

THE STRUCTURE OF ETHANOL DRINKING IN ANIMAL MODELS

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ABSTRACT – Rat models can give important variables involved in the control of human alcohol consumption. The behavioral studies in the animal have been showed different factors regulating bout size and bout frequency of drinking alcohol. The relative reinforcing ability of ethanol or its efficacy is dependent on a variety of factors, including prior experience, time since last drinking bout, the effects of physical dependence. When the ethanol is delivered either intravenously or intragastrically, it appears to have increased potency compared to the oral route. Delay of the onset factor via the oral route is important and influences the process of consumption regulation. The reinforcing efficacy of ethanol changes during normal drinking episodes. At the beginning of an episode efficacy is relatively greater than at the end. Bout size may have a genetic contribution. In studies limited access to ethanol the selected P (alcohol-preferring) line of rats were found to show greater reinforcing efficacy of ethanol than other outbred lines of rats. The factor that may be important in regulating bout size is the composition of the solution in which the ethanol is presented. Studies employing sucrose solutions in which ethanol is presented have resulted in greater bout size. So, beverage taste is an important factor in regulation of alcohol intake.

Key words: alcohol, bout size, bout frequency, factors of drinking.