

High Blood Pressure Linked to HFCS *

If overloading your pancreas is not enough to **slow** down your consumption of ***high fructose corn syrup (HFCS)**, you can add one more concern to your list. People who take in the amount of fructose found in two-and-a-half regular soft drinks per day appear to have a higher risk of hypertension.

A cross-sectional study

showed that consumption of 74 grams (or 18.5 teaspoons) per day of HFCS was associated with 26% to 77% incidence of elevated blood pressure. Non-diet soda has 3.5 to 5 grams of HFCS in each ounce. [This study](#) was performed by Diana Jalal, MD, and colleagues of the University of Colorado Denver.

"Limiting fructose (HFCS) intake is feasible

and in light of our results, prospective studies are needed to assess whether decreased intake of HFCS will reduce incidence of hypertension and the burden of cardiovascular disease in the U.S. adult population," they wrote online in the [Journal of the American Society of Nephrology](#).

In developed nations, recent rises in

consumption of fructose is mainly due to the addition of HFCS or table sugar to soft drinks, bakery products, fruit drinks, dairy desserts and candies. At the same time, the prevalence of hypertension has been rising. Epidemiological studies have yielded conflicting results regarding an association between the two trends.



To explore the issue, Jalal used data from 4,528 adults with no history of hypertension included in the National Health and Nutrition Examination Survey (NHANES) from 2003 to 2006. Fructose intake was determined through a self-reported dietary questionnaire.

Consumption of natural fruits was excluded to isolate intake of added sugar. Median intake was 74 grams a day. Increasing systolic blood pressure was associated with increasing fructose intake. It raised their risk of having blood pressure of 135/86 by 26 percent, of 140/90 by 30 percent and there was a 77 percent higher risk for blood pressure of 160/100 or more.

After adjusting for physical activity, smoking, demographics, co-morbidities, total calorie intake and dietary confounders including total carbohydrate, alcohol, salt, potassium, and vitamin C intake, as well as other factors, 74 grams/ day of fructose intake of was linked to elevated blood pressure.

Additional analyses showed that fructose intake was associated with systolic -- but not diastolic -- blood pressure.

There are several possible mechanisms

that might explain the association between fructose and blood pressure, the authors wrote, "including stimulation of uric acid, inhibition of [the] endothelial nitric oxide synthase system, and stimulation of the sympathetic nervous system, or by directly increasing sodium absorption in the gut." Do you know the sources of HFCS in your diet? It adds up quickly!

