

THE FACTS ABOUT Supplements

- Dietary supplements, such as multivitamins, can sometimes help people with restricted diets or who have an impaired ability to eat to get essential nutrients; however, taking dietary supplements is not recommended for cancer prevention.
- Dietary supplements can include vitamins, minerals, herbs, enzymes, amino acids, antioxidants and other substances. They are manufactured and sold in the form of pills, capsules, tablets, powders, drinks and energy bars.



THE RECOMMENDATION

For cancer prevention, don't rely on dietary supplements.

Aim to meet nutritional needs through diet alone.

THE RESEARCH

Research indicates that high-dose nutrient supplements can be protective or can cause cancer. In some studies, specific supplements actually increased risk of certain cancers.

For many people, by eating a varied diet rich in vegetables, fruits and other plant-based foods, it is possible to obtain all the needed nutrients for good health.

However, some groups of people will benefit from taking supplements for specific health reasons. For example, your health-care provider may advise taking a calcium supplement if you are at risk for osteoporosis. Ask your health-care provider for more advice about supplements tailored to your specific needs.

Be Wary of Supplement Labels

The U.S. Food and Drug Administration (FDA) does not determine whether dietary supplements are effective before they are marketed. Be aware that manufacturers of nutritional supplements are not obligated to follow the strict government regulations written for drug manufacturers or have the contents

of their products meet FDA approval. Because supplements are not drugs, they are not intended to treat, prevent or cure diseases.

That means supplements vary widely in content quality, purity and strength – even among different batches of the same brand. For example, herbal supplements vary because of variations in growing and harvesting conditions.

You may see words like “standardized,” “verified” or “certified” on labels. However, since the FDA doesn't define these terms, they may be meaningless. A few independent organizations offer a “seal of approval” that you might see on a supplement label. If it has a seal of these three organizations, the product contains the ingredients on the label and has no harmful levels of contaminants – but it does not guarantee the product is safe or effective:

- U.S. Pharmacopeia
- ConsumerLab.com
- NSF International

Supplement Safety

It's important to understand that supplements can frequently be ineffective and sometimes dangerous.

- **Be careful not to take supplements in combination with prescription medications** without consulting your health-care provider first. Some dietary supplements can interfere with chemotherapy and other medications, either speeding up these medications' metabolism by the body, by reducing their concentration and effectiveness or by slowing their metabolism and increasing the possibility of toxicity or side effects. Vitamin E or other antioxidant supplements might interact with chemotherapy and radiation therapy. If you are undergoing these treatments, talk with your doctor before taking any supplements.
- In some studies, specific supplements actually increased risk of certain cancers. For example, alpha-tocopherol, a form of vitamin E, has been associated with increased risk for prostate cancer, and beta-carotene (which becomes vitamin A in our bodies) increased risk for lung cancer in smokers. These findings indicate that **some vitamin supplements could increase risk of cancer under certain circumstances.**
- Check with your health-care provider about **supplements' possible effects if you are scheduled to have any type of surgical procedure.**
- **Supplements labeled as "natural" aren't necessarily safe.** Certain herbs (such as comfrey and kava) can harm the liver.

- **Don't take supplements to treat a condition you have diagnosed yourself** without consulting a health-care provider.
- **Be as careful taking supplements as you are with prescription medications:** keep a record of the specific product name, the dose and how often you take it. Remember, taking more than the recommended dose won't give you more health benefits and may cause harm. Bring the supplement package with you when you visit your health-care provider.

Who May Require Supplements

- People over age 50 who have trouble absorbing naturally occurring vitamin B12.
- Strict vegetarians (who consume no animal foods at all) may need a vitamin B12 supplement or B12-fortified foods.
- Pregnant women, who have increased need for folic acid, a B vitamin.
- Individuals who are dark-skinned, elderly or obese, or who are rarely outdoors and live in northern latitudes, may require supplemental vitamin D. (UV rays from sunlight trigger vitamin D synthesis in the skin.)
- Calcium supplements may benefit people at risk for osteoporosis.
- People with medical problems that limit the body's ability to consume or absorb enough nutrients for health.



FOR A BALANCED DIET WITHOUT DIETARY SUPPLEMENTS

Eat whole plant foods.

Every plant-based food contains many substances you need for good health, including fiber, vitamins, minerals and phytochemicals (plant chemicals), including antioxidants. Although some of these substances are isolated and sold as supplements, research suggests that we get the most protection from them when they are absorbed together from whole foods.

• Eat a variety of vegetables and fruits.

• Five servings of fruits and vegetables a day (2 ½ cups) is a good starting target for a diet linked to lower cancer risk. Then work on boosting that further to 2 to 2 ½ cups of a variety of vegetables and 1 ½ to 2 cups of different fruits each day for best overall health and a diet that helps you reach and maintain a healthy weight.

• Eat a balance of plant foods, fish, poultry, meat and low-fat dairy foods.

• Filling at least 2/3 of your plate with plant foods will help you to achieve a healthy balance with animal protein foods. For lower cancer risk, limit red meat to 18 ounces per week and avoid processed meats like ham, sausage, bacon, bologna and other preserved deli meats. Try vegetable-based protein foods, like beans and nuts, which also provide fiber.