

SORT: KEY RECOMMENDATIONS FOR PRACTICE

Clinical recommendation	Evidence rating	References	Comments
Serum 25-OH-D levels of 12 to 20 ng per mL (30 to 50 nmol per L) correlate to the vitamin D exposure necessary to maintain bone health. Individuals with levels less than 12 ng per mL are usually deficient in vitamin D, and 97.5% of individuals with levels higher than 20 ng per mL have adequate vitamin D intake.	C	5	Use of 25-OH-D levels to assess adequate vitamin D exposure is limited by variability in measurement technique and precision.
Routine vitamin D supplementation in community-dwelling adults is not recommended.	A	16-22	Routine vitamin D supplementation does not prolong life, decrease the incidence of cancer or cardiovascular disease, or decrease fracture rates.
There is insufficient evidence to recommend screening the general population for vitamin D deficiency. Treating asymptomatic individuals with identified deficiency has not been shown to improve health.	B	25-27	The USPSTF found adequate evidence that treating vitamin D deficiency does not reduce risk of cancer, type 2 diabetes mellitus, or death in community-dwelling adults, or fractures in persons not at high risk of fractures. Evidence is insufficient for other outcomes, including psychosocial and physical functioning.
Physicians should not measure 25-OH-D levels or prescribe vitamin D supplementation in the treatment of depression, fatigue, osteoarthritis, or chronic pain.	A	37-41, 46-48, 53-57	Randomized controlled trials do not show benefit for conditions commonly treated with vitamin D. Other nonskeletal conditions have been inadequately studied.

25-OH-D = 25-hydroxyvitamin D; USPSTF = U.S. Preventive Services Task Force.

A = consistent, good-quality patient-oriented evidence; **B** = inconsistent or limited-quality patient-oriented evidence; **C** = consensus, disease-oriented evidence, usual practice, expert opinion, or case series. For information about the SORT evidence rating system, go to <http://www.aafp.org/afpsort>.