



Fructose tied to higher blood pressure: study

Wed Sep 23, 2009 5:16pm EDT

By [David Morgan](#)

WASHINGTON (Reuters) - A diet high in a form of sugar found in sweetened soft drinks and junk food raises blood pressure among men, according to research likely to mean more bad news for beverage companies and restaurant chains.

One of two studies released on Wednesday provided the first evidence that fructose helps raise blood pressure. It also found that the drug allopurinol, used to treat gout, can alleviate the effect by reducing uric acid levels in the body.

The second study, which measured fructose intake in mice, suggested that people who consume junk foods and sweetened soft drinks at night could gain weight faster than those who don't.

"These results suggest that excessive fructose intake may have a role in the worldwide epidemic of obesity and diabetes," said Dr. Richard Johnson of the University of Colorado-Denver, who studied the link between blood pressure and men.

The findings provide the latest evidence of ties between sugar-rich diets and health problems that have prompted some experts to call for a tax on sugary soft drinks.

Fructose accounts for about half the sugar molecules in table sugar and in high-fructose corn syrup, the sweetener used in many packaged foods.

Johnson and colleagues at the Mateo Orfila Hospital in Spain studied 74 men given 200 grams of fructose per day on top of their regular diet. That amount is well above a daily intake of 50 grams to 70 grams of fructose consumed by most American adults.

Half the men were also given allopurinol.

After two weeks, the men who received only the fructose registered increases of six millimeters in systolic blood pressure -- the top reading -- and about three millimeters in diastolic or the bottom reading, the researchers told an American Heart Association meeting in Chicago.

REVERSIBLE EFFECT

Most of their blood pressure readings returned to normal levels after two months.

The men who did not get allopurinol also were twice as likely to develop metabolic syndrome, measured by risk factors such as too much abdominal fat, high blood pressure and poor cholesterol readings.

By contrast, those given allopurinol and fructose had significantly lower uric acid levels, and virtually no increase in systolic blood pressure or higher risk of metabolic syndrome.

For the second study, researchers in Ohio studied mice given fructose water to drink. Some had unrestricted access, while others received it during the day or at night.

"The first thing we noticed was that the mice on restricted access rushed to their drinking bottles to load up on the sweetened beverage, similar to teenagers who drink too many soft drinks," said Mariana Morris of Wright State University in Dayton, Ohio.

The mice that drank fructose water during their regular daylight sleeping hours gained more weight and had higher stress hormone levels than the other mice.

"This model may be similar to the human condition of night time bingeing of fructose-laden foods and beverages," Morris said.

The American Heart Association says women should eat no more than 100 calories of added processed sugar per day, or six teaspoons (25 grams), while most men should keep it to just 150 calories or nine teaspoons (37.5 grams). On average Americans consume 22 teaspoons (90 grams) or 355 calories of added sugar each day.

(Editing by [Maggie Fox](#) and [Xavier Briand](#))