# Supplement

**Impact of fish oil supplementation on omega-3 fatty acids and their derived lipid metabolites in patients with** **parenteral nutrition**

Weylandt et al.

Supplementary Table1:

Fatty acid composition of Omegaven and Lipovenös MCT 20 % batch used in PN during longitudinal study

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| --- | --- | --- |
| Fatty acid [mg/ml] | Omegaven 10 % | Lipovenös MCT 20% |
| C12:0 | 0,00 | 0,00 |
| C14:0 | 1,48 | 0,00 |
| C14:1 | 0,00 | 0,00 |
| C16:0 | 3,67 | 0,36 |
| C16:1 | 0,60 | 0,52 |
| C18:0 | 2,33 | 4,11 |
| C18:1 cis | 10,84 | 21,28 |
| C18:2 | 0,26 | 48,32 |
| C18:3 n-3 | 2,08 | 7,99 |
| C18:3 n-6 | 0,63 | 0,00 |
| C20:1 | 0,37 | 0,00 |
| C20:3 | 0,00 | 0,00 |
| C20:4 n-3 | 0,74 | 0,00 |
| C20:4 n-6 | 1,10 | 0,43 |
| C20:5 n-3 | 15,69 | 0,00 |
| C22:1 | 1,83 | 1,84 |
| C22:5 n-3 | 1,01 | 0,00 |
| C22:5 n-6 | 0,35 | 0,21 |
| C22:6 n-3 | 13,59 | 0,39 |

Data are result of a single measurement

Supplementary Table 2:

Presence of oxylipins in Omegaven batch used

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| --- | --- |
| Oxylipin [ng/ml] | Omegaven 10 % |
| 8,9-EET | n.d. |
| 11,12-EET | n.d. |
| 14,15-EET | n.d. |
| 5,6-DHET | n.d. |
| 8,9-DHET | n.d. |
| 11,12-DHET | n.d. |
| 14,15-DHET | n.d. |
| 8,9-EEQ | n.d. |
| 11,12-EEQ | n.d. |
| 14,15-EEQ | n.d. |
| 17,18-EEQ | n.d. |
| 5,6-DiHETE | 2,00 |
| 8,9-DiHETE | n.d. |
| 11,12-DiHETE | n.d. |
| 14,15-DiHETE | n.d. |
| 17,18-DiHETE | 2,80 |
| 7,8-EDP | 3,15 |
| 10,11-EDP | 4,87 |
| 13,14-EDP | n.d. |
| 16,17-EDP | n.d. |
| 19,20-EDP | n.d. |
| 7,8-DiHDPA | n.d. |
| 10,11-DiHDPA | n.d. |
| 13,14-DiHDPA | n.d. |
| 16,17-DiHDPA | n.d. |
| 19,20-DiHDPA | n.d. |
| 20-HETE | n.d. |
| 20-HEPE | n.d. |
| 22-HDHA | 0,99 |
|  |  |

|  |  |
| --- | --- |
| Oxylipin [ng/ml] | Omegaven 10 % |
| 5-HETE | n.d. |
| 5-HEPE | 6,53 |
| 4-HDHA | 6,66 |
| 7-HDHA | 4,16 |
| 12-HETE | n.d. |
| 12-HEPE | 4,35 |
| 14-HDHA | 6,80 |
| 15-HETE | n.d. |
| 15-HEPE | 2,76 |
| 17-HDHA | 11,75 |
| 18-HEPE | 7,35 |
| 9-HETE | n.d. |
| 9-HEPE | 3,08 |
| 8-HETE | n.d. |
| Resolvin D1 | n.d. |
| Resolvin D2 | n.d. |
| Resolvin D3 | n.d. |
| Resolvin D5 | n.d. |
| Resolvin E1 | n.d. |
|  |  |

Data are result of a single measurement of total oxylipins, as described in Materials and Methods. n.d. – not detected.