

Fructose consumption increases risk factors for heart disease

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A recent study accepted for publication in The Endocrine Society's *Journal of Clinical Endocrinology & Metabolism (JCEM)* found that adults who consumed high fructose corn syrup for two weeks as 25 percent of their daily calorie requirement had increased blood levels of cholesterol and triglycerides, which have been shown to be indicators of increased risk for heart disease.

The American Heart Association recommends that people consume only five percent of calories as added [sugar](#). The [Dietary Guidelines](#) for Americans 2010 suggest an upper limit of 25 percent or less of daily calories consumed as added sugar. To address this discrepancy in recommended consumption levels, researchers examined what happened when young overweight and normal weight adults consumed fructose, high [fructose corn](#) syrup or glucose at the 25 percent upper limit.

"While there is evidence that people who consume sugar are more likely to have heart disease or diabetes, it is controversial as to whether high sugar diets may actually promote these diseases, and dietary guidelines are conflicting," said the study's senior author, Kimber Stanhope, PhD, of the University of California, Davis. "Our findings demonstrate that several factors associated with an elevated risk for cardiovascular disease were increased in individuals consuming 25 percent of their calories as fructose or [high fructose](#) corn syrup, but consumption of glucose did not have this effect."

In this study, researchers examined 48 adults between the ages of 18 and 40 years and compared the effects of consuming 25 percent of one's daily calorie requirement as glucose, fructose or high fructose corn syrup on risk factors for cardiovascular disease. They found that within two weeks, study participants consuming fructose or high fructose [corn syrup](#), but not glucose, exhibited increased concentrations of LDL cholesterol, triglycerides and apolipoprotein-B (a protein which can lead to plaques that cause vascular disease).

"These results suggest that consumption of sugar may promote [heart disease](#)," said Stanhope. "Additionally our findings provide evidence that the upper limit of 25 percent of daily calories consumed as added sugar as suggested by The Dietary Guidelines for American 2010 may need to be re-evaluated."

Provided by The Endocrine Society

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