

Alcoholism Linked to Chemical Imbalance

Researchers found that a chemical imbalance in the brain could be the reason why some people are more likely to become compulsive drinkers, Reuters reported March 21.

In studying the brains of people with a family history of alcohol abuse, scientists from the State University of New York Health Science Center in Brooklyn, N.Y., identified an imbalance between two chemical signaling systems that regulate the stimulation and inhibition of brain cells.

Dr. Henri Begleiter explained that the balance between the neurotransmitters that manage inhibition and excitability is "absolutely critical" for proper brain function. Because alcohol acts quickly on the brain pathway involved in stimulation or "excitability," researchers concluded that alcoholics may drink to restore the balance in their brains.

The research also showed that alcoholics tend to take more risks and be more aggressive and antisocial because of a deficit in the inhibiting system in the brain.

The study's findings were based on measurements of electrical activity in the brains of two groups of non-alcoholic teens and young adults -- 16 with a family history of alcoholism, and 22 at low risk of becoming an alcoholic.

The research is published in the March issue of the journal [Alcoholism: Clinical and Experimental Research](#).