.0	@2Na2KUreaV	12	844.130	141.1546	16.7%	
		Constant	12	1.000	.0000	0.0%	
	1.0	@2Na2KUreaV	11	929.401	138.0324	14.9%	
		Constant	11	1.000	.0000	0.0%	
	2.0	@2Na2KUreaV	12	952.115	97.2040	10.2%	
		Constant	12	1.000	.0000	0.0%	
Total		@2Na2KUreaV	35	907.953	131.8398	14.5%	
		Constant	35	1.000	.0000	0.0%	
	12	.0	@2Na2KUreaV	12	889.411	100.8765	11.3%
			Constant	12	1.000	.0000	0.0%
1.0		@2Na2KUreaV	11	862.345	106.9997	12.4%	
		Constant	11	1.000	.0000	0.0%	

	2.0	@2Na2KUreaV	12	874.247	119.7768	13.7%
		Constant	12	1.000	.0000	0.0%
	Total	@2Na2KUreaV	35	875.706	106.8920	12.2%
		Constant	35	1.000	.0000	0.0%
15	.0	@2Na2KUreaV	12	900.348	72.4099	8.0%
		Constant	12	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	11	843.688	91.9112	10.9%
		Constant	11	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	12	876.220	79.5951	9.1%
		Constant	12	1.000	.0000	0.0%
	Total	@2Na2KUreaV	35	874.268	82.3077	9.4%
		Constant	35	1.000	.0000	0.0%
16	.0	@2Na2KUreaV	12	937.583	70.5998	7.5%
		Constant	12	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	11	887.075	93.6831	10.6%
		Constant	11	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	12	893.972	109.9694	12.3%
		Constant	12	1.000	.0000	0.0%
	Total	@2Na2KUreaV	35	906.756	92.8700	10.2%
		Constant	35	1.000	.0000	0.0%
51	.0	@2Na2KUreaV	20	767.430	93.0192	12.1%
		Constant	20	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	20	712.803	95.7261	13.4%
		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	673.372	110.1207	16.4%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	717.868	105.6174	14.7%
		Constant	60	1.000	.0000	0.0%
52	.0	@2Na2KUreaV	20	683.071	113.0141	16.5%
		Constant	20	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	20	669.015	89.7347	13.4%
		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	679.732	87.3392	12.8%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	677.273	95.9129	14.2%
		Constant	60	1.000	.0000	0.0%
53	.0	@2Na2KUreaV	20	807.320	98.5236	12.2%
		Constant	20	1.000	.0000	0.0%

	1.0	@2Na2KUreaV	20	779.021	60.4518	7.8%
		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	774.572	130.7553	16.9%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	786.971	100.1125	12.7%
		Constant	60	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	20	684.240	85.2736	12.5%
		Constant	20	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	20	716.796	94.7791	13.2%
		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	627.277	103.0531	16.4%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	676.104	100.2318	14.8%
		Constant	60	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	20	783.572	138.6815	17.7%
		Constant	20	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	20	821.017	136.3964	16.6%
		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	793.027	80.0147	10.1%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	799.205	120.4304	15.1%
		Constant	60	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	20	667.595	111.2599	16.7%
		Constant	20	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	20	634.960	83.0626	13.1%
		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	630.132	74.2108	11.8%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	644.229	90.9027	14.1%
		Constant	60	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	168	778.108	135.8148	17.5%
		Constant	168	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	164	764.755	132.2929	17.3%
		Constant	164	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	168	754.291	145.9812	19.4%
		Constant	168	1.000	.0000	0.0%
	Total	@2Na2KUreaV	500	765.726	138.2679	18.1%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6068.009
Akaike's Information Criterion (AIC)	6072.009
Hurvich and Tsai's Criterion (AICC)	6072.033
Bozdogan's Criterion (CAIC)	6082.426
Schwarz's Bayesian Criterion (BIC)	6080.426

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.982	592.014	.000
UAldoV_h_I_perdiet	2	487.987	2.255	.106

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	773.724966	32.950859	9.717	23.481	.000	700.014674	847.435257
[UAldoV_h_I_perdiet=.0]	23.817355	11.244969	487.983	2.118	.035	1.722821	45.911889
[UAldoV_h_I_perdiet=1.0]	13.426346	11.314708	487.989	1.187	.236	-8.805213	35.657904
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	10621.743720	679.999273
Constant [subject = subject] Variance	10211.909740	4925.744443

a. Dependent Variable: @2Na2KUreaV.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON U2Na2KUreaV AT 6 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2Na2KUreaV BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED @2Na2KUreaV BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	@2Na2KUreaV	10	838.322	177.4390	21.2%
		Constant	10	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	9	749.987	71.8212	9.6%
		Constant	9	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	10	713.338	75.6849	10.6%
		Constant	10	1.000	.0000	0.0%
Total	@2Na2KUreaV	29	767.809	127.9553	16.7%	
	Constant	29	1.000	.0000	0.0%	
12	.0	@2Na2KUreaV	10	1010.898	120.8225	12.0%
		Constant	10	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	9	948.656	57.9153	6.1%
		Constant	9	1.000	.0000	0.0%

	2.0	@2Na2KUreaV	10	996.251	125.7324	12.6%
		Constant	10	1.000	.0000	0.0%
	Total	@2Na2KUreaV	29	986.531	106.9524	10.8%
		Constant	29	1.000	.0000	0.0%
15	.0	@2Na2KUreaV	10	734.818	100.7625	13.7%
		Constant	10	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	9	744.042	117.5686	15.8%
		Constant	9	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	10	760.305	96.6041	12.7%
		Constant	10	1.000	.0000	0.0%
	Total	@2Na2KUreaV	29	746.469	101.6424	13.6%
		Constant	29	1.000	.0000	0.0%
16	.0	@2Na2KUreaV	10	816.817	114.1655	14.0%
		Constant	10	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	9	811.328	75.8852	9.4%
		Constant	9	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	10	786.219	42.8422	5.4%
		Constant	10	1.000	.0000	0.0%
	Total	@2Na2KUreaV	29	804.563	81.3216	10.1%
		Constant	29	1.000	.0000	0.0%
51	.0	@2Na2KUreaV	16	677.589	117.1346	17.3%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	616.699	78.5236	12.7%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	613.113	68.8562	11.2%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	635.801	93.5618	14.7%
		Constant	48	1.000	.0000	0.0%
52	.0	@2Na2KUreaV	16	535.402	95.1325	17.8%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	525.547	56.9383	10.8%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	563.871	69.9333	12.4%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	541.606	75.8521	14.0%
		Constant	48	1.000	.0000	0.0%
53	.0	@2Na2KUreaV	16	723.855	90.4928	12.5%
		Constant	16	1.000	.0000	0.0%



	1.0	@2Na2KUreaV	16	709.119	60.8383	8.6%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	698.621	104.5710	15.0%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	710.532	85.9888	12.1%
		Constant	48	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	16	610.297	126.2240	20.7%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	623.309	97.7784	15.7%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	577.616	58.7962	10.2%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	603.741	98.0649	16.2%
		Constant	48	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	16	686.942	82.8169	12.1%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	686.043	90.1096	13.1%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	648.753	65.0627	10.0%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	673.913	80.3412	11.9%
		Constant	48	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	16	611.155	92.1330	15.1%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	565.633	67.8834	12.0%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	566.052	63.2177	11.2%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	580.947	76.9497	13.2%
		Constant	48	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	136	702.444	162.6421	23.2%
		Constant	136	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	132	673.543	134.1261	19.9%
		Constant	132	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	136	670.953	139.8301	20.8%
		Constant	136	1.000	.0000	0.0%
	Total	@2Na2KUreaV	404	682.400	146.5073	21.5%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4809.324
Akaike's Information Criterion (AIC)	4813.324
Hurvich and Tsai's Criterion (AICC)	4813.355
Bozdogan's Criterion (CAIC)	4823.312
Schwarz's Bayesian Criterion (BIC)	4821.312

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.973	293.498	.000
UAldoV_h_I_perdiet	2	391.976	4.503	.012

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	692.008207	41.624624	9.405	16.625	.000	598.460653	785.555762
[UAldoV_h_I_perdiet=.0]	31.491281	11.028169	391.974	2.856	.005	9.809520	53.173041
[UAldoV_h_I_perdiet=1.0]	6.844404	11.113432	391.978	.616	.538	-15.004987	28.693795
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	8270.194632	590.748106
Constant [subject = subject] Variance	16706.931990	7989.890639

a. Dependent Variable: @2Na2KUreaV.

\*ANALYSIS OF EXCRETION DATA FOR FREE WATER EXCRETION CALCULATIONS  
RESPONSE TO CORTISONE TERTILE

\*ON SODIUM EXCRETION

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2UNaV AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

```
MIXED @2NaV BY UFEV_h_1_perdiet WITH Constant  
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)  
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)  
/METHOD=REML  
/PRINT=DESCRIPTIVES SOLUTION  
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED @2NaV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2NaV	35	256.471	91.2223	35.6%
	Constant	35	1.000	.0000	0.0%
	1.0 @2NaV	34	292.500	94.7448	32.4%
	Constant	34	1.000	.0000	0.0%
	2.0 @2NaV	35	343.357	111.8652	32.6%
	Constant	35	1.000	.0000	0.0%
12	Total @2NaV	104	297.490	105.1119	35.3%
	Constant	104	1.000	.0000	0.0%
	.0 @2NaV	35	307.388	66.6891	21.7%
	Constant	35	1.000	.0000	0.0%
	1.0 @2NaV	34	306.434	66.4835	21.7%
	Constant	34	1.000	.0000	0.0%
	2.0 @2NaV	35	350.728	81.0624	23.1%

		Constant	35	1.000	.0000	0.0%
	Total	@2NaV	104	321.662	74.0688	23.0%
		Constant	104	1.000	.0000	0.0%
15	.0	@2NaV	35	273.383	83.2323	30.4%
		Constant	35	1.000	.0000	0.0%
	1.0	@2NaV	34	302.134	104.8016	34.7%
		Constant	34	1.000	.0000	0.0%
	2.0	@2NaV	35	326.034	98.2417	30.1%
		Constant	35	1.000	.0000	0.0%
	Total	@2NaV	104	300.501	97.2828	32.4%
		Constant	104	1.000	.0000	0.0%
16	.0	@2NaV	35	249.787	81.2281	32.5%
		Constant	35	1.000	.0000	0.0%
	1.0	@2NaV	34	301.935	103.3006	34.2%
		Constant	34	1.000	.0000	0.0%
	2.0	@2NaV	35	331.765	97.5615	29.4%
		Constant	35	1.000	.0000	0.0%
	Total	@2NaV	104	294.424	99.5404	33.8%
		Constant	104	1.000	.0000	0.0%
51	.0	@2NaV	68	265.650	116.5551	43.9%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	307.499	117.6316	38.3%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	344.502	136.9487	39.8%
		Constant	68	1.000	.0000	0.0%
	Total	@2NaV	205	305.891	127.5597	41.7%
		Constant	205	1.000	.0000	0.0%
52	.0	@2NaV	68	232.088	83.7224	36.1%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	270.908	105.4391	38.9%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	298.055	102.9421	34.5%
		Constant	68	1.000	.0000	0.0%
	Total	@2NaV	205	267.036	101.1002	37.9%
		Constant	205	1.000	.0000	0.0%
53	.0	@2NaV	68	267.076	104.6132	39.2%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	299.209	106.3439	35.5%

		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	329.592	99.2657	30.1%
		Constant	68	1.000	.0000	0.0%
	Total	@2NaV	205	298.628	106.0746	35.5%
		Constant	205	1.000	.0000	0.0%
54	.0	@2NaV	68	248.558	89.1791	35.9%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	282.689	98.0443	34.7%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	310.322	100.3674	32.3%
		Constant	68	1.000	.0000	0.0%
	Total	@2NaV	205	280.534	98.8073	35.2%
		Constant	205	1.000	.0000	0.0%
55	.0	@2NaV	68	247.334	92.2583	37.3%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	291.739	85.4494	29.3%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	333.658	110.3592	33.1%
		Constant	68	1.000	.0000	0.0%
	Total	@2NaV	205	290.914	102.3311	35.2%
		Constant	205	1.000	.0000	0.0%
56	.0	@2NaV	68	261.705	97.2813	37.2%
		Constant	68	1.000	.0000	0.0%
	1.0	@2NaV	69	273.093	93.3360	34.2%
		Constant	69	1.000	.0000	0.0%
	2.0	@2NaV	68	293.468	93.8550	32.0%
		Constant	68	1.000	.0000	0.0%
	Total	@2NaV	205	276.074	95.2774	34.5%
		Constant	205	1.000	.0000	0.0%
Total	.0	@2NaV	548	258.339	94.7457	36.7%
		Constant	548	1.000	.0000	0.0%
	1.0	@2NaV	550	290.794	99.7248	34.3%
		Constant	550	1.000	.0000	0.0%
	2.0	@2NaV	548	323.300	106.5291	33.0%
		Constant	548	1.000	.0000	0.0%
	Total	@2NaV	1646	290.811	103.8293	35.7%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2NaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	19814.384
Akaike's Information Criterion (AIC)	19818.384
Hurvich and Tsai's Criterion (AICC)	19818.391
Bozdogan's Criterion (CAIC)	19831.192
Schwarz's Bayesian Criterion (BIC)	19829.192

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2NaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.967	3461.826	.000
UFEV_h_I_perdiet	2	1634.160	58.236	.000

a. Dependent Variable: @2NaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	325.030081	6.065731	19.839	53.585	.000	312.370595	337.689567
[UFEV_h_I_perdiet=.0]	-64.960960	6.019237	1634.124	-10.792	.000	-76.767192	-53.154727
[UFEV_h_I_perdiet=1.0]	-32.408426	6.013888	1634.178	-5.389	.000	-44.204167	-20.612685
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2NaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	9927.352884	347.300928
Constant [subject = subject]	Variance	182.080246
		115.878921

a. Dependent Variable: @2NaV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2UNaV AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2NaV BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:46
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED @2NaV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.12

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2NaV	13	334.606	69.4231	20.7%
	Constant	13	1.000	.0000	0.0%
	1.0 @2NaV	14	366.478	86.9162	23.7%
	Constant	14	1.000	.0000	0.0%
	2.0 @2NaV	13	434.850	67.4021	15.5%
	Constant	13	1.000	.0000	0.0%
12	Total @2NaV	40	378.341	84.5664	22.4%
	Constant	40	1.000	.0000	0.0%
	.0 @2NaV	13	326.217	59.9765	18.4%
	Constant	13	1.000	.0000	0.0%
	1.0 @2NaV	14	353.002	47.5038	13.5%
	Constant	14	1.000	.0000	0.0%
2.0 @2NaV	13	404.873	84.7965	20.9%	

		Constant	13	1.000	.0000	0.0%
	Total	@2NaV	40	361.155	71.6889	19.8%
		Constant	40	1.000	.0000	0.0%
15	.0	@2NaV	13	335.478	64.3044	19.2%
		Constant	13	1.000	.0000	0.0%
	1.0	@2NaV	14	395.204	68.8077	17.4%
		Constant	14	1.000	.0000	0.0%
	2.0	@2NaV	13	418.016	41.0802	9.8%
		Constant	13	1.000	.0000	0.0%
	Total	@2NaV	40	383.207	67.7101	17.7%
		Constant	40	1.000	.0000	0.0%
16	.0	@2NaV	13	312.380	77.9063	24.9%
		Constant	13	1.000	.0000	0.0%
	1.0	@2NaV	14	378.547	101.9905	26.9%
		Constant	14	1.000	.0000	0.0%
	2.0	@2NaV	13	415.000	63.7407	15.4%
		Constant	13	1.000	.0000	0.0%
	Total	@2NaV	40	368.890	91.6058	24.8%
		Constant	40	1.000	.0000	0.0%
51	.0	@2NaV	32	338.201	103.6851	30.7%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	389.580	97.4743	25.0%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	447.365	98.1575	21.9%
		Constant	32	1.000	.0000	0.0%
	Total	@2NaV	97	391.693	108.3436	27.7%
		Constant	97	1.000	.0000	0.0%
52	.0	@2NaV	32	294.025	66.0778	22.5%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	359.926	58.5965	16.3%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	379.173	55.6540	14.7%
		Constant	32	1.000	.0000	0.0%
	Total	@2NaV	97	344.535	69.9031	20.3%
		Constant	97	1.000	.0000	0.0%
53	.0	@2NaV	32	359.249	64.7522	18.0%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	388.233	68.7961	17.7%

		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	405.818	62.8331	15.5%
		Constant	32	1.000	.0000	0.0%
	Total	@2NaV	97	384.473	67.6407	17.6%
		Constant	97	1.000	.0000	0.0%
54	.0	@2NaV	32	326.386	50.5715	15.5%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	366.083	58.9840	16.1%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	391.222	65.4528	16.7%
		Constant	32	1.000	.0000	0.0%
	Total	@2NaV	97	361.280	63.8872	17.7%
		Constant	97	1.000	.0000	0.0%
55	.0	@2NaV	32	309.716	72.6817	23.5%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	359.734	44.2436	12.3%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	422.566	70.3903	16.7%
		Constant	32	1.000	.0000	0.0%
	Total	@2NaV	97	363.961	78.0396	21.4%
		Constant	97	1.000	.0000	0.0%
56	.0	@2NaV	32	336.513	71.0554	21.1%
		Constant	32	1.000	.0000	0.0%
	1.0	@2NaV	33	348.339	55.1470	15.8%
		Constant	33	1.000	.0000	0.0%
	2.0	@2NaV	32	363.385	72.8019	20.0%
		Constant	32	1.000	.0000	0.0%
	Total	@2NaV	97	349.401	66.9069	19.1%
		Constant	97	1.000	.0000	0.0%
Total	.0	@2NaV	244	327.310	73.4405	22.4%
		Constant	244	1.000	.0000	0.0%
	1.0	@2NaV	254	369.676	69.4849	18.8%
		Constant	254	1.000	.0000	0.0%
	2.0	@2NaV	244	405.125	74.3380	18.3%
		Constant	244	1.000	.0000	0.0%
	Total	@2NaV	742	367.402	78.9243	21.5%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2NaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	8426.355
Akaike's Information Criterion (AIC)	8430.355
Hurvich and Tsai's Criterion (AICC)	8430.372
Bozdogan's Criterion (CAIC)	8441.566
Schwarz's Bayesian Criterion (BIC)	8439.566

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2NaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.879	4971.042	.000
UFEV_h_I_perdiet	2	731.089	73.399	.000

a. Dependent Variable: @2NaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	405.997938	6.416985	22.384	63.269	.000	392.703146	419.292730
[UFEV_h_I_perdiet=.0]	-77.814736	6.430970	731.075	-12.100	.000	-90.440107	-65.189364
[UFEV_h_I_perdiet=1.0]	-35.483278	6.367473	731.096	-5.573	.000	-47.983990	-22.982565
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2NaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	5045.599764	263.904511
Constant [subject = subject]	Variance 195.586664	120.877681

a. Dependent Variable: @2NaV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2UNaV AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2NaV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:47	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax		MIXED @2NaV BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.13

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2NaV	12	247.599	42.4882	17.2%
	Constant	12	1.000	.0000	0.0%
	1.0 @2NaV	11	280.876	40.2998	14.3%
	Constant	11	1.000	.0000	0.0%
	2.0 @2NaV	12	325.974	82.6910	25.4%
	Constant	12	1.000	.0000	0.0%
Total	@2NaV	35	284.929	66.0733	23.2%
	Constant	35	1.000	.0000	0.0%
12	.0 @2NaV	12	287.357	58.7045	20.4%
	Constant	12	1.000	.0000	0.0%
	1.0 @2NaV	11	284.969	58.3384	20.5%
	Constant	11	1.000	.0000	0.0%
	2.0 @2NaV	12	321.174	70.4609	21.9%

		Constant	12	1.000	.0000	0.0%
	Total	@2NaV	35	298.201	63.2977	21.2%
		Constant	35	1.000	.0000	0.0%
15	.0	@2NaV	12	279.979	58.2563	20.8%
		Constant	12	1.000	.0000	0.0%
	1.0	@2NaV	11	286.923	42.2396	14.7%
		Constant	11	1.000	.0000	0.0%
	2.0	@2NaV	12	326.603	44.8793	13.7%
		Constant	12	1.000	.0000	0.0%
	Total	@2NaV	35	298.147	52.1290	17.5%
		Constant	35	1.000	.0000	0.0%
16	.0	@2NaV	12	248.758	45.4204	18.3%
		Constant	12	1.000	.0000	0.0%
	1.0	@2NaV	11	292.118	44.0148	15.1%
		Constant	11	1.000	.0000	0.0%
	2.0	@2NaV	12	327.274	50.5940	15.5%
		Constant	12	1.000	.0000	0.0%
	Total	@2NaV	35	289.305	56.1873	19.4%
		Constant	35	1.000	.0000	0.0%
51	.0	@2NaV	20	236.462	94.0417	39.8%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	264.619	78.2561	29.6%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	315.277	71.2441	22.6%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	272.119	86.8111	31.9%
		Constant	60	1.000	.0000	0.0%
52	.0	@2NaV	20	204.137	44.3028	21.7%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	233.649	49.2447	21.1%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	280.219	57.1964	20.4%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	239.335	58.8561	24.6%
		Constant	60	1.000	.0000	0.0%
53	.0	@2NaV	20	215.632	32.5118	15.1%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	252.640	38.6096	15.3%

		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	304.156	59.5889	19.6%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	257.476	57.4808	22.3%
		Constant	60	1.000	.0000	0.0%
54	.0	@2NaV	20	204.503	40.7287	19.9%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	238.401	46.5463	19.5%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	272.491	59.3605	21.8%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	238.465	56.1257	23.5%
		Constant	60	1.000	.0000	0.0%
55	.0	@2NaV	20	234.974	62.6677	26.7%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	275.892	41.8101	15.2%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	292.401	61.7954	21.1%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	267.756	60.4152	22.6%
		Constant	60	1.000	.0000	0.0%
56	.0	@2NaV	20	229.387	60.5602	26.4%
		Constant	20	1.000	.0000	0.0%
	1.0	@2NaV	20	225.816	53.5066	23.7%
		Constant	20	1.000	.0000	0.0%
	2.0	@2NaV	20	265.054	59.7305	22.5%
		Constant	20	1.000	.0000	0.0%
	Total	@2NaV	60	240.085	59.7589	24.9%
		Constant	60	1.000	.0000	0.0%
Total	.0	@2NaV	168	233.728	61.2212	26.2%
		Constant	168	1.000	.0000	0.0%
	1.0	@2NaV	164	258.622	54.8747	21.2%
		Constant	164	1.000	.0000	0.0%
	2.0	@2NaV	168	298.835	64.6369	21.6%
		Constant	168	1.000	.0000	0.0%
	Total	@2NaV	500	263.769	66.0510	25.0%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2NaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5461.675
Akaike's Information Criterion (AIC)	5465.675
Hurvich and Tsai's Criterion (AICC)	5465.699
Bozdogan's Criterion (CAIC)	5476.092
Schwarz's Bayesian Criterion (BIC)	5474.092

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2NaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.880	1272.236	.000
UFEV_h_I_perdiet	2	487.922	55.871	.000

a. Dependent Variable: @2NaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	302.788142	8.315963	13.340	36.410	.000	284.868968	320.707316
[UFEV_h_I_perdiet=.0]	-65.107210	6.206399	487.900	-10.490	.000	-77.301779	-52.912641
[UFEV_h_I_perdiet=1.0]	-39.609671	6.244804	487.933	-6.343	.000	-51.879696	-27.339645
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2NaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3235.628639	207.161163
Constant [subject = subject]	Variance 495.326135	267.443002

a. Dependent Variable: @2NaV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2UNaV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2NaV BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED @2NaV BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2NaV	10	165.542	68.5126	41.4%
	Constant	10	1.000	.0000	0.0%
	1.0 @2NaV	9	191.632	38.8989	20.3%
	Constant	9	1.000	.0000	0.0%
	2.0 @2NaV	10	245.275	98.3691	40.1%
	Constant	10	1.000	.0000	0.0%
Total	@2NaV	29	201.133	78.9223	39.2%
	Constant	29	1.000	.0000	0.0%
12	.0 @2NaV	10	306.946	82.1329	26.8%
	Constant	10	1.000	.0000	0.0%
	1.0 @2NaV	9	260.231	59.0043	22.7%
	Constant	9	1.000	.0000	0.0%
	2.0 @2NaV	10	315.803	49.1374	15.6%

		Constant	10	1.000	.0000	0.0%
	Total	@2NaV	29	295.503	67.3270	22.8%
		Constant	29	1.000	.0000	0.0%
15	.0	@2NaV	10	184.743	46.3904	25.1%
		Constant	10	1.000	.0000	0.0%
	1.0	@2NaV	9	175.951	44.6507	25.4%
		Constant	9	1.000	.0000	0.0%
	2.0	@2NaV	10	205.774	58.8067	28.6%
		Constant	10	1.000	.0000	0.0%
	Total	@2NaV	29	189.267	50.3443	26.6%
		Constant	29	1.000	.0000	0.0%
16	.0	@2NaV	10	169.649	38.9287	22.9%
		Constant	10	1.000	.0000	0.0%
	1.0	@2NaV	9	194.759	36.9651	19.0%
		Constant	9	1.000	.0000	0.0%
	2.0	@2NaV	10	228.949	75.0478	32.8%
		Constant	10	1.000	.0000	0.0%
	Total	@2NaV	29	197.890	57.6227	29.1%
		Constant	29	1.000	.0000	0.0%
51	.0	@2NaV	16	157.031	48.0632	30.6%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	191.805	56.1360	29.3%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	175.306	56.4246	32.2%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	174.714	54.4525	31.2%
		Constant	48	1.000	.0000	0.0%
52	.0	@2NaV	16	143.154	46.2277	32.3%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	133.882	26.2672	19.6%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	158.113	37.9155	24.0%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	145.049	38.2467	26.4%
		Constant	48	1.000	.0000	0.0%
53	.0	@2NaV	16	147.033	43.0646	29.3%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	173.807	46.7023	26.9%



		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	208.936	50.6919	24.3%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	176.592	52.5767	29.8%
		Constant	48	1.000	.0000	0.0%
54	.0	@2NaV	16	147.971	42.8265	28.9%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	166.047	31.3622	18.9%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	195.812	42.6758	21.8%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	169.943	43.3341	25.5%
		Constant	48	1.000	.0000	0.0%
55	.0	@2NaV	16	138.022	29.5850	21.4%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	171.307	27.0817	15.8%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	207.414	56.4840	27.2%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	172.248	48.4943	28.2%
		Constant	48	1.000	.0000	0.0%
56	.0	@2NaV	16	152.488	33.7080	22.1%
		Constant	16	1.000	.0000	0.0%
	1.0	@2NaV	16	176.996	63.9656	36.1%
		Constant	16	1.000	.0000	0.0%
	2.0	@2NaV	16	189.153	27.5821	14.6%
		Constant	16	1.000	.0000	0.0%
	Total	@2NaV	48	172.879	46.3544	26.8%
		Constant	48	1.000	.0000	0.0%
Total	.0	@2NaV	136	165.000	62.4433	37.8%
		Constant	136	1.000	.0000	0.0%
	1.0	@2NaV	132	178.975	51.4496	28.7%
		Constant	132	1.000	.0000	0.0%
	2.0	@2NaV	136	206.719	65.7948	31.8%
		Constant	136	1.000	.0000	0.0%
	Total	@2NaV	404	183.610	62.6172	34.1%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2NaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4319.957
Akaike's Information Criterion (AIC)	4323.957
Hurvich and Tsai's Criterion (AICC)	4323.987
Bozdogan's Criterion (CAIC)	4333.945
Schwarz's Bayesian Criterion (BIC)	4331.945

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2NaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.855	222.301	.000
UFEV_h_l_perdiet	2	391.863	24.224	.000

a. Dependent Variable: @2NaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	212.001770	13.160743	10.243	16.109	.000	182.771981	241.231560
[UFEV_h_l_perdiet=.0]	-41.719111	6.069418	391.854	-6.874	.000	-53.651808	-29.786414
[UFEV_h_l_perdiet=1.0]	-26.676805	6.116308	391.868	-4.362	.000	-38.701688	-14.651921
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2NaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2504.972857	178.959889
Constant [subject = subject]	Variance	1544.617536
		765.264227

a. Dependent Variable: @2NaV.

\*ON POTASSIUM EXCRETION

\* Mixed Linear Models

EFFECT OF UFEV TERTILE ON 2UKV AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED @2KV BY UFEV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UFEV\_h\_l\_perdiet | SSTYPE(3)

```

/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED @2KV BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2KV	35	206.389	33.5754	16.3%
	Constant	35	1.000	.0000	0.0%
	1.0 @2KV	34	216.548	37.3189	17.2%
	Constant	34	1.000	.0000	0.0%
	2.0 @2KV	35	232.046	45.6536	19.7%
	Constant	35	1.000	.0000	0.0%
Total	@2KV	104	218.345	40.2462	18.4%
	Constant	104	1.000	.0000	0.0%
12	.0 @2KV	35	160.563	43.2960	27.0%
	Constant	35	1.000	.0000	0.0%
	1.0 @2KV	34	173.709	43.6706	25.1%
	Constant	34	1.000	.0000	0.0%
	2.0 @2KV	35	204.802	44.7068	21.8%

		Constant	35	1.000	.0000	0.0%
	Total	@2KV	104	179.749	47.3283	26.3%
		Constant	104	1.000	.0000	0.0%
15	.0	@2KV	35	183.571	25.2924	13.8%
		Constant	35	1.000	.0000	0.0%
	1.0	@2KV	34	194.446	33.4989	17.2%
		Constant	34	1.000	.0000	0.0%
	2.0	@2KV	35	193.760	24.6824	12.7%
		Constant	35	1.000	.0000	0.0%
	Total	@2KV	104	190.555	28.2287	14.8%
		Constant	104	1.000	.0000	0.0%
16	.0	@2KV	35	191.062	35.5900	18.6%
		Constant	35	1.000	.0000	0.0%
	1.0	@2KV	34	196.601	26.8003	13.6%
		Constant	34	1.000	.0000	0.0%
	2.0	@2KV	35	213.596	31.0560	14.5%
		Constant	35	1.000	.0000	0.0%
	Total	@2KV	104	200.457	32.5602	16.2%
		Constant	104	1.000	.0000	0.0%
51	.0	@2KV	68	156.726	36.7889	23.5%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	171.207	36.5510	21.3%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	173.664	37.2881	21.5%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	167.218	37.4488	22.4%
		Constant	205	1.000	.0000	0.0%
52	.0	@2KV	68	138.565	34.5944	25.0%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	149.091	36.3709	24.4%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	155.380	37.6776	24.2%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	147.686	36.7202	24.9%
		Constant	205	1.000	.0000	0.0%
53	.0	@2KV	68	167.891	32.1783	19.2%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	178.474	30.3353	17.0%

		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	182.787	32.1643	17.6%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	176.394	32.0278	18.2%
		Constant	205	1.000	.0000	0.0%
54	.0	@2KV	68	145.573	26.4157	18.1%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	156.944	28.5837	18.2%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	173.156	39.2474	22.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	158.550	33.6977	21.3%
		Constant	205	1.000	.0000	0.0%
55	.0	@2KV	68	171.697	34.9541	20.4%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	179.428	28.7469	16.0%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	189.014	46.2345	24.5%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	180.043	37.8018	21.0%
		Constant	205	1.000	.0000	0.0%
56	.0	@2KV	68	140.084	31.0642	22.2%
		Constant	68	1.000	.0000	0.0%
	1.0	@2KV	69	137.338	27.0334	19.7%
		Constant	69	1.000	.0000	0.0%
	2.0	@2KV	68	147.929	30.6229	20.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2KV	205	141.762	29.8121	21.0%
		Constant	205	1.000	.0000	0.0%
Total	.0	@2KV	548	161.591	38.5803	23.9%
		Constant	548	1.000	.0000	0.0%
	1.0	@2KV	550	170.301	38.6389	22.7%
		Constant	550	1.000	.0000	0.0%
	2.0	@2KV	548	180.727	43.6974	24.2%
		Constant	548	1.000	.0000	0.0%
	Total	@2KV	1646	170.872	41.1010	24.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2KV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	16371.050
Akaike's Information Criterion (AIC)	16375.050
Hurvich and Tsai's Criterion (AICC)	16375.057
Bozdogan's Criterion (CAIC)	16387.858
Schwarz's Bayesian Criterion (BIC)	16385.858

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2KV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.977	560.225	.000
UFEV_h_I_perdiet	2	1633.980	41.802	.000

a. Dependent Variable: @2KV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	185.747269	7.532885	9.457	24.658	.000	168.831439	202.663099
[UFEV_h_I_perdiet=.0]	-19.135733	2.094061	1633.977	-9.138	.000	-23.243060	-15.028407
[UFEV_h_I_perdiet=1.0]	-10.140867	2.092218	1633.981	-4.847	.000	-14.244578	-6.037156
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2KV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	1201.515092	42.035983
Constant [subject = subject]	Variance	544.724185
		260.943739

a. Dependent Variable: @2KV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2UKV AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2KV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED @2KV BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2KV	13	216.797	32.9390	15.2%
	Constant	13	1.000	.0000	0.0%
	1.0 @2KV	14	235.289	36.1282	15.4%
	Constant	14	1.000	.0000	0.0%
	2.0 @2KV	13	251.422	40.5565	16.1%
	Constant	13	1.000	.0000	0.0%
Total	@2KV	40	234.522	38.4079	16.4%
	Constant	40	1.000	.0000	0.0%
12	.0 @2KV	13	121.637	29.3072	24.1%
	Constant	13	1.000	.0000	0.0%
	1.0 @2KV	14	135.776	27.9519	20.6%
	Constant	14	1.000	.0000	0.0%
	2.0 @2KV	13	187.661	49.9105	26.6%

		Constant	13	1.000	.0000	0.0%
	Total	@2KV	40	148.043	45.8349	31.0%
		Constant	40	1.000	.0000	0.0%
15	.0	@2KV	13	183.529	22.6585	12.3%
		Constant	13	1.000	.0000	0.0%
	1.0	@2KV	14	193.862	29.8741	15.4%
		Constant	14	1.000	.0000	0.0%
	2.0	@2KV	13	195.829	17.8972	9.1%
		Constant	13	1.000	.0000	0.0%
	Total	@2KV	40	191.143	24.1519	12.6%
		Constant	40	1.000	.0000	0.0%
16	.0	@2KV	13	189.952	31.9051	16.8%
		Constant	13	1.000	.0000	0.0%
	1.0	@2KV	14	203.385	21.6198	10.6%
		Constant	14	1.000	.0000	0.0%
	2.0	@2KV	13	216.946	32.2959	14.9%
		Constant	13	1.000	.0000	0.0%
	Total	@2KV	40	203.426	30.1893	14.8%
		Constant	40	1.000	.0000	0.0%
51	.0	@2KV	32	173.554	40.4528	23.3%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	188.656	41.7885	22.2%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	193.708	36.6586	18.9%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	185.341	40.2231	21.7%
		Constant	97	1.000	.0000	0.0%
52	.0	@2KV	32	156.928	35.8323	22.8%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	166.461	35.1490	21.1%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	169.493	38.7914	22.9%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	164.316	36.6204	22.3%
		Constant	97	1.000	.0000	0.0%
53	.0	@2KV	32	183.186	33.7323	18.4%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	192.438	31.3693	16.3%

		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	197.308	32.9069	16.7%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	190.992	32.8550	17.2%
		Constant	97	1.000	.0000	0.0%
54	.0	@2KV	32	156.900	25.3353	16.1%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	166.695	28.8176	17.3%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	184.844	49.6056	26.8%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	169.451	37.5872	22.2%
		Constant	97	1.000	.0000	0.0%
55	.0	@2KV	32	185.673	33.1353	17.8%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	186.151	31.1351	16.7%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	200.929	46.9836	23.4%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	190.868	37.9590	19.9%
		Constant	97	1.000	.0000	0.0%
56	.0	@2KV	32	153.666	37.7216	24.5%
		Constant	32	1.000	.0000	0.0%
	1.0	@2KV	33	142.483	26.3978	18.5%
		Constant	33	1.000	.0000	0.0%
	2.0	@2KV	32	151.955	38.3910	25.3%
		Constant	32	1.000	.0000	0.0%
	Total	@2KV	97	149.297	34.5309	23.1%
		Constant	97	1.000	.0000	0.0%
Total	.0	@2KV	244	170.377	38.7710	22.8%
		Constant	244	1.000	.0000	0.0%
	1.0	@2KV	254	177.841	39.6679	22.3%
		Constant	254	1.000	.0000	0.0%
	2.0	@2KV	244	189.417	45.5320	24.0%
		Constant	244	1.000	.0000	0.0%
	Total	@2KV	742	179.193	42.0798	23.5%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2KV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7428.807
Akaike's Information Criterion (AIC)	7432.807
Hurvich and Tsai's Criterion (AICC)	7432.823
Bozdogan's Criterion (CAIC)	7444.018
Schwarz's Bayesian Criterion (BIC)	7442.018

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2KV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.845	495.694	.000
UFEV_h_I_perdiet	2	729.847	17.694	.000

a. Dependent Variable: @2KV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	192.887067	8.414261	9.791	22.924	.000	174.084515	211.689618
[UFEV_h_I_perdiet=.0]	-19.040294	3.229608	729.846	-5.896	.000	-25.380724	-12.699865
[UFEV_h_I_perdiet=1.0]	-11.712816	3.197745	729.848	-3.663	.000	-17.990692	-5.434941
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2KV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	1272.504689	66.612986
Constant [subject = subject]	Variance	652.431839
		319.930917

a. Dependent Variable: @2KV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2UKV AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2KV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax		MIXED @2KV BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.02

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2KV	12	204.460	33.3638	16.3%
	Constant	12	1.000	.0000	0.0%
	1.0 @2KV	11	211.741	28.9536	13.7%
	Constant	11	1.000	.0000	0.0%
	2.0 @2KV	12	238.423	42.5857	17.9%
	Constant	12	1.000	.0000	0.0%
Total	@2KV	35	218.393	37.6546	17.2%
	Constant	35	1.000	.0000	0.0%
12	.0 @2KV	12	175.051	28.9719	16.6%
	Constant	12	1.000	.0000	0.0%
	1.0 @2KV	11	195.001	29.8567	15.3%
	Constant	11	1.000	.0000	0.0%
	2.0 @2KV	12	209.680	47.8352	22.8%

		Constant	12	1.000	.0000	0.0%
	Total	@2KV	35	193.194	38.5643	20.0%
		Constant	35	1.000	.0000	0.0%
15	.0	@2KV	12	184.082	27.7020	15.0%
		Constant	12	1.000	.0000	0.0%
	1.0	@2KV	11	201.315	36.8222	18.3%
		Constant	11	1.000	.0000	0.0%
	2.0	@2KV	12	187.718	31.6571	16.9%
		Constant	12	1.000	.0000	0.0%
	Total	@2KV	35	190.745	32.0366	16.8%
		Constant	35	1.000	.0000	0.0%
16	.0	@2KV	12	200.954	43.0457	21.4%
		Constant	12	1.000	.0000	0.0%
	1.0	@2KV	11	188.013	31.9378	17.0%
		Constant	11	1.000	.0000	0.0%
	2.0	@2KV	12	213.273	38.3125	18.0%
		Constant	12	1.000	.0000	0.0%
	Total	@2KV	35	201.110	38.4980	19.1%
		Constant	35	1.000	.0000	0.0%
51	.0	@2KV	20	144.073	30.8432	21.4%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	152.792	23.2952	15.2%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	164.814	28.3399	17.2%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	153.893	28.5180	18.5%
		Constant	60	1.000	.0000	0.0%
52	.0	@2KV	20	124.488	23.2957	18.7%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	148.606	27.0623	18.2%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	155.894	33.9543	21.8%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	142.996	31.0654	21.7%
		Constant	60	1.000	.0000	0.0%
53	.0	@2KV	20	151.328	27.2840	18.0%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	171.731	23.3660	13.6%

		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	172.002	29.6192	17.2%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	165.020	28.1675	17.1%
		Constant	60	1.000	.0000	0.0%
54	.0	@2KV	20	138.771	14.2099	10.2%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	156.502	30.8942	19.7%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	165.927	28.3674	17.1%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	153.733	27.5757	17.9%
		Constant	60	1.000	.0000	0.0%
55	.0	@2KV	20	171.097	32.1048	18.8%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	181.498	29.7153	16.4%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	175.429	30.7976	17.6%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	176.008	30.6633	17.4%
		Constant	60	1.000	.0000	0.0%
56	.0	@2KV	20	132.146	16.7822	12.7%
		Constant	20	1.000	.0000	0.0%
	1.0	@2KV	20	131.702	31.3171	23.8%
		Constant	20	1.000	.0000	0.0%
	2.0	@2KV	20	146.952	24.2237	16.5%
		Constant	20	1.000	.0000	0.0%
	Total	@2KV	60	136.933	25.4278	18.6%
		Constant	60	1.000	.0000	0.0%
Total	.0	@2KV	168	157.218	37.3219	23.7%
		Constant	168	1.000	.0000	0.0%
	1.0	@2KV	164	168.374	36.7319	21.8%
		Constant	164	1.000	.0000	0.0%
	2.0	@2KV	168	177.437	40.8550	23.0%
		Constant	168	1.000	.0000	0.0%
	Total	@2KV	500	167.671	39.1736	23.4%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2KV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4839.964
Akaike's Information Criterion (AIC)	4843.964
Hurvich and Tsai's Criterion (AICC)	4843.989
Bozdogan's Criterion (CAIC)	4854.382
Schwarz's Bayesian Criterion (BIC)	4852.382

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2KV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.963	410.612	.000
UFEV_h_I_perdiet	2	487.968	19.266	.000

a. Dependent Variable: @2KV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	182.555027	8.745430	9.855	20.874	.000	163.030195	202.079859
[UFEV_h_I_perdiet=.0]	-20.219418	3.274672	487.963	-6.174	.000	-26.653617	-13.785219
[UFEV_h_I_perdiet=1.0]	-8.283105	3.294979	487.970	-2.514	.012	-14.757203	-1.809007
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2KV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	900.772214	57.668201
Constant [subject = subject]	Variance	710.074715
		344.519488

a. Dependent Variable: @2KV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2UKV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2KV BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED @2KV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2KV	10	195.175	33.9179	17.4%
	Constant	10	1.000	.0000	0.0%
	1.0 @2KV	9	193.271	36.3324	18.8%
	Constant	9	1.000	.0000	0.0%
	2.0 @2KV	10	199.205	40.8572	20.5%
	Constant	10	1.000	.0000	0.0%
12	Total @2KV	29	195.974	35.9138	18.3%
	Constant	29	1.000	.0000	0.0%
	.0 @2KV	10	193.780	34.8706	18.0%
	Constant	10	1.000	.0000	0.0%
	1.0 @2KV	9	206.694	33.4279	16.2%
	Constant	9	1.000	.0000	0.0%
2.0 @2KV	10	221.231	26.0094	11.8%	

		Constant	10	1.000	.0000	0.0%
	Total	@2KV	29	207.254	32.5923	15.7%
		Constant	29	1.000	.0000	0.0%
15	.0	@2KV	10	183.013	28.1689	15.4%
		Constant	10	1.000	.0000	0.0%
	1.0	@2KV	9	186.959	36.8149	19.7%
		Constant	9	1.000	.0000	0.0%
	2.0	@2KV	10	198.322	23.9075	12.1%
		Constant	10	1.000	.0000	0.0%
	Total	@2KV	29	189.516	29.5111	15.6%
		Constant	29	1.000	.0000	0.0%
16	.0	@2KV	10	180.635	30.1684	16.7%
		Constant	10	1.000	.0000	0.0%
	1.0	@2KV	9	196.546	27.3181	13.9%
		Constant	9	1.000	.0000	0.0%
	2.0	@2KV	10	209.629	20.6155	9.8%
		Constant	10	1.000	.0000	0.0%
	Total	@2KV	29	195.571	28.1589	14.4%
		Constant	29	1.000	.0000	0.0%
51	.0	@2KV	16	138.883	17.3539	12.5%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	158.237	18.5010	11.7%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	144.637	23.5711	16.3%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	147.253	21.2113	14.4%
		Constant	48	1.000	.0000	0.0%
52	.0	@2KV	16	119.437	25.1175	21.0%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	113.874	21.1327	18.6%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	126.510	21.3632	16.9%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	119.941	22.7341	19.0%
		Constant	48	1.000	.0000	0.0%
53	.0	@2KV	16	158.005	19.0093	12.0%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	158.102	21.1790	13.4%



		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	167.225	20.2130	12.1%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	161.111	20.1982	12.5%
		Constant	48	1.000	.0000	0.0%
54	.0	@2KV	16	131.422	31.3930	23.9%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	137.384	10.2808	7.5%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	158.816	13.9663	8.8%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	142.541	23.4910	16.5%
		Constant	48	1.000	.0000	0.0%
55	.0	@2KV	16	144.495	26.0041	18.0%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	162.973	12.8757	7.9%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	182.166	56.4417	31.0%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	163.211	39.0769	23.9%
		Constant	48	1.000	.0000	0.0%
56	.0	@2KV	16	122.843	14.7710	12.0%
		Constant	16	1.000	.0000	0.0%
	1.0	@2KV	16	133.772	21.6779	16.2%
		Constant	16	1.000	.0000	0.0%
	2.0	@2KV	16	141.096	17.7133	12.6%
		Constant	16	1.000	.0000	0.0%
	Total	@2KV	48	132.570	19.4216	14.7%
		Constant	48	1.000	.0000	0.0%
Total	.0	@2KV	136	151.231	36.4781	24.1%
		Constant	136	1.000	.0000	0.0%
	1.0	@2KV	132	158.187	35.7247	22.6%
		Constant	132	1.000	.0000	0.0%
	2.0	@2KV	136	169.199	40.7007	24.1%
		Constant	136	1.000	.0000	0.0%
	Total	@2KV	404	159.552	38.3526	24.0%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2KV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3809.367
Akaike's Information Criterion (AIC)	3813.367
Hurvich and Tsai's Criterion (AICC)	3813.397
Bozdogan's Criterion (CAIC)	3823.355
Schwarz's Bayesian Criterion (BIC)	3821.355

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2KV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.979	301.051	.000
UFEV_h_l_perdiet	2	391.984	15.965	.000

a. Dependent Variable: @2KV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	174.648168	9.704382	9.654	17.997	.000	152.920005	196.376332
[UFEV_h_l_perdiet=.0]	-17.968293	3.185390	391.980	-5.641	.000	-24.230880	-11.705706
[UFEV_h_l_perdiet=1.0]	-9.911486	3.210013	391.986	-3.088	.002	-16.222483	-3.600490
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2KV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	689.976429	49.285312
Constant [subject = subject]	Variance	890.101526
		428.627458

a. Dependent Variable: @2KV.

\*ON UREA EXCRETION

\* Mixed Linear Models

EFFECT OF UFEV TERTILE ON UreaV AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED UreaV BY UFEV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)  
/FIXED=UFEV\_h\_l\_perdiet | SSTYPE(3)

```

/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```
Syntax
MIXED UreaV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).
```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

**Descriptive Statistics**

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UreaV	35	389.127	59.4462	15.3%
		Constant	35	1.000	.0000	0.0%
	1.0	UreaV	34	404.355	66.6026	16.5%
		Constant	34	1.000	.0000	0.0%
	2.0	UreaV	35	424.630	60.8881	14.3%
		Constant	35	1.000	.0000	0.0%
Total	UreaV	104	406.053	63.4593	15.6%	
	Constant	104	1.000	.0000	0.0%	
12	.0	UreaV	35	405.750	67.7599	16.7%
		Constant	35	1.000	.0000	0.0%
	1.0	UreaV	34	409.194	55.9184	13.7%
		Constant	34	1.000	.0000	0.0%
	2.0	UreaV	35	449.528	99.8494	22.2%

		Constant	35	1.000	.0000	0.0%
	Total	UreaV	104	421.609	78.8015	18.7%
		Constant	104	1.000	.0000	0.0%
15	.0	UreaV	35	357.777	43.3491	12.1%
		Constant	35	1.000	.0000	0.0%
	1.0	UreaV	33	385.394	41.4238	10.7%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	35	392.086	39.8911	10.2%
		Constant	35	1.000	.0000	0.0%
	Total	UreaV	103	378.284	43.8311	11.6%
		Constant	103	1.000	.0000	0.0%
16	.0	UreaV	35	395.244	45.6253	11.5%
		Constant	35	1.000	.0000	0.0%
	1.0	UreaV	34	420.970	31.6409	7.5%
		Constant	34	1.000	.0000	0.0%
	2.0	UreaV	35	432.400	40.9212	9.5%
		Constant	35	1.000	.0000	0.0%
	Total	UreaV	104	416.159	42.5039	10.2%
		Constant	104	1.000	.0000	0.0%
51	.0	UreaV	68	281.534	45.1324	16.0%
		Constant	68	1.000	.0000	0.0%
	1.0	UreaV	69	303.037	40.1172	13.2%
		Constant	69	1.000	.0000	0.0%
	2.0	UreaV	68	313.534	78.7730	25.1%
		Constant	68	1.000	.0000	0.0%
	Total	UreaV	205	299.386	58.4883	19.5%
		Constant	205	1.000	.0000	0.0%
52	.0	UreaV	68	285.006	50.2843	17.6%
		Constant	68	1.000	.0000	0.0%
	1.0	UreaV	69	292.581	47.9468	16.4%
		Constant	69	1.000	.0000	0.0%
	2.0	UreaV	67	291.757	48.5366	16.6%
		Constant	67	1.000	.0000	0.0%
	Total	UreaV	204	289.785	48.8070	16.8%
		Constant	204	1.000	.0000	0.0%
53	.0	UreaV	67	335.803	48.2103	14.4%
		Constant	67	1.000	.0000	0.0%
	1.0	UreaV	69	340.409	46.9090	13.8%

		Constant	69	1.000	.0000	0.0%
	2.0	UreaV	68	363.738	60.7783	16.7%
		Constant	68	1.000	.0000	0.0%
	Total	UreaV	204	346.672	53.4962	15.4%
		Constant	204	1.000	.0000	0.0%
54	.0	UreaV	67	273.397	43.7451	16.0%
		Constant	67	1.000	.0000	0.0%
	1.0	UreaV	68	288.353	43.2846	15.0%
		Constant	68	1.000	.0000	0.0%
	2.0	UreaV	68	304.690	45.0437	14.8%
		Constant	68	1.000	.0000	0.0%
	Total	UreaV	203	288.889	45.6442	15.8%
		Constant	203	1.000	.0000	0.0%
55	.0	UreaV	67	325.063	56.1974	17.3%
		Constant	67	1.000	.0000	0.0%
	1.0	UreaV	67	356.851	51.5932	14.5%
		Constant	67	1.000	.0000	0.0%
	2.0	UreaV	67	381.423	80.3355	21.1%
		Constant	67	1.000	.0000	0.0%
	Total	UreaV	201	354.446	67.7149	19.1%
		Constant	201	1.000	.0000	0.0%
56	.0	UreaV	68	275.489	34.1909	12.4%
		Constant	68	1.000	.0000	0.0%
	1.0	UreaV	68	273.268	39.7210	14.5%
		Constant	68	1.000	.0000	0.0%
	2.0	UreaV	68	280.507	40.2724	14.4%
		Constant	68	1.000	.0000	0.0%
	Total	UreaV	204	276.421	38.0931	13.8%
		Constant	204	1.000	.0000	0.0%
Total	.0	UreaV	545	319.321	66.9492	21.0%
		Constant	545	1.000	.0000	0.0%
	1.0	UreaV	545	332.801	67.5022	20.3%
		Constant	545	1.000	.0000	0.0%
	2.0	UreaV	546	348.724	83.1758	23.9%
		Constant	546	1.000	.0000	0.0%
	Total	UreaV	1636	333.625	73.8784	22.1%
		Constant	1636	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	17678.691
Akaike's Information Criterion (AIC)	17682.691
Hurvich and Tsai's Criterion (AICC)	17682.698
Bozdogan's Criterion (CAIC)	17695.487
Schwarz's Bayesian Criterion (BIC)	17693.487

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.992	378.536	.000
UFEV_h_I_perdiet	2	1623.994	41.614	.000

a. Dependent Variable: UreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	362.499565	17.965507	9.187	20.178	.000	321.984833	403.014297
[UFEV_h_I_perdiet=.0]	-29.381664	3.221118	1623.993	-9.122	.000	-35.699648	-23.063679
[UFEV_h_I_perdiet=1.0]	-15.119590	3.221239	1623.994	-4.694	.000	-21.437811	-8.801369
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2829.906626	99.310485
Constant [subject = subject]	Variance	3173.893085
		1505.892145

a. Dependent Variable: UreaV.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON UreaV AT 12 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UreaV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:47	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UreaV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UreaV	13	405.353	49.0534	12.1%
		Constant	13	1.000	.0000	0.0%
	1.0	UreaV	14	442.047	60.8976	13.8%
		Constant	14	1.000	.0000	0.0%
	2.0	UreaV	13	450.680	67.7159	15.0%
		Constant	13	1.000	.0000	0.0%
Total	UreaV	40	432.927	61.4476	14.2%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UreaV	13	380.316	64.1447	16.9%
		Constant	13	1.000	.0000	0.0%
	1.0	UreaV	14	389.710	50.0105	12.8%
		Constant	14	1.000	.0000	0.0%
	2.0	UreaV	13	458.998	53.9968	11.8%

		Constant	13	1.000	.0000	0.0%
	Total	UreaV	40	409.176	65.0989	15.9%
		Constant	40	1.000	.0000	0.0%
15	.0	UreaV	13	345.100	35.8062	10.4%
		Constant	13	1.000	.0000	0.0%
	1.0	UreaV	13	395.236	33.4228	8.5%
		Constant	13	1.000	.0000	0.0%
	2.0	UreaV	13	399.059	17.8623	4.5%
		Constant	13	1.000	.0000	0.0%
	Total	UreaV	39	379.798	38.4541	10.1%
		Constant	39	1.000	.0000	0.0%
16	.0	UreaV	13	386.974	45.6804	11.8%
		Constant	13	1.000	.0000	0.0%
	1.0	UreaV	14	432.656	33.2455	7.7%
		Constant	14	1.000	.0000	0.0%
	2.0	UreaV	13	438.370	49.6248	11.3%
		Constant	13	1.000	.0000	0.0%
	Total	UreaV	40	419.667	47.9755	11.4%
		Constant	40	1.000	.0000	0.0%
51	.0	UreaV	32	276.045	52.8704	19.2%
		Constant	32	1.000	.0000	0.0%
	1.0	UreaV	33	301.003	42.5744	14.1%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	32	313.508	95.0549	30.3%
		Constant	32	1.000	.0000	0.0%
	Total	UreaV	97	296.895	68.3172	23.0%
		Constant	97	1.000	.0000	0.0%
52	.0	UreaV	32	287.879	56.7158	19.7%
		Constant	32	1.000	.0000	0.0%
	1.0	UreaV	33	296.275	61.1362	20.6%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	31	295.255	55.7478	18.9%
		Constant	31	1.000	.0000	0.0%
	Total	UreaV	96	293.147	57.4827	19.6%
		Constant	96	1.000	.0000	0.0%
53	.0	UreaV	31	312.373	46.3461	14.8%
		Constant	31	1.000	.0000	0.0%
	1.0	UreaV	33	315.127	38.5656	12.2%

		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	32	339.816	52.7288	15.5%
		Constant	32	1.000	.0000	0.0%
	Total	UreaV	96	322.468	47.3275	14.7%
		Constant	96	1.000	.0000	0.0%
54	.0	UreaV	31	265.051	34.3703	13.0%
		Constant	31	1.000	.0000	0.0%
	1.0	UreaV	33	290.911	45.8598	15.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UreaV	32	306.664	44.2308	14.4%
		Constant	32	1.000	.0000	0.0%
	Total	UreaV	96	287.811	44.8549	15.6%
		Constant	96	1.000	.0000	0.0%
55	.0	UreaV	31	319.353	64.1144	20.1%
		Constant	31	1.000	.0000	0.0%
	1.0	UreaV	32	350.189	56.0674	16.0%
		Constant	32	1.000	.0000	0.0%
	2.0	UreaV	32	392.667	103.0079	26.2%
		Constant	32	1.000	.0000	0.0%
	Total	UreaV	95	354.435	82.2039	23.2%
		Constant	95	1.000	.0000	0.0%
56	.0	UreaV	32	281.982	31.6140	11.2%
		Constant	32	1.000	.0000	0.0%
	1.0	UreaV	32	274.323	38.5649	14.1%
		Constant	32	1.000	.0000	0.0%
	2.0	UreaV	32	291.612	43.0376	14.8%
		Constant	32	1.000	.0000	0.0%
	Total	UreaV	96	282.639	38.2939	13.5%
		Constant	96	1.000	.0000	0.0%
Total	.0	UreaV	241	309.543	63.8320	20.6%
		Constant	241	1.000	.0000	0.0%
	1.0	UreaV	251	328.819	69.5121	21.1%
		Constant	251	1.000	.0000	0.0%
	2.0	UreaV	243	347.662	86.5763	24.9%
		Constant	243	1.000	.0000	0.0%
	Total	UreaV	735	328.728	75.4242	22.9%
		Constant	735	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	8011.597
Akaike's Information Criterion (AIC)	8015.597
Hurvich and Tsai's Criterion (AICC)	8015.613
Bozdogan's Criterion (CAIC)	8026.788
Schwarz's Bayesian Criterion (BIC)	8024.788

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.965	348.368	.000
UFEV_h_I_perdiet	2	722.968	28.498	.000

a. Dependent Variable: UreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	366.667278	18.846591	9.410	19.455	.000	324.314506	409.020050
[UFEV_h_I_perdiet=.0]	-38.061393	5.041846	722.967	-7.549	.000	-47.959801	-28.162985
[UFEV_h_I_perdiet=1.0]	-19.338307	4.991282	722.968	-3.874	.000	-29.137445	-9.539168
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3075.564771	161.763688
Constant [subject = subject] Variance	3416.973443	1637.488819

a. Dependent Variable: UreaV.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON UreaV AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UreaV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED UreaV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UreaV	12	392.711	81.5003	20.8%
		Constant	12	1.000	.0000	0.0%
	1.0	UreaV	11	404.055	64.8251	16.0%
		Constant	11	1.000	.0000	0.0%
	2.0	UreaV	12	417.080	57.0632	13.7%
		Constant	12	1.000	.0000	0.0%
Total	UreaV	35	404.631	67.4046	16.7%	
	Constant	35	1.000	.0000	0.0%	
12	.0	UreaV	12	388.437	65.5368	16.9%
		Constant	12	1.000	.0000	0.0%
	1.0	UreaV	11	384.053	44.4876	11.6%
		Constant	11	1.000	.0000	0.0%
	2.0	UreaV	12	380.420	121.2209	31.9%

		Constant	12	1.000	.0000	0.0%
	Total	UreaV	35	384.311	82.0802	21.4%
		Constant	35	1.000	.0000	0.0%
15	.0	UreaV	12	371.327	39.8288	10.7%
		Constant	12	1.000	.0000	0.0%
	1.0	UreaV	11	395.029	46.2431	11.7%
		Constant	11	1.000	.0000	0.0%
	2.0	UreaV	12	390.578	44.4929	11.4%
		Constant	12	1.000	.0000	0.0%
	Total	UreaV	35	385.376	43.4971	11.3%
		Constant	35	1.000	.0000	0.0%
16	.0	UreaV	12	393.692	36.5817	9.3%
		Constant	12	1.000	.0000	0.0%
	1.0	UreaV	11	423.183	24.1411	5.7%
		Constant	11	1.000	.0000	0.0%
	2.0	UreaV	12	432.717	41.6369	9.6%
		Constant	12	1.000	.0000	0.0%
	Total	UreaV	35	416.341	38.1586	9.2%
		Constant	35	1.000	.0000	0.0%
51	.0	UreaV	20	280.674	26.6219	9.5%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	20	296.916	35.9427	12.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	20	297.977	36.5872	12.3%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	60	291.856	33.7506	11.6%
		Constant	60	1.000	.0000	0.0%
52	.0	UreaV	20	284.428	45.6813	16.1%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	20	297.669	35.1501	11.8%
		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	20	302.728	42.2825	14.0%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	60	294.942	41.3059	14.0%
		Constant	60	1.000	.0000	0.0%
53	.0	UreaV	20	349.623	37.1346	10.6%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	20	364.039	34.5676	9.5%

		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	20	379.762	49.6324	13.1%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	60	364.475	42.1454	11.6%
		Constant	60	1.000	.0000	0.0%
54	.0	UreaV	20	272.973	33.5174	12.3%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	19	290.162	47.1534	16.3%
		Constant	19	1.000	.0000	0.0%
	2.0	UreaV	20	303.091	53.0401	17.5%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	59	288.718	46.2282	16.0%
		Constant	59	1.000	.0000	0.0%
55	.0	UreaV	20	338.408	58.9829	17.4%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	19	374.079	49.8169	13.3%
		Constant	19	1.000	.0000	0.0%
	2.0	UreaV	20	372.541	51.1988	13.7%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	59	361.466	55.1934	15.3%
		Constant	59	1.000	.0000	0.0%
56	.0	UreaV	20	272.326	36.7869	13.5%
		Constant	20	1.000	.0000	0.0%
	1.0	UreaV	20	261.717	42.1764	16.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UreaV	20	267.588	39.0468	14.6%
		Constant	20	1.000	.0000	0.0%
	Total	UreaV	60	267.210	38.9717	14.6%
		Constant	60	1.000	.0000	0.0%
Total	.0	UreaV	168	324.540	66.0326	20.3%
		Constant	168	1.000	.0000	0.0%
	1.0	UreaV	162	337.635	67.3171	19.9%
		Constant	162	1.000	.0000	0.0%
	2.0	UreaV	168	344.782	75.2509	21.8%
		Constant	168	1.000	.0000	0.0%
	Total	UreaV	498	335.628	70.0505	20.9%
		Constant	498	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5291.560
Akaike's Information Criterion (AIC)	5295.560
Hurvich and Tsai's Criterion (AICC)	5295.584
Bozdogan's Criterion (CAIC)	5305.969
Schwarz's Bayesian Criterion (BIC)	5303.969

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.996	398.106	.000
UFEV_h_I_perdiet	2	485.999	7.887	.000

a. Dependent Variable: UreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	354.462329	17.590846	9.549	20.150	.000	315.015055	393.909602
[UFEV_h_I_perdiet=.0]	-20.242010	5.246693	485.996	-3.858	.000	-30.551013	-9.933006
[UFEV_h_I_perdiet=1.0]	-5.784634	5.295657	486.000	-1.092	.275	-16.189844	4.620577
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2312.334416	148.336889
Constant [subject = subject] Variance	2953.793039	1416.122886

a. Dependent Variable: UreaV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON UreaV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UreaV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UreaV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	UreaV	10	363.733	30.1579	8.3%
		Constant	10	1.000	.0000	0.0%
	1.0	UreaV	9	346.091	26.7131	7.7%
		Constant	9	1.000	.0000	0.0%
	2.0	UreaV	10	399.824	46.6040	11.7%
		Constant	10	1.000	.0000	0.0%
Total	UreaV	29	370.703	41.3432	11.2%	
	Constant	29	1.000	.0000	0.0%	
12	.0	UreaV	10	459.588	45.3332	9.9%
		Constant	10	1.000	.0000	0.0%
	1.0	UreaV	9	470.231	25.2094	5.4%
		Constant	9	1.000	.0000	0.0%
	2.0	UreaV	10	520.148	61.4646	11.8%

		Constant	10	1.000	.0000	0.0%
	Total	UreaV	29	483.774	52.8852	10.9%
		Constant	29	1.000	.0000	0.0%
15	.0	UreaV	10	357.998	54.5316	15.2%
		Constant	10	1.000	.0000	0.0%
	1.0	UreaV	9	359.402	38.3408	10.7%
		Constant	9	1.000	.0000	0.0%
	2.0	UreaV	10	384.830	55.0894	14.3%
		Constant	10	1.000	.0000	0.0%
	Total	UreaV	29	367.686	50.1185	13.6%
			Constant	29	1.000	.0000
16	.0	UreaV	10	407.858	56.2800	13.8%
		Constant	10	1.000	.0000	0.0%
	1.0	UreaV	9	400.087	29.4759	7.4%
		Constant	9	1.000	.0000	0.0%
	2.0	UreaV	10	424.258	28.2562	6.7%
		Constant	10	1.000	.0000	0.0%
	Total	UreaV	29	411.102	40.3429	9.8%
			Constant	29	1.000	.0000
51	.0	UreaV	16	293.589	46.9400	16.0%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	314.881	39.7993	12.6%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	333.032	81.3600	24.4%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	313.834	59.8889	19.1%
			Constant	48	1.000	.0000
52	.0	UreaV	16	279.981	44.2492	15.8%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	278.603	24.6999	8.9%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	271.265	35.3782	13.0%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	276.616	35.1283	12.7%
			Constant	48	1.000	.0000
53	.0	UreaV	16	363.921	44.1758	12.1%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	363.015	50.9229	14.0%



		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	391.551	72.4238	18.5%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	372.829	57.4765	15.4%
		Constant	48	1.000	.0000	0.0%
54	.0	UreaV	16	290.098	64.7507	22.3%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	280.930	33.7114	12.0%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	302.742	37.9498	12.5%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	291.257	47.3506	16.3%
		Constant	48	1.000	.0000	0.0%
55	.0	UreaV	16	319.446	30.4851	9.5%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	349.716	41.3821	11.8%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	15	369.278	53.0364	14.4%
		Constant	15	1.000	.0000	0.0%
	Total	UreaV	47	345.655	46.3053	13.4%
		Constant	47	1.000	.0000	0.0%
56	.0	UreaV	16	266.455	35.3778	13.3%
		Constant	16	1.000	.0000	0.0%
	1.0	UreaV	16	285.595	37.1226	13.0%
		Constant	16	1.000	.0000	0.0%
	2.0	UreaV	16	274.444	30.9883	11.3%
		Constant	16	1.000	.0000	0.0%
	Total	UreaV	48	275.498	34.7657	12.6%
		Constant	48	1.000	.0000	0.0%
Total	.0	UreaV	136	330.203	71.4158	21.6%
		Constant	136	1.000	.0000	0.0%
	1.0	UreaV	132	334.441	63.7909	19.1%
		Constant	132	1.000	.0000	0.0%
	2.0	UreaV	135	355.543	86.4602	24.3%
		Constant	135	1.000	.0000	0.0%
	Total	UreaV	403	340.080	75.1954	22.1%
		Constant	403	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4256.843
Akaike's Information Criterion (AIC)	4260.843
Hurvich and Tsai's Criterion (AICC)	4260.873
Bozdogan's Criterion (CAIC)	4270.826
Schwarz's Bayesian Criterion (BIC)	4268.826

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.979	287.987	.000
UFEV_h_l_perdiet	2	390.983	11.031	.000

a. Dependent Variable: UreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	365.546975	20.918923	9.427	17.474	.000	318.549479	412.544472
[UFEV_h_l_perdiet=.0]	-25.379027	5.623095	390.980	-4.513	.000	-36.434313	-14.323742
[UFEV_h_l_perdiet=1.0]	-19.128408	5.666621	390.985	-3.376	.001	-30.269268	-7.987548
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2142.023523	153.201212
Constant [subject = subject]	Variance	4214.577040
		2015.636741

a. Dependent Variable: UreaV.

\*ON OSMOLYTE EXCRETION

\* Mixed Linear Models

EFFECT OF UFEV TERTILE ON U2Na2KUreaV AT ALL SALT INTAKES  
all subjects

USE ALL.

MIXED @2Na2KUreaV BY UFEV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UFEV\_h\_l\_perdiet | SSTYPE(3)

/METHOD=REML

```

/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED @2Na2KUreaV BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	@2Na2KUreaV	35	851.988	149.4291	17.5%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	913.403	164.8127	18.0%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	1000.033	174.0545	17.4%
		Constant	35	1.000	.0000	0.0%
Total	@2Na2KUreaV	104	921.889	172.7222	18.7%	
	Constant	104	1.000	.0000	0.0%	
12	.0	@2Na2KUreaV	35	873.700	124.1465	14.2%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	889.338	92.9497	10.5%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	1005.058	146.2684	14.6%

		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	923.020	135.6682	14.7%
		Constant	104	1.000	.0000	0.0%
15	.0	@2Na2KUreaV	35	814.731	104.4317	12.8%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	870.639	135.3888	15.6%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	911.880	118.8234	13.0%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	865.703	125.4946	14.5%
		Constant	104	1.000	.0000	0.0%
16	.0	@2Na2KUreaV	35	836.093	110.0583	13.2%
		Constant	35	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	34	919.507	111.7724	12.2%
		Constant	34	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	35	977.761	124.8389	12.8%
		Constant	35	1.000	.0000	0.0%
	Total	@2Na2KUreaV	104	911.040	128.8045	14.1%
		Constant	104	1.000	.0000	0.0%
51	.0	@2Na2KUreaV	68	703.910	152.0047	21.6%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	781.742	148.3259	19.0%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	831.699	169.9889	20.4%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	772.496	164.8568	21.3%
		Constant	205	1.000	.0000	0.0%
52	.0	@2Na2KUreaV	68	655.659	133.0662	20.3%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	712.580	150.2941	21.1%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	740.901	154.5797	20.9%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	703.093	149.8319	21.3%
		Constant	205	1.000	.0000	0.0%
53	.0	@2Na2KUreaV	68	765.831	120.5149	15.7%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	818.092	118.7069	14.5%

		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	876.117	132.8140	15.2%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	820.004	131.4899	16.0%
		Constant	205	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	68	663.508	118.0914	17.8%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	723.806	136.7738	18.9%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	788.168	144.6776	18.4%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	725.154	142.4129	19.6%
		Constant	205	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	68	739.314	147.8065	20.0%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	817.674	132.4473	16.2%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	898.486	190.4222	21.2%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	818.487	170.7473	20.9%
		Constant	205	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	68	677.278	131.1868	19.4%
		Constant	68	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	69	679.738	126.0363	18.5%
		Constant	69	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	68	721.904	134.8668	18.7%
		Constant	68	1.000	.0000	0.0%
	Total	@2Na2KUreaV	205	692.909	131.6873	19.0%
		Constant	205	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	548	737.503	149.2664	20.2%
		Constant	548	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	550	790.871	154.1475	19.5%
		Constant	550	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	548	851.479	177.7597	20.9%
		Constant	548	1.000	.0000	0.0%
	Total	@2Na2KUreaV	1646	793.281	167.3701	21.1%
		Constant	1646	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20956.413
Akaike's Information Criterion (AIC)	20960.413
Hurvich and Tsai's Criterion (AICC)	20960.420
Bozdogan's Criterion (CAIC)	20973.222
Schwarz's Bayesian Criterion (BIC)	20971.222

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.983	829.277	.000
UFEV_h_I_perdiet	2	1633.986	90.895	.000

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	872.753604	28.717453	9.524	30.391	.000	808.331308	937.175900
[UFEV_h_I_perdiet=.0]	-113.975182	8.455805	1633.983	-13.479	.000	-130.560541	-97.389823
[UFEV_h_I_perdiet=1.0]	-59.400707	8.448361	1633.987	-7.031	.000	-75.971464	-42.829949
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	19591.175900	685.412010
Constant [subject = subject] Variance	7876.501000	3778.989580

a. Dependent Variable: @2Na2KUreaV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON U2Na2KUreaV AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2Na2KUreaV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:47	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED @2Na2KUreaV BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	@2Na2KUreaV	13	956.756	122.0499	12.8%
		Constant	13	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	14	1043.813	131.0554	12.6%
		Constant	14	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	13	1136.953	91.6857	8.1%
		Constant	13	1.000	.0000	0.0%
Total	@2Na2KUreaV	40	1045.790	135.3111	12.9%	
	Constant	40	1.000	.0000	0.0%	
12	.0	@2Na2KUreaV	13	828.171	137.9002	16.7%
		Constant	13	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	14	878.488	97.9545	11.2%
		Constant	14	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	13	1051.532	152.5778	14.5%

		Constant	13	1.000	.0000	0.0%
	Total	@2Na2KUreaV	40	918.374	159.3935	17.4%
15	.0	Constant	40	1.000	.0000	0.0%
		@2Na2KUreaV	13	864.107	84.1982	9.7%
	1.0	Constant	13	1.000	.0000	0.0%
		@2Na2KUreaV	14	956.070	115.4131	12.1%
	2.0	Constant	14	1.000	.0000	0.0%
		@2Na2KUreaV	13	1012.904	52.7563	5.2%
	Total	Constant	13	1.000	.0000	0.0%
		@2Na2KUreaV	40	944.653	106.0182	11.2%
16	.0	Constant	40	1.000	.0000	0.0%
		@2Na2KUreaV	13	889.307	115.5100	13.0%
	1.0	Constant	13	1.000	.0000	0.0%
		@2Na2KUreaV	14	1014.589	83.6264	8.2%
	2.0	Constant	14	1.000	.0000	0.0%
		@2Na2KUreaV	13	1070.316	116.8745	10.9%
	Total	Constant	13	1.000	.0000	0.0%
		@2Na2KUreaV	40	991.983	127.9940	12.9%
51	.0	Constant	40	1.000	.0000	0.0%
		@2Na2KUreaV	32	787.800	152.6792	19.4%
	1.0	Constant	32	1.000	.0000	0.0%
		@2Na2KUreaV	33	879.239	144.7428	16.5%
	2.0	Constant	33	1.000	.0000	0.0%
		@2Na2KUreaV	32	954.581	134.5507	14.1%
	Total	Constant	32	1.000	.0000	0.0%
		@2Na2KUreaV	97	873.929	158.1381	18.1%
52	.0	Constant	97	1.000	.0000	0.0%
		@2Na2KUreaV	32	738.831	120.0815	16.3%
	1.0	Constant	32	1.000	.0000	0.0%
		@2Na2KUreaV	33	822.662	113.3713	13.8%
	2.0	Constant	33	1.000	.0000	0.0%
		@2Na2KUreaV	32	834.694	133.1540	16.0%
	Total	Constant	32	1.000	.0000	0.0%
		@2Na2KUreaV	97	798.976	128.4130	16.1%
53	.0	Constant	97	1.000	.0000	0.0%
		@2Na2KUreaV	32	845.047	119.2404	14.1%
	1.0	@2Na2KUreaV	33	895.799	103.9322	11.6%

		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	942.941	122.8436	13.0%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	894.608	121.0904	13.5%
		Constant	97	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	32	740.054	96.1292	13.0%
		Constant	32	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	33	823.689	94.9061	11.5%
		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	882.729	132.4698	15.0%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	815.575	122.8008	15.1%
		Constant	97	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	32	804.762	152.5205	19.0%
		Constant	32	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	33	885.463	117.9125	13.3%
		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	1016.161	196.1213	19.3%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	901.957	179.3234	19.9%
		Constant	97	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	32	772.161	108.8025	14.1%
		Constant	32	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	33	756.833	108.8364	14.4%
		Constant	33	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	32	806.953	130.7414	16.2%
		Constant	32	1.000	.0000	0.0%
	Total	@2Na2KUreaV	97	778.424	117.1985	15.1%
		Constant	97	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	244	803.424	135.3411	16.8%
		Constant	244	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	254	872.453	134.4070	15.4%
		Constant	254	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	244	940.779	164.7685	17.5%
		Constant	244	1.000	.0000	0.0%
	Total	@2Na2KUreaV	742	872.222	155.5125	17.8%
		Constant	742	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	9300.979
Akaike's Information Criterion (AIC)	9304.979
Hurvich and Tsai's Criterion (AICC)	9304.995
Bozdogan's Criterion (CAIC)	9316.189
Schwarz's Bayesian Criterion (BIC)	9314.189

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.918	1124.099	.000
UFEV_h_I_perdiet	2	729.925	71.649	.000

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	964.266427	27.522959	10.059	35.035	.000	902.990559	1025.542294
[UFEV_h_I_perdiet=.0]	-137.355291	11.474384	729.922	-11.971	.000	-159.882022	-114.828559
[UFEV_h_I_perdiet=1.0]	-69.251042	11.361177	729.926	-6.095	.000	-91.555525	-46.946560
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	16062.700340	840.804928
Constant [subject = subject] Variance	6874.031998	3376.757704

a. Dependent Variable: @2Na2KUreaV.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON U2Na2KUreaV AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2Na2KUreaV BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:47	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax		MIXED @2Na2KUreaV BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.06

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2Na2KUreaV	12	844.770	129.6275	15.3%
	Constant	12	1.000	.0000	0.0%
	1.0 @2Na2KUreaV	11	896.671	100.1675	11.2%
	Constant	11	1.000	.0000	0.0%
	2.0 @2Na2KUreaV	12	981.478	131.9889	13.4%
	Constant	12	1.000	.0000	0.0%
12	Total @2Na2KUreaV	35	907.953	131.8398	14.5%
	Constant	35	1.000	.0000	0.0%
	.0 @2Na2KUreaV	12	850.845	88.1510	10.4%
	Constant	12	1.000	.0000	0.0%
	1.0 @2Na2KUreaV	11	864.024	96.4958	11.2%
	Constant	11	1.000	.0000	0.0%
2.0 @2Na2KUreaV	12	911.274	129.9615	14.3%	

		Constant	12	1.000	.0000	0.0%
	Total	@2Na2KUreaV	35	875.706	106.8920	12.2%
15	.0	Constant	35	1.000	.0000	0.0%
		@2Na2KUreaV	12	835.388	81.0553	9.7%
	1.0	Constant	12	1.000	.0000	0.0%
		@2Na2KUreaV	11	883.267	86.2866	9.8%
	2.0	Constant	11	1.000	.0000	0.0%
		@2Na2KUreaV	12	904.899	69.6238	7.7%
	Total	Constant	12	1.000	.0000	0.0%
		@2Na2KUreaV	35	874.268	82.3077	9.4%
16	.0	Constant	35	1.000	.0000	0.0%
		@2Na2KUreaV	12	843.404	93.7964	11.1%
	1.0	Constant	12	1.000	.0000	0.0%
		@2Na2KUreaV	11	903.314	61.2620	6.8%
	2.0	Constant	11	1.000	.0000	0.0%
		@2Na2KUreaV	12	973.264	72.3425	7.4%
	Total	Constant	12	1.000	.0000	0.0%
		@2Na2KUreaV	35	906.756	92.8700	10.2%
51	.0	Constant	35	1.000	.0000	0.0%
		@2Na2KUreaV	20	661.209	115.4093	17.5%
	1.0	Constant	20	1.000	.0000	0.0%
		@2Na2KUreaV	20	714.327	92.4852	12.9%
	2.0	Constant	20	1.000	.0000	0.0%
		@2Na2KUreaV	20	778.068	74.5613	9.6%
	Total	Constant	20	1.000	.0000	0.0%
		@2Na2KUreaV	60	717.868	105.6174	14.7%
52	.0	Constant	60	1.000	.0000	0.0%
		@2Na2KUreaV	20	613.053	82.4294	13.4%
	1.0	Constant	20	1.000	.0000	0.0%
		@2Na2KUreaV	20	679.923	76.5602	11.3%
	2.0	Constant	20	1.000	.0000	0.0%
		@2Na2KUreaV	20	738.841	87.0133	11.8%
	Total	Constant	20	1.000	.0000	0.0%
		@2Na2KUreaV	60	677.273	95.9129	14.2%
53	.0	Constant	60	1.000	.0000	0.0%
		@2Na2KUreaV	20	716.583	57.2767	8.0%
	1.0	@2Na2KUreaV	20	788.410	66.2394	8.4%

		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	855.920	115.0334	13.4%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	786.971	100.1125	12.7%
		Constant	60	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	20	616.247	48.0986	7.8%
		Constant	20	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	20	670.556	110.2302	16.4%
		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	741.509	91.7924	12.4%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	676.104	100.2318	14.8%
		Constant	60	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	20	744.479	115.3344	15.5%
		Constant	20	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	20	812.765	117.8584	14.5%
		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	840.372	112.7588	13.4%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	799.205	120.4304	15.1%
		Constant	60	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	20	633.859	78.6616	12.4%
		Constant	20	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	20	619.234	96.6355	15.6%
		Constant	20	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	20	679.593	89.7017	13.2%
		Constant	20	1.000	.0000	0.0%
	Total	@2Na2KUreaV	60	644.229	90.9027	14.1%
		Constant	60	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	168	715.485	127.2288	17.8%
		Constant	168	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	164	760.514	132.2417	17.4%
		Constant	164	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	168	821.054	134.9945	16.4%
		Constant	168	1.000	.0000	0.0%
	Total	@2Na2KUreaV	500	765.726	138.2679	18.1%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5975.991
Akaike's Information Criterion (AIC)	5979.991
Hurvich and Tsai's Criterion (AICC)	5980.015
Bozdogan's Criterion (CAIC)	5990.408
Schwarz's Bayesian Criterion (BIC)	5988.408

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.986	592.510	.000
UFEV_h_I_perdiet	2	487.989	53.355	.000

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	840.556585	32.829830	9.592	25.603	.000	766.983572	914.129598
[UFEV_h_I_perdiet=.0]	-105.568638	10.233298	487.986	-10.316	.000	-125.675402	-85.461873
[UFEV_h_I_perdiet=1.0]	-57.566599	10.296768	487.991	-5.591	.000	-77.798072	-37.335127
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	8796.512369	563.147063
Constant [subject = subject] Variance	10243.202050	4921.281834

a. Dependent Variable: @2Na2KUreaV.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON U2Na2KUreaV AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED @2Na2KUreaV BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED @2Na2KUreaV BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation
11	.0 @2Na2KUreaV	10	724.449	99.7878	13.8%
	Constant	10	1.000	.0000	0.0%
	1.0 @2Na2KUreaV	9	730.994	63.3810	8.7%
	Constant	9	1.000	.0000	0.0%
	2.0 @2Na2KUreaV	10	844.304	165.7183	19.6%
	Constant	10	1.000	.0000	0.0%
12	Total @2Na2KUreaV	29	767.809	127.9553	16.7%
	Constant	29	1.000	.0000	0.0%
	.0 @2Na2KUreaV	10	960.315	106.5142	11.1%
	Constant	10	1.000	.0000	0.0%
	1.0 @2Na2KUreaV	9	937.157	68.9029	7.4%
	Constant	9	1.000	.0000	0.0%
2.0 @2Na2KUreaV	10	1057.182	106.1809	10.0%	

		Constant	10	1.000	.0000	0.0%
	Total	@2Na2KUreaV	29	986.531	106.9524	10.8%
15		Constant	29	1.000	.0000	0.0%
	.0	@2Na2KUreaV	10	725.755	104.0723	14.3%
		Constant	10	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	9	722.313	83.1704	11.5%
		Constant	9	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	10	788.925	109.9933	13.9%
		Constant	10	1.000	.0000	0.0%
	Total	@2Na2KUreaV	29	746.469	101.6424	13.6%
		Constant	29	1.000	.0000	0.0%
16	.0	@2Na2KUreaV	10	758.142	79.3957	10.5%
		Constant	10	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	9	791.392	28.8401	3.6%
		Constant	9	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	10	862.836	84.7968	9.8%
		Constant	10	1.000	.0000	0.0%
	Total	@2Na2KUreaV	29	804.563	81.3216	10.1%
			Constant	29	1.000	.0000
51	.0	@2Na2KUreaV	16	589.503	82.1645	13.9%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	664.923	51.7567	7.8%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	652.975	120.3877	18.4%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	635.801	93.5618	14.7%
			Constant	48	1.000	.0000
52	.0	@2Na2KUreaV	16	542.572	99.3142	18.3%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	526.358	49.8412	9.5%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	555.889	72.2060	13.0%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	541.606	75.8521	14.0%
			Constant	48	1.000	.0000
53	.0	@2Na2KUreaV	16	668.959	68.5763	10.3%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	694.923	68.1028	9.8%



		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	767.713	90.7544	11.8%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	710.532	85.9888	12.1%
		Constant	48	1.000	.0000	0.0%
54	.0	@2Na2KUreaV	16	569.491	123.9181	21.8%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	584.361	61.0637	10.4%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	657.370	79.5498	12.1%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	603.741	98.0649	16.2%
		Constant	48	1.000	.0000	0.0%
55	.0	@2Na2KUreaV	16	601.963	57.9718	9.6%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	683.996	55.3795	8.1%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	735.778	63.9092	8.7%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	673.913	80.3412	11.9%
		Constant	48	1.000	.0000	0.0%
56	.0	@2Na2KUreaV	16	541.785	57.1538	10.5%
		Constant	16	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	16	596.363	97.6842	16.4%
		Constant	16	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	16	604.693	57.0408	9.4%
		Constant	16	1.000	.0000	0.0%
	Total	@2Na2KUreaV	48	580.947	76.9497	13.2%
		Constant	48	1.000	.0000	0.0%
Total	.0	@2Na2KUreaV	136	646.434	143.0717	22.1%
		Constant	136	1.000	.0000	0.0%
	1.0	@2Na2KUreaV	132	671.602	120.5794	18.0%
		Constant	132	1.000	.0000	0.0%
	2.0	@2Na2KUreaV	136	728.847	160.9553	22.1%
		Constant	136	1.000	.0000	0.0%
	Total	@2Na2KUreaV	404	682.400	146.5073	21.5%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: @2Na2KUreaV.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4757.743
Akaike's Information Criterion (AIC)	4761.743
Hurvich and Tsai's Criterion (AICC)	4761.773
Bozdogan's Criterion (CAIC)	4771.731
Schwarz's Bayesian Criterion (BIC)	4769.731

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: @2Na2KUreaV.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.977	293.526	.000
UFEV_h_I_perdiet	2	391.979	32.699	.000

a. Dependent Variable: @2Na2KUreaV.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	749.932700	41.563876	9.354	18.043	.000	656.448812	843.416589
[UFEV_h_I_perdiet=.0]	-82.413072	10.325959	391.977	-7.981	.000	-102.714263	-62.111881
[UFEV_h_I_perdiet=1.0]	-52.984723	10.405797	391.980	-5.092	.000	-73.442878	-32.526569
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: @2Na2KUreaV.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	7250.529041	517.910235
Constant [subject = subject] Variance	16732.718370	7987.972655

a. Dependent Variable: @2Na2KUreaV.

\*ANALYSIS OF CONCENTRATION DATA FOR FREE WATER EXCRETION CALCULATIONS  
RESPONSE TO ALDOSTERONE TERTILE

\*ON SODIUM CONCENTRATION

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON 2U[Na] AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

```

MIXED two_UNa BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED two_UNa BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNa	35	160.728	41.0888	25.6%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNa	34	148.754	41.5886	28.0%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNa	35	149.222	43.7494	29.3%
		Constant	35	1.000	.0000	0.0%
Total	two_UNa	104	152.941	42.1229	27.5%	
	Constant	104	1.000	.0000	0.0%	
12	.0	two_UNa	35	213.909	39.6239	18.5%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNa	34	205.681	54.7082	26.6%
		Constant	34	1.000	.0000	0.0%

	2.0	two_UNa	35	197.745	63.4859	32.1%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	205.779	53.4043	26.0%
		Constant	104	1.000	.0000	0.0%
15	.0	two_UNa	35	136.619	42.4456	31.1%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNa	34	147.524	48.8205	33.1%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNa	35	133.185	46.0674	34.6%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	139.029	45.7851	32.9%
		Constant	104	1.000	.0000	0.0%
16	.0	two_UNa	35	190.499	58.9302	30.9%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNa	34	178.192	55.6568	31.2%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNa	35	174.461	67.0034	38.4%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	181.078	60.5686	33.4%
		Constant	104	1.000	.0000	0.0%
51	.0	two_UNa	68	172.984	61.8606	35.8%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNa	69	158.624	63.0161	39.7%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	135.530	54.8388	40.5%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	155.727	61.6950	39.6%
		Constant	205	1.000	.0000	0.0%
52	.0	two_UNa	67	127.877	48.1775	37.7%
		Constant	67	1.000	.0000	0.0%
	1.0	two_UNa	69	139.324	57.5346	41.3%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	142.258	57.0420	40.1%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	204	136.543	54.5504	40.0%
		Constant	204	1.000	.0000	0.0%
53	.0	two_UNa	68	262.392	83.4545	31.8%
		Constant	68	1.000	.0000	0.0%

	1.0	two_UNa	69	217.457	74.5371	34.3%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	215.297	76.1544	35.4%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	231.646	80.7241	34.8%
		Constant	205	1.000	.0000	0.0%
54	.0	two_UNa	68	151.708	53.1278	35.0%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNa	69	145.082	53.2468	36.7%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	142.165	54.2276	38.1%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	146.312	53.4213	36.5%
		Constant	205	1.000	.0000	0.0%
55	.0	two_UNa	67	241.017	71.1666	29.5%
		Constant	67	1.000	.0000	0.0%
	1.0	two_UNa	69	252.320	78.3662	31.1%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	244.111	79.8756	32.7%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	204	245.872	76.3710	31.1%
		Constant	204	1.000	.0000	0.0%
56	.0	two_UNa	68	168.385	43.5401	25.9%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNa	69	152.297	47.8781	31.4%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	152.437	48.6238	31.9%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	157.680	47.1211	29.9%
		Constant	205	1.000	.0000	0.0%
Total	.0	two_UNa	546	184.339	72.8130	39.5%
		Constant	546	1.000	.0000	0.0%
	1.0	two_UNa	550	175.668	71.3857	40.6%
		Constant	550	1.000	.0000	0.0%
	2.0	two_UNa	548	169.843	71.9008	42.3%
		Constant	548	1.000	.0000	0.0%
	Total	two_UNa	1644	176.606	72.2356	40.9%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	18169.433
Akaike's Information Criterion (AIC)	18173.433
Hurvich and Tsai's Criterion (AICC)	18173.440
Bozdogan's Criterion (CAIC)	18186.239
Schwarz's Bayesian Criterion (BIC)	18184.239

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.040	197.051	.000
UAldoV_h_I_perdiet	2	1632.043	8.067	.000

a. Dependent Variable: two\_UNa.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	168.525103	12.663158	9.559	13.308	.000	140.132516	196.917690
[UAldoV_h_I_perdiet=.0]	14.549509	3.648176	1632.040	3.988	.000	7.393909	21.705110
[UAldoV_h_I_perdiet=1.0]	5.750427	3.641619	1632.043	1.579	.115	-1.392312	12.893167
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3640.027033	127.424872
Constant [subject = subject] Variance	1534.728727	733.453333

a. Dependent Variable: two\_UNa.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON 2U[Na] AT 12 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNa BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED two_UNa BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNa	13	192.528	33.1235	17.2%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNa	14	171.919	23.8628	13.9%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNa	13	178.115	41.1687	23.1%
		Constant	13	1.000	.0000	0.0%
Total	two_UNa	40	180.630	33.5474	18.6%	
	Constant	40	1.000	.0000	0.0%	
12	.0	two_UNa	13	208.902	37.0553	17.7%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNa	14	236.869	60.8966	25.7%
		Constant	14	1.000	.0000	0.0%

	2.0	two_UNa	13	255.110	66.2139	26.0%
		Constant	13	1.000	.0000	0.0%
	Total	two_UNa	40	233.708	58.0432	24.8%
		Constant	40	1.000	.0000	0.0%
15	.0	two_UNa	13	172.431	27.5228	16.0%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNa	14	189.209	30.4819	16.1%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNa	13	173.704	18.9841	10.9%
		Constant	13	1.000	.0000	0.0%
	Total	two_UNa	40	178.717	26.7349	15.0%
		Constant	40	1.000	.0000	0.0%
16	.0	two_UNa	13	238.761	43.6459	18.3%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNa	14	211.557	40.4132	19.1%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNa	13	207.807	53.2013	25.6%
		Constant	13	1.000	.0000	0.0%
	Total	two_UNa	40	219.179	46.8318	21.4%
		Constant	40	1.000	.0000	0.0%
51	.0	two_UNa	32	211.423	50.5677	23.9%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNa	33	192.285	55.8414	29.0%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	168.315	40.9256	24.3%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	97	190.691	52.1253	27.3%
		Constant	97	1.000	.0000	0.0%
52	.0	two_UNa	31	156.572	41.1702	26.3%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UNa	33	184.155	36.1044	19.6%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	181.788	40.7577	22.4%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	96	174.459	40.8848	23.4%
		Constant	96	1.000	.0000	0.0%
53	.0	two_UNa	32	324.738	68.2559	21.0%
		Constant	32	1.000	.0000	0.0%

	1.0	two_UNa	33	265.386	66.0604	24.9%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	263.994	68.3897	25.9%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	97	284.507	72.6282	25.5%
		Constant	97	1.000	.0000	0.0%
54	.0	two_UNa	32	194.219	36.7915	18.9%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNa	33	186.705	35.2400	18.9%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	186.989	35.0691	18.8%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	97	189.278	35.5015	18.8%
		Constant	97	1.000	.0000	0.0%
55	.0	two_UNa	31	281.359	58.1796	20.7%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UNa	33	301.930	50.4339	16.7%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	305.471	56.5799	18.5%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	96	296.467	55.5201	18.7%
		Constant	96	1.000	.0000	0.0%
56	.0	two_UNa	32	182.364	25.0637	13.7%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNa	33	180.219	35.0064	19.4%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	185.368	36.1181	19.5%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	97	182.625	32.2041	17.6%
		Constant	97	1.000	.0000	0.0%
Total	.0	two_UNa	242	220.445	70.7368	32.1%
		Constant	242	1.000	.0000	0.0%
	1.0	two_UNa	254	214.906	63.5103	29.6%
		Constant	254	1.000	.0000	0.0%
	2.0	two_UNa	244	212.841	67.1201	31.5%
		Constant	244	1.000	.0000	0.0%
	Total	two_UNa	740	216.037	67.1137	31.1%
		Constant	740	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7869.381
Akaike's Information Criterion (AIC)	7873.381
Hurvich and Tsai's Criterion (AICC)	7873.397
Bozdogan's Criterion (CAIC)	7884.586
Schwarz's Bayesian Criterion (BIC)	7882.586

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.076	222.198	.000
UAldoV_h_I_perdiet	2	728.078	1.649	.193

a. Dependent Variable: two\_UNa.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	209.805021	14.523248	9.663	14.446	.000	177.291527	242.318516
[UAldoV_h_I_perdiet=.0]	7.762153	4.410103	728.077	1.760	.079	-.895883	16.420190
[UAldoV_h_I_perdiet=1.0]	2.184895	4.357533	728.078	.501	.616	-6.369935	10.739724
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2362.940757	123.845252
Constant [subject = subject] Variance	2005.969269	959.520305

a. Dependent Variable: two\_UNa.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON 2U[Na] AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNa BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED two_UNa BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNa	12	152.644	32.9889	21.6%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNa	11	156.141	40.6257	26.0%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNa	12	151.256	27.8907	18.4%
		Constant	12	1.000	.0000	0.0%
Total	two_UNa	35	153.267	33.0669	21.6%	
	Constant	35	1.000	.0000	0.0%	
12	.0	two_UNa	12	209.859	43.7680	20.9%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNa	11	186.966	44.9243	24.0%
		Constant	11	1.000	.0000	0.0%

	2.0	two_UNa	12	171.012	27.8171	16.3%
		Constant	12	1.000	.0000	0.0%
	Total	two_UNa	35	189.345	41.6254	22.0%
		Constant	35	1.000	.0000	0.0%
15	.0	two_UNa	12	137.064	20.0795	14.6%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNa	11	142.441	28.5852	20.1%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNa	12	136.134	29.7980	21.9%
		Constant	12	1.000	.0000	0.0%
	Total	two_UNa	35	138.435	25.8024	18.6%
		Constant	35	1.000	.0000	0.0%
16	.0	two_UNa	12	197.235	32.3020	16.4%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNa	11	193.465	39.7310	20.5%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNa	12	204.898	46.1319	22.5%
		Constant	12	1.000	.0000	0.0%
	Total	two_UNa	35	198.678	38.9045	19.6%
		Constant	35	1.000	.0000	0.0%
51	.0	two_UNa	20	170.009	30.8717	18.2%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	163.907	38.2934	23.4%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	128.636	50.5003	39.3%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	154.184	44.0296	28.6%
		Constant	60	1.000	.0000	0.0%
52	.0	two_UNa	20	127.621	31.5005	24.7%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	126.620	29.4660	23.3%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	129.579	40.0151	30.9%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	127.940	33.4116	26.1%
		Constant	60	1.000	.0000	0.0%
53	.0	two_UNa	20	232.642	42.5777	18.3%
		Constant	20	1.000	.0000	0.0%

	1.0	two_UNa	20	200.476	41.0368	20.5%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	204.875	44.7711	21.9%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	212.664	44.4728	20.9%
		Constant	60	1.000	.0000	0.0%
54	.0	two_UNa	20	130.644	25.4695	19.5%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	127.357	27.6157	21.7%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	120.103	29.9519	24.9%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	126.034	27.6246	21.9%
		Constant	60	1.000	.0000	0.0%
55	.0	two_UNa	20	237.872	57.3803	24.1%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	246.207	71.3772	29.0%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	222.741	44.1265	19.8%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	235.607	58.5145	24.8%
		Constant	60	1.000	.0000	0.0%
56	.0	two_UNa	20	189.417	39.4400	20.8%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	154.534	34.6412	22.4%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	142.719	38.2569	26.8%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	162.224	41.9330	25.8%
		Constant	60	1.000	.0000	0.0%
Total	.0	two_UNa	168	179.320	54.7097	30.5%
		Constant	168	1.000	.0000	0.0%
	1.0	two_UNa	164	169.824	55.6627	32.8%
		Constant	164	1.000	.0000	0.0%
	2.0	two_UNa	168	160.314	53.4686	33.4%
		Constant	168	1.000	.0000	0.0%
	Total	two_UNa	500	169.819	55.0581	32.4%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5130.428
Akaike's Information Criterion (AIC)	5134.428
Hurvich and Tsai's Criterion (AICC)	5134.452
Bozdogan's Criterion (CAIC)	5144.845
Schwarz's Bayesian Criterion (BIC)	5142.845

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.050	204.728	.000
UAldoV_h_I_perdiet	2	488.055	9.402	.000

a. Dependent Variable: two\_UNa.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	160.330877	12.134639	9.885	13.213	.000	133.250339	187.411414
[UAldoV_h_I_perdiet=.0]	19.006136	4.383083	488.050	4.336	.000	10.394095	27.618177
[UAldoV_h_I_perdiet=1.0]	9.513110	4.410264	488.057	2.157	.031	.847662	18.178557
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	1613.758747	103.304982
Constant [subject = subject] Variance	1374.402691	662.314859

a. Dependent Variable: two\_UNa.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON 2U[Na] AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNa BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED two_UNa BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNa	10	129.089	30.4126	23.6%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNa	9	103.692	29.1158	28.1%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNa	10	109.222	32.1093	29.4%
		Constant	10	1.000	.0000	0.0%
Total	two_UNa	29	114.356	31.5339	27.6%	
	Constant	29	1.000	.0000	0.0%	
12	.0	two_UNa	10	225.277	39.4655	17.5%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNa	9	180.039	29.5582	16.4%
		Constant	9	1.000	.0000	0.0%

	2.0	two_UNa	10	155.252	26.8739	17.3%
		Constant	10	1.000	.0000	0.0%
	Total	two_UNa	29	187.091	43.3728	23.2%
		Constant	29	1.000	.0000	0.0%
15	.0	two_UNa	10	89.528	31.4109	35.1%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNa	9	88.893	18.8860	21.2%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNa	10	76.973	23.6139	30.7%
		Constant	10	1.000	.0000	0.0%
Total	two_UNa	29	85.002	25.1690	29.6%	
	Constant	29	1.000	.0000	0.0%	
16	.0	two_UNa	10	119.674	17.4847	14.6%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNa	9	107.625	16.7242	15.5%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNa	10	94.587	25.5945	27.1%
		Constant	10	1.000	.0000	0.0%
Total	two_UNa	29	107.284	22.3871	20.9%	
	Constant	29	1.000	.0000	0.0%	
51	.0	two_UNa	16	99.827	41.5731	41.6%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	82.595	28.2245	34.2%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	78.575	30.4015	38.7%
		Constant	16	1.000	.0000	0.0%
Total	two_UNa	48	86.999	34.4614	39.6%	
	Constant	48	1.000	.0000	0.0%	
52	.0	two_UNa	16	72.602	24.5965	33.9%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	62.742	15.2718	24.3%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	79.047	35.5296	44.9%
		Constant	16	1.000	.0000	0.0%
Total	two_UNa	48	71.464	26.7639	37.5%	
	Constant	48	1.000	.0000	0.0%	
53	.0	two_UNa	16	174.890	39.3030	22.5%
		Constant	16	1.000	.0000	0.0%



	1.0	two_UNa	16	139.829	43.3249	31.0%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	130.931	30.0569	23.0%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	148.550	41.8107	28.1%
		Constant	48	1.000	.0000	0.0%
54	.0	two_UNa	16	93.013	29.4374	31.6%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	81.391	26.0848	32.0%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	80.096	20.3001	25.3%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	84.833	25.6844	30.3%
		Constant	48	1.000	.0000	0.0%
55	.0	two_UNa	16	166.786	45.7189	27.4%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	157.644	30.5841	19.4%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	148.103	30.6986	20.7%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	157.511	36.4117	23.1%
		Constant	48	1.000	.0000	0.0%
56	.0	two_UNa	16	114.138	32.4570	28.4%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	91.910	25.4165	27.7%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	98.724	22.2198	22.5%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	101.591	28.0756	27.6%
		Constant	48	1.000	.0000	0.0%
Total	.0	two_UNa	136	126.293	54.8226	43.4%
		Constant	136	1.000	.0000	0.0%
	1.0	two_UNa	132	107.424	44.6121	41.5%
		Constant	132	1.000	.0000	0.0%
	2.0	two_UNa	136	104.470	39.2604	37.6%
		Constant	136	1.000	.0000	0.0%
	Total	two_UNa	404	112.782	47.5859	42.2%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3943.322
Akaike's Information Criterion (AIC)	3947.322
Hurvich and Tsai's Criterion (AICC)	3947.352
Bozdogan's Criterion (CAIC)	3957.310
Schwarz's Bayesian Criterion (BIC)	3955.310

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.987	91.787	.000
UAldoV_h_l_perdiet	2	391.991	19.550	.000

a. Dependent Variable: two\_UNa.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	106.003162	12.131229	9.585	8.738	.000	78.813719	133.192604
[UAldoV_h_l_perdiet=.0]	21.822264	3.759421	391.987	5.805	.000	14.431114	29.213415
[UAldoV_h_l_perdiet=1.0]	3.263849	3.788483	391.993	.862	.389	-4.184438	10.712136
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	961.060725	68.648326
Constant [subject = subject] Variance	1399.722900	672.221219

a. Dependent Variable: two\_UNa.

\*ON POTASSIUM CONCENTRATION

\* Mixed Linear Models

EFFECT OF UAldoV TERTILE ON 2U[K] AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED two\_UK BY UAldoV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UAldoV\_h\_l\_perdiet | SSTYPE(3)

```

/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:47
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED two_UK BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.06

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UK	35	102.366	24.2995	23.7%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UK	34	113.176	21.9579	19.4%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UK	35	135.486	34.7489	25.6%
		Constant	35	1.000	.0000	0.0%
Total	two_UK	104	117.046	30.6870	26.2%	
	Constant	104	1.000	.0000	0.0%	
12	.0	two_UK	35	100.463	36.5245	36.4%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UK	34	115.259	30.4793	26.4%
		Constant	34	1.000	.0000	0.0%

	2.0	two_UK	35	129.863	29.5131	22.7%
		Constant	35	1.000	.0000	0.0%
	Total	two_UK	104	115.194	34.2400	29.7%
		Constant	104	1.000	.0000	0.0%
15	.0	two_UK	35	84.880	22.3798	26.4%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UK	34	88.871	17.6856	19.9%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UK	35	92.994	18.4041	19.8%
		Constant	35	1.000	.0000	0.0%
	Total	two_UK	104	88.915	19.7113	22.2%
		Constant	104	1.000	.0000	0.0%
16	.0	two_UK	35	104.651	17.0898	16.3%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UK	34	121.906	24.3296	20.0%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UK	35	148.720	37.9619	25.5%
		Constant	35	1.000	.0000	0.0%
	Total	two_UK	104	125.123	33.1179	26.5%
		Constant	104	1.000	.0000	0.0%
51	.0	two_UK	68	77.568	23.1307	29.8%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UK	69	86.149	22.9036	26.6%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UK	68	97.638	28.1968	28.9%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	205	87.113	26.0636	29.9%
		Constant	205	1.000	.0000	0.0%
52	.0	two_UK	67	59.854	18.6928	31.2%
		Constant	67	1.000	.0000	0.0%
	1.0	two_UK	69	78.116	23.9575	30.7%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UK	68	92.982	26.0337	28.0%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	204	77.074	26.6941	34.6%
		Constant	204	1.000	.0000	0.0%
53	.0	two_UK	68	134.694	37.5065	27.8%
		Constant	68	1.000	.0000	0.0%

	1.0	two_UK	69	135.342	37.4598	27.7%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UK	68	152.197	34.9560	23.0%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	205	140.718	37.3748	26.6%
		Constant	205	1.000	.0000	0.0%
54	.0	two_UK	68	76.791	18.7589	24.4%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UK	69	81.606	20.6119	25.3%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UK	68	92.425	29.5529	32.0%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	205	83.598	24.2238	29.0%
		Constant	205	1.000	.0000	0.0%
55	.0	two_UK	67	133.125	35.3377	26.5%
		Constant	67	1.000	.0000	0.0%
	1.0	two_UK	69	159.142	45.5405	28.6%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UK	68	184.068	44.4158	24.1%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	204	158.906	46.7256	29.4%
		Constant	204	1.000	.0000	0.0%
56	.0	two_UK	68	72.547	20.6136	28.4%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UK	69	80.820	19.4750	24.1%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UK	68	96.641	21.7937	22.6%
		Constant	68	1.000	.0000	0.0%
	Total	two_UK	205	83.324	22.8457	27.4%
		Constant	205	1.000	.0000	0.0%
Total	.0	two_UK	546	93.866	37.1925	39.6%
		Constant	546	1.000	.0000	0.0%
	1.0	two_UK	550	105.080	40.1487	38.2%
		Constant	550	1.000	.0000	0.0%
	2.0	two_UK	548	121.226	45.2834	37.4%
		Constant	548	1.000	.0000	0.0%
	Total	two_UK	1644	106.738	42.4988	39.8%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	15806.792
Akaike's Information Criterion (AIC)	15810.792
Hurvich and Tsai's Criterion (AICC)	15810.799
Bozdogan's Criterion (CAIC)	15823.598
Schwarz's Bayesian Criterion (BIC)	15821.598

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.026	147.671	.000
UAldoV_h_I_perdiet	2	1632.028	120.093	.000

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	122.149747	8.919688	9.268	13.694	.000	102.060572	142.238922
[UAldoV_h_I_perdiet=.0]	-27.319063	1.772287	1632.027	-15.415	.000	-30.795260	-23.842866
[UAldoV_h_I_perdiet=1.0]	-16.093223	1.769102	1632.028	-9.097	.000	-19.563173	-12.623273
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	859.055245	30.072704
Constant [subject = subject] Variance	779.359599	369.590357

a. Dependent Variable: two\_UK.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON 2U[K] AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UK BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED two_UK BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UK	13	101.138	28.6091	28.3%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UK	14	112.343	18.6843	16.6%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UK	13	132.015	30.1428	22.8%
		Constant	13	1.000	.0000	0.0%
Total	two_UK	40	115.095	28.4755	24.7%	
	Constant	40	1.000	.0000	0.0%	
12	.0	two_UK	13	72.200	17.0076	23.6%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UK	14	96.429	25.7170	26.7%
		Constant	14	1.000	.0000	0.0%

	2.0	two_UK	13	118.200	36.6856	31.0%
		Constant	13	1.000	.0000	0.0%
	Total	two_UK	40	95.630	32.8113	34.3%
		Constant	40	1.000	.0000	0.0%
15	.0	two_UK	13	84.277	19.1415	22.7%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UK	14	93.900	22.3275	23.8%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UK	13	94.154	15.1702	16.1%
		Constant	13	1.000	.0000	0.0%
	Total	two_UK	40	90.855	19.2639	21.2%
		Constant	40	1.000	.0000	0.0%
16	.0	two_UK	13	106.415	20.9575	19.7%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UK	14	115.843	24.7881	21.4%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UK	13	153.831	36.9879	24.0%
		Constant	13	1.000	.0000	0.0%
	Total	two_UK	40	125.125	34.3977	27.5%
		Constant	40	1.000	.0000	0.0%
51	.0	two_UK	32	82.069	24.6505	30.0%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UK	33	91.618	26.9391	29.4%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	103.219	27.7167	26.9%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	97	92.295	27.5860	29.9%
		Constant	97	1.000	.0000	0.0%
52	.0	two_UK	31	62.948	18.5441	29.5%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UK	33	89.964	22.1561	24.6%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	101.475	21.3009	21.0%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	96	85.077	26.0896	30.7%
		Constant	96	1.000	.0000	0.0%
53	.0	two_UK	32	141.131	32.2405	22.8%
		Constant	32	1.000	.0000	0.0%

	1.0	two_UK	33	131.927	40.9403	31.0%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	152.450	38.1995	25.1%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	97	141.734	37.9080	26.7%
		Constant	97	1.000	.0000	0.0%
54	.0	two_UK	32	82.200	21.5274	26.2%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UK	33	86.509	20.2983	23.5%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	101.231	31.0572	30.7%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	97	89.944	25.7870	28.7%
		Constant	97	1.000	.0000	0.0%
55	.0	two_UK	31	133.413	32.7337	24.5%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UK	33	161.691	46.3270	28.7%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	186.362	38.2339	20.5%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	96	160.783	44.7599	27.8%
		Constant	96	1.000	.0000	0.0%
56	.0	two_UK	32	64.325	13.6425	21.2%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UK	33	79.297	19.2184	24.2%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	93.831	23.1073	24.6%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	97	79.153	22.3774	28.3%
		Constant	97	1.000	.0000	0.0%
Total	.0	two_UK	242	93.598	37.1702	39.7%
		Constant	242	1.000	.0000	0.0%
	1.0	two_UK	254	106.348	39.5121	37.2%
		Constant	254	1.000	.0000	0.0%
	2.0	two_UK	244	123.405	44.0526	35.7%
		Constant	244	1.000	.0000	0.0%
	Total	two_UK	740	107.803	42.0756	39.0%
		Constant	740	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7098.575
Akaike's Information Criterion (AIC)	7102.575
Hurvich and Tsai's Criterion (AICC)	7102.591
Bozdogan's Criterion (CAIC)	7113.780
Schwarz's Bayesian Criterion (BIC)	7111.780

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.082	155.550	.000
UAldoV_h_I_perdiet	2	728.083	65.011	.000

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	123.145737	8.756387	9.648	14.064	.000	103.538447	142.753026
[UAldoV_h_I_perdiet=.0]	-29.684319	2.613649	728.083	-11.357	.000	-34.815506	-24.553132
[UAldoV_h_I_perdiet=1.0]	-17.046683	2.582493	728.084	-6.601	.000	-22.116704	-11.976661
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	829.945693	43.498526
Constant [subject = subject] Variance	730.466488	349.066109

a. Dependent Variable: two\_UK.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON 2U[K] AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UK BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED two_UK BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UK	12	102.950	26.1966	25.4%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UK	11	120.073	26.1365	21.8%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UK	12	133.300	16.7231	12.5%
		Constant	12	1.000	.0000	0.0%
Total	two_UK	35	118.737	26.0156	21.9%	
	Constant	35	1.000	.0000	0.0%	
12	.0	two_UK	12	112.483	35.8478	31.9%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UK	11	122.691	28.8052	23.5%
		Constant	11	1.000	.0000	0.0%

	2.0	two_UK	12	135.833	27.3081	20.1%
		Constant	12	1.000	.0000	0.0%
	Total	two_UK	35	123.697	31.5873	25.5%
		Constant	35	1.000	.0000	0.0%
15	.0	two_UK	12	81.667	17.5854	21.5%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UK	11	86.073	13.9972	16.3%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UK	12	98.633	15.6451	15.9%
		Constant	12	1.000	.0000	0.0%
	Total	two_UK	35	88.869	17.0691	19.2%
		Constant	35	1.000	.0000	0.0%
16	.0	two_UK	12	109.350	16.6528	15.2%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UK	11	140.182	21.8322	15.6%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UK	12	169.150	33.3957	19.7%
		Constant	12	1.000	.0000	0.0%
	Total	two_UK	35	139.543	34.9570	25.1%
		Constant	35	1.000	.0000	0.0%
51	.0	two_UK	20	77.420	16.3559	21.1%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	88.263	11.5610	13.1%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	102.400	28.5375	27.9%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	89.361	22.3121	25.0%
		Constant	60	1.000	.0000	0.0%
52	.0	two_UK	20	63.990	20.6762	32.3%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	76.380	20.0141	26.2%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	95.290	29.8277	31.3%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	78.553	26.8631	34.2%
		Constant	60	1.000	.0000	0.0%
53	.0	two_UK	20	132.780	40.0980	30.2%
		Constant	20	1.000	.0000	0.0%

	1.0	two_UK	20	132.830	30.2602	22.8%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	152.020	35.0587	23.1%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	139.210	35.9433	25.8%
		Constant	60	1.000	.0000	0.0%
54	.0	two_UK	20	74.180	11.7087	15.8%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	84.090	20.2885	24.1%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	90.020	27.5179	30.6%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	82.763	21.5402	26.0%
		Constant	60	1.000	.0000	0.0%
55	.0	two_UK	20	134.250	37.8983	28.2%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	163.940	52.8311	32.2%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	181.290	51.7872	28.6%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	159.827	51.0753	32.0%
		Constant	60	1.000	.0000	0.0%
56	.0	two_UK	20	88.940	23.5505	26.5%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	88.340	21.0517	23.8%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	102.530	20.7041	20.2%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	93.270	22.4283	24.0%
		Constant	60	1.000	.0000	0.0%
Total	.0	two_UK	168	97.075	35.8645	36.9%
		Constant	168	1.000	.0000	0.0%
	1.0	two_UK	164	108.756	40.0236	36.8%
		Constant	164	1.000	.0000	0.0%
	2.0	two_UK	168	124.488	44.4389	35.7%
		Constant	168	1.000	.0000	0.0%
	Total	two_UK	500	110.117	41.7379	37.9%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4799.833
Akaike's Information Criterion (AIC)	4803.833
Hurvich and Tsai's Criterion (AICC)	4803.857
Bozdogan's Criterion (CAIC)	4814.250
Schwarz's Bayesian Criterion (BIC)	4812.250

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.042	151.391	.000
UAldoV_h_I_perdiet	2	488.046	38.350	.000

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	125.660639	9.227345	9.776	13.618	.000	105.036897	146.284382
[UAldoV_h_I_perdiet=.0]	-27.413095	3.139402	488.042	-8.732	.000	-33.581507	-21.244684
[UAldoV_h_I_perdiet=1.0]	-15.552890	3.158872	488.048	-4.924	.000	-21.759557	-9.346224
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	827.890846	52.997973
Constant [subject = subject] Variance	801.112342	385.088027

a. Dependent Variable: two\_UK.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON 2U[K] AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UK BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED two_UK BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UK	10	103.260	17.2354	16.7%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	106.044	21.0677	19.9%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	142.620	54.1113	37.9%
		Constant	10	1.000	.0000	0.0%
Total	two_UK	29	117.697	38.7734	32.9%	
	Constant	29	1.000	.0000	0.0%	
12	.0	two_UK	10	122.780	34.4025	28.0%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	135.467	23.7556	17.5%
		Constant	9	1.000	.0000	0.0%

	2.0	two_UK	10	137.860	16.4184	11.9%
		Constant	10	1.000	.0000	0.0%
	Total	two_UK	29	131.917	25.9766	19.7%
		Constant	29	1.000	.0000	0.0%
15	.0	two_UK	10	89.520	31.4232	35.1%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	84.467	12.5849	14.9%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	84.720	23.5191	27.8%
		Constant	10	1.000	.0000	0.0%
	Total	two_UK	29	86.297	23.3689	27.1%
		Constant	29	1.000	.0000	0.0%
16	.0	two_UK	10	96.720	8.6570	9.0%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	109.000	11.6808	10.7%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	117.560	24.1629	20.6%
		Constant	10	1.000	.0000	0.0%
	Total	two_UK	29	107.717	18.1400	16.8%
		Constant	29	1.000	.0000	0.0%
51	.0	two_UK	16	68.750	25.8640	37.6%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	72.225	19.5451	27.1%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	80.525	22.8689	28.4%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	73.833	22.9618	31.1%
		Constant	48	1.000	.0000	0.0%
52	.0	two_UK	16	48.688	11.5142	23.6%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	55.850	14.3420	25.7%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	73.113	19.5077	26.7%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	59.217	18.3506	31.0%
		Constant	48	1.000	.0000	0.0%
53	.0	two_UK	16	124.212	43.4527	35.0%
		Constant	16	1.000	.0000	0.0%



	1.0	two_UK	16	145.525	38.4850	26.4%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	151.913	29.7505	19.6%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	140.550	38.7428	27.6%
		Constant	48	1.000	.0000	0.0%
54	.0	two_UK	16	69.238	17.5510	25.3%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	68.388	16.6771	24.4%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	77.819	23.4054	30.1%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	71.815	19.5049	27.2%
		Constant	48	1.000	.0000	0.0%
55	.0	two_UK	16	131.163	39.0674	29.8%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	147.888	33.2835	22.5%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	182.950	48.6890	26.6%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	154.000	45.5282	29.6%
		Constant	48	1.000	.0000	0.0%
56	.0	two_UK	16	68.500	17.0530	24.9%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	74.563	15.7423	21.1%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	94.900	20.2172	21.3%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	79.321	20.7977	26.2%
		Constant	48	1.000	.0000	0.0%
Total	.0	two_UK	136	90.379	38.7498	42.9%
		Constant	136	1.000	.0000	0.0%
	1.0	two_UK	132	98.074	40.9569	41.8%
		Constant	132	1.000	.0000	0.0%
	2.0	two_UK	136	113.288	47.8258	42.2%
		Constant	136	1.000	.0000	0.0%
	Total	two_UK	404	100.605	43.6596	43.4%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3845.629
Akaike's Information Criterion (AIC)	3849.629
Hurvich and Tsai's Criterion (AICC)	3849.659
Bozdogan's Criterion (CAIC)	3859.617
Schwarz's Bayesian Criterion (BIC)	3857.617

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.044	96.846	.000
UAldoV_h_l_perdiet	2	392.048	24.372	.000

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	114.778423	10.557148	9.668	10.872	.000	91.145811	138.411035
[UAldoV_h_l_perdiet=.0]	-22.908155	3.329629	392.044	-6.880	.000	-29.454318	-16.361993
[UAldoV_h_l_perdiet=1.0]	-14.912141	3.355368	392.050	-4.444	.000	-21.508907	-8.315375
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	753.877349	53.845379
Constant [subject = subject] Variance	1058.099647	506.892936

a. Dependent Variable: two\_UK.

\*ON UREA CONCENTRATION

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON U[Urea] AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED UUrea BY UAldoV\_h\_l\_perdiet WITH Constant  
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)  
/FIXED=UAldoV\_h\_l\_perdiet | SSTYPE(3)

```

/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UUrea BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.06

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UUrea	35	195.604	44.6892	22.8%
		Constant	35	1.000	.0000	0.0%
	1.0	UUrea	34	209.834	45.3194	21.6%
		Constant	34	1.000	.0000	0.0%
	2.0	UUrea	35	250.830	70.7816	28.2%
		Constant	35	1.000	.0000	0.0%
Total	UUrea	104	218.842	59.4058	27.1%	
	Constant	104	1.000	.0000	0.0%	
12	.0	UUrea	35	262.495	67.0368	25.5%
		Constant	35	1.000	.0000	0.0%
	1.0	UUrea	34	271.126	74.3885	27.4%
		Constant	34	1.000	.0000	0.0%

	2.0	UUrea	35	287.075	69.8933	24.3%
		Constant	35	1.000	.0000	0.0%
	Total	UUrea	104	273.589	70.5303	25.8%
		Constant	104	1.000	.0000	0.0%
15	.0	UUrea	35	164.474	37.3813	22.7%
		Constant	35	1.000	.0000	0.0%
	1.0	UUrea	34	185.829	36.5497	19.7%
		Constant	34	1.000	.0000	0.0%
	2.0	UUrea	34	182.900	35.3049	19.3%
		Constant	34	1.000	.0000	0.0%
	Total	UUrea	103	177.606	37.3136	21.0%
		Constant	103	1.000	.0000	0.0%
16	.0	UUrea	35	226.887	38.8426	17.1%
		Constant	35	1.000	.0000	0.0%
	1.0	UUrea	34	256.214	64.5994	25.2%
		Constant	34	1.000	.0000	0.0%
	2.0	UUrea	35	305.062	89.4904	29.3%
		Constant	35	1.000	.0000	0.0%
	Total	UUrea	104	262.784	74.4185	28.3%
		Constant	104	1.000	.0000	0.0%
51	.0	UUrea	68	142.757	46.2810	32.4%
		Constant	68	1.000	.0000	0.0%
	1.0	UUrea	69	156.406	42.1216	26.9%
		Constant	69	1.000	.0000	0.0%
	2.0	UUrea	68	171.517	47.3357	27.6%
		Constant	68	1.000	.0000	0.0%
	Total	UUrea	205	156.891	46.5701	29.7%
		Constant	205	1.000	.0000	0.0%
52	.0	UUrea	67	124.796	40.9756	32.8%
		Constant	67	1.000	.0000	0.0%
	1.0	UUrea	69	151.498	39.0932	25.8%
		Constant	69	1.000	.0000	0.0%
	2.0	UUrea	68	177.781	44.3138	24.9%
		Constant	68	1.000	.0000	0.0%
	Total	UUrea	204	151.489	46.6118	30.8%
		Constant	204	1.000	.0000	0.0%
53	.0	UUrea	68	278.778	78.8121	28.3%
		Constant	68	1.000	.0000	0.0%

	1.0	UUrea	69	270.756	91.2324	33.7%
		Constant	69	1.000	.0000	0.0%
	2.0	UUrea	67	293.726	93.2130	31.7%
		Constant	67	1.000	.0000	0.0%
	Total	UUrea	204	280.974	88.0558	31.3%
		Constant	204	1.000	.0000	0.0%
54	.0	UUrea	67	141.292	38.7083	27.4%
		Constant	67	1.000	.0000	0.0%
	1.0	UUrea	69	150.770	36.9863	24.5%
		Constant	69	1.000	.0000	0.0%
	2.0	UUrea	67	168.660	52.8412	31.3%
		Constant	67	1.000	.0000	0.0%
	Total	UUrea	203	153.546	44.6158	29.1%
		Constant	203	1.000	.0000	0.0%
55	.0	UUrea	66	275.533	77.2809	28.0%
		Constant	66	1.000	.0000	0.0%
	1.0	UUrea	69	305.919	71.9812	23.5%
		Constant	69	1.000	.0000	0.0%
	2.0	UUrea	66	350.468	78.9093	22.5%
		Constant	66	1.000	.0000	0.0%
	Total	UUrea	201	310.569	81.6346	26.3%
		Constant	201	1.000	.0000	0.0%
56	.0	UUrea	67	153.491	39.8100	25.9%
		Constant	67	1.000	.0000	0.0%
	1.0	UUrea	69	154.184	31.7411	20.6%
		Constant	69	1.000	.0000	0.0%
	2.0	UUrea	68	181.581	42.8347	23.6%
		Constant	68	1.000	.0000	0.0%
	Total	UUrea	204	163.089	40.3762	24.8%
		Constant	204	1.000	.0000	0.0%
Total	.0	UUrea	543	192.804	80.7775	41.9%
		Constant	543	1.000	.0000	0.0%
	1.0	UUrea	550	206.291	82.4207	40.0%
		Constant	550	1.000	.0000	0.0%
	2.0	UUrea	543	231.921	92.8853	40.1%
		Constant	543	1.000	.0000	0.0%
	Total	UUrea	1636	210.321	86.9852	41.4%
		Constant	1636	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	18023.577
Akaike's Information Criterion (AIC)	18027.577
Hurvich and Tsai's Criterion (AICC)	18027.585
Bozdogan's Criterion (CAIC)	18040.374
Schwarz's Bayesian Criterion (BIC)	18038.374

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.015	120.260	.000
UAldoV_h_I_perdiet	2	1624.016	62.119	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	236.621646	19.707679	9.218	12.007	.000	192.199624	281.043669
[UAldoV_h_I_perdiet=.0]	-39.382214	3.588384	1624.015	-10.975	.000	-46.420564	-32.343865
[UAldoV_h_I_perdiet=1.0]	-25.714231	3.577067	1624.017	-7.189	.000	-32.730381	-18.698080
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3495.892163	122.681202
Constant [subject = subject] Variance	3817.217532	1809.161442

a. Dependent Variable: UUrea.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON U[Urea] AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UUrea BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:48	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED UUrea BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UUrea	13	190.707	43.7109	22.9%
		Constant	13	1.000	.0000	0.0%
	1.0	UUrea	14	202.678	45.8883	22.6%
		Constant	14	1.000	.0000	0.0%
	2.0	UUrea	13	247.253	57.5123	23.3%
		Constant	13	1.000	.0000	0.0%
Total	UUrea	40	213.274	53.8745	25.3%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UUrea	13	234.074	61.9655	26.5%
		Constant	13	1.000	.0000	0.0%
	1.0	UUrea	14	274.154	65.5995	23.9%
		Constant	14	1.000	.0000	0.0%

	2.0	UUrea	13	292.643	63.6158	21.7%
		Constant	13	1.000	.0000	0.0%
	Total	UUrea	40	267.137	66.7835	25.0%
		Constant	40	1.000	.0000	0.0%
15	.0	UUrea	13	165.527	25.0230	15.1%
		Constant	13	1.000	.0000	0.0%
	1.0	UUrea	14	189.239	34.6468	18.3%
		Constant	14	1.000	.0000	0.0%
	2.0	UUrea	12	189.033	22.5588	11.9%
		Constant	12	1.000	.0000	0.0%
	Total	UUrea	39	181.272	29.7141	16.4%
		Constant	39	1.000	.0000	0.0%
16	.0	UUrea	13	232.588	28.0025	12.0%
		Constant	13	1.000	.0000	0.0%
	1.0	UUrea	14	241.734	60.7533	25.1%
		Constant	14	1.000	.0000	0.0%
	2.0	UUrea	13	300.097	76.7599	25.6%
		Constant	13	1.000	.0000	0.0%
	Total	UUrea	40	257.730	64.6949	25.1%
		Constant	40	1.000	.0000	0.0%
51	.0	UUrea	32	137.014	50.9978	37.2%
		Constant	32	1.000	.0000	0.0%
	1.0	UUrea	33	150.254	46.2973	30.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	32	157.795	40.6597	25.8%
		Constant	32	1.000	.0000	0.0%
	Total	UUrea	97	148.374	46.4971	31.3%
		Constant	97	1.000	.0000	0.0%
52	.0	UUrea	31	118.758	36.6674	30.9%
		Constant	31	1.000	.0000	0.0%
	1.0	UUrea	33	155.774	38.7902	24.9%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	32	178.884	40.4051	22.6%
		Constant	32	1.000	.0000	0.0%
	Total	UUrea	96	151.524	45.5292	30.0%
		Constant	96	1.000	.0000	0.0%
53	.0	UUrea	32	257.154	55.0234	21.4%
		Constant	32	1.000	.0000	0.0%

	1.0	UUrea	33	227.041	76.6880	33.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	31	236.548	71.6774	30.3%
		Constant	31	1.000	.0000	0.0%
	Total	UUrea	96	240.149	68.9396	28.7%
		Constant	96	1.000	.0000	0.0%
54	.0	UUrea	31	147.992	37.0112	25.0%
		Constant	31	1.000	.0000	0.0%
	1.0	UUrea	33	151.530	29.5961	19.5%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	32	156.817	35.7199	22.8%
		Constant	32	1.000	.0000	0.0%
	Total	UUrea	96	152.150	34.0160	22.4%
		Constant	96	1.000	.0000	0.0%
55	.0	UUrea	31	259.133	65.6928	25.4%
		Constant	31	1.000	.0000	0.0%
	1.0	UUrea	33	286.517	65.4141	22.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	31	327.318	57.8582	17.7%
		Constant	31	1.000	.0000	0.0%
	Total	UUrea	95	290.895	68.4053	23.5%
		Constant	95	1.000	.0000	0.0%
56	.0	UUrea	31	137.980	29.9032	21.7%
		Constant	31	1.000	.0000	0.0%
	1.0	UUrea	33	144.785	21.8372	15.1%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	32	164.908	31.9148	19.4%
		Constant	32	1.000	.0000	0.0%
	Total	UUrea	96	149.295	30.1054	20.2%
		Constant	96	1.000	.0000	0.0%
Total	.0	UUrea	240	182.878	71.4707	39.1%
		Constant	240	1.000	.0000	0.0%
	1.0	UUrea	254	195.016	72.3497	37.1%
		Constant	254	1.000	.0000	0.0%
	2.0	UUrea	241	214.677	79.7587	37.2%
		Constant	241	1.000	.0000	0.0%
	Total	UUrea	735	197.499	75.6073	38.3%
		Constant	735	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7875.976
Akaike's Information Criterion (AIC)	7879.976
Hurvich and Tsai's Criterion (AICC)	7879.992
Bozdogan's Criterion (CAIC)	7891.167
Schwarz's Bayesian Criterion (BIC)	7889.167

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.031	135.249	.000
UAldoV_h_I_perdiet	2	723.034	25.440	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	222.776144	17.839960	9.451	12.487	.000	182.710912	262.841376
[UAldoV_h_I_perdiet=.0]	-32.487597	4.607978	723.034	-7.050	.000	-41.534212	-23.440981
[UAldoV_h_I_perdiet=1.0]	-20.458226	4.543931	723.035	-4.502	.000	-29.379101	-11.537351
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2552.968024	134.270878
Constant [subject = subject] Variance	3069.533565	1464.030379

a. Dependent Variable: UUrea.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON U[Urea] AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UUrea BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:48	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED UUrea BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UUrea	12	196.817	60.0488	30.5%
		Constant	12	1.000	.0000	0.0%
	1.0	UUrea	11	224.609	53.2985	23.7%
		Constant	11	1.000	.0000	0.0%
	2.0	UUrea	12	247.322	65.0803	26.3%
		Constant	12	1.000	.0000	0.0%
Total	UUrea	35	222.868	61.8382	27.7%	
	Constant	35	1.000	.0000	0.0%	
12	.0	UUrea	12	258.741	65.7214	25.4%
		Constant	12	1.000	.0000	0.0%
	1.0	UUrea	11	233.009	90.5085	38.8%
		Constant	11	1.000	.0000	0.0%

	2.0	UUrea	12	265.138	90.3233	34.1%
		Constant	12	1.000	.0000	0.0%
	Total	UUrea	35	252.847	81.4808	32.2%
		Constant	35	1.000	.0000	0.0%
15	.0	UUrea	12	159.701	27.5792	17.3%
		Constant	12	1.000	.0000	0.0%
	1.0	UUrea	11	187.207	34.6179	18.5%
		Constant	11	1.000	.0000	0.0%
	2.0	UUrea	12	196.429	34.4774	17.6%
		Constant	12	1.000	.0000	0.0%
Total	UUrea	35	180.938	35.2095	19.5%	
	Constant	35	1.000	.0000	0.0%	
16	.0	UUrea	12	241.869	45.2004	18.7%
		Constant	12	1.000	.0000	0.0%
	1.0	UUrea	11	297.445	73.7188	24.8%
		Constant	11	1.000	.0000	0.0%
	2.0	UUrea	12	346.376	94.0660	27.2%
		Constant	12	1.000	.0000	0.0%
Total	UUrea	35	295.167	83.9755	28.5%	
	Constant	35	1.000	.0000	0.0%	
51	.0	UUrea	20	147.736	26.1966	17.7%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	20	171.037	29.1808	17.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	20	193.290	47.0002	24.3%
		Constant	20	1.000	.0000	0.0%
Total	UUrea	60	170.688	39.4764	23.1%	
	Constant	60	1.000	.0000	0.0%	
52	.0	UUrea	20	138.661	50.1209	36.1%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	20	162.138	39.5578	24.4%
		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	20	186.455	46.2990	24.8%
		Constant	20	1.000	.0000	0.0%
Total	UUrea	60	162.418	48.8919	30.1%	
	Constant	60	1.000	.0000	0.0%	
53	.0	UUrea	20	302.872	78.6473	26.0%
		Constant	20	1.000	.0000	0.0%

	1.0	UUrea	20	291.042	81.8352	28.1%
		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	20	337.179	83.3882	24.7%
		Constant	20	1.000	.0000	0.0%
	Total	UUrea	60	310.365	82.3237	26.5%
		Constant	60	1.000	.0000	0.0%
54	.0	UUrea	20	135.290	33.3777	24.7%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	20	154.121	32.7733	21.3%
		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	19	190.012	71.5261	37.6%
		Constant	19	1.000	.0000	0.0%
	Total	UUrea	59	159.296	53.1183	33.3%
		Constant	59	1.000	.0000	0.0%
55	.0	UUrea	19	275.724	67.8453	24.6%
		Constant	19	1.000	.0000	0.0%
	1.0	UUrea	20	324.101	68.8635	21.2%
		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	20	370.529	94.4217	25.5%
		Constant	20	1.000	.0000	0.0%
	Total	UUrea	59	324.260	86.0959	26.6%
		Constant	59	1.000	.0000	0.0%
56	.0	UUrea	20	177.389	40.7200	23.0%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	20	168.948	39.2510	23.2%
		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	20	203.613	49.0647	24.1%
		Constant	20	1.000	.0000	0.0%
	Total	UUrea	60	183.317	45.0211	24.6%
		Constant	60	1.000	.0000	0.0%
Total	.0	UUrea	167	200.978	79.8411	39.7%
		Constant	167	1.000	.0000	0.0%
	1.0	UUrea	164	218.248	83.6477	38.3%
		Constant	164	1.000	.0000	0.0%
	2.0	UUrea	167	252.064	98.6609	39.1%
		Constant	167	1.000	.0000	0.0%
	Total	UUrea	498	223.797	90.1594	40.3%
		Constant	498	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5514.470
Akaike's Information Criterion (AIC)	5518.470
Hurvich and Tsai's Criterion (AICC)	5518.494
Bozdogan's Criterion (CAIC)	5528.879
Schwarz's Bayesian Criterion (BIC)	5526.879

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.036	122.083	.000
UAldoV_h_I_perdiet	2	486.041	29.822	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	253.856970	20.813879	9.669	12.197	.000	207.264635	300.449306
[UAldoV_h_I_perdiet=.0]	-50.118426	6.598785	486.038	-7.595	.000	-63.084095	-37.152758
[UAldoV_h_I_perdiet=1.0]	-33.106694	6.629678	486.043	-4.994	.000	-46.133062	-20.080326
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3635.557781	233.212359
Constant [subject = subject] Variance	4109.975812	1970.226143

a. Dependent Variable: UUrea.

\* Mixed Linear Models  
EFFECT OF UAldoV TERTILE ON U[Urea] AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UUrea BY UAldoV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED UUrea BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UUrea	10	200.516	22.9475	11.4%
		Constant	10	1.000	.0000	0.0%
	1.0	UUrea	9	202.908	32.4910	16.0%
		Constant	9	1.000	.0000	0.0%
	2.0	UUrea	10	259.690	96.0095	37.0%
		Constant	10	1.000	.0000	0.0%
Total	UUrea	29	221.663	64.9844	29.3%	
	Constant	29	1.000	.0000	0.0%	
12	.0	UUrea	10	303.946	59.0222	19.4%
		Constant	10	1.000	.0000	0.0%
	1.0	UUrea	9	313.002	40.0900	12.8%
		Constant	9	1.000	.0000	0.0%

	2.0	UUrea	10	306.161	44.6799	14.6%
		Constant	10	1.000	.0000	0.0%
	Total	UUrea	29	307.520	47.2809	15.4%
		Constant	29	1.000	.0000	0.0%
15	.0	UUrea	10	168.831	58.8333	34.8%
		Constant	10	1.000	.0000	0.0%
	1.0	UUrea	9	178.840	44.5414	24.9%
		Constant	9	1.000	.0000	0.0%
	2.0	UUrea	10	159.307	39.7844	25.0%
		Constant	10	1.000	.0000	0.0%
Total	UUrea	29	168.653	47.4630	28.1%	
	Constant	29	1.000	.0000	0.0%	
16	.0	UUrea	10	201.499	33.0859	16.4%
		Constant	10	1.000	.0000	0.0%
	1.0	UUrea	9	228.346	29.0679	12.7%
		Constant	9	1.000	.0000	0.0%
	2.0	UUrea	10	261.938	84.8879	32.4%
		Constant	10	1.000	.0000	0.0%
Total	UUrea	29	230.672	59.7018	25.9%	
	Constant	29	1.000	.0000	0.0%	
51	.0	UUrea	16	148.019	56.4812	38.2%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	150.808	44.6069	29.6%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	171.745	52.5338	30.6%
		Constant	16	1.000	.0000	0.0%
Total	UUrea	48	156.857	51.4631	32.8%	
	Constant	48	1.000	.0000	0.0%	
52	.0	UUrea	16	119.162	33.9271	28.5%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	129.381	31.9875	24.7%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	164.731	48.9642	29.7%
		Constant	16	1.000	.0000	0.0%
Total	UUrea	48	137.758	42.9925	31.2%	
	Constant	48	1.000	.0000	0.0%	
53	.0	UUrea	16	291.906	108.1516	37.1%
		Constant	16	1.000	.0000	0.0%



	1.0	UUrea	16	335.560	86.4341	25.8%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	350.191	80.4483	23.0%
		Constant	16	1.000	.0000	0.0%
	Total	UUrea	48	325.886	93.8556	28.8%
		Constant	48	1.000	.0000	0.0%
54	.0	UUrea	16	135.812	47.6341	35.1%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	145.011	54.0441	37.3%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	166.989	51.2830	30.7%
		Constant	16	1.000	.0000	0.0%
	Total	UUrea	48	149.271	51.6756	34.6%
		Constant	48	1.000	.0000	0.0%
55	.0	UUrea	16	307.078	100.5391	32.7%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	323.208	82.2523	25.4%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	15	371.562	86.0133	23.1%
		Constant	15	1.000	.0000	0.0%
	Total	UUrea	47	333.149	92.2271	27.7%
		Constant	47	1.000	.0000	0.0%
56	.0	UUrea	16	153.669	42.7301	27.8%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	155.116	33.3558	21.5%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	187.386	42.0117	22.4%
		Constant	16	1.000	.0000	0.0%
	Total	UUrea	48	165.390	41.8151	25.3%
		Constant	48	1.000	.0000	0.0%
Total	.0	UUrea	136	200.281	94.8739	47.4%
		Constant	136	1.000	.0000	0.0%
	1.0	UUrea	132	213.130	95.8176	45.0%
		Constant	132	1.000	.0000	0.0%
	2.0	UUrea	135	237.786	101.8320	42.8%
		Constant	135	1.000	.0000	0.0%
	Total	UUrea	403	217.053	98.5683	45.4%
		Constant	403	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4478.507
Akaike's Information Criterion (AIC)	4482.507
Hurvich and Tsai's Criterion (AICC)	4482.537
Bozdogan's Criterion (CAIC)	4492.490
Schwarz's Bayesian Criterion (BIC)	4490.490

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.031	81.244	.000
UAldoV_h_l_perdiet	2	391.035	13.697	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	240.769052	24.740618	9.598	9.732	.000	185.329313	296.208791
[UAldoV_h_l_perdiet=.0]	-38.353009	7.437603	391.032	-5.157	.000	-52.975702	-23.730317
[UAldoV_h_l_perdiet=1.0]	-25.072788	7.495168	391.038	-3.345	.001	-39.808657	-10.336919
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3747.481370	268.008675
Constant [subject = subject] Variance	5838.566096	2793.984688

a. Dependent Variable: UUrea.

\*ON OSMOLYTE CONCENTRATION

\* Mixed Linear Models

EFFECT OF UAldoV TERTILE ON U[2Na2KUrea] AT ALL LEVELS OF SALT INTAKE  
all subjects

USE ALL.

MIXED two\_UNaUK\_Urea BY UAldoV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UAldoV\_h\_l\_perdiet | SSTYPE(3)

/METHOD=REML

```

/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED two_UNaUK_Urea BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	two_UNaUK_Urea	35	458.698	89.3513	19.5%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	34	471.765	87.2251	18.5%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	35	535.538	127.2885	23.8%
		Constant	35	1.000	.0000	0.0%
Total	two_UNaUK_Urea	104	488.829	107.5514	22.0%	
	Constant	104	1.000	.0000	0.0%	
12	.0	two_UNaUK_Urea	35	576.866	127.2283	22.1%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	34	592.066	131.3206	22.2%
		Constant	34	1.000	.0000	0.0%

	2.0	two_UNaUK_Urea	35	614.683	129.0475	21.0%	
		Constant	35	1.000	.0000	0.0%	
Total		two_UNaUK_Urea	104	594.562	128.8862	21.7%	
		Constant	104	1.000	.0000	0.0%	
15	.0	two_UNaUK_Urea	35	385.972	79.7308	20.7%	
		Constant	35	1.000	.0000	0.0%	
	1.0	two_UNaUK_Urea	34	422.224	85.5543	20.3%	
		Constant	34	1.000	.0000	0.0%	
	2.0	two_UNaUK_Urea	34	408.932	85.2814	20.9%	
		Constant	34	1.000	.0000	0.0%	
	Total	two_UNaUK_Urea	103	405.518	84.0719	20.7%	
		Constant	103	1.000	.0000	0.0%	
	16	.0	two_UNaUK_Urea	35	522.038	97.7144	18.7%
			Constant	35	1.000	.0000	0.0%
1.0		two_UNaUK_Urea	34	556.312	124.4948	22.4%	
		Constant	34	1.000	.0000	0.0%	
2.0		two_UNaUK_Urea	35	628.243	170.4943	27.1%	
		Constant	35	1.000	.0000	0.0%	
Total		two_UNaUK_Urea	104	568.985	140.3853	24.7%	
		Constant	104	1.000	.0000	0.0%	
51		.0	two_UNaUK_Urea	68	393.309	108.2538	27.5%
			Constant	68	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	69	401.179	110.7822	27.6%	
		Constant	69	1.000	.0000	0.0%	
	2.0	two_UNaUK_Urea	68	404.685	98.4448	24.3%	
		Constant	68	1.000	.0000	0.0%	
	Total	two_UNaUK_Urea	205	399.731	105.5715	26.4%	
		Constant	205	1.000	.0000	0.0%	
	52	.0	two_UNaUK_Urea	67	312.527	92.3574	29.6%
			Constant	67	1.000	.0000	0.0%
1.0		two_UNaUK_Urea	69	368.938	104.2028	28.2%	
		Constant	69	1.000	.0000	0.0%	
2.0		two_UNaUK_Urea	68	413.021	110.2687	26.7%	
		Constant	68	1.000	.0000	0.0%	
Total		two_UNaUK_Urea	204	365.105	110.0461	30.1%	
		Constant	204	1.000	.0000	0.0%	
53		.0	two_UNaUK_Urea	68	675.864	159.5121	23.6%
			Constant	68	1.000	.0000	0.0%

	1.0	two_UNaUK_Urea	69	623.555	159.2689	25.5%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	67	656.901	142.0117	21.6%
		Constant	67	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	204	651.943	154.6789	23.7%
		Constant	204	1.000	.0000	0.0%
54	.0	two_UNaUK_Urea	67	368.772	97.1975	26.4%
		Constant	67	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	69	377.457	92.1607	24.4%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	67	404.930	107.4385	26.5%
		Constant	67	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	203	383.658	99.7706	26.0%
		Constant	203	1.000	.0000	0.0%
55	.0	two_UNaUK_Urea	66	649.272	152.2027	23.4%
		Constant	66	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	69	717.381	160.4163	22.4%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	66	777.710	153.6570	19.8%
		Constant	66	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	201	714.826	163.3307	22.8%
		Constant	201	1.000	.0000	0.0%
56	.0	two_UNaUK_Urea	67	394.417	87.3237	22.1%
		Constant	67	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	69	387.301	80.0499	20.7%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	68	430.659	85.3906	19.8%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	204	404.091	85.9968	21.3%
		Constant	204	1.000	.0000	0.0%
Total	.0	two_UNaUK_Urea	543	470.817	171.4247	36.4%
		Constant	543	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	550	487.039	172.0764	35.3%
		Constant	550	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	543	522.118	181.3552	34.7%
		Constant	543	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	1636	493.298	176.1927	35.7%
		Constant	1636	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNaUK\_Urea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20331.219
Akaike's Information Criterion (AIC)	20335.219
Hurvich and Tsai's Criterion (AICC)	20335.226
Bozdogan's Criterion (CAIC)	20348.015
Schwarz's Bayesian Criterion (BIC)	20346.015

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNaUK\_Urea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.018	155.627	.000
UAldoV_h_I_perdiet	2	1624.020	26.580	.000

a. Dependent Variable: two\_UNaUK\_Urea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	526.860874	40.117688	9.219	13.133	.000	436.436006	617.285741
[UAldoV_h_I_perdiet=.0]	-51.831366	7.273542	1624.019	-7.126	.000	-66.097879	-37.564853
[UAldoV_h_I_perdiet=1.0]	-35.591536	7.250601	1624.020	-4.909	.000	-49.813052	-21.370019
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNaUK\_Urea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	14363.227170	504.047649
Constant [subject = subject] Variance	15820.209460	7496.206978

a. Dependent Variable: two\_UNaUK\_Urea.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON U[2Na2KUrea] AT 12 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNaUK_Urea BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:48	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	<pre> MIXED two_UNaUK_Urea BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNaUK_Urea	13	484.373	94.2358	19.5%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	14	486.940	69.6643	14.3%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	13	557.383	119.8827	21.5%
		Constant	13	1.000	.0000	0.0%
Total	two_UNaUK_Urea	40	509.000	99.6463	19.6%	
	Constant	40	1.000	.0000	0.0%	
12	.0	two_UNaUK_Urea	13	515.176	103.7936	20.1%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	14	607.452	141.0840	23.2%
		Constant	14	1.000	.0000	0.0%

	2.0	two_UNaUK_Urea	13	665.953	147.7588	22.2%
		Constant	13	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	40	596.475	143.2584	24.0%
		Constant	40	1.000	.0000	0.0%
15	.0	two_UNaUK_Urea	13	422.235	53.9850	12.8%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	14	472.349	82.5627	17.5%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	12	459.944	46.6900	10.2%
		Constant	12	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	39	451.827	66.0220	14.6%
		Constant	39	1.000	.0000	0.0%
16	.0	two_UNaUK_Urea	13	577.764	75.3617	13.0%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	14	569.134	114.3552	20.1%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	13	661.735	145.0316	21.9%
		Constant	13	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	40	602.034	119.7980	19.9%
		Constant	40	1.000	.0000	0.0%
51	.0	two_UNaUK_Urea	32	430.505	113.0525	26.3%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	33	434.157	121.2806	27.9%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	32	429.329	80.0180	18.6%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	97	431.359	105.3663	24.4%
		Constant	97	1.000	.0000	0.0%
52	.0	two_UNaUK_Urea	31	338.278	84.4116	25.0%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	33	429.892	86.7059	20.2%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	32	462.147	83.4964	18.1%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	96	411.060	98.9356	24.1%
		Constant	96	1.000	.0000	0.0%
53	.0	two_UNaUK_Urea	32	723.023	141.4127	19.6%
		Constant	32	1.000	.0000	0.0%

	1.0	two_UNaUK_Urea	33	624.354	176.5555	28.3%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	31	645.236	153.8123	23.8%
		Constant	31	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	96	663.987	162.2679	24.4%
		Constant	96	1.000	.0000	0.0%
54	.0	two_UNaUK_Urea	31	423.757	89.8020	21.2%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	33	424.745	73.8781	17.4%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	32	445.037	90.9353	20.4%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	96	431.190	84.7381	19.7%
		Constant	96	1.000	.0000	0.0%
55	.0	two_UNaUK_Urea	31	673.905	138.0975	20.5%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	33	750.137	148.0108	19.7%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	31	817.541	126.2188	15.4%
		Constant	31	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	95	747.256	148.4423	19.9%
		Constant	95	1.000	.0000	0.0%
56	.0	two_UNaUK_Urea	31	384.842	57.0479	14.8%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	33	404.301	64.5413	16.0%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	32	444.107	80.5308	18.1%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	96	411.286	71.7990	17.5%
		Constant	96	1.000	.0000	0.0%
Total	.0	two_UNaUK_Urea	240	497.297	167.7816	33.7%
		Constant	240	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	254	516.270	164.4500	31.9%
		Constant	254	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	241	549.175	172.3599	31.4%
		Constant	241	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	735	520.864	169.2741	32.5%
		Constant	735	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNaUK\_Urea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	9058.902
Akaike's Information Criterion (AIC)	9062.902
Hurvich and Tsai's Criterion (AICC)	9062.918
Bozdogan's Criterion (CAIC)	9074.093
Schwarz's Bayesian Criterion (BIC)	9072.093

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNaUK\_Urea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.063	191.344	.000
UAldoV_h_I_perdiet	2	723.066	13.739	.000

a. Dependent Variable: two\_UNaUK\_Urea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	554.854030	38.467575	9.521	14.424	.000	468.555237	641.152823
[UAldoV_h_I_perdiet=.0]	-53.467147	10.342938	723.066	-5.169	.000	-73.772924	-33.161371
[UAldoV_h_I_perdiet=1.0]	-34.321534	10.199181	723.067	-3.365	.001	-54.345077	-14.297990
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNaUK\_Urea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	12862.117680	676.455529
Constant [subject = subject] Variance	14227.742730	6781.636077

a. Dependent Variable: two\_UNaUK\_Urea.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON U[2Na2KUrea] AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNaUK_Urea BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	<pre> MIXED two_UNaUK_Urea BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNaUK_Urea	12	452.411	108.4065	24.0%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	11	500.822	108.8875	21.7%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	12	531.878	97.2855	18.3%
		Constant	12	1.000	.0000	0.0%
Total	two_UNaUK_Urea	35	494.872	107.1562	21.7%	
	Constant	35	1.000	.0000	0.0%	
12	.0	two_UNaUK_Urea	12	581.083	131.5207	22.6%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	11	542.666	146.8455	27.1%
		Constant	11	1.000	.0000	0.0%

	2.0	two_UNaUK_Urea	12	571.983	131.9322	23.1%
		Constant	12	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	35	565.889	133.5627	23.6%
		Constant	35	1.000	.0000	0.0%
15	.0	two_UNaUK_Urea	12	378.432	51.8586	13.7%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	11	415.721	65.2164	15.7%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	12	431.196	64.6957	15.0%
		Constant	12	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	35	408.242	63.1889	15.5%
		Constant	35	1.000	.0000	0.0%
16	.0	two_UNaUK_Urea	12	548.455	87.3467	15.9%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	11	631.091	125.1523	19.8%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	12	720.424	153.2371	21.3%
		Constant	12	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	35	633.387	141.0442	22.3%
		Constant	35	1.000	.0000	0.0%
51	.0	two_UNaUK_Urea	20	395.165	51.2925	13.0%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	20	423.207	56.8975	13.4%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	20	424.326	105.6057	24.9%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	60	414.233	75.2753	18.2%
		Constant	60	1.000	.0000	0.0%
52	.0	two_UNaUK_Urea	20	330.272	94.9286	28.7%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	20	365.137	72.5124	19.9%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	20	411.324	109.4277	26.6%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	60	368.911	97.8373	26.5%
		Constant	60	1.000	.0000	0.0%
53	.0	two_UNaUK_Urea	20	668.294	147.1077	22.0%
		Constant	20	1.000	.0000	0.0%

	1.0	two_UNaUK_Urea	20	624.348	140.1222	22.4%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	20	694.075	145.5749	21.0%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	60	662.239	144.7728	21.9%
		Constant	60	1.000	.0000	0.0%
54	.0	two_UNaUK_Urea	20	340.113	58.9179	17.3%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	20	365.568	66.2855	18.1%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	19	404.770	112.8625	27.9%
		Constant	19	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	59	369.563	85.0897	23.0%
		Constant	59	1.000	.0000	0.0%
55	.0	two_UNaUK_Urea	19	646.340	152.6450	23.6%
		Constant	19	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	20	734.248	179.0460	24.4%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	20	774.561	175.2302	22.6%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	59	719.604	175.1151	24.3%
		Constant	59	1.000	.0000	0.0%
56	.0	two_UNaUK_Urea	20	455.746	94.2737	20.7%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	20	411.822	86.5888	21.0%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	20	448.862	88.7130	19.8%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	60	438.810	90.4951	20.6%
		Constant	60	1.000	.0000	0.0%
Total	.0	two_UNaUK_Urea	167	476.628	160.1914	33.6%
		Constant	167	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	164	496.829	167.8763	33.8%
		Constant	164	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	167	537.840	184.2712	34.3%
		Constant	167	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	498	503.807	172.6522	34.3%
		Constant	498	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNaUK\_Urea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6146.548
Akaike's Information Criterion (AIC)	6150.548
Hurvich and Tsai's Criterion (AICC)	6150.573
Bozdogan's Criterion (CAIC)	6160.957
Schwarz's Bayesian Criterion (BIC)	6158.957

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNaUK\_Urea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.033	154.461	.000
UAldoV_h_I_perdiet	2	486.038	11.660	.000

a. Dependent Variable: two\_UNaUK\_Urea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	540.394830	41.456819	9.601	13.035	.000	447.500060	633.289600
[UAldoV_h_I_perdiet=.0]	-59.150429	12.483167	486.035	-4.738	.000	-83.678064	-34.622793
[UAldoV_h_I_perdiet=1.0]	-39.710435	12.541611	486.039	-3.166	.002	-64.352904	-15.067965
[UAldoV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNaUK\_Urea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	13010.456110	834.592440
Constant [subject = subject] Variance	16391.464580	7844.049304

a. Dependent Variable: two\_UNaUK\_Urea.

\* Mixed Linear Models  
 EFFECT OF UAldoV TERTILE ON U[2Na2KUrea] AT 6 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNaUK_Urea BY UAldoV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UAldoV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED two_UNaUK_Urea BY UAldoV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UAldoV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.02

### Descriptive Statistics

subject	UAldoV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNaUK_Urea	10	432.865	47.0118	10.9%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	9	412.645	56.3999	13.7%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	10	511.532	170.6789	33.4%
		Constant	10	1.000	.0000	0.0%
Total	two_UNaUK_Urea	29	453.716	113.4644	25.0%	
	Constant	29	1.000	.0000	0.0%	
12	.0	two_UNaUK_Urea	10	652.003	117.6929	18.1%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	9	628.508	81.0723	12.9%
		Constant	9	1.000	.0000	0.0%

	2.0	two_UNaUK_Urea	10	599.272	77.6918	13.0%
		Constant	10	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	29	626.528	93.6415	14.9%
		Constant	29	1.000	.0000	0.0%
15	.0	two_UNaUK_Urea	10	347.879	115.1304	33.1%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	9	352.199	61.8726	17.6%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	10	321.001	78.5229	24.5%
		Constant	10	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	29	339.952	86.8051	25.5%
		Constant	29	1.000	.0000	0.0%
16	.0	two_UNaUK_Urea	10	417.893	41.3013	9.9%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	9	444.970	34.3627	7.7%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	10	474.085	117.1022	24.7%
		Constant	10	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	29	445.673	76.5341	17.2%
		Constant	29	1.000	.0000	0.0%
51	.0	two_UNaUK_Urea	16	316.596	115.6056	36.5%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	16	305.627	85.8960	28.1%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	16	330.845	91.1216	27.5%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	48	317.689	96.8443	30.5%
		Constant	48	1.000	.0000	0.0%
52	.0	two_UNaUK_Urea	16	240.451	67.3417	28.0%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	16	247.973	52.1967	21.0%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	16	316.891	98.6207	31.1%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	48	268.438	81.4205	30.3%
		Constant	48	1.000	.0000	0.0%
53	.0	two_UNaUK_Urea	16	591.009	180.0254	30.5%
		Constant	16	1.000	.0000	0.0%



	1.0	two_UNaUK_Urea	16	620.914	153.6733	24.7%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	16	633.035	108.8358	17.2%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	48	614.986	148.2537	24.1%
		Constant	48	1.000	.0000	0.0%
54	.0	two_UNaUK_Urea	16	298.063	91.4666	30.7%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	16	294.790	94.3284	32.0%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	16	324.904	90.2841	27.8%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	48	305.919	91.0885	29.8%
		Constant	48	1.000	.0000	0.0%
55	.0	two_UNaUK_Urea	16	605.027	175.8665	29.1%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	16	628.739	134.8911	21.5%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	15	699.588	154.0901	22.0%
		Constant	15	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	47	643.278	157.6759	24.5%
		Constant	47	1.000	.0000	0.0%
56	.0	two_UNaUK_Urea	16	336.307	83.5401	24.8%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	16	321.589	67.9892	21.1%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	16	381.010	75.7660	19.9%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	48	346.302	78.6554	22.7%
		Constant	48	1.000	.0000	0.0%
Total	.0	two_UNaUK_Urea	136	416.953	179.9416	43.2%
		Constant	136	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	132	418.629	174.0782	41.6%
		Constant	132	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	135	454.368	177.5092	39.1%
		Constant	135	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	403	430.036	177.6263	41.3%
		Constant	403	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UAldoV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNaUK\_Urea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4925.342
Akaike's Information Criterion (AIC)	4929.342
Hurvich and Tsai's Criterion (AICC)	4929.373
Bozdogan's Criterion (CAIC)	4939.325
Schwarz's Bayesian Criterion (BIC)	4937.325

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNaUK\_Urea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.020	90.769	.000
UAldoV_h_l_perdiet	2	391.024	5.590	.004

a. Dependent Variable: two\_UNaUK\_Urea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	461.127623	46.376454	9.509	9.943	.000	357.066334	565.188912
[UAldoV_h_l_perdiet=.0]	-38.974362	12.980378	391.021	-3.003	.003	-64.494425	-13.454299
[UAldoV_h_l_perdiet=1.0]	-36.248154	13.080850	391.027	-2.771	.006	-61.965750	-10.530558
[UAldoV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNaUK\_Urea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	11414.269370	816.325400
Constant [subject = subject] Variance	20647.522310	9863.667662

a. Dependent Variable: two\_UNaUK\_Urea.

\*ANALYSIS OF CONCENTRATION DATA FOR FREE WATER EXCRETION CALCULATIONS  
RESPONSE TO CORTISONE TERTILE

\*ON SODIUM CONCENTRATION

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2U[Na] AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED two\_UNa BY UFEV\_h\_l\_perdiet WITH Constant

```

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED two_UNa BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNa	35	158.043	53.7110	34.0%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNa	34	149.915	35.3385	23.6%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNa	35	150.780	35.1782	23.3%
		Constant	35	1.000	.0000	0.0%
12	Total	two_UNa	104	152.941	42.1229	27.5%
		Constant	104	1.000	.0000	0.0%
	.0	two_UNa	35	229.216	58.0336	25.3%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNa	34	188.687	46.2234	24.5%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNa	35	198.946	47.8820	24.1%

		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	205.779	53.4043	26.0%
		Constant	104	1.000	.0000	0.0%
15	.0	two_UNa	35	139.580	48.0637	34.4%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNa	34	141.411	46.2473	32.7%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNa	35	136.163	44.1590	32.4%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	139.029	45.7851	32.9%
		Constant	104	1.000	.0000	0.0%
16	.0	two_UNa	35	192.532	65.9617	34.3%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNa	34	184.348	64.8667	35.2%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNa	35	166.448	48.0897	28.9%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNa	104	181.078	60.5686	33.4%
		Constant	104	1.000	.0000	0.0%
51	.0	two_UNa	68	167.649	68.3040	40.7%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNa	69	153.608	59.4954	38.7%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	145.955	55.5473	38.1%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	155.727	61.6950	39.6%
		Constant	205	1.000	.0000	0.0%
52	.0	two_UNa	68	147.293	60.1215	40.8%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNa	69	137.601	55.4991	40.3%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	67	124.542	45.2037	36.3%
		Constant	67	1.000	.0000	0.0%
	Total	two_UNa	204	136.543	54.5504	40.0%
		Constant	204	1.000	.0000	0.0%
53	.0	two_UNa	68	266.434	94.2077	35.4%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNa	69	222.393	70.9458	31.9%

		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	206.247	62.3395	30.2%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	231.646	80.7241	34.8%
		Constant	205	1.000	.0000	0.0%
54	.0	two_UNa	68	154.661	57.6575	37.3%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNa	69	144.117	51.1412	35.5%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	140.191	50.9580	36.3%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	146.312	53.4213	36.5%
		Constant	205	1.000	.0000	0.0%
55	.0	two_UNa	68	269.857	78.0828	28.9%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNa	68	250.479	72.2535	28.8%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UNa	68	217.278	70.1353	32.3%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	204	245.872	76.3710	31.1%
		Constant	204	1.000	.0000	0.0%
56	.0	two_UNa	68	173.708	51.9118	29.9%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNa	69	154.761	45.4283	29.4%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNa	68	144.613	39.0952	27.0%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNa	205	157.680	47.1211	29.9%
		Constant	205	1.000	.0000	0.0%
Total	.0	two_UNa	548	192.319	81.8876	42.6%
		Constant	548	1.000	.0000	0.0%
	1.0	two_UNa	549	174.284	69.0773	39.6%
		Constant	549	1.000	.0000	0.0%
	2.0	two_UNa	547	163.195	61.3294	37.6%
		Constant	547	1.000	.0000	0.0%
	Total	two_UNa	1644	176.606	72.2356	40.9%
		Constant	1644	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	18119.542
Akaike's Information Criterion (AIC)	18123.542
Hurvich and Tsai's Criterion (AICC)	18123.549
Bozdogan's Criterion (CAIC)	18136.348
Schwarz's Bayesian Criterion (BIC)	18134.348

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.038	197.011	.000
UFEV_h_I_perdiet	2	1632.041	33.649	.000

a. Dependent Variable: two\_UNa.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	161.804851	12.658338	9.543	12.782	.000	133.416342	190.193360
[UFEV_h_I_perdiet=.0]	29.197092	3.591186	1632.039	8.130	.000	22.153272	36.240911
[UFEV_h_I_perdiet=1.0]	11.211920	3.589666	1632.043	3.123	.002	4.171082	18.252757
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3530.432697	123.588395
Constant [subject = subject] Variance	1535.476075	733.505819

a. Dependent Variable: two\_UNa.

```
* Mixed Linear Models
EFFECT OF UFEV TERTILE ON 2U[Na] AT 12 g SALT INTAKE
all subjects
```

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
```

EXECUTE.

```
MIXED two_UNa BY UFEV_h_l_perdiet WITH Constant  
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)  
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)  
/METHOD=REML  
/PRINT=DESCRIPTIVES SOLUTION  
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC).
```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED two_UNa BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNa	13	194.038	50.0069	25.8%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNa	14	173.548	18.0273	10.4%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNa	13	174.851	22.7033	13.0%
		Constant	13	1.000	.0000	0.0%
12	Total	two_UNa	40	180.630	33.5474	18.6%
		Constant	40	1.000	.0000	0.0%
	.0	two_UNa	13	260.973	62.7286	24.0%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNa	14	216.356	49.1386	22.7%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNa	13	225.130	56.2342	25.0%

		Constant	13	1.000	.0000	0.0%
	Total	two_UNa	40	233.708	58.0432	24.8%
		Constant	40	1.000	.0000	0.0%
15	.0	two_UNa	13	184.373	36.5568	19.8%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNa	14	177.011	25.9567	14.7%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNa	13	174.899	14.2410	8.1%
		Constant	13	1.000	.0000	0.0%
	Total	two_UNa	40	178.717	26.7349	15.0%
		Constant	40	1.000	.0000	0.0%
16	.0	two_UNa	13	237.915	51.5469	21.7%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNa	14	223.594	48.0671	21.5%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNa	13	195.690	31.0989	15.9%
		Constant	13	1.000	.0000	0.0%
	Total	two_UNa	40	219.179	46.8318	21.4%
		Constant	40	1.000	.0000	0.0%
51	.0	two_UNa	32	207.344	62.0391	29.9%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNa	33	186.522	48.6105	26.1%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	178.337	40.7883	22.9%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	97	190.691	52.1253	27.3%
		Constant	97	1.000	.0000	0.0%
52	.0	two_UNa	32	186.963	51.7798	27.7%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNa	33	176.595	35.2318	20.0%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	31	159.278	28.0862	17.6%
		Constant	31	1.000	.0000	0.0%
	Total	two_UNa	96	174.459	40.8848	23.4%
		Constant	96	1.000	.0000	0.0%
53	.0	two_UNa	32	337.362	69.5949	20.6%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNa	33	266.747	65.6660	24.6%

		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	249.966	50.8855	20.4%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	97	284.507	72.6282	25.5%
		Constant	97	1.000	.0000	0.0%
54	.0	two_UNa	32	201.243	39.3418	19.5%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNa	33	186.414	31.4044	16.8%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	180.266	33.1188	18.4%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	97	189.278	35.5015	18.8%
		Constant	97	1.000	.0000	0.0%
55	.0	two_UNa	32	318.256	62.9632	19.8%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNa	32	301.261	50.8971	16.9%
		Constant	32	1.000	.0000	0.0%
	2.0	two_UNa	32	269.885	40.5982	15.0%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	96	296.467	55.5201	18.7%
		Constant	96	1.000	.0000	0.0%
56	.0	two_UNa	32	201.665	31.4558	15.6%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNa	33	181.012	24.3515	13.5%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNa	32	165.250	30.3559	18.4%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNa	97	182.625	32.2041	17.6%
		Constant	97	1.000	.0000	0.0%
Total	.0	two_UNa	244	237.277	77.7639	32.8%
		Constant	244	1.000	.0000	0.0%
	1.0	two_UNa	253	211.929	61.9943	29.3%
		Constant	253	1.000	.0000	0.0%
	2.0	two_UNa	243	198.986	53.9996	27.1%
		Constant	243	1.000	.0000	0.0%
	Total	two_UNa	740	216.037	67.1137	31.1%
		Constant	740	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7789.976
Akaike's Information Criterion (AIC)	7793.976
Hurvich and Tsai's Criterion (AICC)	7793.992
Bozdogan's Criterion (CAIC)	7805.181
Schwarz's Bayesian Criterion (BIC)	7803.181

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.068	222.398	.000
UFEV_h_I_perdiet	2	728.070	43.787	.000

a. Dependent Variable: two\_UNa.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	195.789238	14.495095	9.597	13.507	.000	163.307174	228.271301
[UFEV_h_I_perdiet=.0]	38.461312	4.171712	728.069	9.220	.000	30.271291	46.651333
[UFEV_h_I_perdiet=1.0]	13.547024	4.134679	728.071	3.276	.001	5.429709	21.664340
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2118.789699	111.049522
Constant [subject = subject] Variance	2008.151668	959.115213

a. Dependent Variable: two\_UNa.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2U[Na] AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNa BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	MIXED two_UNa BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNa	12	156.411	35.0867	22.4%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNa	11	153.906	32.2310	20.9%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNa	12	149.537	34.3194	23.0%
		Constant	12	1.000	.0000	0.0%
12	Total	two_UNa	35	153.267	33.0669	21.6%
		Constant	35	1.000	.0000	0.0%
	.0	two_UNa	12	219.193	50.9216	23.2%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNa	11	173.053	22.0157	12.7%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNa	12	174.431	29.0155	16.6%

		Constant	12	1.000	.0000	0.0%
	Total	two_UNa	35	189.345	41.6254	22.0%
		Constant	35	1.000	.0000	0.0%
15	.0	two_UNa	12	130.305	21.6647	16.6%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNa	11	146.300	27.9382	19.1%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNa	12	139.356	27.2759	19.6%
		Constant	12	1.000	.0000	0.0%
	Total	two_UNa	35	138.435	25.8024	18.6%
		Constant	35	1.000	.0000	0.0%
16	.0	two_UNa	12	211.512	37.5162	17.7%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNa	11	202.296	43.4525	21.5%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNa	12	182.526	32.8172	18.0%
		Constant	12	1.000	.0000	0.0%
	Total	two_UNa	35	198.678	38.9045	19.6%
		Constant	35	1.000	.0000	0.0%
51	.0	two_UNa	20	154.849	49.6697	32.1%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	153.040	48.8657	31.9%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	154.663	34.1008	22.0%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	154.184	44.0296	28.6%
		Constant	60	1.000	.0000	0.0%
52	.0	two_UNa	20	131.413	39.8119	30.3%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	133.507	35.6125	26.7%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	118.899	21.9527	18.5%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	127.940	33.4116	26.1%
		Constant	60	1.000	.0000	0.0%
53	.0	two_UNa	20	237.302	48.5587	20.5%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	204.629	42.6158	20.8%

		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	196.061	31.1534	15.9%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	212.664	44.4728	20.9%
		Constant	60	1.000	.0000	0.0%
54	.0	two_UNa	20	128.850	23.0228	17.9%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	124.405	27.0447	21.7%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	124.848	33.0998	26.5%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	126.034	27.6246	21.9%
		Constant	60	1.000	.0000	0.0%
55	.0	two_UNa	20	265.478	53.8857	20.3%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	241.012	49.3094	20.5%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	200.330	54.9290	27.4%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	235.607	58.5145	24.8%
		Constant	60	1.000	.0000	0.0%
56	.0	two_UNa	20	180.495	50.4156	27.9%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNa	20	154.786	41.7819	27.0%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNa	20	151.389	25.2894	16.7%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNa	60	162.224	41.9330	25.8%
		Constant	60	1.000	.0000	0.0%
Total	.0	two_UNa	168	182.005	64.1862	35.3%
		Constant	168	1.000	.0000	0.0%
	1.0	two_UNa	164	168.651	53.2903	31.6%
		Constant	164	1.000	.0000	0.0%
	2.0	two_UNa	168	158.774	43.5054	27.4%
		Constant	168	1.000	.0000	0.0%
	Total	two_UNa	500	169.819	55.0581	32.4%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5120.841
Akaike's Information Criterion (AIC)	5124.841
Hurvich and Tsai's Criterion (AICC)	5124.865
Bozdogan's Criterion (CAIC)	5135.258
Schwarz's Bayesian Criterion (BIC)	5133.258

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.049	204.719	.000
UFEV_h_I_perdiet	2	488.054	14.429	.000

a. Dependent Variable: two\_UNa.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	158.787601	12.128904	9.867	13.092	.000	131.713254	185.861947
[UFEV_h_I_perdiet=.0]	23.230749	4.340242	488.049	5.352	.000	14.702882	31.758615
[UFEV_h_I_perdiet=1.0]	9.878750	4.367158	488.056	2.262	.024	1.297998	18.459502
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	1582.367029	101.295538
Constant [subject = subject] Variance	1374.918370	662.278275

a. Dependent Variable: two\_UNa.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2U[Na] AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNa BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED two_UNa BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UNa	10	113.207	44.1689	39.0%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNa	9	108.274	19.3577	17.9%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNa	10	120.979	26.8791	22.2%
		Constant	10	1.000	.0000	0.0%
12	Total	two_UNa	29	114.356	31.5339	27.6%
		Constant	29	1.000	.0000	0.0%
	.0	two_UNa	10	199.958	42.0186	21.0%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNa	9	164.755	44.3138	26.9%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNa	10	194.327	40.0066	20.6%

		Constant	10	1.000	.0000	0.0%
	Total	two_UNa	29	187.091	43.3728	23.2%
		Constant	29	1.000	.0000	0.0%
15	.0	two_UNa	10	92.478	29.8929	32.3%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNa	9	80.058	16.3302	20.4%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNa	10	81.975	27.2669	33.3%
		Constant	10	1.000	.0000	0.0%
	Total	two_UNa	29	85.002	25.1690	29.6%
		Constant	29	1.000	.0000	0.0%
16	.0	two_UNa	10	110.759	16.9912	15.3%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNa	9	101.361	18.8692	18.6%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNa	10	109.139	30.0288	27.5%
		Constant	10	1.000	.0000	0.0%
	Total	two_UNa	29	107.284	22.3871	20.9%
		Constant	29	1.000	.0000	0.0%
51	.0	two_UNa	16	104.259	43.5151	41.7%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	86.433	28.0000	32.4%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	70.305	20.6925	29.4%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	86.999	34.4614	39.6%
		Constant	48	1.000	.0000	0.0%
52	.0	two_UNa	16	87.804	33.5890	38.3%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	62.296	17.0997	27.4%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	64.292	19.8617	30.9%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	71.464	26.7639	37.5%
		Constant	48	1.000	.0000	0.0%
53	.0	two_UNa	16	160.993	54.0593	33.6%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	153.117	38.0826	24.9%



		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	131.541	24.6745	18.8%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	148.550	41.8107	28.1%
		Constant	48	1.000	.0000	0.0%
54	.0	two_UNa	16	93.762	38.8009	41.4%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	81.519	13.8715	17.0%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	79.219	15.4507	19.5%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	84.833	25.6844	30.3%
		Constant	48	1.000	.0000	0.0%
55	.0	two_UNa	16	178.533	37.9876	21.3%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	160.749	25.9942	16.2%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	133.251	30.4154	22.8%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	157.511	36.4117	23.1%
		Constant	48	1.000	.0000	0.0%
56	.0	two_UNa	16	109.312	24.9089	22.8%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNa	16	100.589	35.1143	34.9%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNa	16	94.871	22.4392	23.7%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNa	48	101.591	28.0756	27.6%
		Constant	48	1.000	.0000	0.0%
Total	.0	two_UNa	136	124.402	52.4984	42.2%
		Constant	136	1.000	.0000	0.0%
	1.0	two_UNa	132	109.131	44.4991	40.8%
		Constant	132	1.000	.0000	0.0%
	2.0	two_UNa	136	104.705	43.2130	41.3%
		Constant	136	1.000	.0000	0.0%
	Total	two_UNa	404	112.782	47.5859	42.2%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNa.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3952.450
Akaike's Information Criterion (AIC)	3956.450
Hurvich and Tsai's Criterion (AICC)	3956.480
Bozdogan's Criterion (CAIC)	3966.438
Schwarz's Bayesian Criterion (BIC)	3964.438

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNa.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.986	91.797	.000
UFEV_h_l_perdiet	2	391.991	14.589	.000

a. Dependent Variable: two\_UNa.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	106.243253	12.137451	9.599	8.753	.000	79.045427	133.441079
[UFEV_h_l_perdiet=.0]	19.696523	3.803435	391.987	5.179	.000	12.218840	27.174206
[UFEV_h_l_perdiet=1.0]	4.736602	3.832836	391.993	1.236	.217	-2.798885	12.272090
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNa.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	983.695843	70.265173
Constant [subject = subject] Variance	1399.539080	672.425770

a. Dependent Variable: two\_UNa.

\*ON POTASSIUM CONCENTRATION

\* Mixed Linear Models

EFFECT OF UFEV TERTILE ON 2U[K] AT ALL SALT INTAKE LEVELS  
all subjects

MIXED two\_UK BY UFEV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UFEV\_h\_l\_perdiet | SSTYPE(3)

/METHOD=REML

/PRINT=DESCRIPTIVES SOLUTION

/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED two_UK BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

**Descriptive Statistics**

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UK	10	141.040	55.0612	39.0%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	110.156	23.1283	21.0%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	101.140	14.2489	14.1%
		Constant	10	1.000	.0000	0.0%
Total	two_UK	29	117.697	38.7734	32.9%	
	Constant	29	1.000	.0000	0.0%	
12	.0	two_UK	10	129.680	32.6005	25.1%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	129.622	22.7441	17.5%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	136.220	23.3521	17.1%

		Constant	10	1.000	.0000	0.0%
	Total	two_UK	29	131.917	25.9766	19.7%
		Constant	29	1.000	.0000	0.0%
15	.0	two_UK	10	92.900	29.9468	32.2%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	86.756	20.6101	23.8%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	79.280	17.9233	22.6%
		Constant	10	1.000	.0000	0.0%
	Total	two_UK	29	86.297	23.3689	27.1%
		Constant	29	1.000	.0000	0.0%
16	.0	two_UK	10	120.200	22.8524	19.0%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	102.000	11.5516	11.3%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	100.380	10.8285	10.8%
		Constant	10	1.000	.0000	0.0%
	Total	two_UK	29	107.717	18.1400	16.8%
		Constant	29	1.000	.0000	0.0%
51	.0	two_UK	16	91.813	26.9221	29.3%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	71.725	14.0705	19.6%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	57.963	10.5374	18.2%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	73.833	22.9618	31.1%
		Constant	48	1.000	.0000	0.0%
52	.0	two_UK	16	73.750	20.1705	27.3%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	52.588	12.5572	23.9%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	51.313	12.3199	24.0%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	59.217	18.3506	31.0%
		Constant	48	1.000	.0000	0.0%
53	.0	two_UK	16	173.250	35.0953	20.3%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	140.875	25.7070	18.2%

		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	107.525	22.5070	20.9%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	140.550	38.7428	27.6%
		Constant	48	1.000	.0000	0.0%
54	.0	two_UK	16	82.475	29.0389	35.2%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	68.338	11.3642	16.6%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	64.632	5.5222	8.5%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	71.815	19.5049	27.2%
		Constant	48	1.000	.0000	0.0%
55	.0	two_UK	16	188.200	42.1259	22.4%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	156.100	33.1114	21.2%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	117.700	31.0806	26.4%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	154.000	45.5282	29.6%
		Constant	48	1.000	.0000	0.0%
56	.0	two_UK	16	89.450	21.5235	24.1%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	77.325	19.1392	24.8%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	71.188	18.4792	26.0%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	79.321	20.7977	26.2%
		Constant	48	1.000	.0000	0.0%
Total	.0	two_UK	136	117.803	50.7375	43.1%
		Constant	136	1.000	.0000	0.0%
	1.0	two_UK	132	97.939	40.2285	41.1%
		Constant	132	1.000	.0000	0.0%
	2.0	two_UK	136	85.995	32.0256	37.2%
		Constant	136	1.000	.0000	0.0%
	Total	two_UK	404	100.605	43.6596	43.4%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3798.854
Akaike's Information Criterion (AIC)	3802.854
Hurvich and Tsai's Criterion (AICC)	3802.884
Bozdogan's Criterion (CAIC)	3812.842
Schwarz's Bayesian Criterion (BIC)	3810.842

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.039	96.905	.000
UFEV_h_I_perdiet	2	392.042	52.300	.000

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	87.488744	10.534666	9.592	8.305	.000	63.880103	111.097386
[UFEV_h_I_perdiet=.0]	31.808021	3.136807	392.039	10.140	.000	25.640954	37.975089
[UFEV_h_I_perdiet=1.0]	12.246257	3.161057	392.044	3.874	.000	6.031514	18.461000
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	669.089888	47.789767
Constant [subject = subject] Variance	1059.702797	506.738386

a. Dependent Variable: two\_UK.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2U[K] AT 12 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UK BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED two_UK BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.05

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UK	13	127.708	33.3835	26.1%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UK	14	115.000	24.9756	21.7%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UK	13	102.585	22.4313	21.9%
		Constant	13	1.000	.0000	0.0%
12	Total	two_UK	40	115.095	28.4755	24.7%
		Constant	40	1.000	.0000	0.0%
	.0	two_UK	13	96.877	26.9777	27.8%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UK	14	83.171	22.9686	27.6%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UK	13	107.800	43.0853	40.0%

		Constant	13	1.000	.0000	0.0%
	Total	two_UK	40	95.630	32.8113	34.3%
		Constant	40	1.000	.0000	0.0%
15	.0	two_UK	13	103.031	24.5927	23.9%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UK	14	87.471	14.9402	17.1%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UK	13	82.323	10.3268	12.5%
		Constant	13	1.000	.0000	0.0%
	Total	two_UK	40	90.855	19.2639	21.2%
		Constant	40	1.000	.0000	0.0%
16	.0	two_UK	13	148.462	41.3515	27.9%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UK	14	124.186	24.6133	19.8%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UK	13	102.800	18.6607	18.2%
		Constant	13	1.000	.0000	0.0%
	Total	two_UK	40	125.125	34.3977	27.5%
		Constant	40	1.000	.0000	0.0%
51	.0	two_UK	32	107.913	31.3480	29.0%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UK	33	90.570	21.5151	23.8%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	78.456	21.0582	26.8%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	97	92.295	27.5860	29.9%
		Constant	97	1.000	.0000	0.0%
52	.0	two_UK	32	100.387	30.0574	29.9%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UK	33	82.230	21.6177	26.3%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	31	72.303	17.1999	23.8%
		Constant	31	1.000	.0000	0.0%
	Total	two_UK	96	85.077	26.0896	30.7%
		Constant	96	1.000	.0000	0.0%
53	.0	two_UK	32	171.750	34.3666	20.0%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UK	33	132.533	34.6806	26.2%

		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	121.206	23.9247	19.7%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	97	141.734	37.9080	26.7%
		Constant	97	1.000	.0000	0.0%
54	.0	two_UK	32	98.206	27.6536	28.2%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UK	33	86.352	22.5046	26.1%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	85.388	25.8092	30.2%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	97	89.944	25.7870	28.7%
		Constant	97	1.000	.0000	0.0%
55	.0	two_UK	32	193.975	38.8246	20.0%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UK	32	158.938	39.7484	25.0%
		Constant	32	1.000	.0000	0.0%
	2.0	two_UK	32	129.438	29.9552	23.1%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	96	160.783	44.7599	27.8%
		Constant	96	1.000	.0000	0.0%
56	.0	two_UK	32	93.675	25.6549	27.4%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UK	33	74.703	16.1387	21.6%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UK	32	69.219	16.8236	24.3%
		Constant	32	1.000	.0000	0.0%
	Total	two_UK	97	79.153	22.3774	28.3%
		Constant	97	1.000	.0000	0.0%
Total	.0	two_UK	244	125.811	48.2079	38.3%
		Constant	244	1.000	.0000	0.0%
	1.0	two_UK	253	103.614	38.2359	36.9%
		Constant	253	1.000	.0000	0.0%
	2.0	two_UK	243	94.081	31.8709	33.9%
		Constant	243	1.000	.0000	0.0%
	Total	two_UK	740	107.803	42.0756	39.0%
		Constant	740	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7072.089
Akaike's Information Criterion (AIC)	7076.089
Hurvich and Tsai's Criterion (AICC)	7076.105
Bozdogan's Criterion (CAIC)	7087.294
Schwarz's Bayesian Criterion (BIC)	7085.294

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.079	155.500	.000
UFEV_h_I_perdiet	2	728.081	80.909	.000

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	93.731711	8.757882	9.627	10.703	.000	74.114907	113.348515
[UFEV_h_I_perdiet=.0]	31.824015	2.563843	728.079	12.413	.000	26.790608	36.857421
[UFEV_h_I_perdiet=1.0]	9.843628	2.541082	728.081	3.874	.000	4.854905	14.832351
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	800.279800	41.943784
Constant [subject = subject] Variance	731.907746	349.576304

a. Dependent Variable: two\_UK.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON 2U[K] AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UK BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED two_UK BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UK	12	129.100	27.6105	21.4%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UK	11	116.109	24.7248	21.3%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UK	12	110.783	24.1002	21.8%
		Constant	12	1.000	.0000	0.0%
Total	two_UK	35	118.737	26.0156	21.9%	
	Constant	35	1.000	.0000	0.0%	
12	.0	two_UK	12	136.033	41.3336	30.4%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UK	11	121.145	27.7066	22.9%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UK	12	113.700	19.9019	17.5%

		Constant	12	1.000	.0000	0.0%
	Total	two_UK	35	123.697	31.5873	25.5%
		Constant	35	1.000	.0000	0.0%
15	.0	two_UK	12	86.800	16.7093	19.3%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UK	11	101.327	13.7516	13.6%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UK	12	79.517	13.9332	17.5%
		Constant	12	1.000	.0000	0.0%
	Total	two_UK	35	88.869	17.0691	19.2%
		Constant	35	1.000	.0000	0.0%
16	.0	two_UK	12	170.417	36.0777	21.2%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UK	11	129.636	24.7905	19.1%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UK	12	117.750	16.1455	13.7%
		Constant	12	1.000	.0000	0.0%
	Total	two_UK	35	139.543	34.9570	25.1%
		Constant	35	1.000	.0000	0.0%
51	.0	two_UK	20	98.093	25.6273	26.1%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	88.980	23.0456	25.9%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	81.010	14.2901	17.6%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	89.361	22.3121	25.0%
		Constant	60	1.000	.0000	0.0%
52	.0	two_UK	20	82.410	33.3820	40.5%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	85.250	22.0095	25.8%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	68.000	21.4936	31.6%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	78.553	26.8631	34.2%
		Constant	60	1.000	.0000	0.0%
53	.0	two_UK	20	165.820	32.0014	19.3%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	139.970	31.4718	22.5%

		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	111.840	21.5096	19.2%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	139.210	35.9433	25.8%
		Constant	60	1.000	.0000	0.0%
54	.0	two_UK	20	90.230	25.5223	28.3%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	82.390	21.0122	25.5%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	75.670	15.3652	20.3%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	82.763	21.5402	26.0%
		Constant	60	1.000	.0000	0.0%
55	.0	two_UK	20	198.980	49.4278	24.8%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	159.980	40.0503	25.0%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	120.520	28.5219	23.7%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	159.827	51.0753	32.0%
		Constant	60	1.000	.0000	0.0%
56	.0	two_UK	20	104.630	20.2537	19.4%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UK	20	90.160	26.9326	29.9%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UK	20	85.020	14.4499	17.0%
		Constant	20	1.000	.0000	0.0%
	Total	two_UK	60	93.270	22.4283	24.0%
		Constant	60	1.000	.0000	0.0%
Total	.0	two_UK	168	125.425	50.9892	40.7%
		Constant	168	1.000	.0000	0.0%
	1.0	two_UK	164	110.274	37.6904	34.2%
		Constant	164	1.000	.0000	0.0%
	2.0	two_UK	168	94.656	27.2509	28.8%
		Constant	168	1.000	.0000	0.0%
	Total	two_UK	500	110.117	41.7379	37.9%
		Constant	500	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4780.055
Akaike's Information Criterion (AIC)	4784.055
Hurvich and Tsai's Criterion (AICC)	4784.079
Bozdogan's Criterion (CAIC)	4794.472
Schwarz's Bayesian Criterion (BIC)	4792.472

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.040	151.424	.000
UFEV_h_I_perdiet	2	488.044	50.029	.000

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	95.834448	9.220795	9.745	10.393	.000	75.216051	116.452845
[UFEV_h_I_perdiet=.0]	30.769405	3.076421	488.041	10.002	.000	24.724740	36.814070
[UFEV_h_I_perdiet=1.0]	15.798087	3.095501	488.046	5.104	.000	9.715934	21.880240
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	795.006751	50.892966
Constant [subject = subject] Variance	801.902069	385.165973

a. Dependent Variable: two\_UK.

```
* Mixed Linear Models
EFFECT OF UFEV TERTILE ON 2U[K] AT 6 g SALT INTAKE
all subjects
```

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UK BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax	MIXED two_UK BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet	Count	Mean	Standard Deviation	Coefficient of Variation	
11	.0	two_UK	10	141.040	55.0612	39.0%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	110.156	23.1283	21.0%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	101.140	14.2489	14.1%
		Constant	10	1.000	.0000	0.0%
Total	two_UK	29	117.697	38.7734	32.9%	
	Constant	29	1.000	.0000	0.0%	
12	.0	two_UK	10	129.680	32.6005	25.1%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	129.622	22.7441	17.5%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	136.220	23.3521	17.1%

		Constant	10	1.000	.0000	0.0%
	Total	two_UK	29	131.917	25.9766	19.7%
		Constant	29	1.000	.0000	0.0%
15	.0	two_UK	10	92.900	29.9468	32.2%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	86.756	20.6101	23.8%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	79.280	17.9233	22.6%
		Constant	10	1.000	.0000	0.0%
	Total	two_UK	29	86.297	23.3689	27.1%
		Constant	29	1.000	.0000	0.0%
16	.0	two_UK	10	120.200	22.8524	19.0%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UK	9	102.000	11.5516	11.3%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UK	10	100.380	10.8285	10.8%
		Constant	10	1.000	.0000	0.0%
	Total	two_UK	29	107.717	18.1400	16.8%
		Constant	29	1.000	.0000	0.0%
51	.0	two_UK	16	91.813	26.9221	29.3%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	71.725	14.0705	19.6%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	57.963	10.5374	18.2%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	73.833	22.9618	31.1%
		Constant	48	1.000	.0000	0.0%
52	.0	two_UK	16	73.750	20.1705	27.3%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	52.588	12.5572	23.9%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	51.313	12.3199	24.0%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	59.217	18.3506	31.0%
		Constant	48	1.000	.0000	0.0%
53	.0	two_UK	16	173.250	35.0953	20.3%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	140.875	25.7070	18.2%



		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	107.525	22.5070	20.9%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	140.550	38.7428	27.6%
		Constant	48	1.000	.0000	0.0%
54	.0	two_UK	16	82.475	29.0389	35.2%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	68.338	11.3642	16.6%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	64.632	5.5222	8.5%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	71.815	19.5049	27.2%
		Constant	48	1.000	.0000	0.0%
55	.0	two_UK	16	188.200	42.1259	22.4%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	156.100	33.1114	21.2%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	117.700	31.0806	26.4%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	154.000	45.5282	29.6%
		Constant	48	1.000	.0000	0.0%
56	.0	two_UK	16	89.450	21.5235	24.1%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UK	16	77.325	19.1392	24.8%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UK	16	71.188	18.4792	26.0%
		Constant	16	1.000	.0000	0.0%
	Total	two_UK	48	79.321	20.7977	26.2%
		Constant	48	1.000	.0000	0.0%
Total	.0	two_UK	136	117.803	50.7375	43.1%
		Constant	136	1.000	.0000	0.0%
	1.0	two_UK	132	97.939	40.2285	41.1%
		Constant	132	1.000	.0000	0.0%
	2.0	two_UK	136	85.995	32.0256	37.2%
		Constant	136	1.000	.0000	0.0%
	Total	two_UK	404	100.605	43.6596	43.4%
		Constant	404	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UK.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	3798.854
Akaike's Information Criterion (AIC)	3802.854
Hurvich and Tsai's Criterion (AICC)	3802.884
Bozdogan's Criterion (CAIC)	3812.842
Schwarz's Bayesian Criterion (BIC)	3810.842

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UK.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.039	96.905	.000
UFEV_h_l_perdiet	2	392.042	52.300	.000

a. Dependent Variable: two\_UK.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	87.488744	10.534666	9.592	8.305	.000	63.880103	111.097386
[UFEV_h_l_perdiet=.0]	31.808021	3.136807	392.039	10.140	.000	25.640954	37.975089
[UFEV_h_l_perdiet=1.0]	12.246257	3.161057	392.044	3.874	.000	6.031514	18.461000
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UK.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	669.089888	47.789767
Constant [subject = subject]	Variance	1059.702797
		506.738386

a. Dependent Variable: two\_UK.

\*ON UREA CONCENTRATION

\* Mixed Linear Models

EFFECT OF UFEV TERTILE ON U[Urea] AT ALL SALT INTAKE LEVELS  
all subjects

USE ALL.

MIXED Uurea BY UFEV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UFEV\_h\_l\_perdiet | SSTYPE(3)

```

/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:48
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UUrea BY
UFEV_h_I_perdiet WITH Constant
  /CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
  /FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES
SOLUTION
  /RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UUrea	35	250.193	76.6720	30.6%
		Constant	35	1.000	.0000	0.0%
	1.0	UUrea	34	212.107	39.4047	18.6%
		Constant	34	1.000	.0000	0.0%
	2.0	UUrea	35	194.035	40.1827	20.7%
		Constant	35	1.000	.0000	0.0%
Total	UUrea	104	218.842	59.4058	27.1%	
	Constant	104	1.000	.0000	0.0%	
12	.0	UUrea	35	304.657	75.1910	24.7%
		Constant	35	1.000	.0000	0.0%
	1.0	UUrea	34	252.806	47.3392	18.7%
		Constant	34	1.000	.0000	0.0%
	2.0	UUrea	35	262.709	75.4566	28.7%

		Constant	35	1.000	.0000	0.0%
	Total	UUrea	104	273.589	70.5303	25.8%
		Constant	104	1.000	.0000	0.0%
15	.0	UUrea	35	183.664	42.8102	23.3%
		Constant	35	1.000	.0000	0.0%
	1.0	UUrea	33	185.834	34.9274	18.8%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	35	163.789	29.9333	18.3%
		Constant	35	1.000	.0000	0.0%
	Total	UUrea	103	177.606	37.3136	21.0%
		Constant	103	1.000	.0000	0.0%
16	.0	UUrea	35	308.511	81.7011	26.5%
		Constant	35	1.000	.0000	0.0%
	1.0	UUrea	34	261.018	67.1091	25.7%
		Constant	34	1.000	.0000	0.0%
	2.0	UUrea	35	218.772	39.7667	18.2%
		Constant	35	1.000	.0000	0.0%
	Total	UUrea	104	262.784	74.4185	28.3%
		Constant	104	1.000	.0000	0.0%
51	.0	UUrea	68	184.563	53.8472	29.2%
		Constant	68	1.000	.0000	0.0%
	1.0	UUrea	69	152.541	35.2403	23.1%
		Constant	69	1.000	.0000	0.0%
	2.0	UUrea	68	133.634	33.1338	24.8%
		Constant	68	1.000	.0000	0.0%
	Total	UUrea	205	156.891	46.5701	29.7%
		Constant	205	1.000	.0000	0.0%
52	.0	UUrea	68	181.287	48.8180	26.9%
		Constant	68	1.000	.0000	0.0%
	1.0	UUrea	69	149.360	39.3044	26.3%
		Constant	69	1.000	.0000	0.0%
	2.0	UUrea	67	123.439	30.8762	25.0%
		Constant	67	1.000	.0000	0.0%
	Total	UUrea	204	151.489	46.6118	30.8%
		Constant	204	1.000	.0000	0.0%
53	.0	UUrea	67	346.049	84.9940	24.6%
		Constant	67	1.000	.0000	0.0%
	1.0	UUrea	69	265.679	75.5668	28.4%

		Constant	69	1.000	.0000	0.0%
	2.0	UUrea	68	232.375	60.8966	26.2%
		Constant	68	1.000	.0000	0.0%
	Total	UUrea	204	280.974	88.0558	31.3%
		Constant	204	1.000	.0000	0.0%
54	.0	UUrea	67	174.785	57.4443	32.9%
		Constant	67	1.000	.0000	0.0%
	1.0	UUrea	68	149.238	33.5887	22.5%
		Constant	68	1.000	.0000	0.0%
	2.0	UUrea	68	136.927	29.5358	21.6%
		Constant	68	1.000	.0000	0.0%
	Total	UUrea	203	153.546	44.6158	29.1%
		Constant	203	1.000	.0000	0.0%
55	.0	UUrea	67	368.348	78.7357	21.4%
		Constant	67	1.000	.0000	0.0%
	1.0	UUrea	67	312.476	65.2134	20.9%
		Constant	67	1.000	.0000	0.0%
	2.0	UUrea	67	250.883	52.2821	20.8%
		Constant	67	1.000	.0000	0.0%
	Total	UUrea	201	310.569	81.6346	26.3%
		Constant	201	1.000	.0000	0.0%
56	.0	UUrea	68	189.991	42.2071	22.2%
		Constant	68	1.000	.0000	0.0%
	1.0	UUrea	68	158.183	32.9856	20.9%
		Constant	68	1.000	.0000	0.0%
	2.0	UUrea	68	141.092	28.6323	20.3%
		Constant	68	1.000	.0000	0.0%
	Total	UUrea	204	163.089	40.3762	24.8%
		Constant	204	1.000	.0000	0.0%
Total	.0	UUrea	545	245.905	99.8190	40.6%
		Constant	545	1.000	.0000	0.0%
	1.0	UUrea	545	205.170	78.0036	38.0%
		Constant	545	1.000	.0000	0.0%
	2.0	UUrea	546	179.943	66.8063	37.1%
		Constant	546	1.000	.0000	0.0%
	Total	UUrea	1636	210.321	86.9852	41.4%
		Constant	1636	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	17784.348
Akaike's Information Criterion (AIC)	17788.348
Hurvich and Tsai's Criterion (AICC)	17788.355
Bozdogan's Criterion (CAIC)	17801.144
Schwarz's Bayesian Criterion (BIC)	17799.144

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.013	120.280	.000
UFEV_h_I_perdiet	2	1624.014	200.852	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	184.376313	19.689518	9.186	9.364	.000	139.972656	228.779971
[UFEV_h_I_perdiet=.0]	66.095339	3.325923	1624.013	19.873	.000	59.571788	72.618891
[UFEV_h_I_perdiet=1.0]	25.516716	3.326048	1624.014	7.672	.000	18.992920	32.040513
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3017.055146	105.877462
Constant [subject = subject]	Variance	3819.516760
		1808.920724

a. Dependent Variable: UUrea.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON U[Urea] AT 12 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UUrea BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

### Notes

Output Created	23-DEC-2016 17:42:48	
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UUrea BY
UFEV_h_I_perdiet WITH Constant
  /CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
  /FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
  /METHOD=REML
  /PRINT=DESCRIPTIVES
SOLUTION
  /RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UUrea	13	240.951	67.2677	27.9%
		Constant	13	1.000	.0000	0.0%
	1.0	UUrea	14	213.073	25.2965	11.9%
		Constant	14	1.000	.0000	0.0%
	2.0	UUrea	13	185.814	50.6756	27.3%
		Constant	13	1.000	.0000	0.0%
Total	UUrea	40	213.274	53.8745	25.3%	
	Constant	40	1.000	.0000	0.0%	
12	.0	UUrea	13	304.772	68.2079	22.4%
		Constant	13	1.000	.0000	0.0%
	1.0	UUrea	14	238.286	48.6337	20.4%
		Constant	14	1.000	.0000	0.0%
	2.0	UUrea	13	260.573	68.7619	26.4%

		Constant	13	1.000	.0000	0.0%
	Total	UUrea	40	267.137	66.7835	25.0%
		Constant	40	1.000	.0000	0.0%
15	.0	UUrea	13	191.078	34.0823	17.8%
		Constant	13	1.000	.0000	0.0%
	1.0	UUrea	13	184.661	30.9359	16.8%
		Constant	13	1.000	.0000	0.0%
	2.0	UUrea	13	168.076	19.2880	11.5%
		Constant	13	1.000	.0000	0.0%
	Total	UUrea	39	181.272	29.7141	16.4%
		Constant	39	1.000	.0000	0.0%
16	.0	UUrea	13	300.955	69.5968	23.1%
		Constant	13	1.000	.0000	0.0%
	1.0	UUrea	14	264.426	53.9574	20.4%
		Constant	14	1.000	.0000	0.0%
	2.0	UUrea	13	207.293	27.7946	13.4%
		Constant	13	1.000	.0000	0.0%
	Total	UUrea	40	257.730	64.6949	25.1%
		Constant	40	1.000	.0000	0.0%
51	.0	UUrea	32	173.883	54.5245	31.4%
		Constant	32	1.000	.0000	0.0%
	1.0	UUrea	33	145.773	32.0999	22.0%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	32	125.546	37.9708	30.2%
		Constant	32	1.000	.0000	0.0%
	Total	UUrea	97	148.374	46.4971	31.3%
		Constant	97	1.000	.0000	0.0%
52	.0	UUrea	32	183.348	49.5256	27.0%
		Constant	32	1.000	.0000	0.0%
	1.0	UUrea	33	145.400	33.6816	23.2%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	31	125.192	31.3302	25.0%
		Constant	31	1.000	.0000	0.0%
	Total	UUrea	96	151.524	45.5292	30.0%
		Constant	96	1.000	.0000	0.0%
53	.0	UUrea	31	293.722	69.8341	23.8%
		Constant	31	1.000	.0000	0.0%
	1.0	UUrea	33	217.631	50.9303	23.4%

		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	32	211.471	53.9326	25.5%
		Constant	32	1.000	.0000	0.0%
	Total	UUrea	96	240.149	68.9396	28.7%
		Constant	96	1.000	.0000	0.0%
54	.0	UUrea	31	164.615	36.1391	22.0%
		Constant	31	1.000	.0000	0.0%
	1.0	UUrea	33	149.891	32.1889	21.5%
		Constant	33	1.000	.0000	0.0%
	2.0	UUrea	32	142.404	30.8807	21.7%
		Constant	32	1.000	.0000	0.0%
	Total	UUrea	96	152.150	34.0160	22.4%
		Constant	96	1.000	.0000	0.0%
55	.0	UUrea	31	330.320	70.3182	21.3%
		Constant	31	1.000	.0000	0.0%
	1.0	UUrea	32	292.686	53.7682	18.4%
		Constant	32	1.000	.0000	0.0%
	2.0	UUrea	32	250.911	57.4859	22.9%
		Constant	32	1.000	.0000	0.0%
	Total	UUrea	95	290.895	68.4053	23.5%
		Constant	95	1.000	.0000	0.0%
56	.0	UUrea	32	172.000	29.8245	17.3%
		Constant	32	1.000	.0000	0.0%
	1.0	UUrea	32	142.207	21.2702	15.0%
		Constant	32	1.000	.0000	0.0%
	2.0	UUrea	32	133.679	24.4911	18.3%
		Constant	32	1.000	.0000	0.0%
	Total	UUrea	96	149.295	30.1054	20.2%
		Constant	96	1.000	.0000	0.0%
Total	.0	UUrea	241	227.696	84.6156	37.2%
		Constant	241	1.000	.0000	0.0%
	1.0	UUrea	251	191.534	66.7502	34.9%
		Constant	251	1.000	.0000	0.0%
	2.0	UUrea	243	173.712	64.2007	37.0%
		Constant	243	1.000	.0000	0.0%
	Total	UUrea	735	197.499	75.6073	38.3%
		Constant	735	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	7773.232
Akaike's Information Criterion (AIC)	7777.232
Hurvich and Tsai's Criterion (AICC)	7777.249
Bozdogan's Criterion (CAIC)	7788.424
Schwarz's Bayesian Criterion (BIC)	7786.424

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.027	135.256	.000
UFEV_h_I_perdiet	2	723.029	84.529	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	181.097041	17.818367	9.384	10.164	.000	141.039438	221.154644
[UFEV_h_I_perdiet=.0]	54.548871	4.278476	723.028	12.750	.000	46.149151	62.948592
[UFEV_h_I_perdiet=1.0]	17.824692	4.235569	723.029	4.208	.000	9.509210	26.140174
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2214.745806	116.482759
Constant [subject = subject] Variance	3077.730418	1465.657414

a. Dependent Variable: UUrea.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON U[Urea] AT 9 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UUrea BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



```

Syntax
MIXED UUrea BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

**Descriptive Statistics**

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UUrea	12	251.401	74.3646	29.6%
		Constant	12	1.000	.0000	0.0%
	1.0	UUrea	11	223.791	59.7528	26.7%
		Constant	11	1.000	.0000	0.0%
	2.0	UUrea	12	193.487	34.8265	18.0%
		Constant	12	1.000	.0000	0.0%
Total	UUrea	35	222.868	61.8382	27.7%	
	Constant	35	1.000	.0000	0.0%	
12	.0	UUrea	12	303.044	100.3044	33.1%
		Constant	12	1.000	.0000	0.0%
	1.0	UUrea	11	236.249	31.7718	13.4%
		Constant	11	1.000	.0000	0.0%
	2.0	UUrea	12	217.865	71.9927	33.0%

		Constant	12	1.000	.0000	0.0%
	Total	UUrea	35	252.847	81.4808	32.2%
		Constant	35	1.000	.0000	0.0%
15	.0	UUrea	12	176.213	35.0041	19.9%
		Constant	12	1.000	.0000	0.0%
	1.0	UUrea	11	201.057	31.3155	15.6%
		Constant	11	1.000	.0000	0.0%
	2.0	UUrea	12	167.222	32.8735	19.7%
		Constant	12	1.000	.0000	0.0%
	Total	UUrea	35	180.938	35.2095	19.5%
		Constant	35	1.000	.0000	0.0%
16	.0	UUrea	12	344.114	90.5805	26.3%
		Constant	12	1.000	.0000	0.0%
	1.0	UUrea	11	298.383	78.7240	26.4%
		Constant	11	1.000	.0000	0.0%
	2.0	UUrea	12	243.271	48.9468	20.1%
		Constant	12	1.000	.0000	0.0%
	Total	UUrea	35	295.167	83.9755	28.5%
		Constant	35	1.000	.0000	0.0%
51	.0	UUrea	20	192.732	39.1633	20.3%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	20	172.103	40.4127	23.5%
		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	20	147.228	24.0680	16.3%
		Constant	20	1.000	.0000	0.0%
	Total	UUrea	60	170.688	39.4764	23.1%
		Constant	60	1.000	.0000	0.0%
52	.0	UUrea	20	183.958	49.7954	27.1%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	20	172.211	48.1431	28.0%
		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	20	131.086	31.6674	24.2%
		Constant	20	1.000	.0000	0.0%
	Total	UUrea	60	162.418	48.8919	30.1%
		Constant	60	1.000	.0000	0.0%
53	.0	UUrea	20	385.048	65.8238	17.1%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	20	298.160	67.9400	22.8%

		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	20	247.885	44.2636	17.9%
		Constant	20	1.000	.0000	0.0%
	Total	UUrea	60	310.365	82.3237	26.5%
		Constant	60	1.000	.0000	0.0%
54	.0	UUrea	20	182.501	70.3687	38.6%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	19	155.870	39.7939	25.5%
		Constant	19	1.000	.0000	0.0%
	2.0	UUrea	20	139.344	34.1119	24.5%
		Constant	20	1.000	.0000	0.0%
	Total	UUrea	59	159.296	53.1183	33.3%
		Constant	59	1.000	.0000	0.0%
55	.0	UUrea	20	388.936	74.6976	19.2%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	19	327.725	71.2216	21.7%
		Constant	19	1.000	.0000	0.0%
	2.0	UUrea	20	256.294	54.4488	21.2%
		Constant	20	1.000	.0000	0.0%
	Total	UUrea	59	324.260	86.0959	26.6%
		Constant	59	1.000	.0000	0.0%
56	.0	UUrea	20	216.117	46.8235	21.7%
		Constant	20	1.000	.0000	0.0%
	1.0	UUrea	20	178.497	36.8869	20.7%
		Constant	20	1.000	.0000	0.0%
	2.0	UUrea	20	155.336	27.5663	17.7%
		Constant	20	1.000	.0000	0.0%
	Total	UUrea	60	183.317	45.0211	24.6%
		Constant	60	1.000	.0000	0.0%
Total	.0	UUrea	168	261.209	106.0336	40.6%
		Constant	168	1.000	.0000	0.0%
	1.0	UUrea	162	223.222	80.5932	36.1%
		Constant	162	1.000	.0000	0.0%
	2.0	UUrea	168	186.938	62.5408	33.5%
		Constant	168	1.000	.0000	0.0%
	Total	UUrea	498	223.797	90.1594	40.3%
		Constant	498	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	5441.431
Akaike's Information Criterion (AIC)	5445.431
Hurvich and Tsai's Criterion (AICC)	5445.455
Bozdogan's Criterion (CAIC)	5455.840
Schwarz's Bayesian Criterion (BIC)	5453.840

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.031	121.724	.000
UFEV_h_I_perdiet	2	486.034	74.066	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	189.134051	20.797678	9.568	9.094	.000	142.508516	235.759587
[UFEV_h_I_perdiet=.0]	74.270967	6.102363	486.031	12.171	.000	62.280697	86.261237
[UFEV_h_I_perdiet=1.0]	36.840384	6.159313	486.035	5.981	.000	24.738216	48.942553
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	3128.062353	200.658804
Constant [subject = subject]	Variance	4135.251251
		1977.565957

a. Dependent Variable: UUrea.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON U[Urea] AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED UUrea BY UFEV_h_1_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_1_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED UUrea BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	UUrea	10	260.756	95.7417	36.7%
		Constant	10	1.000	.0000	0.0%
	1.0	UUrea	9	196.322	20.7963	10.6%
		Constant	9	1.000	.0000	0.0%
	2.0	UUrea	10	205.378	30.8605	15.0%
		Constant	10	1.000	.0000	0.0%
Total	UUrea	29	221.663	64.9844	29.3%	
	Constant	29	1.000	.0000	0.0%	
12	.0	UUrea	10	306.444	53.3993	17.4%
		Constant	10	1.000	.0000	0.0%
	1.0	UUrea	9	295.630	36.4652	12.3%
		Constant	9	1.000	.0000	0.0%
	2.0	UUrea	10	319.297	51.2311	16.0%

		Constant	10	1.000	.0000	0.0%
	Total	UUrea	29	307.520	47.2809	15.4%
		Constant	29	1.000	.0000	0.0%
15	.0	UUrea	10	182.967	61.0184	33.3%
		Constant	10	1.000	.0000	0.0%
	1.0	UUrea	9	168.924	39.6959	23.5%
		Constant	9	1.000	.0000	0.0%
	2.0	UUrea	10	154.096	37.7014	24.5%
		Constant	10	1.000	.0000	0.0%
	Total	UUrea	29	168.653	47.4630	28.1%
		Constant	29	1.000	.0000	0.0%
16	.0	UUrea	10	275.608	75.8618	27.5%
		Constant	10	1.000	.0000	0.0%
	1.0	UUrea	9	210.049	35.1714	16.7%
		Constant	9	1.000	.0000	0.0%
	2.0	UUrea	10	204.296	28.1509	13.8%
		Constant	10	1.000	.0000	0.0%
	Total	UUrea	29	230.672	59.7018	25.9%
		Constant	29	1.000	.0000	0.0%
51	.0	UUrea	16	195.711	66.3291	33.9%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	142.045	25.1889	17.7%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	132.815	28.3491	21.3%
		Constant	16	1.000	.0000	0.0%
	Total	UUrea	48	156.857	51.4631	32.8%
		Constant	48	1.000	.0000	0.0%
52	.0	UUrea	16	173.826	48.5501	27.9%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	128.965	21.7448	16.9%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	110.483	26.4186	23.9%
		Constant	16	1.000	.0000	0.0%
	Total	UUrea	48	137.758	42.9925	31.2%
		Constant	48	1.000	.0000	0.0%
53	.0	UUrea	16	398.685	76.8239	19.3%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	324.176	66.1125	20.4%



		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	254.797	79.2577	31.1%
		Constant	16	1.000	.0000	0.0%
	Total	UUrea	48	325.886	93.8556	28.8%
		Constant	48	1.000	.0000	0.0%
54	.0	UUrea	16	184.846	72.3459	39.1%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	140.016	27.9508	20.0%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	122.950	13.1016	10.7%
		Constant	16	1.000	.0000	0.0%
	Total	UUrea	48	149.271	51.6756	34.6%
		Constant	48	1.000	.0000	0.0%
55	.0	UUrea	16	416.292	65.6836	15.8%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	333.947	70.9133	21.2%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	15	243.612	38.0367	15.6%
		Constant	15	1.000	.0000	0.0%
	Total	UUrea	47	333.149	92.2271	27.7%
		Constant	47	1.000	.0000	0.0%
56	.0	UUrea	16	193.317	41.5846	21.5%
		Constant	16	1.000	.0000	0.0%
	1.0	UUrea	16	164.742	32.5713	19.8%
		Constant	16	1.000	.0000	0.0%
	2.0	UUrea	16	138.112	32.5946	23.6%
		Constant	16	1.000	.0000	0.0%
	Total	UUrea	48	165.390	41.8151	25.3%
		Constant	48	1.000	.0000	0.0%
Total	.0	UUrea	136	259.269	111.5818	43.0%
		Constant	136	1.000	.0000	0.0%
	1.0	UUrea	132	208.944	89.4864	42.8%
		Constant	132	1.000	.0000	0.0%
	2.0	UUrea	135	182.455	75.4695	41.4%
		Constant	135	1.000	.0000	0.0%
	Total	UUrea	403	217.053	98.5683	45.4%
		Constant	403	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: UUrea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4388.530
Akaike's Information Criterion (AIC)	4392.530
Hurvich and Tsai's Criterion (AICC)	4392.560
Bozdogan's Criterion (CAIC)	4402.513
Schwarz's Bayesian Criterion (BIC)	4400.513

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: UUrea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.025	81.609	.000
UFEV_h_l_perdiet	2	391.028	67.820	.000

a. Dependent Variable: UUrea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	185.446801	24.592376	9.477	7.541	.000	130.238539	240.655064
[UFEV_h_l_perdiet=.0]	75.970671	6.629684	391.025	11.459	.000	62.936386	89.004955
[UFEV_h_l_perdiet=1.0]	26.079639	6.681001	391.030	3.904	.000	12.944461	39.214816
[UFEV_h_l_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: UUrea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	2977.549789	212.947203
Constant [subject = subject] Variance	5823.442752	2778.325182

a. Dependent Variable: UUrea.

\*ON OSMOLYTE CONCENTRATION

\* Mixed Linear Models

EFFECT OF UFEV TERTILE ON U[2Na2KUrea] AT ALL SALT INTAKES  
all subjects

USE ALL.

MIXED two\_UNaUK\_Urea BY UFEV\_h\_l\_perdiet WITH Constant

/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)

/FIXED=UFEV\_h\_l\_perdiet | SSTYPE(3)

/METHOD=REML

```

/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1646
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

```

Syntax
MIXED two_UNaUK_Urea BY
UFEV_h_I_perdiet WITH Constant
/CRITERIA=CIN(95)
MXITER(100) MXSTEP(10)
SCORING(1)
SINGULAR(0.000000000001)
HCONVERGE(0, ABSOLUTE)
LCONVERGE(0, ABSOLUTE)
PCONVERGE(0.000001,
ABSOLUTE)
/FIXED=UFEV_h_I_perdiet |
SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES
SOLUTION
/RANDOM=Constant |
SUBJECT(subject)
COVTYPE(VC).

```

Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	two_UNaUK_Urea	35	540.229	142.6514	26.4%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	34	476.098	76.6823	16.1%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	35	449.797	67.3455	15.0%
		Constant	35	1.000	.0000	0.0%
Total	two_UNaUK_Urea	104	488.829	107.5514	22.0%	
	Constant	104	1.000	.0000	0.0%	
12	.0	two_UNaUK_Urea	35	653.547	137.0710	21.0%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	34	549.246	89.1565	16.2%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	35	579.598	133.9940	23.1%

		Constant	35	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	104	594.562	128.8862	21.7%
		Constant	104	1.000	.0000	0.0%
15	.0	two_UNaUK_Urea	35	417.815	96.5956	23.1%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	33	419.069	78.0056	18.6%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	35	380.443	71.8714	18.9%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	103	405.518	84.0719	20.7%
		Constant	103	1.000	.0000	0.0%
16	.0	two_UNaUK_Urea	35	648.957	156.5695	24.1%
		Constant	35	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	34	565.443	126.6325	22.4%
		Constant	34	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	35	492.454	83.6670	17.0%
		Constant	35	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	104	568.985	140.3853	24.7%
		Constant	104	1.000	.0000	0.0%
51	.0	two_UNaUK_Urea	68	453.448	117.6899	26.0%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	69	391.888	93.9699	24.0%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	68	353.974	77.4926	21.9%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	205	399.731	105.5715	26.4%
		Constant	205	1.000	.0000	0.0%
52	.0	two_UNaUK_Urea	68	417.412	121.6054	29.1%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	69	363.193	99.4732	27.4%
		Constant	69	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	67	313.986	81.0287	25.8%
		Constant	67	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	204	365.105	110.0461	30.1%
		Constant	204	1.000	.0000	0.0%
53	.0	two_UNaUK_Urea	67	779.557	135.1227	17.3%
		Constant	67	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	69	624.695	123.6951	19.8%

		Constant	69	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	68	553.855	110.2794	19.9%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	204	651.943	154.6789	23.7%
		Constant	204	1.000	.0000	0.0%
54	.0	two_UNaUK_Urea	67	420.861	115.8816	27.5%
		Constant	67	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	68	375.897	83.7965	22.3%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	68	354.763	86.4209	24.4%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	203	383.658	99.7706	26.0%
		Constant	203	1.000	.0000	0.0%
55	.0	two_UNaUK_Urea	67	831.132	134.1252	16.1%
		Constant	67	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	67	721.656	134.7819	18.7%
		Constant	67	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	67	591.691	124.5466	21.0%
		Constant	67	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	201	714.826	163.3307	22.8%
		Constant	201	1.000	.0000	0.0%
56	.0	two_UNaUK_Urea	68	459.603	86.6579	18.9%
		Constant	68	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	68	392.635	73.2293	18.7%
		Constant	68	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	68	360.035	65.6073	18.2%
		Constant	68	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	204	404.091	85.9968	21.3%
		Constant	204	1.000	.0000	0.0%
Total	.0	two_UNaUK_Urea	545	560.926	200.0837	35.7%
		Constant	545	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	545	483.911	161.2167	33.3%
		Constant	545	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	546	435.163	138.4953	31.8%
		Constant	546	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	1636	493.298	176.1927	35.7%
		Constant	1636	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNaUK\_Urea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	20055.462
Akaike's Information Criterion (AIC)	20059.462
Hurvich and Tsai's Criterion (AICC)	20059.469
Bozdogan's Criterion (CAIC)	20072.258
Schwarz's Bayesian Criterion (BIC)	20070.258

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNaUK\_Urea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**



Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.015	155.614	.000
UFEV_h_I_perdiet	2	1624.016	181.776	.000

a. Dependent Variable: two\_UNaUK\_Urea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	439.314379	40.082349	9.183	10.960	.000	348.916729	529.712029
[UFEV_h_I_perdiet=.0]	126.087618	6.666144	1624.015	18.915	.000	113.012472	139.162764
[UFEV_h_I_perdiet=1.0]	49.090811	6.666394	1624.017	7.364	.000	36.015174	62.166448
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNaUK\_Urea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	12120.153850	425.332020
Constant [subject = subject] Variance	15835.942760	7497.628742

a. Dependent Variable: two\_UNaUK\_Urea.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON U[2Na2KUrea] AT 12 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 12).
VARIABLE LABELS filter_$ 'salt = 12 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNaUK_Urea BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 12 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	742
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED two_UNaUK_Urea BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	two_UNaUK_Urea	13	562.697	139.2665	24.7%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	14	501.620	34.5918	6.9%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	13	463.249	78.2584	16.9%
		Constant	13	1.000	.0000	0.0%
Total	two_UNaUK_Urea	40	509.000	99.6463	19.6%	
	Constant	40	1.000	.0000	0.0%	
12	.0	two_UNaUK_Urea	13	662.622	146.3915	22.1%
		Constant	13	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	14	537.813	109.2889	20.3%
		Constant	14	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	13	593.503	153.5103	25.9%
		Constant	13	1.000	.0000	0.0%

		Constant	13	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	40	596.475	143.2584	24.0%
15	.0	Constant	40	1.000	.0000	0.0%
		two_UNaUK_Urea	13	478.482	84.5715	17.7%
	1.0	Constant	13	1.000	.0000	0.0%
		two_UNaUK_Urea	13	451.702	61.7067	13.7%
	2.0	Constant	13	1.000	.0000	0.0%
		two_UNaUK_Urea	13	425.298	36.2078	8.5%
	Total	Constant	13	1.000	.0000	0.0%
		two_UNaUK_Urea	39	451.827	66.0220	14.6%
16	.0	Constant	39	1.000	.0000	0.0%
		two_UNaUK_Urea	13	687.332	141.3277	20.6%
	1.0	Constant	13	1.000	.0000	0.0%
		two_UNaUK_Urea	14	612.205	62.9523	10.3%
	2.0	Constant	14	1.000	.0000	0.0%
		two_UNaUK_Urea	13	505.783	65.8538	13.0%
	Total	Constant	13	1.000	.0000	0.0%
		two_UNaUK_Urea	40	602.034	119.7980	19.9%
51	.0	Constant	40	1.000	.0000	0.0%
		two_UNaUK_Urea	32	489.140	125.5058	25.7%
	1.0	Constant	32	1.000	.0000	0.0%
		two_UNaUK_Urea	33	422.865	86.0740	20.4%
	2.0	Constant	33	1.000	.0000	0.0%
		two_UNaUK_Urea	32	382.339	70.5518	18.5%
	Total	Constant	32	1.000	.0000	0.0%
		two_UNaUK_Urea	97	431.359	105.3663	24.4%
52	.0	Constant	97	1.000	.0000	0.0%
		two_UNaUK_Urea	32	470.698	114.7064	24.4%
	1.0	Constant	32	1.000	.0000	0.0%
		two_UNaUK_Urea	33	404.225	74.8760	18.5%
	2.0	Constant	33	1.000	.0000	0.0%
		two_UNaUK_Urea	31	356.774	67.3009	18.9%
	Total	Constant	31	1.000	.0000	0.0%
		two_UNaUK_Urea	96	411.060	98.9356	24.1%
53	.0	Constant	96	1.000	.0000	0.0%
		two_UNaUK_Urea	31	798.068	146.8818	18.4%
	1.0	two_UNaUK_Urea	33	616.911	134.5204	21.8%

		Constant	33	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	32	582.644	118.1808	20.3%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	96	663.987	162.2679	24.4%
		Constant	96	1.000	.0000	0.0%
54	.0	two_UNaUK_Urea	31	464.153	93.8065	20.2%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	33	422.656	73.3527	17.4%
		Constant	33	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	32	408.058	78.8575	19.3%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	96	431.190	84.7381	19.7%
		Constant	96	1.000	.0000	0.0%
55	.0	two_UNaUK_Urea	31	841.599	142.0786	16.9%
		Constant	31	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	32	752.885	125.3358	16.6%
		Constant	32	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	32	650.233	113.6722	17.5%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	95	747.256	148.4423	19.9%
		Constant	95	1.000	.0000	0.0%
56	.0	two_UNaUK_Urea	32	467.339	68.8396	14.7%
		Constant	32	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	32	398.371	45.8093	11.5%
		Constant	32	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	32	368.147	60.1996	16.4%
		Constant	32	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	96	411.286	71.7990	17.5%
		Constant	96	1.000	.0000	0.0%
Total	.0	two_UNaUK_Urea	241	589.099	191.4423	32.5%
		Constant	241	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	251	507.709	151.3139	29.8%
		Constant	251	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	243	466.779	138.4007	29.7%
		Constant	243	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	735	520.864	169.2741	32.5%
		Constant	735	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNaUK\_Urea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	8924.935
Akaike's Information Criterion (AIC)	8928.935
Hurvich and Tsai's Criterion (AICC)	8928.951
Bozdogan's Criterion (CAIC)	8940.126
Schwarz's Bayesian Criterion (BIC)	8938.126

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNaUK\_Urea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.052	191.157	.000
UFEV_h_I_perdiet	2	723.054	90.131	.000

a. Dependent Variable: two\_UNaUK\_Urea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	470.697224	38.416268	9.425	12.253	.000	384.387761	557.006687
[UFEV_h_I_perdiet=.0]	123.927750	9.398154	723.053	13.186	.000	105.476822	142.378679
[UFEV_h_I_perdiet=1.0]	41.396843	9.303902	723.055	4.449	.000	23.130955	59.662732
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNaUK\_Urea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	10686.382860	562.031686
Constant [subject = subject] Variance	14289.056920	6798.014260

a. Dependent Variable: two\_UNaUK\_Urea.

\* Mixed Linear Models  
 EFFECT OF UFEV TERTILE ON U[2Na2KUrea] AT 9 g SALT INTAKE  
 all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 9).
VARIABLE LABELS filter_$ 'salt = 9 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNaUK_Urea BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 9 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.



Syntax	<pre> MIXED two_UNaUK_Urea BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC). </pre>	
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	two_UNaUK_Urea	12	536.912	127.2464	23.7%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	11	493.806	106.8715	21.6%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	12	453.808	71.7470	15.8%
		Constant	12	1.000	.0000	0.0%
Total	two_UNaUK_Urea	35	494.872	107.1562	21.7%	
	Constant	35	1.000	.0000	0.0%	
12	.0	two_UNaUK_Urea	12	658.271	164.6651	25.0%
		Constant	12	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	11	530.447	56.9822	10.7%
		Constant	11	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	12	505.996	102.9207	20.3%

		Constant	12	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	35	565.889	133.5627	23.6%
15	.0	Constant	35	1.000	.0000	0.0%
		two_UNaUK_Urea	12	393.318	56.5770	14.4%
	1.0	Constant	12	1.000	.0000	0.0%
		two_UNaUK_Urea	11	448.684	57.1889	12.7%
	2.0	Constant	11	1.000	.0000	0.0%
		two_UNaUK_Urea	12	386.094	61.2668	15.9%
	Total	Constant	12	1.000	.0000	0.0%
		two_UNaUK_Urea	35	408.242	63.1889	15.5%
16	.0	Constant	35	1.000	.0000	0.0%
		two_UNaUK_Urea	12	726.042	145.0516	20.0%
	1.0	Constant	12	1.000	.0000	0.0%
		two_UNaUK_Urea	11	630.316	132.9139	21.1%
	2.0	Constant	11	1.000	.0000	0.0%
		two_UNaUK_Urea	12	543.547	78.7966	14.5%
	Total	Constant	12	1.000	.0000	0.0%
		two_UNaUK_Urea	35	633.387	141.0442	22.3%
51	.0	Constant	35	1.000	.0000	0.0%
		two_UNaUK_Urea	20	445.674	72.3210	16.2%
	1.0	Constant	20	1.000	.0000	0.0%
		two_UNaUK_Urea	20	414.123	91.2016	22.0%
	2.0	Constant	20	1.000	.0000	0.0%
		two_UNaUK_Urea	20	382.901	44.4250	11.6%
	Total	Constant	20	1.000	.0000	0.0%
		two_UNaUK_Urea	60	414.233	75.2753	18.2%
52	.0	Constant	60	1.000	.0000	0.0%
		two_UNaUK_Urea	20	397.781	114.0075	28.7%
	1.0	Constant	20	1.000	.0000	0.0%
		two_UNaUK_Urea	20	390.968	92.9552	23.8%
	2.0	Constant	20	1.000	.0000	0.0%
		two_UNaUK_Urea	20	317.985	62.9782	19.8%
	Total	Constant	20	1.000	.0000	0.0%
		two_UNaUK_Urea	60	368.911	97.8373	26.5%
53	.0	Constant	60	1.000	.0000	0.0%
		two_UNaUK_Urea	20	788.170	111.7352	14.2%
	1.0	two_UNaUK_Urea	20	642.759	130.1443	20.2%

		Constant	20	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	20	555.787	81.4872	14.7%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	60	662.239	144.7728	21.9%
		Constant	60	1.000	.0000	0.0%
54	.0	two_UNaUK_Urea	20	401.581	109.7486	27.3%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	19	367.125	63.9965	17.4%
		Constant	19	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	20	339.862	64.5250	19.0%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	59	369.563	85.0897	23.0%
		Constant	59	1.000	.0000	0.0%
55	.0	two_UNaUK_Urea	20	853.394	131.8729	15.5%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	19	728.730	148.6077	20.4%
		Constant	19	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	20	577.143	122.5117	21.2%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	59	719.604	175.1151	24.3%
		Constant	59	1.000	.0000	0.0%
56	.0	two_UNaUK_Urea	20	501.242	92.3554	18.4%
		Constant	20	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	20	423.442	91.6219	21.6%
		Constant	20	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	20	391.746	42.6949	10.9%
		Constant	20	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	60	438.810	90.4951	20.6%
		Constant	60	1.000	.0000	0.0%
Total	.0	two_UNaUK_Urea	168	568.639	203.9050	35.9%
		Constant	168	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	162	502.364	159.4998	31.7%
		Constant	162	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	168	440.368	119.7079	27.2%
		Constant	168	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	498	503.807	172.6522	34.3%
		Constant	498	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNaUK\_Urea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	6055.627
Akaike's Information Criterion (AIC)	6059.627
Hurvich and Tsai's Criterion (AICC)	6059.652
Bozdogan's Criterion (CAIC)	6070.036
Schwarz's Bayesian Criterion (BIC)	6068.036

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNaUK\_Urea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.028	154.222	.000
UFEV_h_I_perdiet	2	486.030	64.050	.000

a. Dependent Variable: two\_UNaUK\_Urea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	443.746418	41.382631	9.492	10.723	.000	350.867013	536.625822
[UFEV_h_I_perdiet=.0]	128.271120	11.333797	486.028	11.318	.000	106.001831	150.540410
[UFEV_h_I_perdiet=1.0]	63.011265	11.439572	486.031	5.508	.000	40.534144	85.488386
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNaUK\_Urea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	10790.216800	692.173002
Constant [subject = subject] Variance	16469.155970	7860.707421

a. Dependent Variable: two\_UNaUK\_Urea.

\* Mixed Linear Models  
EFFECT OF UFEV TERTILE ON U[2Na2KUrea] AT 6 g SALT INTAKE  
all subjects

```
USE ALL.
COMPUTE filter_$=(salt = 6).
VARIABLE LABELS filter_$ 'salt = 6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

```

MIXED two_UNaUK_Urea BY UFEV_h_l_perdiet WITH Constant
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=UFEV_h_l_perdiet | SSTYPE(3)
/METHOD=REML
/PRINT=DESCRIPTIVES SOLUTION
/RANDOM=Constant | SUBJECT(subject) COVTYPE(VC) .

```

## Mixed Model Analysis

Notes		
Output Created		23-DEC-2016 17:42:49
Comments		
Input	Data	C:\Users\Titze Lab\Jens\Mars500\2016.05.09 Submission JCI\Human Urea\2016.09.27 Revision\Data\SPSS\Data used for Paper\2016.11.26 Original Data.sav
	Filter	salt = 6 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.

Syntax		MIXED two_UNaUK_Urea BY UFEV_h_I_perdiet WITH Constant /CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1) SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE) /FIXED=UFEV_h_I_perdiet   SSTYPE(3) /METHOD=REML /PRINT=DESCRIPTIVES SOLUTION /RANDOM=Constant   SUBJECT(subject) COVTYPE(VC).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.02

### Descriptive Statistics

subject	UFEV_h_I_per diet		Count	Mean	Standard Deviation	Coefficient of Variation
11	.0	two_UNaUK_Urea	10	515.003	172.5536	33.5%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	9	414.752	47.2174	11.4%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	10	427.497	42.9071	10.0%
		Constant	10	1.000	.0000	0.0%
Total	two_UNaUK_Urea	29	453.716	113.4644	25.0%	
	Constant	29	1.000	.0000	0.0%	
12	.0	two_UNaUK_Urea	10	636.081	93.6856	14.7%
		Constant	10	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	9	590.008	82.0821	13.9%
		Constant	9	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	10	649.844	102.3496	15.7%
		Constant	10	1.000	.0000	0.0%

		Constant	10	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	29	626.528	93.6415	14.9%
15	.0	Constant	29	1.000	.0000	0.0%
		two_UNaUK_Urea	10	368.345	113.8639	30.9%
	1.0	Constant	10	1.000	.0000	0.0%
		two_UNaUK_Urea	9	335.737	61.5715	18.3%
	2.0	Constant	9	1.000	.0000	0.0%
		two_UNaUK_Urea	10	315.351	74.3093	23.6%
	Total	Constant	10	1.000	.0000	0.0%
		two_UNaUK_Urea	29	339.952	86.8051	25.5%
16	.0	Constant	29	1.000	.0000	0.0%
		two_UNaUK_Urea	10	506.566	87.6565	17.3%
	1.0	Constant	10	1.000	.0000	0.0%
		two_UNaUK_Urea	9	413.410	44.8158	10.8%
	2.0	Constant	9	1.000	.0000	0.0%
		two_UNaUK_Urea	10	413.815	49.6558	12.0%
	Total	Constant	10	1.000	.0000	0.0%
		two_UNaUK_Urea	29	445.673	76.5341	17.2%
51	.0	Constant	29	1.000	.0000	0.0%
		two_UNaUK_Urea	16	391.782	125.8345	32.1%
	1.0	Constant	16	1.000	.0000	0.0%
		two_UNaUK_Urea	16	300.204	44.1942	14.7%
	2.0	Constant	16	1.000	.0000	0.0%
		two_UNaUK_Urea	16	261.083	44.7192	17.1%
	Total	Constant	16	1.000	.0000	0.0%
		two_UNaUK_Urea	48	317.689	96.8443	30.5%
52	.0	Constant	48	1.000	.0000	0.0%
		two_UNaUK_Urea	16	335.380	92.9915	27.7%
	1.0	Constant	16	1.000	.0000	0.0%
		two_UNaUK_Urea	16	243.848	45.0151	18.5%
	2.0	Constant	16	1.000	.0000	0.0%
		two_UNaUK_Urea	16	226.087	52.5351	23.2%
	Total	Constant	16	1.000	.0000	0.0%
		two_UNaUK_Urea	48	268.438	81.4205	30.3%
53	.0	Constant	48	1.000	.0000	0.0%
		two_UNaUK_Urea	16	732.927	135.0815	18.4%
	1.0	two_UNaUK_Urea	16	618.167	93.2196	15.1%



		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	16	493.864	106.9310	21.7%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	48	614.986	148.2537	24.1%
		Constant	48	1.000	.0000	0.0%
54	.0	two_UNaUK_Urea	16	361.083	134.3468	37.2%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	16	289.873	46.5818	16.1%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	16	266.801	25.0164	9.4%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	48	305.919	91.0885	29.8%
		Constant	48	1.000	.0000	0.0%
55	.0	two_UNaUK_Urea	16	783.025	115.7484	14.8%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	16	650.796	116.0380	17.8%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	15	486.197	63.9255	13.1%
		Constant	15	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	47	643.278	157.6759	24.5%
		Constant	47	1.000	.0000	0.0%
56	.0	two_UNaUK_Urea	16	392.079	75.1146	19.2%
		Constant	16	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	16	342.656	70.5871	20.6%
		Constant	16	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	16	304.170	67.9508	22.3%
		Constant	16	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	48	346.302	78.6554	22.7%
		Constant	48	1.000	.0000	0.0%
Total	.0	two_UNaUK_Urea	136	501.473	199.1982	39.7%
		Constant	136	1.000	.0000	0.0%
	1.0	two_UNaUK_Urea	132	416.014	163.7659	39.4%
		Constant	132	1.000	.0000	0.0%
	2.0	two_UNaUK_Urea	135	371.779	140.2355	37.7%
		Constant	135	1.000	.0000	0.0%
	Total	two_UNaUK_Urea	403	430.036	177.6263	41.3%
		Constant	403	1.000	.0000	0.0%

**Model Dimension<sup>a</sup>**

		Number of Levels	Covariance Structure	Number of Parameters	Subject Variables
Fixed Effects	Intercept	1		1	
	UFEV_h_I_perdiet	3		2	
Random Effects	Constant <sup>b</sup>	1	Variance Components	1	subject
Residual				1	
Total		5		5	

a. Dependent Variable: two\_UNaUK\_Urea.

b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information.

**Information Criteria<sup>a</sup>**

-2 Restricted Log Likelihood	4823.622
Akaike's Information Criterion (AIC)	4827.622
Hurvich and Tsai's Criterion (AICC)	4827.652
Bozdogan's Criterion (CAIC)	4837.605
Schwarz's Bayesian Criterion (BIC)	4835.605

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: two\_UNaUK\_Urea.

**Fixed Effects**

**Type III Tests of Fixed Effects<sup>a</sup>**

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	9.016	91.100	.000
UFEV_h_I_perdiet	2	391.019	65.334	.000

a. Dependent Variable: two\_UNaUK\_Urea.

#### Estimates of Fixed Effects<sup>a</sup>

Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	378.571622	46.136361	9.393	8.205	.000	274.865260	482.277983
[UFEV_h_I_perdiet=.0]	128.142319	11.397722	391.016	11.243	.000	105.733833	150.550804
[UFEV_h_I_perdiet=1.0]	43.741708	11.485954	391.021	3.808	.000	21.159756	66.323660
[UFEV_h_I_perdiet=2.0]	0 <sup>b</sup>	0	.	.	.	.	.

a. Dependent Variable: two\_UNaUK\_Urea.

b. This parameter is set to zero because it is redundant.

## Covariance Parameters

#### Estimates of Covariance Parameters<sup>a</sup>

Parameter	Estimate	Std. Error
Residual	8800.544118	629.400915
Constant [subject = subject] Variance	20622.346570	9822.048676

a. Dependent Variable: two\_UNaUK\_Urea.