

## Correlation between ethanol tolerance and acetaldehyde disposal rate by brain homogenates from UChA and UChB rats

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As previously reported UChA rats (low ethanol consumer) develop tolerance to the narcotic effect of ethanol, while UChB rats (high ethanol consumer) did not develop tolerance under the same conditions. They also have a different disappearance rate of added acetaldehyde when incubated with brain homogenates, it being higher in UChB rats. It was therefore considered pertinent to study the possible role of these differing capacities in the development of tolerance. In UChA rats, at 21 days on 10% ethanol as the only drinking fluid, tolerance was maximal, the rate of disappearance of acetaldehyde incubated with brain homogenates was significantly higher than that in controls. On the contrary UChB rats maintained under the same drinking conditions did not change the disappearance rate of added acetaldehyde. In UChA rats at 150 days on forced ethanol intake, tolerance disappeared and the acetaldehyde disappearance rate was similar to that in controls. The results show that the increase of ac