

Dietary Supplements: What You Need to Know



The majority of adults in the United States take one or more dietary supplements either every day or occasionally. Today's dietary supplements include vitamins, minerals, herbals and botanicals, amino acids, enzymes, and many other products. Dietary supplements come in a variety of forms: traditional tablets, capsules, and powders, as well as drinks and energy bars. Popular supplements include vitamins D and E; minerals like calcium and iron; herbs such as echinacea and garlic; and specialty products like glucosamine, probiotics, and fish oils.

The Dietary Supplement Label

All products labeled as a dietary supplement carry a Supplement Facts panel that lists the contents, amount of active ingredients per serving, and other added ingredients (like fillers, binders, and flavorings). The manufacturer suggests the serving size, but you or your health care provider might decide that a different amount is more appropriate for you.

Effectiveness

If you don't eat a nutritious variety of foods, some supplements might help you get adequate amounts of essential nutrients. However, supplements can't take the place of the variety of foods that are important to a healthy diet. Good sources of information on eating well include the Dietary Guidelines for Americans (<http://health.gov/dietaryguidelines>) and My Plate (<http://www.choosemyplate.gov>).

Scientific evidence shows that some dietary supplements are beneficial for overall health and for managing some health conditions. For example, calcium and vitamin D are important for keeping bones strong and reducing bone loss; folic acid decreases the risk of certain birth defects; and omega-3 fatty acids from fish oils might help some people with heart disease. Other supplements need more study to

determine their value. The U.S. Food and Drug Administration (FDA) does not determine whether dietary supplements are effective before they are marketed.

Safety and Risk

Many supplements contain active ingredients that can have strong effects in the body. Always be alert to the possibility of unexpected side effects, especially when taking a new product.

Supplements are most likely to cause side effects or harm when people take them instead of prescribed medicines or when people take many supplements in combination. Some supplements can increase the risk of bleeding or, if a person takes them before or after surgery, they can affect the person's response to anesthesia. Dietary supplements can also interact with certain prescription drugs in ways that might cause problems. Here are just a few examples:

- Vitamin K can reduce the ability of the blood thinner Coumadin® to prevent blood from clotting.
- St. John's wort can speed the breakdown of many drugs (including antidepressants and birth control pills) and thereby reduce these drugs' effectiveness.
- Antioxidant supplements, like vitamins

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C and E, might reduce the effectiveness of some types of cancer chemotherapy.

Keep in mind that some ingredients found in dietary supplements are added to a growing number of foods, including breakfast cereals and beverages. As a result, you may be getting more of these ingredients than you think, and more might not be better. Taking more than you need is always more expensive and can also raise your risk of experiencing side effects. For example, getting too much vitamin A can cause headaches and liver damage, reduce bone strength, and cause birth defects. Excess iron causes nausea and vomiting and may damage the liver and other organs.

Be cautious about taking dietary supplements if you are pregnant or nursing. Also, be careful about giving them (beyond a basic multivitamin/mineral product) to a child. Most dietary supplements have not been well tested for safety in pregnant women, nursing mothers, or children.

If you suspect that you have had a serious reaction from a dietary supplement, let your health care provider know. He or she may report your experience to the FDA. You may also submit a report to the FDA by calling 800-FDA-1088 or completing a form at <http://www.fda.gov/Safety/MedWatch/HowToReport>. In addition, report your reaction to the dietary supplement company by using the contact information on the product label.

Quality

Dietary supplements are complex products. The FDA has established quality standards for dietary supplements to help ensure their identity, purity, strength, and composition. These standards are designed to prevent the inclusion of the wrong ingredient, the addition of too much or too little of an ingredient, the possibility of contamination, and the improper packaging and labeling of a product. The FDA periodically inspects facilities that manufacture dietary supplements.

In addition, several independent organizations offer quality testing and allow products that pass these tests to display their seals of approval. These seals of approval provide assurance that the product was properly manufactured, contains the ingredients listed on the label, and does not contain harmful levels of contaminants. These seals of approval do not guarantee that a product is safe or effective. Organizations that offer this quality testing include:

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

Keep in Mind

Don't decide to take dietary supplements to treat a health condition that you have diagnosed yourself, without consulting a health care provider.

- Don't take supplements in place of, or in combination with, prescribed medications without your health care provider's approval.
- Check with your health care provider about the supplements you take if you are scheduled to have any type of surgical procedure.
- The term "natural" doesn't always mean safe. A supplement's safety depends on many things, such as its chemical makeup, how it works in the body, how it is prepared, and the dose used. Certain herbs (for example, comfrey and kava) can harm the liver.
- Before taking a dietary supplement, ask yourself these questions:
 - What are the potential health benefits of this dietary supplement product?
 - What are its potential benefits for me?
 - Does this product have any safety risks?
 - What is the proper dose to take?
 - How, when, and for how long should I take it?

If you don't know the answers to these questions, use the information sources listed in this brochure and talk to your health care providers.

Talk with Your Health Care Provider

Let your health care providers (including doctors, pharmacists, and dietitians) know which dietary supplements you're taking so that you can discuss what's best for your overall health. Your health care provider can help you determine which supplements, if any, might be valuable for you.

Keep a record of the supplements you take in one place, just as you should be doing for all of your medicines. Note the specific product name, the dose you take, how often you take it, and the reason why you use each one. You can also bring the products you use with you when you see your health care provider.

Federal Regulation of Dietary Supplements

Dietary supplements are products intended to supplement the diet. They are not drugs and, therefore, are not intended to treat, diagnose, mitigate, prevent, or cure diseases. The FDA is the federal agency that oversees both dietary supplements and medicines.

In general, the FDA regulations for dietary supplements are different from those for prescription or over-the-counter drugs.

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Unlike drugs, which must be approved by the FDA before they can be marketed, dietary supplements do not require premarket review or approval by the FDA. While the supplement company is responsible for having evidence that their products are safe and the label claims are truthful and not misleading, they do not have to provide that evidence to the FDA before the product is marketed.

Dietary supplement labels may carry certain types of health-related claims. Manufacturers are permitted to say, for example, that a dietary supplement addresses a nutrient deficiency, supports health, or is linked to a particular body function (like immunity or heart health). Such a claim must be followed by the words, “This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.”

Manufacturers must follow certain good manufacturing practices to ensure the identity, purity, strength, and composition of their products. If the FDA finds a product to be unsafe or otherwise unfit for human consumption, it may take enforcement action to remove the product from the marketplace or work with the manufacturer to voluntarily recall the product.

Also, once a dietary supplement is on the market, the FDA monitors information on the product’s label and package insert to make sure that information about the supplement’s content is accurate and that any claims made for the product are truthful and not misleading. The Federal Trade Commission, which polices product advertising, also requires all information about a dietary supplement product to be truthful and not misleading.

The federal government can take legal action against companies and Web sites that sell dietary supplements when the companies make false or deceptive statements about their products, if they promote them as treatments or cures for diseases, or if their products are unsafe.

Federal Government Information Sources on Dietary Supplements

NATIONAL INSTITUTES OF HEALTH

The National Institutes of Health supports research on dietary supplements.

- **Office of Dietary Supplements**
<http://ods.od.nih.gov>
The Office of Dietary Supplements provides accurate and up-to-date scientific information about dietary supplements.
- **National Center for Complementary and Alternative Medicine**
<http://nccam.nih.gov>
National Center for Complementary and Alternative Medicine Clearinghouse:
1-888-644-6226
- **National Library of Medicine**
<http://www.nlm.nih.gov>
Medline Plus <http://medlineplus.gov>
PubMed <http://www.pubmed.gov>
- **NIH Health Information**
<http://health.nih.gov>

U.S. FOOD AND DRUG ADMINISTRATION

<http://www.fda.gov/Food/DietarySupplements>

The Food and Drug Administration issues rules and regulations and provides oversight of dietary supplement labeling, marketing, and safety.

FEDERAL TRADE COMMISSION

<http://www.ftc.gov>

The Federal Trade Commission polices health and safety claims made in advertising for dietary supplements.

U.S. DEPARTMENT OF AGRICULTURE

<http://www.nutrition.gov>

<http://fnic.nal.usda.gov>

The U.S. Department of Agriculture provides information on a variety of food and nutrition topics.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

<http://www.healthfinder.gov>

The U.S. Department of Health and Human Services provides an encyclopedia of health topics, personal health tools, and health news.



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