Calcium, vitamin D don't seem to reduce fracture risk in seniors

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(HealthDay)—For community-dwelling older adults, supplementation

with calcium, vitamin D, or both does not reduce the incidence of fractures, according to a review published in the Dec. 26 issue of the *Journal of the American Medical Association*.

Jia-Guo Zhao, M.D., from Tianjin Hospital in China, and colleagues conducted a systematic review and meta-analysis to examine whether calcium, vitamin D, or combined calcium and vitamin D supplements are linked to a reduced incidence of fracture among community-dwelling older adults. Thirty-three randomized trials involving 51,145 participants were included.

The researchers found that neither calcium nor vitamin D was significantly associated with the risk of hip fracture compared with placebo or no treatment (calcium: risk ratio [RR], 1.53; 95 percent confidence interval [CI], 0.97 to 2.42; vitamin D: RR, 1.21; 95 percent CI, 0.99 to 1.47). No significant correlation with hip fracture was seen for combined calcium and vitamin D compared with placebo or no treatment (RR, 1.09; 95 percent CI, 0.85 to 1.39). There were also no significant correlations for calcium, vitamin D, or the combination of calcium and vitamin D with incidence of nonvertebral, vertebral, or total fractures.

"These findings do not support the routine use of these supplements in community-dwelling older people," the authors write.

More information: Abstract/Full Text (subscription or payment may be required)