

Scientists have discovered a natural protein in the brain which could be used to suppress the desire to drink alcohol, potentially leading to a cure for binge drinking and alcoholism shows new study.

The study by University of North Carolina School of Medicine discovered that this new found protein can "put the brakes" on binge drinking; consuming dangerous amounts of alcohol in a short period of time.

"Using a series of genetic and pharmacological approaches we identified how a compound in the brain, Neuropeptide Y (NPY), can suppress this dangerous behaviour.

"Specifically, we found that NPY acted in a part of the brain known as the extended amygdala, or bed nucleus of the stria terminalis, that we know is linked to both stress and reward.

"This anti-drinking effect was due to increasing inhibition (the brakes) on a specific population of cells that produce a 'pro-drinking' molecule called corticotropin releasing factor (CRF).

"When we then mimicked the actions of NPY using engineered proteins, we were also able to suppress binge alcohol drinking in mice.

"Finally, we found that this anti-drinking NPY system is altered by long-term alcohol drinking in multiple species, suggesting that this may be either a marker or treatment for alcohol abuse." Assistant professor Thomas Kash, from the departments of pharmacology and psychology, told The Telegraph.

"The identification of where in the brain and how NPY blunts binge drinking, and the observation that the NPY system is compromised during early binge drinking prior to the transition to dependence, are novel and important observations.

"What is particularly exciting is that these findings suggest that restoring NPY may not only be useful for treating alcohol use disorders, but may also protect some individuals from becoming alcohol dependent." added Professor of psychology Todd Thiele.

This is not the first time a study has analysed the role that NPY plays in influencing the desire to drink alcohol. In other research a protein called RGS6 was found to control alcohol cravings. Men drinking three pints of beer and women drinking two large glasses of wine per night and who do not cut down within two weeks should be prescribed a new drug, Nice said.

The drug called Nalmefene is taken when they feel the urge to have a drink and eliminates the craving to do so. It blocks opiate receptors, stopping endorphins otherwise produced by alcohol, and giving a feeling of pleasure.

Source: The Telegraph