

What You Should Know About Nutraceuticals

What is a nutraceutical? This word—with “nutra” derived from nutrition and “ceutical” from pharmaceutical—refers to substances that may be considered a food or part of a food and may provide medical and health benefits.

Using food products to promote health and cure disease is nothing new. Some common drugs used today are based on plants used in the distant past. Aspirin and other fever and pain relievers rely on chemicals similar to those found in willow bark. Opium, from poppies, is the basis of the potent pain reliever morphine. Many countries, such as India, China, and Tibet, have a long tradition of relying on herbs and other plant products (botanicals) for treating health problems.

In the United States, nutraceuticals are considered part of the field of complementary and alternative medicine—substances or treatments that can be used along with, or instead of, the usual medical approach. There are basically two types of nutraceuticals: dietary supplements and functional foods.

Dietary Supplements

Dietary supplements are defined by federal law as products taken by mouth that contain a “dietary ingredient” intended to add something to the foods you eat. Examples of dietary supplements are black cohosh for menopausal symptoms, ginkgo biloba for memory loss, and glucosamine/chondroitin for arthritis. If you take a daily multiple vitamin, you are taking a dietary supplement. Supplement ingredients may contain vitamins, minerals, herbs or other botanicals, amino acids, enzymes, organ tissues, gland extracts, or other

dietary substances. They are sold in many forms, including tablets, capsules, liquids, powders, extracts, and concentrates.

Dietary supplements are easily available. Health food stores and online marketers sell them, as do many grocery stores and chain drugstores. The idea of dietary supplements appeals to many: In 2002, US citizens spent about \$18.7 billion on them; about \$4.3 billion of that was spent on herbs and botanicals. If you use or are considering taking dietary supplements to prevent or treat medical conditions, you should be aware of the possible risks as well as the potential benefits.

Functional Foods

Functional foods are foods that may provide health benefits beyond their basic nutritional value. The benefits may come from naturally occurring parts of the foods themselves or from the manufacturing process. For instance, oat bran helps lower cholesterol, as do specially made types of margarine. In 1999, US consumers spent about \$16.2 billion on functional foods. Other than personal reactions and money spent on a food that doesn’t deliver the intended benefit, functional foods rarely have serious unwanted effects.

The Pros and Cons

Nutraceuticals may seem attractive because they do not require an appointment

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with a health care provider and are easily available without a prescription. Many people believe this approach is more natural than using prescription drugs. They feel dietary supplements will help them feel stronger and healthier, give them more energy, and prevent illness. Some people turn to these products when they feel standard treatments for their specific illnesses have failed.

There are also some drawbacks to using these products, however. For one thing, drugs—including prescription drugs and those sold over the counter—are regulated by the US Food and Drug Administration. Drug manufacturers must submit scientific evidence that their products are safe and effective. Then they must manufacture the drugs in a strictly controlled manner that ensures they are pure and contain the exact amount of the specific ingredients they should. Dietary supplements, on the other hand, are regulated as foods, not as drugs. They may contain more, less, or none of the actual effective ingredient, and they may be contaminated with other substances.

In addition, dietary supplement manufacturers are not required to submit scientific studies proving their products' safety and effectiveness. Just because dietary supplements seem natural does not mean they are safe, or that they will have the effects they promise. Supplements, just like drugs, can have unwanted side effects as well as desirable effects. Some supplements can interact with prescription drugs, causing harm.

Be an Informed Consumer of Nutraceuticals

If you choose to use nutraceuticals, especially dietary supplements, follow these suggested guidelines:

- Learn about the product you intend to use from a reliable source (see Resources). Advertisers, health food store staff, or other retailers who sell these products may sing the praises of supplements, especially by using testimonials—but they are salespeople, not health consultants; selling these products is how they make money.

Resources

- **National Institutes of Health National Center for Complementary and Alternative Medicine**
<http://www.nccam.nih.gov>
- **Introduction: Medicinal Herbs and Nutraceuticals (Merck Manual Second Home Edition)**
<http://www.merck.com/mmhe/sec02/ch019/ch019a.html>

- If you are using prescription medications or being treated for ongoing medical problems, you should discuss the use of dietary supplements with your health care provider. If your health care provider seems unwilling to discuss this topic or dismisses your desire to try alternative treatments, ask for a referral to a professional who is more knowledgeable about the topic. Health care providers are becoming more educated about complementary and alternative medicine and should be able to discuss it with you. Even if you feel that your health care provider will not support your use of dietary supplements, you should still let him or her know if you are taking any of these products. You can also ask a pharmacist if dietary supplements will interact with any medications you are taking.
- When buying herbal and botanical products, look for the term “standardized” on the label. This means that the manufacturer guarantees that the product actually contains the correct amount of the herb or botanical substance. Some experts recommend looking for a lot number, expiration date, description of contents and dose, and manufacturer name and address, as well as buying only from well-known and trusted manufacturers.

In Conclusion

Nutraceuticals may be beneficial to your health, but we are still learning about their benefits and possible harmful effects. If you are using or thinking about using these products, be an informed consumer and be sure to discuss them with your health care provider.

This Patient Handout was prepared by Diane E. Judge, APN/CNP, using materials from The Nutraceuticals Institute, the National Center for Complementary and Alternative Medicine, and the Merck Manual Second Home Edition.

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