Ethanol deprivation and central 5-HT deficiency differentially affect the mRNA editing of the 5-HT_{2C} receptor in the mouse brain

Supplementary Results

"High ethanol-drinking" mice exhibit an increased ethanol consumption and preference compared to low ethanol-drinking mice

Ethanol consumption among mice, categorized as high and low-ethanol drinkers, significantly changed over the course of 24 days (a significant ethanol group x day interaction ($F_{23,138}=1.67$, p=0.038, $\eta^2_p=0.22$), a significant effect for the ethanol group ($F_{1,6}=6.35$, p=0.045, $\eta^2_p=0.51$) and day ($F_{23,138}=2.17$, p=0.0032, $\eta^2_p=0.27$); Suppl. Fig. 1a). Post hoc analysis using the Tukey test revealed that high ethanol drinkers exhibited an increased ethanol intake on day 19 compared to day 1 (p=0.004, Suppl. Fig.1a). Ethanol intake levels remained stable in low-ethanol drinkers throughout the 24-day period (p>0.05; Suppl. Fig. 1a).

Ethanol preference was altered by the duration of drinking (a significant ethanol group x day interaction (F_{23,138}=1.64, p=0.042, η^2_p =0.22), a significant effect for the ethanol group (F_{1,6}=7.08, p=0.037, η^2_p =0.54) and day (F_{23,138}=2.05, p=0.006, η^2_p =0.25); Suppl. Fig.1b). The Tukey test demonstrated that high-ethanol drinkers displayed a higher ethanol preference on days 11 and 19 compared to day 1 (p=0.038, and p=0.003, respectively; Suppl. Fig. 1b). There was no change in ethanol preference in the "low ethanol-drinking group" over the 24-day period (p>0.05; Suppl. Fig. 1b).



Suppl. Fig. 1 Ethanol consumption and preference in C57BL/6N mice categorized as high and low-ethanol drinkers. During 24 days, the animals had access to both water and 10% ethanol using a two-bottle free-choice procedure. Based on the amount of ethanol consumed during the final week of ethanol drinking, the mice were divided into "high" (HD) and "low (LD) ethanol-drinking" groups. (a) ethanol consumption – g of pure ethanol ingested within one day per kg of body weight, (g/kg/d); (b) ethanol preference – g of ethanol consumed per day as a percentage of the total liquid consumed. The data is presented as the means (\pm SEM) (n = 4 mice/group). (a) one-way repeated measures ANOVA followed by the Tukey test: **p<0.01 vs. day 1 (HD group); p<0.05: main effect for the ethanol group; p<0.01 vs. day 1 (HD group); p<0.05: main effect for the ethanol group; p<0.01 vs. day 1 (HD group); p<0.01: main effect for the day.