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Editor's Note

How Much Vitamin D Is Enough?

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There is ongoing controversy regarding the definition of vitamin D insufficiency and the optimal treatment goal: should treatment aim to maintain a serum vitamin D level above 20 ng/mL or above 30 ng/mL? We found the randomized clinical trial by Hansen et al¹ informative because it enrolled women with

low vitamin D levels and tested both a lower-dose treatment to maintain vitamin D levels greater than 20 ng/mL and a higher-dose treatment to maintain levels greater than 30 ng/mL. After

1 year of treatment, randomization to a higher dose of cholecalciferol resulted in slightly better fractional excretion of calcium compared with low-dose cholecalciferol or placebo, but these differences are not clinically meaningful. Of more clinical importance, neither dose of cholecalciferol improved bone density, strength, muscle mass, functional status, or fall rate. It is possible that treatment beyond 1 year would result in better outcomes, but these data provide no support for use of higher-dose cholecalciferol replacement therapy or indeed any dose of cholecalciferol compared with placebo.

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1. Hansen KE, Johnson RE, Chambers KR, et al. Treatment of vitamin D insufficiency in

postmenopausal women: a randomized clinical trial [published online August 3, 2015]. *JAMA Intern Med*. doi:10.1001/jamainternmed.2015.3874.