

Sugar-sweetened drinks raise risk of diabetes, metabolic syndrome

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Regularly drinking sugar-sweetened beverages such as soda and juice contributes to the development of diabetes, high blood pressure and other endemic health problems, according to a review of epidemiological

studies published in the *Journal of the Endocrine Society*.

The analysis also found a link between sugar-sweetened beverage consumption and the [metabolic syndrome](#)—a cluster of [risk factors](#) that raise the chances of developing heart disease, stroke and [diabetes](#), according to the [Hormone Health Network](#). The risk factors include abdominal obesity, high levels of fats in the blood known as triglycerides, elevated blood pressure, high-fasting blood sugar and reduced high-density lipoprotein (HDL), or good, cholesterol levels.

The World Health Organization estimates that cardiometabolic conditions such as the metabolic syndrome and diabetes result in 19 million deaths a year.

"Sugar-sweetened beverage consumption is steadily rising among all age groups worldwide," said the review's senior author, M. Faadiel Essop, Ph.D., of Stellenbosch University in Stellenbosch, South Africa. "Our analysis revealed that most [epidemiological studies](#) strongly show that frequent intake of these beverages contributes to the onset of the metabolic syndrome, diabetes and hypertension."

The authors reviewed 36 studies on the cardiometabolic effects of sugar-sweetened beverage consumption from the past decade. Since some recent studies reached conflicting findings regarding the relationship between beverage consumption and health conditions such as diabetes and heart diseases, the researchers critically assessed the research landscape for overall trends.

Although there were some studies with negative or neutral findings, most of the studies supported a link between sugar-sweetened beverage consumption and the risk of developing the metabolic syndrome. Most of the analyzed studies looked at individuals who drank more than five sugar-sweetened beverages a week.

Studies on diet and diabetes revealed consuming as few as two servings of sugar-sweetened beverages a week was linked to an increased risk of developing type 2 diabetes. Several of the analyzed studies found drinking at least one sugar-sweetened beverage a day was associated with elevated blood pressure.

"The findings demonstrate there is a clear need for public education about the harmful effects of excess consumption of sugar-sweetened beverages," Essop said. "But our understanding of this topic would benefit from additional research to further clarify how [sugar-sweetened beverages](#) affect our health. We do see some limitations in the current research on this topic, including a need for longer-term studies and standardized research methods."

More information: "Frequent Sugar-sweetened Beverage Consumption and the Onset of Cardiometabolic Diseases: Cause for Concern?," [DOI: 10.1210/js.2017-00262](https://doi.org/10.1210/js.2017-00262)

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