

High fructose diet may contribute to high blood pressure

July 1 2010

People who eat a diet high in fructose, in the form of added sugar, are at increased risk of developing high blood pressure, or hypertension, according to a study appearing in an upcoming issue of the *Journal of the American Society Nephrology* (JASN). The results suggest that cutting back on foods and beverages containing a lot of fructose (sugar) might decrease one's risk of developing hypertension.

Hypertension is the most common chronic condition in developed countries and a major risk factor for heart and kidney diseases. Researchers are striving to identify environmental factors that might be responsible for the development of hypertension, and they suspect that fructose may play a role. Over the past century, a dramatic increase in the consumption of this simple sugar, which is used to sweeten a wide variety of processed foods, mirrors the dramatic rise in the prevalence of hypertension.

To examine whether increased fructose consumption has contributed to rising rates of hypertension, Diana Jalal, MD (University of Colorado Denver Health Sciences Center) and her colleagues analyzed data from the National Health and Nutrition Examination Survey (2003-2006). The study involved 4,528 US adults 18 years of age or older with no prior history of hypertension. Study participants answered questions related to their consumption of foods and beverages such as fruit juices, [soft drinks](#), bakery products, and candy. Dr. Jalal's team found that people who consumed a diet of 74 grams or more per day of fructose (corresponding to 2.5 sugary soft drinks per day) had a 26%, 30%, and

77% higher risk for blood pressure levels of 135/85, 140/90, and 160/100 mmHg, respectively. (A normal [blood pressure](#) reading is below 120/80 mmHg.)

"Our study identifies a potentially modifiable risk factor for [high blood pressure](#). However, well-planned prospective randomized clinical studies need to be completed to see if low [fructose](#) diets will prevent the development of hypertension and its complications," said Dr. Jalal.

More information: The article, entitled "Increased Fructose Associates with Elevated Blood Pressure," will appear online at [doi:10.1681/ASN.2009111111](https://doi.org/10.1681/ASN.2009111111)

Provided by American Society of Nephrology

Citation: High fructose diet may contribute to high blood pressure (2010, July 1) retrieved 2 May 2024 from <https://medicalxpress.com/news/2010-07-high-fructose-diet-contribute-blood.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--