Triglycerides in Junk Food are the Chemical Equivalent of ‘Hard Drugs’ for the Brain

(NaturalNews – Ethan A. Huff) Millions of Americans who claim to be opposed to drug use are actually heavy drug users themselves, according to a new study out of France. Researchers from the University of Paris’ Functional and Adaptive Biology laboratory recently found that triglycerides, a type of fat often found in junk foods, act on the brain in the same manner as many street drugs, exposing an epidemic of inadvertent drug addiction via the standard American diet.

Serge Luquet and his team, publishing their findings in the April 15, 2014, issue of the journal *Molecular Psychiatry*, tested the effects of triglycerides on mice. Having previously learned that these lipid compounds stimulate certain areas of the brain associated with pleasure and reward, the team decided to see how mice reacted to having a steady supply of triglycerides infused directly into their brains.

A body conditioned to high fat intake will constantly seek it out like a drug fix

Compared to mice not receiving the triglycerides, the test mice were less motivated than control mice to seek out more food, indicating a dose-response effect from consuming the fats. All the mice were allowed to access special levers that dispensed various food rewards, but those mice given the triglycerides were less likely to have brain activity telling them to eat more.

On the flip side, the mice not given triglycerides were found

to be much more compulsive when it came to getting their food. Much in the same way that drug addicts have to constantly seek out their next “fix” in order to function, the control mice, who like all mice naturally desire high-fat, high-sugar foods, tended toward obsessively craving the food rewards.

“[T]riglycerides, fatty substances from food, may act in our brains directly on the reward circuit, the same circuit that is involved in drug addiction,” reads a summary of the report.

Brain responds to fat intake the same way it responds to hard drugs

Using a fluorescence microscope to analyze the mice’s individual brain activity, the research team was able to ascertain a specific enzyme in the brain that decomposes triglycerides, producing feelings of pleasure and satisfaction. When this enzyme is removed or deactivated, as the researchers did with the test mice, the desire for fatty foods becomes insatiable, much in the same way that a drug addict goes through withdrawals when cut off from his preferred substances.

Interestingly, the infused mice tended toward reduced physical activity and decreased likelihood of balancing a diet of both high-fat foods and simpler foods, compared to control mice who were obsessed with trying to gain access to the fats.

Many obese people are ‘drug’ addicts to triglycerides, unhealthy foods

In the end, this constant desire for fatty foods can lead to binge eating and gluttony, which in turn results in obesity for many people. Not surprisingly, obese individuals tend to

have excessively high levels of triglycerides in both their blood and brain, and are typically more sedentary than the average person.

"[W]ith obesity, blood (and therefore brain) triglyceride levels are higher than average," reads a *ScienceDaily.com* summary of the study's outcomes. "So obesity is often associated with overconsumption of sugary, fatty foods. … At high triglyceride contents, the brain adapts to obtain its reward, similar to the mechanisms observed when people consume drugs."

You can read a full press release of the study here: http://www2.cnrs.fr.

Sources for this article include:
http://www.sciencedaily.com
http://www2.cnrs.fr