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[A taste for alcohol](#)

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The flavour of beer alone may activate a brain region that provokes the urge to become intoxicated, according to a study published this week in *Neuropsychopharmacology*. The research suggests that this effect may be stronger in people with a genetic predisposition for alcoholism.

In animals, alcohol and other intoxicating drugs increase release of the neurotransmitter dopamine in a reward-related brain region called the striatum. However, sensory cues associated with intoxication also provoke dopamine activity and drive drug-seeking behaviour.

To determine if alcohol-related flavours alone can activate this response in humans, David Kareken and colleagues measure changes in dopamine release in 49 men (of varied drinking habits and family histories of alcoholism) while the men tasted beer. Although the beer used was alcoholic, the

amount consumed was too small to cause a pharmacological effect. The authors report that, compared to a control flavour of similar intensity, beer flavour produced a significantly greater increase in self-reported desire to drink, and also induced dopamine release in the striatum. The increase in dopamine release was greatest in men with first-degree alcoholic relatives.

The results demonstrate that the flavour of an alcoholic drink induces striatal dopamine release in the human brain, and that the magnitude of this effect is related to familial alcoholism. The findings suggest a possible brain mechanism of inherited alcoholism risk.

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