

# Evaluation, Treatment, and Prevention of Vitamin D Deficiency

*A new practice guideline recommends against routinely measuring serum vitamin D levels in adults.*

The Endocrine Society has published a new practice guideline on vitamin D deficiency. This summary covers portions of the guideline that are relevant to adult medicine (the pediatric portion is covered elsewhere; [JW Gen Med Jun 23 2011](#)). Key points follow:

- Population-wide screening for vitamin D deficiency is not recommended because evidence to support this practice is lacking. However, screening is recommended in adults who are at high risk for deficiency, including those with osteoporosis, obesity, or history of falls.
- Vitamin D deficiency is defined as serum 25-hydroxyvitamin D (25[OH]D) level <20 ng/mL (50 nmol/L); however, serum assays are notoriously variable.
- Recommended dietary intake for adults is at least 600 IU daily (800 IU for those aged >70); however, some at-risk adults might require  $\geq 1500$  IU. Few foods contain substantial vitamin D naturally, and many adults eat little vitamin D–fortified food and do not get enough sun exposure to maintain vitamin D sufficiency. Blacks and other dark-skinned people are at higher risk for deficiency than whites.
- Both vitamin D<sub>2</sub> (ergocalciferol) and D<sub>3</sub> (cholecalciferol) are acceptable as supplements.
- Treatment of vitamin D deficiency is indicated mainly for skeletal reasons; evidence also suggests that treatment lowers the incidence of falls in older adults. In contrast, evidence that treatment prevents cardiovascular disease, lowers mortality, or generally improves quality of life is lacking.

**Comment:** Because many clinicians routinely check vitamin D levels these days, the guideline's rejection of population-wide screening is perhaps the key point for clinicians. Unfortunately, for average-risk adults, the guideline doesn't explicitly say whether clinicians should recommend daily supplements (600–800 IU) universally or should evaluate, case-by-case, whether a given person's sun exposure and dietary intake likely ensure sufficient vitamin D.

— [Allan S. Brett, MD](#)

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