

Sugar-sweetened beverages associated with increased kidney stone risk

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Twenty percent of American males and 10 percent of American females will experience a kidney stone at some point in their lifetime. Often, these patients will be advised to drink more fluids as a way to prevent future stone formation. Now, new research from Brigham and Women's Hospital finds that some beverages may be more helpful than others when it comes to preventing recurrent kidney stones. In a study published online May 15, 2013 in the *Clinical Journal of the American Society of Nephrology (CJASN)*, researchers report that the consumption of sugar sweetened soda and punch is associated with a higher risk of stone formation.

"Our study found that the relation between fluid intake and kidney stones may be dependent on the type of beverage consumed," explained Gary Curhan, MD, ScD, a physician in the Channing Division of Network Medicine at BWH and senior author of this study. "We found that higher consumption of sugar-sweetened drinks was associated with a higher incidence of kidney stones."

The researchers analyzed data from three ongoing cohorts, the [Health Professionals Follow-Up Study \(HPFS\)](#), and both the Nurses' [Health Study I \(NHS I\)](#) and II (NHS II). The total analysis involved 194,095 participants over a median follow-up of more than 8 years. Participants in all the three cohorts had been asked to complete biennial questionnaires with information on [medical history](#), lifestyle, and medication. Questions on diet were updated every four years. They found that participants who consumed one or more sugar-sweetened cola

servings per day had a 23 percent higher risk of developing [kidney stones](#) compared with those participants consuming less than one serving per week. This was true for consuming sugar-sweetened non cola as well, such as punch. They also found that some beverages, such as coffee, tea and [orange juice](#), were associated with a lower risk of stone formation.

"Our prospective study confirms that some beverages are associated with a lower risk of kidney stone formation, whereas others are associated with a higher risk," explained Pietro Manuel Ferraro, MD, a physician at the Catholic University of the Sacred Heart of Rome and corresponding author of this study. "Although higher total fluid intake reduces the risk of stone formation, this information about individual beverages may be useful for general practitioners seeking to implement strategies to reduce stone formation in their patients."

Provided by Brigham and Women's Hospital

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