

This fact sheet explains the U.S. Preventive Services Task Force's (Task Force) draft recommendation statement on vitamin D, calcium, or combined supplementation for the primary prevention of fractures. It also tells you how you can send comments about the draft recommendation to the Task Force. Comments may be submitted from September 26 to October 23. The Task Force welcomes your comments.

Vitamin D and Calcium Supplements to Prevent Fractures

The Task Force has issued a **draft recommendation** statement on *Vitamin D, Calcium, or Combined Supplementation for the Primary Prevention of Fractures*. The Task Force found that:

- There is not enough evidence to determine whether taking vitamin D or calcium supplements can prevent fractures in women who have not yet gone through menopause and in men.
- There is not enough evidence to make a recommendation for or against taking vitamin D or calcium supplements

in larger doses to help prevent fractures in women who have gone through menopause.

- Lower doses of vitamin D do not prevent fractures in women who have gone through menopause, and therefore recommends against low dose vitamin D for this purpose.

This draft recommendation applies to adults who live at home and not in nursing homes and who have no history of fractures related to weak bones and are not at high risk of falling.

Fractures: A Big Problem for Older Adults

Bone fractures cause serious disability and death in older adults. Women who have gone through menopause are at increased risk of fractures. Other things that increase risk for both men and women include having low bone mass, older age, smoking, and an increased risk of falls.

Facts About Fractures, Vitamin D, and Calcium

Bone fractures, or breaking a bone, can cause significant disability and death in older adults. As people age, bones become fragile and break more easily. This is especially true for bones in the hip, spine, and wrist. These fractures often lead to pain and disability, less independence, and a reduced quality of life. Fractures, especially hip fractures, have also been linked with an increased risk of death.

Bone health is important to helping prevent fractures and vitamin D and calcium help keep bones strong. Calcium is a mineral that helps maintain strong bones and teeth. Vitamin D helps the body absorb calcium.

Potential Benefits and Harms of Fracture Prevention Using Vitamin D and Calcium Supplements

The Task Force reviewed studies about the benefits and harms of taking vitamin D and calcium for the prevention of fractures in adults. There was not enough evidence to understand whether taking higher doses of vitamin D or calcium helps to prevent fractures in women who have gone through menopause—or at any dose for younger women or for men.

The evidence was clear, however, that taking vitamin D and calcium supplements at low doses does not prevent fractures. There is also a small risk that taking vitamin D and calcium supplements to prevent fractures can increase your risk of developing kidney stones.

The Draft Recommendations on Fracture Prevention Using Vitamin D and Calcium Supplements: What Do They Mean?

Here are the Task Force's draft recommendations on fracture prevention for adults using vitamin D and calcium supplements. They are based on the quality and strength of the evidence about the potential benefits and harms of taking supplements for this purpose. They are also based on the size of the potential benefits and harms. The Task Force recommendation grades are explained in the box at the end of this fact sheet.

This recommendation includes I statements and a D grade. 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**. When the Task Force recommends against **(Grade D)** using supplements for a particular purpose, it is because there is no overall benefit or there are more potential harms than potential benefits.

Before you send comments to the Task Force, you may want to read the full [draft recommendation statement](#). The recommendation statement explains the evidence the Task Force reviewed and how it decided on the grade. An [evidence document](#) provides more detail about the scientific studies the Task Force reviewed.

- 1 The Task Force concludes that the current *evidence is insufficient* to *assess the balance* of the benefits and harms of vitamin D and calcium *supplementation*, alone or combined, for the *primary prevention* of fractures in *pre-menopausal women* and men. **(I Statement)**
- 2 The Task Force concludes that the current evidence is insufficient to assess the balance of the benefits and harms of daily supplementation with greater than 400 *IU* of vitamin D and greater than 1,000 *mg* of calcium for the primary prevention of fractures in *community-dwelling post-menopausal women*. **(I Statement)**
- 3 The Task Force recommends against daily supplementation with 400 IU or less of vitamin D and 1,000 mg or less of calcium for the primary prevention of fractures in community-dwelling post-menopausal women. **(Grade D)**

Notes

- 1 *evidence is insufficient*
The Task Force did not find enough information on benefits and harms of the use of these supplements for the prevention of fractures.

assess the balance

The Task Force was not able to determine whether the potential benefits would outweigh any potential harms.

supplementation

Supplements are vitamins or minerals added to the diet to improve health. They can be taken in pill, capsule, tablet, or liquid form.

primary prevention

Preventing a disease or condition before it begins.

pre-menopausal women

Women who have not yet gone through menopause.

- 2 *IU*
International Units. IUs are used to indicate amounts of certain vitamins and other biological substances.

community-dwelling

Adults living at home and not in a nursing home.

post-menopausal women

Women who have already gone through menopause.

What is the U.S. Preventive Services Task Force?

The Task Force is an independent, volunteer 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, and 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

Grade	Definition
A	Recommended.
B	Recommended.
C	Recommendation depends on the patient's situation.
D	Not recommended.
I statement	There is not enough evidence to make a recommendation.

Click Here to Learn More About Fractures, Vitamin D, and Calcium

 **Prevent Falls and Fractures**
(National Institute on Aging)

 **What is Vitamin D and What Does It Do?**
(National Institutes of Health, Office of Dietary Supplements)

 **What Is Calcium and What Does It Do?**
(National Institutes of Health, Office of Dietary Supplements)

 **Click Here** to Comment on the Draft Recommendation



The Task Force welcomes comments on this draft recommendation.



Comments must be received between September 26 and October 23, 2017.



All comments will be considered for use in writing final recommendations.