Screening for Vitamin D Deficiency in Adults: U.S. Preventive Services Task Force Recommendation Statement

Who developed these recommendations?
The U.S. Preventive Services Task Force (USPSTF) developed these recommendations. The USPSTF is a group of health experts that reviews published research and makes recommendations about preventive health care. Support for the USPSTF and its review of the published research is provided by the Agency for Healthcare Research and Quality.

What is the problem and what is known about it so far?
Vitamin D helps regulate calcium levels and bone health. Some, but not all, studies have found a relationship between low vitamin D levels and osteoporosis, fractures, falls, cancer, diabetes, heart disease, depression, and other conditions. Important sources of vitamin D include diet (such as fatty fish and dairy products), fortified beverages and foods, and vitamin supplements. The exact definition of a low vitamin D level is not well-established.

Daily vitamin D intake of 600 IU in adults aged 18 to 70 years and 800 IU in adults older than 70 years will meet the needs of most adults. Sun exposure may also increase vitamin D levels, but many factors, such as sunscreen use, time of day, time spent in the sun, season, and location, affect this production. Sun exposure to prevent vitamin D deficiency is not generally recommended because it increases the risk for skin cancer.

Because low vitamin D levels are relatively common, can be treated with vitamin D in oral form, and might be associated with poor health, some expert groups wonder if all adults should have vitamin D levels measured. Other groups believe that only people at high risk for low levels, or those who have conditions known to be related to low levels and improve with supplements, should have vitamin D levels measured.

How did the USPSTF develop these recommendations?
The authors reviewed published studies to identify the risks and benefits of screening for low vitamin D levels in healthy adults.

What did the authors find?
The USPSTF found no studies that directly evaluated the benefits or harms of screening for low vitamin D levels in adults. The USPSTF found adequate evidence that treatment of low vitamin D in healthy, average-risk people does not reduce cancer, type 2 diabetes, early death, or bone fractures. Evidence about the benefits of treating low vitamin D early to prevent other conditions is not good enough to reach clear conclusions. The USPSTF found adequate evidence that the harms of treatment of vitamin D deficiency are small to none.

What does the USPSTF recommend that patients and doctors do?
The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for vitamin D deficiency in asymptomatic adults.

What are the cautions related to these recommendations?
These recommendations apply only to community-dwelling, nonpregnant adults 18 years or older who are seen in primary care settings, do not live in nursing homes or similar institutions, and have no signs or symptoms of low vitamin D or conditions, such as osteoporosis or a history of falls.