Higher doses of vitamin D prevent fractures in older women

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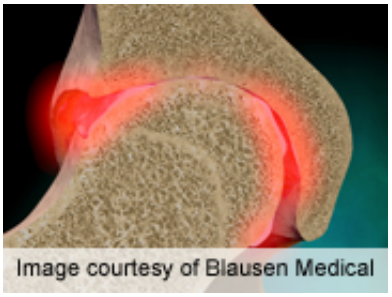

But evidence review found less than 800 IUs a day didn't seem to make a difference.

(HealthDay) -- In the latest study to look at the effect of vitamin D on fracture risk, Swiss researchers found that taking more than 800 international units (IU) of vitamin D daily could reduce the risk of hip fractures in older women by 30 percent.

"Vitamin D supplementation is effective in fracture reduction, including hip fractures," said study author Dr. Heike Bischoff-Ferrari, from the Center on Aging and Mobility at the University of Zurich and Wald City Hospital, also in Zurich.

"However, dose matters, as we saw this benefit only at the highest intake level of greater than 800 IU per day, and no dose below 792 IU per day reduced fracture risk," she said.

If everyone took more than 800 IU of vitamin D daily, the impact on public health could be enormous because hip fractures are the most severe and frequent fractures among the elderly, according to Bischoff-Ferrari.

Results of the study are published in the July 5 issue of the New England Journal of Medicine.

Vitamin D is important for bone health, according to Dr. Anna Lasak, clinical director of the department of rehabilitation and the women's physical medicine and rehabilitation program at Montefiore Medical Center, in New York City. The body makes vitamin D when exposed to sunlight. Sunscreen blocks this effect.

Vitamin D is also found in fatty fish, eggs and some mushrooms, she said. It's also added to dairy products, some cereals and some breads, according to Lasak. But, she said, it can be difficult, especially for elderly people, to get enough vitamin D from these sources. In addition, elderly people may have digestive issues that can cause their bodies to absorb even less vitamin D.

A number of studies have been done looking at vitamin D and bone health, and the studies have often come up with conflicting findings, with some showing benefits, while others found no benefits. In mid-June, the U.S. Preventive Services Task Force recommended that postmenopausal women should not take low-dose vitamin D supplements (400 IU) because there was no evidence of benefit. The task force, however, said there wasn't yet enough clear evidence on higher doses of vitamin D to make a recommendation one way or the other.

The current study is a pooled analysis of 11 double-blind, randomized controlled trials of vitamin D supplementation with or without calcium compared to a placebo or calcium supplementation alone.

The studies included more than 31,000 people. All of the participants in the studies were over 65, with an average age of 76. Most (91 percent) of the volunteers in the studies were women.

They found that people taking less than 800 IU daily showed no statistically significant drop in fracture risk. However, those taking over 800 IU reduced the risk of hip fracture by 30 percent and the risk of non spine-related fractures by 14 percent, according to the study.

"Our data strongly support a daily vitamin D supplement of 800 IU per day in adults age 65 and older to lower their risk of fracture, including those living at home and those living in nursing homes, including men and women, and the younger and the old," Bischoff-Ferrari said.

Lasak said 800 IU is a safe level of vitamin D intake for just about anyone. But, she said, it's better for older folks to have their vitamin D levels measured first. Some may not need additional vitamin D, but many actually need more than 800 IU a day.

"Most people do have a deficiency," she said. While 800 IU is a safe limit, that may not be enough, she said. No one should exceed levels of 4,000 IU, Lasak added. That's the upper safe limit of this nutrient.

She said it's also important to ensure that you're getting enough calcium. The recommendation is for between 1,000 and 1,200 milligrams (mg) a day, with older people needing more, she said. Lasak recommended getting the bulk of your calcium from foods, rather than a supplement, because some studies have suggested possible harm from higher levels of calcium intake from supplements.

Bischoff-Ferrari said the current analysis also suggested that higher levels of calcium supplementation (more than 1,000 mg) may reduce vitamin D's benefit.

More information: Learn more about vitamin D and bone health from the National Osteoporosis Foundation.