

## High Fructose Intake Correlated With High Blood Pressure

High fructose consumption is independently associated with high blood pressure, according to findings at Renal Week 2009: American Society of Nephrology 2009 Annual Meeting.

An analysis of data from more than 4500 participants in the National Health and Nutrition Examination Survey (NHANES) showed that consuming 74 grams or more of fructose per day correlated significantly with blood pressure of at least 135/85 mm Hg; the relation grew stronger as blood pressure rose. The survey participants had no history of hypertension.

Fructose consumption, in the form of added sugar, has been rising in Western nations since the 1900s, and parallels the growing prevalence of hypertension.

Food rich in fructose content include bakery products, dairy desserts, chocolate and other candy, dried fruits, honeys, jams, jellies, syrups, and sugar-sweetened soft drinks. Fresh fruits were excluded from the analysis because they contain ascorbate, antioxidants, and potassium, which counteract the effect of fructose.

Daily fructose consumption of 74 g or more was independently associated with a 28% increased risk for blood pressure of 135/85 mm Hg or higher, a 36% increased risk for blood pressure of 140/90 mm Hg or higher, and an 87% increased risk for blood pressure of 160/100 mm Hg or higher.

The relation was seen only between systolic blood pressure and fructose intake. There was no correlation between fructose consumption and diastolic blood pressure.

"In subjects with no history of hypertension, there is an independent and significant graded association between high fructose intake and systolic blood pressure levels. The mechanism underlying the relation is unclear.

Among other variables, black ethnicity and waist circumference were significantly associated with higher levels of fructose intake, independent of calorie or carbohydrate consumption. Inverse correlations were seen for sodium and alcohol consumption and fructose.

This study shows that we must pay more attention to the nutritional needs of the patients.

*Dr. Jalal and Dr. Ikizler have disclosed no relevant financial relationships.*

*Renal Week 2009: American Society of Nephrology (ASN) 2009 Annual Meeting: Abstract TH-FC037. Presented October 29, 2009.*

---