

Medical Bias and Supplements, Part II: Vitamin C and Kidney Stones

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Last month, we looked at a theory on why there has been an antisupplement bias by academic medicine in the United States. In a commentary piece, doctors James Goodwin, MD, and Michael Tangum, MD, stated what many practitioners in alternative disciplines have noticed for years: reports of negative outcomes, side-effects, and potential toxicities of nutritional supplements appear to be routinely embraced with little critical analysis, while positive studies are greeted by close scrutiny aimed at magnifying any possible flaw to a level at which the entire body of work is unfairly dismissed or ignored.¹

The Vitamin C and Kidney Stone Story

In their article, doctors Goodwin and Tangum make the point that MDs have received training informing them that high doses of vitamin C can cause kidney stones. When they looked at the literature, they found plenty of references, but upon closer examination, they discovered a lack of concrete evidence. As an example, they cited a 1984 article, "The Toxic Effects of Water Soluble Vitamins."² The vitamin C and kidney stone statement was supported by seven references. Of the seven references, five were from books; one was a letter to the editor published in *Lancet* in 1973. The seventh reference was a mistake and had nothing to do with the subject. Only two of the five books cited a reference for the statement that high doses of vitamin C can cause kidney stones. One of the books referenced another chapter in another book, while the other used the 1973 letter to the editor.

When the authors looked for hard evidence linking vitamin C to kidney stones, they found the opposite. They cited three studies (which I tracked down and read) and found that there was no association between vitamin C intake and stone formation.^{3,4,5} Recent investigations have concluded that large amounts of vitamin C cause only trivial increases in urinary oxalate formation, and that these increases are not nearly enough to cause stone formation.^{6,7,8} A 1996 study found that people who consumed 1,500 mg or more of vitamin C only formed 78 percent of the amount of stones seen in groups whose daily vitamin C intake was below 250 mg.⁹ It should be noted that their data was not statistically significant for a protective effect of vitamin C intake. However, it certainly does not appear to provoke kidney stone formation.

Conclusion

In a 1993 article about vitamin toxicity, I too advised that high dose vitamin C could cause kidney stones because I accepted statements in nutrition textbooks.¹⁰ Curiously, in a very popular nutrition book, I found that 3,000 mg of vitamin C is recommended by the authors for the treatment of kidney

stones.¹¹ The authors' rationale is that vitamin C acidifies the urine and that acid urine will block stone formation. What is most ironic is that there is no reference given for this recommendation. Thus, I will not make the same mistake twice and make another recommendation based on a chapter in a book.

References

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