

Soft drinks and sugar in the diet may have negative effects on the kidneys

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Two new studies highlight the potential negative effects that soft drinks and sugar can have on kidney health. Results of these studies will be presented at ASN Kidney Week 2013 November 5-10 at the Georgia World Congress Center in Atlanta, GA.

In one study, researchers led by Ryohei Yamamoto, MD, PhD (Osaka Univ Graduate School of Medicine, in Japan) found that consuming at least two soft drinks per day is linked with proteinuria—or increased excretion of protein in the <u>urine</u>, which is a hallmark of <u>kidney</u> <u>dysfunction</u>. Among 3579, 3055, and 1342 university employees with normal kidney function at the start of the study who reported that they drink zero, one, and two or more <u>soft drinks</u> per day, 301 (8.4%), 272 (8.9%) and 144 (10.7%) employees developed proteinuria during a median of 2.9 years of follow-up, respectively.

Another study led by Agustin Gonzalez-Vicente (Case Western Reserve University) and conducted in rats found that moderate fructose intake increases the kidney's sensitivity to angiotensin II, a protein that regulates salt balance. This leads to increased salt reabsorption by cells in the kidneys, a finding that might help explain why consumption of high-fructose corn syrup as a sweetener may contribute to the epidemic of diabetes, obesity, kidney failure, and hypertension.

More information: "Soft Drink Intake and Prediction of Proteinuria: A Retrospective Cohort Study." (Abstract 2458)
"Chronic Consumption of Fructose Increases Proximal Tubular



Transport by Enhancing the Sensitivity to Angiotensin II." (Abstract 3955)

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