

Dietary Supplements – Nutrition in a Pill?

Even if you eat a wide variety of foods, how can you be sure that you are getting all the vitamins, minerals, and other nutrients you need as you get older? If you are over 50, your nutritional needs may change. Informed food choices are the first place to start, making sure you get a variety of foods while watching your calorie intake.

Supplements and fortified foods may also help you get appropriate amounts of nutrients. To help you make informed decisions, talk to your doctor and/or registered dietitian. They can work together with you to determine if your intake of a specific nutrient might be too low or too high and then decide how you can achieve a balance between the foods and nutrients you personally need.



What Are Dietary Supplements?

Today's dietary supplements are not only vitamins and minerals. They also include other less-familiar substances, such as herbals, botanicals, amino acids, enzymes, and animal extracts. Some dietary supplements are well understood and established, but others need further study. Whatever your choice, supplements should not replace the variety of foods important to a healthful diet.

Unlike drugs, dietary supplements are not pre-approved by the government for safety or effectiveness before marketing. Also, unlike drugs, supplements are not intended to treat, diagnose, prevent, or cure diseases. But some supplements can help assure that you get an adequate dietary intake of essential nutrients; others may help you reduce your risk of disease. Some older people, for example, are tired due to low iron levels. In that case, their doctor may recommend an iron supplement.

At times, it can be confusing to tell the difference between a dietary supplement, a food, or over-the-counter (OTC) medicines. This is because supplements, by law, come in a variety of forms that resemble these products, such as tablets, capsules, powders, energy bars, or drinks. One way to know if a product is a dietary supplement is to look for the *Supplement Facts* label on the product.

Supplement Facts	
Serving Size 1 Capsule	
Amount Per Capsule	% Daily Value
Calories 20	
Calories from Fat 20	
Total Fat 2 g	3%*
Saturated Fat 0.5 g	3%*
Polyunsaturated Fat 1 g	†
Monounsaturated Fat 0.5 g	†
Vitamin A 4250 IU	85%
Vitamin D 425 IU	106%
Omega-3 fatty acids 0.5 g	†

* Percent Daily Values are based on a 2,000 calorie diet.
† Daily Value not established.

Ingredients: Cod liver oil, gelatin, water, and glycerin.

Are There Any Risks to Using Dietary Supplements?

While certain products may be helpful to some older individuals, there may be circumstances when these products may not benefit your health or when they may create unexpected risks. Many supplements contain active ingredients that have strong biological effects in the body. This could make them unsafe in some situations and hurt or complicate your health. For example:

- **Are you taking both medicines and supplements? Are you substituting one for the other?** Taking a combination of supplements, using these products together with medications (whether prescription or over-the-counter), or substituting them in place of medicines your doctor prescribes could lead to harmful, even life-threatening results. Be alert to any advisories about these products. Coumadin (a prescription medicine), ginkgo biloba (an herbal supplement), aspirin (an over-the-counter drug), and vitamin E (a vitamin supplement) can each thin the blood. Taking any of these products alone or together can increase the potential for internal bleeding or stroke. Another example is St. John's wort that may reduce the effectiveness of prescription drugs for heart disease, depression, seizures, certain cancers, or HIV.
- **Are you planning surgery?** Some supplements can have unwanted effects before, during, and after surgery. It is important to fully inform your healthcare professional, including your pharmacist, about the vitamins, minerals, herbals, and any other supplements you are taking, especially before surgery. You may be asked to stop taking these products at least 2-3 weeks ahead of the procedure to avoid potentially dangerous supplement/drug interactions - such as changes in heart rate, blood pressure, or bleeding risk that could adversely affect the outcome of your surgery.
- **Is taking more of a good thing better?** Some people might think that if a little is good, taking a lot is even better. But taking too much of some nutrients, even vitamins and minerals, can also cause problems. Depending on the supplement, your age, and the status of your health, taking more than 100% of the Daily Value (DV) (see the Supplements Facts panel) of certain vitamins and minerals, e.g. Vitamin A, vitamin D, and iron (from supplements and food sources like vitamin-fortified cereals and drinks) may actually harm your health. Large amounts can also interfere with how your medicines work.

Remember: Your combined intake from all supplements (including multivitamins, single supplements, and combination products) plus fortified foods, like some cereals and drinks, could cause health problems.

Why Speak to My Healthcare Provider about Dietary Supplements?

You and your health professionals (doctors, nurses, registered dietitians, pharmacists, and other caregivers) are a team working toward a common goal -- to develop a personalized health plan for you. Your doctor and other members of the health team can help monitor your medical condition and overall health, especially if any problems develop. Although they may not immediately have answers to your questions, these health professionals have access to the most current research on dietary supplements.

There are numerous resources that provide information about dietary supplements. These include TV, radio, newspapers, magazines, store clerks, friends, family, or the Internet. It is important to question recommendations from people who have no formal training in nutrition, botanicals, or medicine. While some of these sources, like the Web, may seem to offer a wealth of accurate information, these same sources may contain misinformation that may not be obvious. Given the abundance and conflicting nature of information now available about supplements, it is more important than ever to partner with your healthcare team to sort the reliable information from the questionable.

How Will I Be Able to Spot False Claims?

Be savvy! Although the benefits of some dietary supplements have been documented, the claims of others may be unproven. If something sounds too good to be true, it usually is. Here are some signs of a false claim:

Statements that the product is a quick and effective "cure-all." For example: "Extremely beneficial in treatment of rheumatism, arthritis, infections, prostate problems, ulcers, cancer, heart trouble, hardening of the arteries, and more."

Statements that suggest the product can treat or cure diseases. For example: "shrinks tumors" or "cures impotency." Actually, these are drug claims and should not be made for dietary supplements.

Statements that claim the product is "totally safe," "all natural," or has "definitely no side effects."

Promotions that use words like "scientific breakthrough," "miraculous cure," "exclusive product," "secret ingredient," or "ancient remedy." For example: "A scientific breakthrough formulated by using proven principles of natural health-based medical science."

Text that uses overly impressive-sounding terms, like those for a weight-loss product: "hunger stimulation point" and "thermogenesis."

Personal testimonials by consumers or doctors claiming amazing results. For example: "My husband has Alzheimer's. He began eating a teaspoonful of this product each day. And now in just 22 days, he mowed the grass, cleaned out the garage, and weeded the flower beds; we take our morning walk together again."

Limited availability and advance payment required. For example: "Hurry. This offer will not last. Send us a check now to reserve your supply."

Promises of no-risk "money-back guarantees." For example: "If after 30 days you have not lost at least 4 pounds each week, your un-cashed check will be returned to you."

What Are The Key "Points to Ponder" Before I Buy?

- **Think twice about chasing the latest headline.** Sound health advice is generally based on research over time, not a single study. Be wary of results claiming a "quick fix" that depart from scientific research and established dietary guidance. Keep in mind that science does not generally proceed by dramatic breakthroughs, but rather by taking many small steps, slowly building towards scientific agreement.
- **We may think, "*Even if a product may not help me, it at least won't hurt me.*" It's best not to assume that this will always be true.** Some product ingredients, including nutrients and plant components, can be toxic based on their activity in your body. Some products may become harmful when consumed in high enough amounts, for a long enough time, or in combination with certain other substances.
- **The term 'natural' does not always mean safe.** Do not assume this term assures wholesomeness or that these products have milder effects, making them safer to use than prescribed drugs. For example, many weight-loss products claim to be "natural" or "herbal" but this doesn't necessarily make them safe. The products' ingredients may interact with drugs or may be dangerous for people with certain medical conditions.
- **Spend your money wisely.** Some supplement products may be expensive and may not work, given your specific condition. Be wary of substituting a product or therapy for prescription medicines. Be sure to talk with your healthcare team to help you determine what is best for your overall health.
- **Remember: Safety first.** Resist the pressure to decide "on the spot" about trying an untested product or treatment. Ask for more information and consult your doctor, nurse, dietitian, pharmacist, and/or caregiver about whether the product is right for you and safe for you to use.

What's The Bottom Line?

- Dietary supplements are intended to supplement the diet, not to cure, prevent, or treat diseases or replace the variety of foods important to a healthful diet.
- Supplements can help you meet daily requirements for certain nutrients, but when you combine drugs and foods, too much of some nutrients can also cause problems.
- Many factors play a role in deciding if a supplement is right for you, including possible drug interactions and side effects.
- **Do not self-diagnose any health condition.** Together, you and your healthcare team can make the best decision for optimal health.

Ask yourself the following questions and use the checklist below to talk to your doctor, nurse, dietitian, pharmacist, and/or caregiver about dietary supplements.

Questions to Ask:	Yes	No
Is taking a dietary supplement an important part of my total diet?		
Are there any precautions or warnings I should know about (e.g. is there an amount or "upper limit" I should not go above)?		
Are there any known side effects (e.g., loss of appetite, nausea, headaches, etc.)? Do they apply to me?		
Are there any foods, medicines (prescription or over-the counter), or other supplements I should avoid while taking this product?		
If I am scheduled for surgery, should I be concerned about the dietary supplements I am taking?		

Other Questions to Consider:

What is this product for? What are its intended benefits? How, when and for how long should I take it?

Katherine L. Cason, PhD, RD, LD. 2008. This fact sheet was adapted from US Food and Drug Administration Center for Food Safety and Applied Nutrition fact sheet *Tips for Older Dietary Supplement Users* available at: <http://www.cfsan.fda.gov/~dms/ds-savv2.html>.