Alcohol abuse is in the genes

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According to a study by the research group "Alcoholism and drug addiction", of the University of Granada (Universidad de Granada), although there are no specific reasons to become an alcoholic, many social, family, environmental, and genetic factors may contribute to its development. Thanks to this study, researchers have shown that the lack of endorphin is hereditary, and thus that there is a genetic predisposition to become addicted to alcohol.

Beta-endorphin is a kind of “morphine” released by the brain in response to several situations, such as pain. In this way, beta-endorphins can be considered “endogenous analgesics” to numb or dull pains.

Researchers have focused on the low beta-endorphin levels in chronic alcohol abusers. According to José Rico Irles, lecturer of Medicine of the UGR, and head of the research group, this low beta-endorphin level determines whether someone may become an alcoholic. When a subjects’ brain with low beta-endorphin levels gets used to the presence of an exogenous surplus, then, when its own production stops, a dependence starts on the external source: alcohol.

A total of 200 families of the Southern Spanish province of Granada participated in the research. There was at least one chronic alcoholic parent in each family. From birth, each subject presented predetermined beta-endorphin levels. However, children of this population group aged between 6 months and 10 years old, registered lower beta-endorphin levels than other children of the same age. ”These levels were even lower in children whose both parents were alcohol abusers”, the researcher

states.

According to researcher, although alcohol consumption does not affect all people in the same way, differences in endorphin levels make some subjects more vulnerable to alcohol. Therefore, they are more likely to become alcohol dependent.

Beta-endorphins constitute a useful biological marker to identify specifically those subjects who have a higher risk of developing alcohol abuse, the research claims.

Regarding the results of this study, professor Rico states the following: “alcohol-abuse prevention must consist of locating and identifying genetically predisposed subjects.” More campaigns for children and teenagers should be launched before these young people make contact with alcohol. Alcohol awareness is fundamental to prevent addiction, the researcher affirms, because alcohol is a drug with reversible effects up to a point.

In relation to the “botellón culture” (gathering in the streets to drink with friends), José Rico states that some of these “social drinkers” could have low beta-endorphin levels and, therefore, a higher predisposition to become “solitary drinkers” and to develop alcohol abuse.

Source: Universidad de Granada