



## Herbs: Magic, Medicine, or Mystery?

The use of herbs for medicinal purposes is growing in popularity. Billions of dollars in herbal products are bought by individuals who use them, rather than synthetic (manufactured) drugs, to prevent or treat medical conditions.

### **Why do people use herbal products rather than manufactured ones?**

There are four main reasons why people choose herbal products:

- 1) They erroneously believe herbal products are superior to manufactured products.
- 2) They believe herbal products are less expensive than synthetic drugs.
- 3) They are not satisfied with the results they get with manufactured drugs.
- 4) They do not feel their physicians have identified the problem, so they turn to herbal remedies as another option.

### **What are herbs?**

An herb might be considered a diluted drug. To achieve the desired benefit, an individual must take an adequate amount over a certain length of time.

Each herb is different. While some are safe and effective for specific uses, others are not. Herbs can produce undesirable side effects, just like other drugs. People often assume that because herbs are from natural plants, they are safe. But herbal products can be as toxic as manufactured ones. However, it may take more to cause toxicity, because herbs usually are not as potent as manufactured drugs.

### **How are herbal products regulated?**

Herbal products, categorized as nutritional supplements, are not regulated. Unless the packaging contains a medical claim, herbal products are not reviewed by any governmental agency. The Food and Drug Administration, which regulates prescription drugs, only reviews an herbal product if the item is suspected of being harmful or if the label contains a medical claim.

Consumers can buy herbal products without a prescription and may not recognize the potential hazards. For example, an herb may be included on the Generally Recognized As Safe (GRAS) list, but that does not mean it has been approved for therapeutic uses.

Potency and quality of an individual herbal product can be unclear because of this lack of regulation. Studies of herbal products have shown that consumers have less than a 50 percent chance of actually getting what is listed on the label. Look for herbal products with labels showing they are manufactured according to United States Pharmacopeia standards.

The lack of consistent labeling on herbal products can be a source of consumer frustration. An herb is categorized as a nutritional supplement, so its possible health benefits cannot be stated on the label, leaving the consumer with little information. The label may not list why the product should be taken, how much to take, how often, the active ingredients, how much of the active ingredients are in the supplement, or the side effects. Some herbal

products include medical claims on their labels along with an asterisk, which means the claim has not been approved by the FDA. The label must say that the product is not intended to diagnose, treat, cure, or prevent any disease.

Under current law, drug companies do not usually find it cost-effective to research the safety and effectiveness of even the most promising herbal products. Getting an herbal product approved as a new drug is time-consuming and costly. Since natural products cannot be patented, it is not profitable for most companies to go through the approval process.

## How do people learn about the uses of herbs?

Consumers learn about herbs from advertisements, articles in the popular media and information provided by health food stores. It is often difficult to decide if the information is based on good research, or is just opinion, with no valid and reliable scientific evidence to support it. The processor can make outrageous advertising claims as long as the claims are not made on the product's packaging or label. Look for information written by experts in the area of medicine or pharmacognosy, the science of discovering medicinal products in nature. Be wary of authors in the popular media who take a sentence or paragraph out of a research report and make it fit their purpose. Such usage takes the information out of context and can be misleading.

## Cautions regarding herbal products

### Placebo effect

Claims that certain herbs provide benefits one might not find in any peer-reviewed research journal involve the placebo effect. The substance provides relief simply because the consumer believes it is effective, rather than

there being any physiological change. A placebo does for you what you think it will do. Placebos “work” about one-third of the time.

### Self-medication

Most herbal treatments in the United States are self-selected. Self-medication is not recommended: Knowing which conditions to self-treat and which deserve professional attention is difficult. For example, depression can mask other medical conditions, such as an unbalanced thyroid. Treating the symptom rather than the underlying illness can cause long-term health problems.

### How do you know if you are getting the product shown on the label?

It is the consumer's responsibility to investigate the quality of the nutritional supplement. Since herbs are not strictly regulated, it is important to buy them from a reputable supplier who uses good manufacturing practices. Where the herbs are grown, soil fertility, length of the growing season, temperature, amount of moisture, time harvested, and how the herbs are processed are significant factors in detecting their quality and potency.

When considering quality herbal products, look for the words “standardized” or “guaranteed potency.” “Standardized” means that the herbal product has been processed a bit to guarantee a known minimum level of one or more of the major active compounds. This may be an indicator that the herb contains the active ingredient, but there is no real guarantee. To be certain, call the company, and ask for an assay of the particular lot of the herb that you are buying. The company will send you a report of the chemical breakdown, which can be compared with the label.

Price does not always indicate quality.

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## Questions to ask before taking an herbal product for medicinal use

### Why am I taking this herb?

There should be a reason you are taking an herbal product. You should not just take an herb without a specific reason.

### Does research-based information confirm this herb to be beneficial for the intended use?

Question statements regarding an herb's usefulness in preventing or treating ailments. Is the statement based on research or opinion?

### Are there side effects or safety concerns?

All drugs have side effects. Talk to your doctor, pharmacist, or other reliable source of information. While an herb is considered a diluted drug, and therefore side effects may be less severe, be cautious. If an herb disagrees with you, or if you develop any symptoms after taking it, discontinue its use. Allergies or other side effects are possible.

Avoid herbal remedies if you are pregnant or nursing. Herbal remedies should not be combined with prescription or other over-the-counter drugs. For example, if an individual takes garlic along with some type of blood-thinning medication, and then requires emergency surgery, the blood may not clot as it should, causing complications.

### What are the recommended forms and dosages of the herb?

Herbs are available as capsules, tablets, powder, liquid, fresh, tea, or candy. Do not take more than the amount recommended on the packaging or by your doctor. Unless the herb's long-term effects have been well studied, do not consume high doses for months or years. For many herbs, the active compounds and long-term effects are not well known.

## Have you talked to your physician about the herbs you are taking?

It is the consumer's responsibility to talk with the physician to identify the root of the health problem and how best to treat it. If you are planning to take herbal products, or are already taking them, consult your physician. The physician should know what herbs you take to make sure they do not have a negative reaction with other medications. If asked to list medications, include herbal products as well.

### Conclusion:

Learn about herbal products before taking them for medicinal purposes. Be skeptical: Misinformation is abundant. Look for signs that the information is credible. Consider the author or the person or organization supporting the information. Because of regulations, herbs are categorized as nutritional supplements, but should be considered diluted drugs. Keep the previous five questions in mind before purchasing herbal products, and make sure your physician is aware that you are using them, especially if you are taking other medications.

### Sources:

Tyler, V. (1993). *The Honest Herbal*. The Haworth Press. Binghamton, N.Y. 3rd edition.

Tyler, V. (1994). *Herbs of Choice*. The Haworth Press. Binghamton N.Y.

Vitamin and Nutritional Supplements, Mayo Clinic Newsletter. June 1997. pp. 1-7.

Respect Grows for Botanicals, But Can You Trust the Herbs You Buy? Environmental Nutrition. May 1995.

From Vitamin A to Zinc, Here's EN's 1996 Nutrition Guide. Environmental Nutrition. January 1996.

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