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25-Hydroxyvitamin D in the Range of 20 to 100 ng/mL and Incidence of Kidney Stones.

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Abstract

Objectives. Increasing 25-hydroxyvitamin D serum levels can prevent a wide range of diseases. There is a concern about increasing kidney stone risk with vitamin D supplementation. We used GrassrootsHealth data to examine the relationship between vitamin D status and kidney stone incidence. **Methods.** The study included 2012 participants followed prospectively for a median of 19 months. Thirteen individuals self-reported kidney stones during the study period. Multivariate logistic regression was applied to assess the association between vitamin D status and kidney stones. **Results. We found no statistically significant association between serum 25-hydroxyvitamin D and kidney stones** ($P = .42$). Body mass index was significantly associated with kidney stone risk (odds ratio = 3.5; 95% confidence interval = 1.1, 11.3).

Conclusions. We concluded that a serum 25-hydroxyvitamin D level of 20 to 100 nanograms per milliliter has no significant association with kidney stone incidence