

Higher doses of vitamin D did not reduce falls in at risk older adults

December 8 2020



Credit: Unsplash/CC0 Public Domain

A randomized trial found that, compared with a lower dose, higher doses of vitamin D supplementation did not reduce falls in older persons at high risk for falls. In addition, several analyses raised safety concerns

about vitamin D3 doses of 1000 IU/d or higher. The findings are published in *Annals of Internal Medicine*.

Some studies have suggested that vitamin D supplements might reduce the risk for falls in [older adults](#); however, evidence has been inconsistent, possibly because of differences in dosage.

Researchers from Johns Hopkins University compared four doses of vitamin D3 to determine whether vitamin D supplementation reduces the risk for falls, and if so, at what dosage. The researchers randomly assigned 514 participants, aged 70 years and older, with elevated fall risk and low vitamin D blood levels to receive 200 (control), 1000, 2000, or 4000 IU/d of vitamin D3. During the dose-finding phase, the best non-control dose for preventing falls was selected.

In the subsequent confirmatory phase, participants previously assigned to receive non-control doses received the best dose, and 174 new participants were randomly assigned to receive 200 IU/d or the best dose. The researchers found that vitamin D3 supplementation at doses of 1000 IU/d or higher did not prevent falls compared with 200 IU/d.

No analysis found a benefit of higher dose vitamin D supplements, while some analyses suggested that the higher doses of vitamin D supplements increased the risk of serious falls and falls with hospitalization.

More information: Lawrence J. Appel et al. The Effects of Four Doses of Vitamin D Supplements on Falls in Older Adults, *Annals of Internal Medicine* (2020). [DOI: 10.7326/M20-3812](https://doi.org/10.7326/M20-3812)

Bruce R. Troen. Falls: To D or Not to D—That Is Not the (Only) Question!, *Annals of Internal Medicine* (2020). [DOI: 10.7326/M20-7609](https://doi.org/10.7326/M20-7609)

Provided by American College of Physicians

Citation: Higher doses of vitamin D did not reduce falls in at risk older adults (2020, December 8) retrieved 8 May 2023 from

<https://medicalxpress.com/news/2020-12-higher-doses-vitamin-d-falls.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.