

This fact sheet explains the U.S. Preventive Services Task Force's (Task Force) draft recommendation statement on vitamin, mineral, and multivitamin supplementation to prevent cardiovascular disease and cancer. It also tells you how you can send comments about the draft recommendation to the Task Force. Comments may be submitted from May 4, 2021 to June 1, 2021. The Task Force welcomes your comments.

Vitamin, Mineral, and Multivitamin Supplementation to Prevent Cardiovascular Disease and Cancer

The Task Force issued a **draft recommendation statement** on *Vitamin, Mineral, and Multivitamin Supplementation to Prevent Cardiovascular Disease and Cancer*.

After looking at the use of vitamins and mineral supplements to specifically prevent heart disease and cancer, the Task Force found that for most vitamin, mineral, and multivitamin supplements, there is not enough evidence to recommend for or against taking them.

However, the Task Force did find evidence on vitamin E and beta-carotene and recommends against taking them for this purpose.

What are vitamins and minerals?

Vitamins and minerals are two of the main types of nutrients that your body needs to stay healthy. They are found naturally in food but can also be taken as supplements. Supplements can contain a single nutrient, a pair of nutrients, or a combination (also known as a multivitamin).

This draft recommendation statement applies to healthy adults who do not have a diagnosis or symptoms of a lack of nutrients or special nutritional needs. It does not apply to children, those who are or may become pregnant, individuals who are chronically ill, or hospitalized patients. The Task Force has a separate recommendation that all persons who are planning or capable of becoming pregnant should take folic acid.

Although people may be taking vitamin and mineral supplements with the goal of improving or maintaining overall health, this recommendation is focused specifically on the use of vitamins and minerals to prevent heart disease and cancer.

Facts About Vitamin, Mineral, and Multivitamin Supplements

Vitamins and minerals are two of the main types of nutrients that your body needs to stay healthy. The best way to get enough nutrients is through a balanced diet. Vitamin and mineral supplements can be found in many forms, including in pill, capsule, powder, gel tab, extract, or liquid form and are taken to add certain nutrients to an individual's diet.

While many people take supplements for overall health, this recommendation is focused on the use of supplements to prevent heart disease and cancer.

Potential Benefits and Harms of Vitamin, Mineral, and Multivitamin Supplements to Prevent Cardiovascular Disease and Cancer

The Task Force looked at the evidence related to taking many vitamin, mineral, and multivitamin supplements and their potential effects on heart disease and cancer.

The Task Force found that there is not enough evidence to determine the benefits of taking most vitamins and minerals to prevent heart disease and cancer.

For most of the vitamins and minerals the Task Force reviewed, there was little evidence of serious harm. But excessive doses can be harmful.

However, the Task Force found that taking vitamin E and beta-carotene does not reduce the risk of heart disease and cancer. The evidence shows that there is no benefit to taking vitamin E and that beta-carotene can be harmful because it increases the risk of lung cancer in people already at risk, for example in people who smoke.

The Draft Recommendation on Vitamin, Mineral, and Multivitamin Supplementation to Prevent Cardiovascular Disease and Cancer: What Does It Mean?

Here is the Task Force's draft recommendation on vitamin, mineral, and multivitamin supplementation to prevent cardiovascular disease and cancer. It is based on the quality and strength of the evidence about the potential benefits and harms of supplementation for this purpose. It is also based on the size of the potential benefits and harms. Task Force recommendation grades are explained in the box at the end of this fact sheet.

When the Task Force issues a **D Grade**, it recommends against supplementation because it has more potential harms than potential benefits.

When the Task Force issues an **I Statement**, it means the current evidence is insufficient to assess the balance of benefits and harms of supplementation.

Before you send comments to the Task Force, you may want to read the [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 USPSTF recommends against the use of *beta-carotene* or *vitamin E* supplements for the prevention of *cardiovascular disease* or cancer. **(D Grade)**
- 2 The USPSTF concludes that the current *evidence is insufficient* to assess the balance of benefits and harms of the use of *multivitamin supplements* for the prevention of cardiovascular disease or cancer. **(I Statement)**
- 3 The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the use of *single or paired-nutrient supplements* (other than beta-carotene and vitamin E) for the prevention of cardiovascular disease or cancer. **(I Statement)**

Notes

- 1 *beta-carotene*
A substance naturally found in yellow and orange fruits and vegetables and in dark green, leafy vegetables. It can help the body make vitamin A and acts as an antioxidant, which means it may help protect against certain types of tissue damage.

vitamin E
A nutrient found in many foods (like oils and nuts) that is important to overall health and is an antioxidant.

cardiovascular disease
Heart disease and stroke.
- 2 *evidence is insufficient*
There is not enough information to make a recommendation for or against.

multivitamin supplements
A combination of vitamins and minerals.
- 3 *single or paired-nutrient supplements*
A single nutrient is taking one vitamin or mineral. Paired nutrient supplements refers to supplements that include two vitamins and/or minerals.





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

The Task Force is an independent, non-federal, volunteer group of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of people nationwide 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](#). All comments are reviewed and considered in developing the final recommendation statement. To learn more, visit the [Task Force website](#).

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 Vitamin and Mineral Supplementation, Cardiovascular Disease, and Cancer](#)

-  **Using Dietary Supplements Wisely**
(MyHealthfinder)
-  **Dietary Guidelines for Americans, 2020-2025**
(U.S. Department of Agriculture and U.S. Department of Health and Human Services)
-  **Heart and Vascular Diseases**
(National Heart, Lung, and Blood Institute)
-  **Cancer Causes and Prevention**
(National Cancer Institute)

 [Click Here](#) to Comment on the Draft Recommendation



The Task Force welcomes comments on this draft recommendation.



Comments must be received between May 4, 2021 and June 1, 2021.



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