

Sugar-sweetened beverages may increase cardiovascular risk in women

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Drinking two or more sugar-sweetened beverages a day may expand a woman's waistline and increase her risk of heart disease and diabetes, according to research presented at the American Heart Association's Scientific Sessions 2011.

In this study, researchers compared middle-aged and older women who drank two or more sugar-sweetened beverages a day, such as carbonated sodas or flavored waters with added sugar, to women who drank one or less daily. Women consuming two or more beverages per day were nearly four times as likely to develop high triglycerides, and were significantly more likely to increase their waist sizes and to develop impaired fasting glucose levels. The same associations were not observed in men.

"Women who drank more than two sugar-sweetened drinks a day had increasing waist sizes, but weren't necessarily gaining weight," said Christina Shay, Ph.D., lead author of the study and assistant professor at the University of Oklahoma Health Sciences Center in Oklahoma City. "These women also developed high triglycerides and women with normal [blood glucose levels](#) more frequently went from having a low risk to a high risk of developing diabetes over time."

The Multi-Ethnic Study of Atherosclerosis (MESA) included food frequency surveys in 4,166 African-American, Caucasian, Chinese-Americans and Hispanic adults 45 to 84 years old. At the beginning of the study the participants didn't have cardiovascular disease.

Researchers assessed risk factors in three follow-up exams spanning five years starting in 2002. Participants were monitored for weight gain, increases in [waist circumference](#), low levels of high density lipoproteins (HDL "good" cholesterol), high levels of low density lipoproteins (LDL "bad" cholesterol), high triglycerides, impaired fasting glucose levels, and [type 2 diabetes](#).

"Most people assume that individuals who consume a lot of sugar-sweetened drinks have an increase in obesity, which in turn, increases their risk for [heart disease](#) and diabetes," said Shay, formerly of Northwestern University's Department of Preventive Medicine in Chicago, where the study was conducted. "Although this does occur, this study showed that risk factors for heart disease and stroke developed even when the women didn't gain weight."

Women may have a greater chance for developing cardiovascular disease risk factors from sugar-sweetened drinks because they require fewer calories than men which makes each calorie count more towards cardiovascular risk in [women](#), Shay said.

Researchers have yet to determine exactly how sugar-sweetened beverages influence cardiovascular [risk factors](#) such as high triglycerides in individuals who do not gain weight, Shay said, but further work is planned to try and figure that out.

Provided by American Heart Association

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