

Effect of captopril on voluntary consumption of ethanol, water and solid food by UChA and UChB rats

Tampier, Lutske

Guivernau, Mauricio

Mardones, Jorge

Angiotensin converting enzyme inhibitors (ACEI) have been reported to reduce ethanol consumption in rats, but it is unclear whether this effect is specific for ethanol or secondary to effects on appetite or satiation for calories or water. In the present study we assessed the effect of captopril, an ACEI, on the voluntary consumption of 10% ethanol solution, water and solid food in our strain of rats genetically selected for their voluntary consumption of ethanol, namely UChA (low consumer) and UChB (high consumer). Captopril (30 mg/kg) was injected intraperitoneally for 3 consecutive days to UChA and UChB rats and ethanol, water and food intake were measured before, during and after captopril treatment; these results were compared with those produced by a control saline solution. Results showed that captopril produced a significant reduction of alcohol voluntary consumption in UChB but not in UChA rats. However, this effect was not specific for ethanol since captopril also induced a s