

Herbal Supplements: Consider Safety, Too

Herbal supplements are a type of dietary supplement (see the box below) that contain herbs, either singly or in mixtures. An herb (also called a botanical) is a plant or plant part used for its scent, flavor, and/or therapeutic properties.

Many herbs have a long history of use and of claimed health benefits. However, some herbs have caused health problems for users. This fact sheet contains points you should consider for your safety if you use, or are thinking about using, herbs for health purposes. It does not discuss whether herbs work for specific diseases and conditions (for science-based information on that topic, see “For More Information”).

About Dietary Supplements

Dietary supplements were defined in a law passed by Congress in 1994. A dietary supplement must meet all of the following conditions:

- It is a product (other than tobacco) intended to supplement the diet, which contains one or more of the following: vitamins; minerals; herbs or other botanicals; amino acids; or any combination of the above ingredients.
- It is intended to be taken in tablet, capsule, powder, softgel, gelcap, or liquid form.
- It is not represented for use as a conventional food or as a sole item of a meal or the diet.
- It is labeled as being a dietary supplement.

1. It's important to know that just because an herbal supplement is labeled “natural” does not mean it is safe or without any harmful effects. For example, the herbs kava and comfrey have been linked to serious liver damage.
2. Herbal supplements can act in the same way as drugs. Therefore, they can cause medical problems if not used correctly or if taken in large amounts. In some

cases, people have experienced negative effects even though they followed the instructions on a supplement label.

3. Women who are pregnant or nursing should be especially cautious about using herbal supplements, since these products can act like drugs. This caution also applies to treating children with herbal supplements.
4. It is important to consult your health care provider before using an herbal supplement, especially if you are taking any medications (whether prescription or over-the-counter). Some herbal supplements are known to interact with medications in ways that cause health problems. Even if your provider does not know about a particular supplement, he can access the latest medical guidance on its uses, risks, and interactions.
5. If you use herbal supplements, it is best to do so under the guidance of a medical professional who has been properly trained in herbal medicine. This is especially important for herbs that are part of an alternative medical system (see the box below), such as the traditional medicines of China, Japan, or India.

Alternative medical systems are built upon complete systems of theory and practice, and have often evolved apart from and earlier than the conventional medical approach used in the United States. To find out more, see NCCAM's fact sheet "What Is Complementary and Alternative Medicine?"

6. In the United States, herbal and other dietary supplements are regulated by the U.S. Food and Drug Administration (FDA) as foods. This means that they do not have to meet the same standards as drugs and over-the-counter medications for proof of safety, effectiveness, and what the FDA calls Good Manufacturing Practices.
7. The active ingredient(s) in many herbs and herbal supplements are not known. There may be dozens, even hundreds, of such compounds in an herbal supplement. Scientists are currently working to identify these ingredients and analyze products, using sophisticated technology. Identifying the active ingredients in herbs and understanding how herbs affect the body are important research areas for the National Center for Complementary and Alternative Medicine.
8. Published analyses of herbal supplements have found differences between what's listed on the label and what's in the bottle. This means that you may be taking less—or more—of the supplement than what the label indicates. Also, the word "standardized" on a product label is no guarantee of higher product quality, since in the United States there is no legal definition of "standardized" (or "certified" or "verified") for supplements.
9. Some herbal supplements have been found to be contaminated with metals, unlabeled prescription drugs, microorganisms, or other substances.

10. There has been an increase in the number of Web sites that sell and promote herbal supplements on the Internet. The Federal Government has taken legal action against a number of company sites because they have been shown to contain incorrect statements and to be deceptive to consumers. It is important to know how to evaluate the claims that are made for supplements. Some sources are listed below.

For More Information

National Center for Complementary and Alternative Medicine (NCCAM) Clearinghouse

Toll-free in the U.S.: 1-888-644-6226

International: 301-519-3153

TTY (for deaf and hard-of-hearing callers): 1-866-464-3615

E-mail: info@nccam.nih.gov

Web site: nccam.nih.gov

Address: NCCAM Clearinghouse, P.O. Box 7923, Gaithersburg, MD 20898-7923

Fax: 1-866-464-3616

Fax-on-Demand service: 1-888-644-6226

The NCCAM Clearinghouse provides information on CAM and on NCCAM. Services include fact sheets, other publications, and searches of Federal databases of scientific and medical literature. Publications include “Are You Considering Using Complementary and Alternative Medicine (CAM)?” (nccam.nih.gov/health/decisions) and “10 Things To Know About Evaluating Medical Resources on the Web” (nccam.nih.gov/health/webresources). The Clearinghouse does not provide medical advice, treatment recommendations, or referrals to practitioners.

U.S. Food and Drug Administration (FDA)

Center for Food Safety and Applied Nutrition

Web site: www.cfsan.fda.gov

Toll-free in the U.S.: 1-888-723-3366

Information includes “Tips for the Savvy Supplement User: Making Informed Decisions and Evaluating Information” (www.cfsan.fda.gov/~dms/ds-savvy.html) and updated safety information on supplements (www.cfsan.fda.gov/~dms/ds-warn.html). If you have experienced an adverse effect from a supplement, you can report it to the FDA’s MedWatch program, which collects and monitors such information (1-800-FDA-1088 or www.fda.gov/medwatch).

Office of Dietary Supplements (ODS), NIH

Web site: ods.od.nih.gov

E-mail: ods@nih.gov

ODS supports research and disseminates research results on dietary supplements. It produces the **International Bibliographic Information on Dietary Supplements (IBIDS) database** on the Web, which contains abstracts of peer-reviewed scientific literature on dietary supplements.

CAM on PubMed

Web site: www.nlm.nih.gov/nccam/camonpubmed.html

CAM on PubMed, a database on the Web developed jointly by NCCAM and the National Library of Medicine, offers abstracts of articles in scientifically based, peer-reviewed journals on complementary and alternative medicine. Some abstracts link to the full text of articles.

The Cochrane Library

Web site: www.cochrane.org/reviews/clibintro.htm

The Cochrane Library is a collection of science-based reviews from the Cochrane Collaboration, an international nonprofit organization that seeks to provide “up-to-date, accurate information about the effects of health care.” Its authors analyze the results of rigorous clinical trials (research studies in people) on a given topic and prepare summaries called systematic reviews. Abstracts (brief summaries) of these reviews can be read online without charge. You can search by treatment name (such as the name of an herb) or medical condition. Subscriptions to the full text are offered at a fee and are carried by some libraries.

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National Institutes of Health



U.S. Department of Health and Human Services