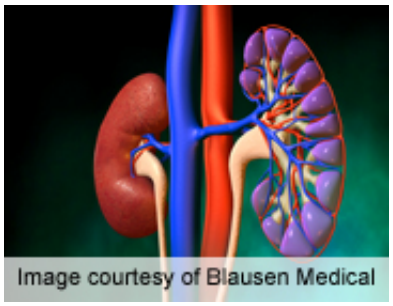
Risk of calcium oxalate stones not affected by oxalate intake

6 June 2012



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(HealthDay) -- Eating large amounts of oxalate does not significantly affect the risk of developing calcium oxalate stones if the recommended amount of dietary calcium is also eaten, according to a study published in the June issue of *Urology*.

Jessica N. Lange, M.D., of the Wake Forest University School of Medicine in Winston-Salem, N.C., and colleagues conducted a study involving 10 adults who were placed on a balanced calcium/oxalate ratio diet (calcium, 1,000 mg; oxalate, 750 mg) for one week, observed a one-week washout period, and finally, were allowed to eat an imbalanced calcium/oxalate ratio diet for one week. The objective of the study was to evaluate whether dietary calcium and oxalate consumption at mealtime affects the absorption of oxalate from the gastrointestinal tract or the excretion of oxalate in the urine.

The researchers found that, in both balanced an imbalanced phases, the total daily calcium excretion, oxalate excretion, and Tiselius index were similar. Urinary calcium excretion was significantly lower in the balanced versus imbalanced diets in the 1 to 6 p.m. and 6 to 11 p.m. time periods, and was significantly higher in the 11 p.m. to 8 a.m. collection. Oxalate excretion was significantly higher on the balanced diet versus the imbalanced diet during the 1 to 6 p.m. time period. No differences in the Tiselius index were observed.

"In conclusion, these results demonstrate that the sequence of consuming a moderate to large amount of food-derived oxalate does not significantly affect calcium oxalate stone risk if the recommended daily quantity of dietary calcium is eaten," the authors write.

More information: Abstract
Full Text (subscription or payment may be required)