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## THE BI-CONCEPTIONAL MODEL OF BRAIN'S ETHANOL EFFECT

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**Introduction:** To identify a general view of the effect of alcohol on brain's functions, we developed a model that identifies the effect of underlying biochemical products of ethanol and its metabolites on brain functions.

**Aim:** To provide a general model for explaining alcohol effect on brain functions.

**Materials and methods:** Peer reviewed materials from Pubmed, Index Medicus, Elsevier from the year 1950 to April 2009 on the effect of ethanol at varying doses on the functions of the brain and liver were examined.

**Results and conclusion:** The bi-conception model of brain's ethanol effect holds that the effects that results from the intake of alcohol even in moderate doses is the resultant effect of hypoglycemic condition (inhibition of glyconeogenesis by increase in NADH/NAD and Lactate/pyruvate ratio) as well as direct effect of ethanol to the brain. Disglycemic control results in many alcohol related effect - like hyperketosis, steatosis, hepatitis, liver cirrhosis etc. Coagulopathy from liver dysfunction is also a major reason for the brain's ethanol effect. The resultant effect (dose-time-dependent effect) on brain functions might be ADHD, various psycho-dysfunctions etc. The extent of hypoglycemia predicts the capacity of neuronal functions.