Screening for Vitamin D Deficiency in Adults

The U.S. Preventive Services Task Force (Task Force) has issued a final recommendation statement on Screening for Vitamin D Deficiency in Adults.

This final recommendation applies to adults who do not have signs or symptoms of vitamin D deficiency. It does not apply to people who have conditions that may require extra vitamin D, pregnant women, or people who live in a nursing home.

The final recommendation statement summarizes what the Task Force learned about the potential benefits and harms of vitamin D screening in adults and whether the Task Force thinks people should be screened for vitamin D deficiency. Currently, there is not enough evidence to determine the potential benefits and harms of this screening and the Task Force cannot recommend for or against screening.

This fact sheet explains this recommendation and what it might mean for you.

What is vitamin D?

Vitamin D is a nutrient that helps the body absorb calcium and maintain strong bones. It may also have a role in other aspects of health.

Vitamin D is naturally found in some foods, such as salmon, beef liver, and egg yolks. Vitamin D is also added to foods and drinks, like milk, orange juice, and cereal. Supplements are another source of vitamin D. The body also makes vitamin D when the skin is exposed to the sun.

Facts About Vitamin D Deficiency and Screening for Vitamin D Deficiency

Vitamin D deficiency (having too little vitamin D in the blood) can lead to a softening of the bones. People can become deficient in vitamin D if they don’t eat enough vitamin D-rich foods, if they have health conditions that prevent their body from absorbing or using vitamin D, or if they have very little exposure to the sun. Symptoms of vitamin D deficiency are often subtle and can include bone pain and muscle weakness.

In general, people with dark skin or obesity have lower levels of vitamin D when compared to other groups. However, it is not known whether these groups are at an increased risk of health problems because of this.

It is difficult to say exactly how many people in the United States have vitamin D deficiency because experts disagree about how to define vitamin D deficiency. Estimates of the percentage of people with vitamin D deficiency vary from 19% to 77%.

There are many tests available that measure vitamin D levels in the blood to screen for vitamin D deficiency. However, it is not clear how accurate these tests are. Whether someone is considered vitamin D deficient or not can change depending on which test is used or which laboratory performs the test.
Screening for Vitamin D Deficiency

Potential Benefits and Harms of Screening for Vitamin D Deficiency

The Task Force reviewed studies on the benefits and harms of screening for vitamin D deficiency. They found that the evidence is insufficient to determine whether screening adults who do not have signs or symptoms of deficiency, leads to improved health.

They also did not find enough evidence to understand the potential harms of screening for vitamin D deficiency. Because of the uncertainties about how to define vitamin D deficiency with a blood test and about the accuracy of current screening tests, performing the screening test may suggest that some people are vitamin D deficient when they are actually healthy. These people may get vitamin D treatment when they do not really need it.

The Final Recommendation on Screening for Vitamin D Deficiency: What Does It Mean?

Here is the Task Force’s final recommendation on screening for vitamin D deficiency. It is based on the quality and strength of the evidence about the potential benefits and harms of screening for vitamin D deficiency in adults who do not have signs or symptoms. Task Force recommendation grades are explained in the box at the end of this fact sheet.

When there is not enough evidence to judge benefits and harms, the Task Force does not make a recommendation for or against—it issues an I Statement. The Notes explain key ideas.

Visit the Task Force Web site to read the full final recommendation statement. The statement explains the evidence the Task Force reviewed and how it decided on the grade. An evidence document provides more detail about the studies the Task Force reviewed.

1 The Task Force concludes that current evidence is insufficient to assess the balance of benefits and harms of screening for vitamin D deficiency in asymptomatic adults. I Statement

Notes

1 current evidence is insufficient
The Task Force did not find enough information from studies to determine whether screening asymptomatic adults for vitamin D deficiency provides an overall benefit or harm.

screening
Performing a test to determine whether someone who does not have any signs or symptoms, is vitamin D deficient.

vitamin D deficiency
Having such a low level of vitamin D in the blood that it causes health problems.

asymptomatic
Having no signs or symptoms.
Should You Be Screened for Vitamin D Deficiency?

Getting the best health care means making smart decisions about what screening tests, counseling services, and preventive medicines to get and when to get them. Many people don’t get the tests or counseling they need. Others get tests or counseling they don’t need or that may be harmful to them.

Task Force recommendations can help you learn about screening tests, counseling services, and preventive medicines. These services can keep you healthy and prevent disease. The Task Force recommendations do not cover diagnosis (tests to find out why you are sick) or treatment of disease. Task Force recommendations also apply to some groups but not others. For example, this recommendation does not apply to pregnant women or to people living in nursing homes.

Deciding Whether to Get Screened for Vitamin D Deficiency

People can get vitamin D by eating foods rich in vitamin D, such as vitamin D-fortified milk, soy milk, orange juice, and cereal; fatty fish, including tuna, mackerel, and salmon; cheese; egg yolks; and beef liver. They also can get vitamin D through vitamin D supplements or exposure to the sun. However, increasing exposure to the sun is not recommended as a way to increase vitamin D because it increases the risk of skin cancer.

If you are concerned about your risk for being low or deficient in vitamin D, talk with your doctor or nurse about how much vitamin D you are currently getting. Consider your own health and lifestyle. Think about your personal beliefs and preferences for health care. And consider scientific recommendations, like this one from the Task Force.
What is the U.S. Preventive Services Task Force?

The Task Force is an independent group of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, or preventive medicines. The recommendations apply to people with no signs or symptoms of the disease being discussed.

To develop a recommendation statement, Task Force members consider the best available science and research on a topic. For each topic, the Task Force posts draft documents for public comment, including a draft recommendation statement. All comments are reviewed and considered in developing the final recommendation statement. To learn more, visit the Task Force Web site.

### USPSTF Recommendation Grades

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<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
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<tbody>
<tr>
<td>A</td>
<td>Recommended.</td>
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<tr>
<td>B</td>
<td>Recommended.</td>
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<tr>
<td>C</td>
<td>Recommendation depends on the patient’s situation.</td>
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<tr>
<td>D</td>
<td>Not recommended.</td>
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<tr>
<td>I statement</td>
<td>There is not enough evidence to make a recommendation.</td>
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Click Here to Learn More About Vitamin D

- Vitamin D: Fact Sheet for Consumers (Office of Dietary Supplements, National Institutes of Health)
- 2010 Dietary Guidelines for Americans (U.S. Department of Agriculture and U.S. Department of Health and Human Services)