

Acetaldehyde metabolism by brain homogenates of UChA and UChB rats

Tampier,

Quintanilla,

The disappearance rate of acetaldehyde added to brain homogenates from UChA (genetically low ethanol consumer) and UChB (genetically high ethanol consumer) rats, was studied by the head space method and gas chromatography. The results showed higher disappearance rate of added acetaldehyde by homogenates from UChB than UChA rats, both under free choice of 10% ethanol solution and water. Long term deprivation of ethanol did not influence this disappearance rate in UChB rats, supporting the idea that this difference is of genetic origin. The acetaldehyde disappearance rate was significantly higher in UChA rats forced to drink only ethanol for 21 to 30 days, than under free choice, of water and ethanol solution. The possibility that this difference between strains could influence appetite for alcohol remains open, since UChA rats having access to only 10% ethanol solution for more than a month returned to voluntary low intake when offered free choice between this ethanol solution and water