

Findings do not support use of vitamin D to reduce pain from knee osteoarthritis

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Vitamin D supplementation for individuals with knee osteoarthritis and low 25-hydroxyvitamin D levels did not reduce knee pain or slow cartilage loss, according to a study appearing in the March 8 issue of *JAMA*.

osteoarthritis," the authors write.

More information: *JAMA*, [DOI: 10.1001/jama.2016.1961](https://doi.org/10.1001/jama.2016.1961)

Symptomatic [knee osteoarthritis](#) occurs among 10 percent of men and 13 percent of women age 60 years or older. Currently there are no disease-modifying therapies for osteoarthritis. Vitamin D can reduce bone turnover and [cartilage](#) degradation, thus potentially preventing the development and progression of knee osteoarthritis. Observational studies suggest that vitamin D supplementation is associated with benefits for knee osteoarthritis, but current evidence from clinical trials is contradictory.

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Changhai Ding, M.D., Ph.D., of the University of Tasmania, Hobart, Tasmania, Australia, and colleagues randomly assigned 413 patients with symptomatic knee osteoarthritis and low 25-hydroxyvitamin D to receive monthly treatment with oral vitamin D3 (50,000 IU; n = 209) or an identical placebo (n = 204) for 2 years. The study was conducted in Tasmania and Melbourne, Australia.

Of 413 enrolled participants (average age, 63 years; 50 percent women), 340 (82 percent) completed the study. The researchers found that vitamin D supplementation, compared with placebo, did not result in significant differences in change in MRI-measured tibial cartilage volume or a measure of [knee pain](#) over 2 years. There were also no significant differences in change of tibiofemoral cartilage defects or change in tibiofemoral bone marrow lesions. Vitamin D levels did increase more in the vitamin D group than in the placebo group over 2 years.

"These data suggest a lack of evidence to support [vitamin](#) D supplementation for slowing disease progression or structural change in knee

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