Wysokie dawki witaminy C nie powodują kamicy nerkowej

Vitamin & Mineral Safety. Council for Responsible Nutrition 2014.
https://www.crnusa.org/sites/default/files/files/resources/CRN-SafetyBook-3rdEdition-2014-fullbook.pdf

Oxalate Kidney Stones

Early reports of large increases in urinary oxalate levels following high intakes of vitamin C speculated thatoxalate production increased with high intakes of ascorbic acid in an analytical procedure that involved heat (Hoffer 1985). More recent reports based on better assay procedures have indicated a small but significant increase in oxalate excretion (10 to 15 mg, still within the normal range) by persons consuming 1,000 mg of ascorbic acid daily (Levine et al. 1996), though this result might be caused by the instability of ascorbic acid in the urine during collection, storage, or analysis. Some reports assert that ascorbic acid is a risk factor for calcium oxalate kidney stones (Urivetzky et al. 1992). Other research involving alternative sample handling procedures found no increase with a different preparation of ascorbic acid at intakes of up to 8 g per day (Fituri et al. 1983). One study found that oxalate production occurred only in the urine sample in vitro with oral ascorbic acid intakes of up to 10 g (Wandzilak et al. 1994).

A significant contribution of high ascorbic acid intakes to urinary oxalate is not established (Costello 1993), and the association of oxalate kidney stones with higher ascorbic acid intakes remains speculative (Gerster 1986). Indeed, the available epidemiological evidence suggests the exact opposite: a decreased risk of oxalate kidney stones with increased intake of vitamin C. For example, a prospective epidemiological study found the relative risk of oxalate renal stones to be decreased for men consuming 1,500 mg or more vitamin C in comparison with those consuming less than 250 mg (Curhan et al. 1996). These data provide further support for an earlier retrospective study (Fellstrom et al. 1989) that produced similar results. An authoritative review found no risk of oxalate kidney stones in relation to vitamin C intake (IOM 2000).

Padayatty SJ et al. Vitamin C: intravenous use by complementary and alternative medicine practitioners and adverse effects. PLoS One. 2010 Jul 7;5(7):e11414. doi: 10.1371/journal.pone.0011414. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2898816/pdf/pone.0011414.pdf

Table 3. Adverse events reported with IV vitamin C use in the survey for the years 2006 and 2008.

	Number of Patients	
Complication	**2006**	**2008**
None Described	5349	3878
Lethargy/Fatigue	10	49
Local Vein Irritation	3	-
Phlebitis	3	-
Kidney Stone (oxalate)	-	1
Kidney Stone (urate)	-	1
Kidney Stone (unspecified)	2	-

Opracowanie: Tomasz Dangel

Goodwin JS et al. Battling Quackery: Attitudes About Micronutrient Supplements in American Academic Medicine. Arch Int Med 1998; 158(20):2187-91. https://www.researchgate.net/publication/13467491_Battling_Quackery_Attitudes_About_Micronutrient_Supplements_in_American_Academic_Medicine

UNCRITICAL ACCEPTANCE OF NEWS OF TOXICITY: THE EXAMPLE OF HIGH-DOSE VITAMIN C

To illustrate the uncritical acceptance of bad news, we focus on the discussion of one particular toxic effect—kidney stones resulting from megadose vitamin C.

It is well known that high-dose ascorbate ingestion can cause kidney stones.[10-13] In a casual survey of 20 of our physician colleagues, all were aware of the association. But where does this common knowledge come from? A search of the medical literature found no articles in refereed journals reporting instances of high-dose vitamin C causing kidney stones. Instead, review articles cite book chapters that in turn cite abstracts, letters, and other review articles. Take, for example, a 1984 article entitled "Toxic Effects of Water-Soluble Vitamins"[13] that noted that excessive intake of vitamin C may cause kidney stones and cited 7 references to buttress that statement.[14-20] Of these 7 citations, 5 were textbooks or monographs,[14,15,17-19] 1 was a letter to the *Lancet*,[20] and 1 was a case report not related to either ascorbate or kidney stones.[16] Of the 5 books, 2[15,18] cite a total of 2 additional references to substantiate the claim that high-dose vitamin C causes kidney stones; one was a letter[21] and another a chapter.[22] This chapter in turn cites the same *Lancet* letter[20] and an article in the *Medical Letter*,[23] which is without citations. Nowhere in the trail of citations is there related any fundamental information on whether or how frequently high-dose vitamin C leads to kidney stones. Instead, authors simply make the statement that vitamin C may cause kidney stones and as proof cite other authors who have said the same thing.

What is the actual evidence about vitamin C intake and kidney stones? In 3 case-control studies[24-26] there was no clear association between ascorbate intake or excretion and stone formation. In a prospective observational study[27] of 45 000 men with no history of kidney stones, those men consuming 1500 mg or more of ascorbate daily from diet and supplements had 78% the rate of kidney stone formation of those consuming less than 250 mg daily. This reduction was not statistically significant, but certainly does not support the idea that high-dose ascorbate increases the risk of kidney stones.

The story of vitamin C and kidney stones is not unique. A major component of medical writing on vitamin supplements focused on toxic effects,[10-13] under such titles as "The Vitamin Craze"[10] and "Toxic Effects of Vitamin Overdosage."[11] The 1987 and 1991 editions of Harrison's[9] contain the statement that " . . . disorders of vitamin excess may now be more common than vitamin deficiency." Once again, no evidence is cited to support this statement.