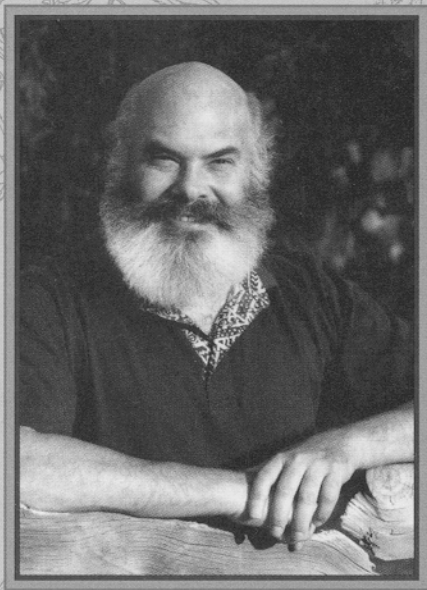


Dr. Andrew Weil's

Consumer Guide to Herbal Medicines



WITH COMPLIMENTS OF

Self Healing

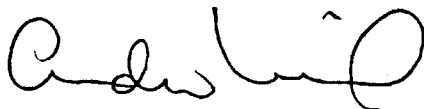
Dear Reader,

When used wisely, herbal medicines can play a key role in caring for your health naturally. In my experience, echinacea can head off a head cold and valerian can induce sleep just as effectively as overprescribed pharmaceuticals—with far fewer side effects. I am delighted to see more and more people turning to this gentler form of medicine to treat their everyday health concerns.

Unfortunately, however, hype and promotional claims abound in this booming industry. Finding a trustworthy source of information on buying and using herbs responsibly can be a difficult task. I have prepared this guide to help you make the best choices possible in the confusing herbal marketplace. Starting on page 5, you will find guidelines on how to be a smart consumer of herbal products—from how to read a label to how to choose the most effective forms. Beginning on page 12, I present detailed information on buying and using 10 best-selling herbs—from the herbal relaxant kava to the prostate protector saw palmetto. I also warn you about three popular herbs you should not waste your money on (see page 11).

I hope you find this guide a valuable tool, and that you will continue to turn to *Self Healing* each month for ongoing advice on caring for body and mind naturally.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew Weil". The signature is fluid and cursive, with a large loop at the end.

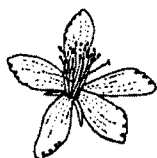
COVER PHOTO

Jack W. Dykinga

HERB ILLUSTRATIONS

Peggy K. Duke

This guide is not intended to be a total replacement for standard (allopathic) medicine, which has its place in the diagnosis and treatment of disease. Any unusual, persistent, or severe symptoms should be evaluated by a physician. The natural treatments suggested here can affect different people differently, occasionally producing adverse reactions. If a condition fails to respond to these treatments, you should consult a physician to see about another course of action.



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Shopping Smart

How to Get the Most from Herbal Medicines

Ever since I began practicing medicine 25 years ago, I have depended on the healing power of herbs. For every pharmaceutical prescription I write, I give out some 40 recommendations for botanicals. I might prescribe valerian for someone bothered by insomnia, for example, or peppermint oil for irritable bowel syndrome. I make sure that patients leave my office knowing which herb to take, what form to purchase, and what dosage is required.

I realize that most consumers have no such clear guidance. Although Americans are turning to herbal medications in unprecedented numbers, the medical profession has done little to teach patients how to use these natural forms of drugs wisely. Today, few medical schools or colleges of pharmacy offer any sort of formal training in botanical medicine. Instead, consumers often rely on word-of-mouth recommendations or the promotional claims of advertisers for advice on herbs. In fact, I often suggest that medical students loiter in the aisles of natural-food stores and eavesdrop if they want to observe the extent to which health-food clerks have supplanted pharmacists and doctors as dispensers of practical health information.

The FDA and Congress have not helped allay consumer confusion, allowing herbs to fall into a twilight zone of regulation. Under current legislation,

herbs are classified as dietary supplements, meaning that manufacturers can make general statements on their labels about an herb's effect on the body's "structure and function" ("good for circulation" or "for joint health"), but can't make the specific health claims ("prevents atherosclerosis") allowed drug manufacturers. The consumer is left guessing exactly what conditions the herb should be used for.

At the same time, the government has done little to regulate the quality of herbal products. While the FDA requires drug companies to conduct controlled studies to prove the safety and efficacy of prescription and OTC drugs, herb manufacturers are held to no such standards. The unfortunate result is a great deal of promotion that is pure baloney, and many ineffective and overpriced products.

In the future, I would like to see the FDA establish a new division of natural therapeutics to regulate herbs and other supplements, so that consumers can use this effective and gentler form of medicine with greater confidence and ease. In the meantime, here are some basic guidelines to help you make the best choices in the confusing herbal marketplace. Starting on page 12 of this guide, you will find specific recommendations for buying and using 10 best-selling herbs.

Know before you go ▶ If you do some research *before* you get to the natural-food store, you are less likely to succumb to hype or be baffled by oblique labeling once there. Your best source of information, of course, is the advice of a knowledgeable health practitioner, such as a medical doctor, herbalist, or naturopath. Your practitioner can recommend an herbal regimen tailored to your health concern, discuss dosages and side effects, and answer your questions in detail. (To find a practitioner, consult the resource guide on page 32.)

If you don't have a practitioner to turn to, consult a good book. I recommend *Herbs of Choice* (Pharmaceutical Products Press, Binghamton NY) by Varro Tyler, a professor emeritus of pharmacognosy at Purdue University and one of the country's leading authorities on botanical medicine, as among the best sources currently available. *The Green Pharmacy* (Rodale Press) by James Duke, a botanist who spent 30 years at the USDA researching medicinal plants, is another good resource. (I'm working to develop a sort of *Physicians Desk Reference* for herbal medicine that could

Which Form Should You Buy?

Selecting the best form of herb to buy is more than just a matter of personal preference—it can determine how effective an herbal medicine really is. As a general principle, forms that allow exposure to air are the quickest to lose their potency, due to the damaging effects of oxidation. Here are my general recommendations for the best—and worst—choices.

- **Liquid and solid extracts.**

Extracts are usually an excellent choice. They are stable, convenient, and preserve the potency of the herb's active ingredients almost indefinitely. Extracts are made by soaking an herb in alcohol and/or water to distill the plant's active ingredients. The *liquid extract* is then taken by the drop or dropperful in some warm water or fruit juice. *Solid extracts* have been dried to remove the solvents, then packed into capsules or made into tablets. Look for extracts that have been *standardized*—measured to ensure a certain amount of the herb's active constituents are present.

- **Tinctures.** Tinctures are another good choice. These liquid preparations are processed much like extracts, so they are also stable, active, and convenient. However, they contain more alcohol and less plant material than do liquid extracts.

- **Freeze-dried encapsulated herbs.** In these preparations, the fresh herb has been flash-evaporated,

resulting in a preparation more stable than air-dried herbs.

- **Teas.** I don't usually recommend teas (except for peppermint or chamomile) as the dried herbs they are made from can deteriorate rapidly. If you do buy herbal teas, let your nose be your guide to freshness. Peppermint tea bags, for example, should be richly fragrant rather than faintly scented.

- **Bulk herbs.** Don't buy bulk herbs from bins in natural-food stores. Often they have lost their color and odor—signs that they may have become inactive. Leaves and flowers deteriorate the fastest; roots and barks more slowly.

- **Powdered herbs in capsules.** In these preparations, dried herbs have been ground up, then encapsulated. Grinding greatly increases surface area, speeding oxidation. Before being ground the plant material may have been old, dirty, or adulterated, making these a risky choice.

be used by both doctors and consumers.)

Either way, you should enter the store knowing in advance which herbs you want to purchase instead of letting the claims or promotions you encounter there be your guide to health decisions.

Look for standardized products ▶ Buying standardized products is the best guarantee that an herbal remedy contains what it's supposed to contain in amounts sufficient to produce a desired effect. The term *standardized* on the label means that the herb's active compound, or compounds that act as markers for general plant activity, have been identified and that the product has been tested to ensure a certain amount of these constituents are present. St. John's wort, often used to treat depression, is now regularly standardized for hypericin, for example, while the herbal relaxant kava is standardized for kavalactones. The label should indicate how much of the constituent is contained in each dosage.

Buying standardized products is particularly important for those herbs most likely to be adulterated, such as ginseng. One study of 54 pure ginseng products, for example, showed that 60 percent were so adulterated with cheaper herbs as to be worthless. Twenty-five percent contained no ginseng at all.

Do keep in mind that standardization is not a complete guarantee. Currently, standardization is done voluntarily by manufacturers rather than by an outside regulating body, so the best assurance that the numbers on the label are correct is to choose a reputable company. In the case of some herbs (including the best-seller echinacea), it is still not fully understood which constituents are responsible for the herb's therapeutic effect. Standardized formulas may not be available, or the constituent tested for may not be the sole or principal determinant of activity of the whole plant.

Stick to single-herb products ▶ While there *are* some useful combination formulas available, as a rule I prefer single-herb products. The immune-boosting herb echinacea, for example, is often sold in combination with goldenseal. Goldenseal has a long history as a useful topical disinfectant, but I have not seen any evidence that it is beneficial when used internally. I would therefore stick with a pure echinacea product.

Indeed, I have seen some kitchen-sink formulations that combine as many as 20 different herbs. Such combinations may expose you to more

How to Read a Label

Although current regulations prevent herbal manufacturers from making specific health claims on the label, there is still much that a smart consumer can learn from reading carefully. Here are some important factors to look for when making your purchase.

- ▶ Look for products made from **fresh** rather than dried herbs.
- ▶ Look for the term **standardized** as your best bet that the product contains a measured amount of the herb's active constituents. The label should give the reference compound and its content per dose.
- ▶ If the product is not standardized, check for the **Latin name** on the label to make sure you're getting the correct plant. The common term *ginseng*, for example, can refer to several different plants, each with different therapeutic properties. Of course, there's no guarantee except for the manufacturer's reputation that the plant described on the label is the plant that's in the bottle.
- ▶ Check the **price**. While it's a good idea to do some comparison shopping, remember that cheaper is not necessarily a bargain. I would be wary of the manufacturer's offering 90 ginseng capsules for \$3 if the typical price is \$30.
- ▶ Look at the **expiration date** to make sure the product is fresh. Companies assign these dates themselves in a somewhat arbitrary manner, but the date should provide at least some clue as to whether those stinging nettle capsules on the shelf are likely to still be effective.
- ▶ Look at the **dosage size** to see how many capsules you have to take per day. If you have to take 10 capsules a day of a low-dose product to achieve an effect, keep that in mind as you calculate the cost.
- ▶ If you're a vegetarian or have food allergies, check the contents to make sure they do not contain animal by-products such as gelatin or **possible allergens** such as artificial preservatives or colorings.
- ▶ Take the **manufacturer's claims** that you do encounter with a grain of salt. Remember that, unlike the claims for pharmaceutical drugs, these have not been approved and validated by the FDA.

medication than you need, increasing the possibility of side effects. Please keep in mind that herbs are dilute forms of natural drugs, so you should never take them casually simply because it seems like a healthy thing to do.

Buy from reputable companies ▶ Unless you have a local herbalist you respect, I think you are better off buying herbal remedies from large companies whose reputation is well established and who provide written materials that explain their manufacturing processes and the sources of their herbs. Herbs are sometimes grown using pesticides or are fumigated in shipment, for example, so look for companies that emphasize the purity of their products and grow their herbs organically.

Among those companies I trust are Nature's Way (many of whose products meet Germany's high standards for phytomedicines), Solaray, Enzymatic Therapy, Phyto-Pharmica, Zand, Mariposa, and the Eclectic Institute. These brands are available in natural-food stores, with the exception of Phyto-Pharmica, which sells mainly to health professionals.

Treat herbs with respect ▶ Most commercially available medicinal herbs are unlikely to hurt you. However, you do need to follow some common-sense rules. With the exception of daily tonic herbs such as ginseng, take herbal medicines only when you really need them. Start slowly and don't exceed the recommended dosage. Allow your body time to work with an herb. If you note any adverse reactions, such as headache, rash, or gastrointestinal symptoms, stop taking it. Unless you are under the care of a knowledgeable practitioner, don't take any herbs during pregnancy or while nursing.



Don't Waste Money On . . .

In today's crowded herbal marketplace, there are a great many products whose remarkable claims are not yet backed up by good scientific evidence. Here are three popular herbal supplements I'd advise you not to waste your money on:

1 Alfalfa (*Medicago sativa*)

Originally used as animal forage, alfalfa over the years has gained a reputation as a treatment for ulcers, asthma, and hayfever, but none of these claims have held up to serious scientific scrutiny. I know of no human nutritional need for alfalfa, whose sprouts can contain a natural toxin called canavanine. Despite some claims that alfalfa supplements are high in vitamins and minerals, most don't contain even the nutrients found in an inexpensive multivitamin.

2 Cat's Claw (*Uncaria tomentosa*)

Traditionally used in South American folk medicine as an anti-inflammatory, cat's claw—also sold as *uña de gato*—is primarily marketed as an immune booster. I consider popular claims for its use as a treatment for cancer and AIDS to be unfounded and irresponsible. While there are a few studies suggesting that it stimulates immune function, I'd recommend using two other more widely researched plants—astragalus and echinacea (see pages 14 and 16)

for treating colds and boosting immunity. If you do choose to experiment with cat's claw, proceed with caution: The demand for this herb has increased so much that in some parts of the country, especially along the Mexican border, vendors are substituting a more-common, possibly toxic plant (*Acacia greggii*), also known commonly as cat's claw.

3 Herbal "Fen-Phen" Products

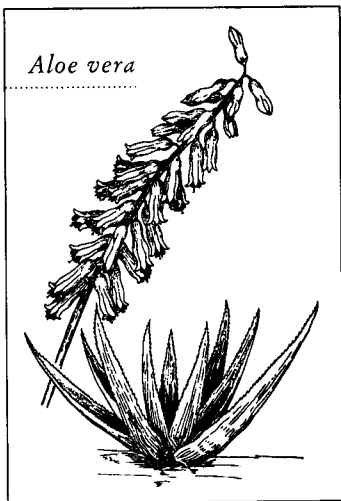
Since the diet drug combo fen-phen was taken off the market, a number of supplement makers have stepped up their promotion of herbal alternatives. Many of these products combine ephedra and St. John's wort, both of which I recommend singly for other conditions. I know of no evidence, however, that these herbs promote long-term weight loss, either alone or in combination. In addition, ephedra—a stimulant—is addictive and can cause nervousness, anxiety, and insomnia. I'd steer clear of herbal weight-loss gimmicks and try a sensible diet and exercise plan instead.

Aloe

SKIN SAVER

Aloe is one home remedy I wouldn't want to be without. Keep a potted aloe plant on your windowsill to have a ready supply of clear gel for topical treatment of cooking burns, minor cuts, dermatitis, and even hemorrhoids. I also recommend carrying a bottle of pure aloe gel in a travel kit as a sunburn soother. While there are numerous aloe *juice* products on the market for internal use, however, I'm convinced that the only good they may do is to your gastrointestinal tract. Any multilevel-marketing claims you hear about the miraculous powers of aloe juice to enhance immune function or cure everything from arthritis to AIDS are sheer fantasy—but such beliefs may have helped turn this African succulent into one of today's herbal best-sellers.

HISTORY & RESEARCH In ancient times, aloe was so coveted for its wound-healing powers that when Alexander the Great conquered Egypt in 332 B.C., he dispatched an army to the island aloe was cultivated on—to seize both island and plant. Modern studies are confirming aloe's topical benefits, suggesting that it increases blood flow to injured areas (which helps speed healing) and also contains compounds that may have pain-relieving and anti-inflammatory effects and help ward off infection. In a 1990 study of patients undergoing dermabrasion—a procedure to remove the top layer of skin—healing was 72 hours faster on the half of the face treated with stabilized aloe, while another study showed that a different aloe product helped promote circulation in skin that was frostbitten.



The internal use of aloe, on the other hand, has little research to back it up, but I've heard many patient testimonials about the juice's ability to help heal digestive disorders, from ulcers to diverticulitis. One friend claims that aloe juice was responsible for curing him of an otherwise intractable case of colitis, lead-

ing me to believe that, even in the absence of good documentation, it may be worth a try for this category of illness.

HOW TO USE IT Because aloe is so easy to grow, and because its active compounds can become destabilized during processing, my advice is to use the live plant instead of commercial preparations whenever possible: Just cut off a lower leaf near the central stalk, remove any spines along the edge, split the leaf lengthwise, score the gel with the point of your knife, and apply directly to the injured area. You can also find pure aloe gel in health-food stores, which can be applied topically in the same way. Be aware, however, that many commercial skin-care products that boast aloe on their labels—from sunscreen to moisturizer to tissues—may have too little of the herb in them to offer real therapeutic benefit.

If you're interested in giving aloe *juice* a try, you can mash up some gel in a little fruit juice and drink it, or use any commercial product that is pure. Aloe juice tastes nasty, however, so ask around for a brand that's relatively palatable. And since aloe vera taken internally can be an irritant laxative, don't overdo: A reasonable dose might be a teaspoonful of aloe juice after meals.

CAUTIONS Aloe products made from the bitter yellow latex—the cells just under the skin of the leaf—have historically been used as laxatives, but I don't recommend aloe for this purpose as it can cause painful cramping and diarrhea.

buying tips

- Your best bet is to cultivate your own aloe plant—they're available at most nurseries and plant stores.
- When buying aloe gel, look at the label to see how much aloe it contains. If no amount is given, check the list of ingredients: Unless aloe appears at the top of the list, chances are there's not much in the product.
- Avoid products labeled "reconstituted" aloe vera gel: This means they've been prepared from a concentrate, a process that may affect quality and effectiveness.

Astragalus

IMMUNE BOOSTER

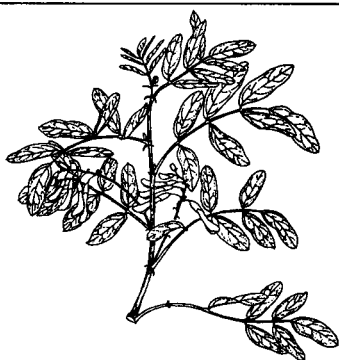
The name of this ancient herb (known in Chinese as *huangqi*) may be less familiar than echinacea—but I'm pleased to note that it has earned a spot among this country's best-selling herbs for its similar powers as an immune enhancer. If you tend to get every cold or virus that's going around, are vulnerable to stress, or have chronic infections such as sinusitis or bronchitis, you should consider taking this herb as a daily tonic. I also recommend it as an adjunctive treatment for conditions of suppressed immunity such as mononucleosis, chronic fatigue syndrome, and AIDS as well as for those undergoing or recovering from radiation or chemotherapy for cancer.

HISTORY & RESEARCH Astragalus is a large genus in the pea family that's related to the locoweed that grows in the American West. The form of the plant used medicinally grows wild in northern China and Inner Mongolia: Its dried root is sold by Chinese herbalists in bundles of thin sweet-tasting slices that look like tongue depressors. One of the most revered herbs in

Chinese medicine for more than 2,000 years, astragalus is still prescribed by practitioners there today as a whole-body tonic—to strengthen or invigorate the healing system on a daily basis—as well as a cold and flu remedy. It's also a chief component of *fu zheng* therapy, a combination herbal treatment designed to restore immune function in cancer patients undergoing radiation or chemotherapy.

Like echinacea, astragalus has been shown to stimulate white blood cell activity and increase the production of antibodies

and interferon (all of which are important to immune function). Chinese clinical studies suggest that it reduces the frequency and duration of the common cold. In addition, cancer research in China—which shows increased survival in patients receiving both herbal and Western therapies—



Astragalus membranaceus

indicates that astragalus may help protect the bone marrow and immune system from some of the damaging effects of conventional cancer treatments. In the West, pharmacological studies of the herb have revealed antiviral properties as well as general immune-boosting effects.

HOW TO USE IT Whether you're taking

astragalus as a preventive measure against frequent sinus infections or to strengthen immunity while being treated for cancer, I suggest giving astragalus a good two-month trial. Follow dosage instructions on the label. (The dose for Astra-8, the combination brand I recommend, is three tablets twice a day). You can also take astragalus as a short-term treatment for colds and flu. Start taking the daily dose at the first sign of symptoms.

If you are generally healthy but want to take astragalus as a preventative during cold and flu season, I'd advise using half the recommended dose. You can continue taking it indefinitely.

CAUTIONS In rare cases, people taking astragalus have reported loose stools or abdominal bloating. But, in general, the underground parts of this herb (from which the extract is prepared) have extremely low toxicity: Studies show that mice given the equivalent of 500 times the recommended human dose exhibit no adverse effects.

buying tips

- Available in tinctures or capsules; choose whichever form you prefer.
- Look for either a single or combination formula—both are effective.
- If you're at a loss, ask for a product called Astra-8, a capsule that mixes astragalus with seven other Chinese herbs.

Echinacea

NATURAL ANTIBIOTIC

For a few years now, this popular immune booster (*Echinacea purpurea* and related species) has been the top-selling herb in the country: Even consumers who'd never set foot in a health-food store are plucking it regularly off their local pharmacy shelves. And for good reason—it's one of the best ways I know to stop the common cold in its tracks. I'd recommend tincture of echinacea to anyone at the first sign of a cold or flu—symptoms like a scratchy throat or body aches—and I often prescribe it as a first line of treatment for common infections such as sore throats or ear infections before resorting to conventional antibiotics.

HISTORY & RESEARCH Familiar to gardeners as the ornamental purple coneflower, echinacea (also called snakeroot or hedgehog) hails from the Native American herbal tradition, where Plains Indians used it widely to treat snakebites, toothaches, and many other ailments. In the late 19th century,

the herb was discovered by doctors in this country and became one of their most trusted medicines. While it fell out of favor in the United States with the rise of modern antibiotics, echinacea has remained popular in Europe: In Germany today echinacea is officially approved as an over-the-counter drug for respiratory infections and other ailments.

In recent years, a body of research done mostly in Germany has shown that echinacea increases the number and activity of key white blood cells involved in immunity: It's known to boost the activity of T-cells (natural killer cells) as well as the production of interferon. One placebo-controlled 1992 study of 180 patients found that four dropperfuls of echinacea extract

a day significantly relieved the severity and duration of flu symptoms, while another double-blind study indicated that patients with diminished immune response benefited significantly from preventative treatment with the herb.

Echinacea purpurea



This country's first controlled trial of echinacea, conducted at Bastyr University in Seattle, is now under way.

HOW TO USE IT To stave off a cold or the flu *at the first sign of symptoms*, I recommend taking a dropperful of tincture in water or tea four times a day and continue until symptoms are gone. Children 3 to 12 may be given half the adult amount. I'd also advise taking a full dose of echinacea while you're battling infections such as sinusitis, tonsillitis, or ear infections, as well as the day before and after major dental work to prevent bacterial infection.

The use of echinacea as a preventative tonic is a bit more controversial. I don't usually recommend it for this purpose, but if you do want to use it to build up your immunity, halve the adult dose and take as long as you feel you need to—although you should probably take a break from the herb on occasion to avoid developing tolerance. (Germany's Commission E—the national agency that regulates botanical medicines—recommends taking echinacea for no longer than eight consecutive weeks.)

I myself use echinacea as a preventative when I'm planning a long plane flight where several hours of breathing stale air is likely to take a toll on my respiratory system: If you tend to get coughs or sore throats from flying, start taking a full dose of echinacea the day before your flight and continue for a day or two after.

CAUTIONS Echinacea is nontoxic. Rarely it may cause mild side effects such as stomach upset and diarrhea. If so, try taking only half the dose. I don't recommend echinacea for people with immune-function disorders such as multiple sclerosis or collagen disease.

buying tips

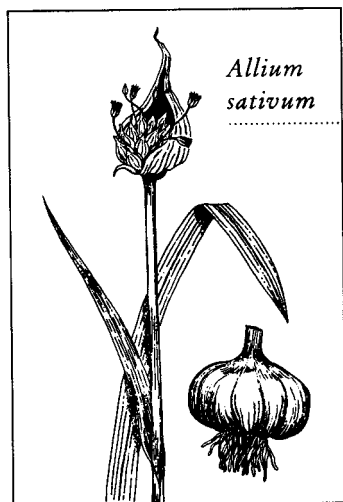
- Choose a tincture made primarily from the root of the plant.
- Avoid combination echinacea/goldenseal remedies, as there is no evidence that goldenseal has health benefits when taken internally, and it is now an endangered species.
- Look for a product made from plants that are certified organically grown—wild echinacea is threatened in some areas.
- Liquid remedies should produce a curious and distinctive numbing sensation when held in the mouth for a few minutes. If a commercial preparation doesn't do this, it's not good.

Garlic

HEART-HEALTHY TONIC

For many people, garlic supplements have become as much a part of a daily health regimen as their morning vitamin pills. Heavily promoted in advertisements that tout the herb's tonic benefits, garlic is outsold only by echinacea and ginseng in today's crowded herbal marketplace. I certainly agree that garlic is nothing short of an herbal superstar. But this is one case where I'm convinced that the benefits of eating the real thing outweigh those of swallowing a capsule, since commercial extracts don't preserve the full activity of the fresh bulb. Instead of taking a supplement, I urge everyone to add garlic liberally to their diets.

HISTORY & RESEARCH Valued as both food and medicine since the reign of the Egyptian pharaohs (King Tut had some in his tomb), garlic has been a staple of folk medicine around the world ever since. Today, this humble bulb has garnered more scientific validation than any other herb. There have



been an estimated 2,400 scientific studies on garlic, showing it to be a rich source of sulfur-containing compounds (including allicin) whose biological activity benefits so many areas of the body that I classify it as a true tonic. Some of garlic's most dramatic effects are on the cardiovascular system: It lowers total cholesterol, while increasing HDL ("good") cholesterol and reducing the susceptibility of LDL ("bad") cholesterol to oxidize, the first step by which it damages arterial walls. (One well-reported meta-analysis showed that the equivalent of one-half to one clove a day can lower cholesterol an average of 9 percent.)

A body of solid research suggests that garlic also lowers blood pressure, mimicking the action of hypertensive drugs without their toxic side effects. In addition, garlic reduces the clotting tendency of the blood, protecting against heart attacks and strokes.

Through a different kind of action, this versatile herb fights many kinds

buying tips

- Buy fresh, whole garlic rather than supplements.
- If you simply can't use the real thing—such as when you're traveling—look for enteric-coated capsules standardized for allicin content.

of bacteria and fungi that cause disease in humans. It also enhances immunity by boosting the number of natural killer cells that check the spread of cancer: Epidemiological studies have shown a link between regular consumption of garlic (as well as onions, scallions, and chives) and a reduction in the risk of stomach cancer.

HOW TO USE IT Many manufacturers of garlic supplements standardize their products for allicin content in the belief that this compound is primarily responsible for the herb's many health benefits, but I'm not so sure. Instead, I recommend that everyone eat one or two cloves of garlic a day. It's much better to eat garlic raw or lightly cooked, as it loses some of its antibiotic properties when you cook or dry it. Chop it fine and mix it with food, mash it into salad dressing, sauté it lightly in olive oil to flavor pasta, and, in general, add it near the end of cooking to enjoy its pungent flavor. You can also cut a clove into chunks and swallow them like pills. If you find that garlic gives you flatulence, eat less. Try chewing parsley after eating garlic to minimize any odor.

In a more-specific use, I have found garlic to be the best home remedy for colds: Eat several cloves of raw garlic at the first onset of symptoms.

CAUTIONS The safety of garlic as a culinary herb is clear, but we have no data on the safety of concentrated extracts. Because of their blood-thinning effects, use them cautiously if you are taking any anticoagulant drugs, especially coumadin.

Ginkgo

CIRCULATION ENHANCER

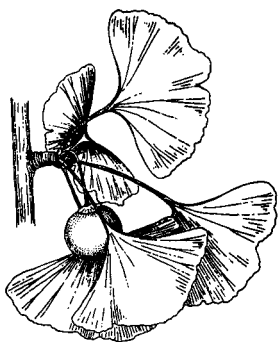
The fan-shaped leaves of this common tree have garnered lots of attention lately as a brain booster: One well-publicized study, for example, found ginkgo extract to enhance mental and social functioning in Alzheimer's patients suffering from reduced blood flow to the brain. In my experience, ginkgo can make a real difference in a number of symptoms caused by inadequate cerebral blood flow (a common concern in older people), such as memory loss, concentration problems, and confusion. I also think it is useful for two other circulation-related conditions, ringing in the ears and vertigo, which can strike at any age. As for the many healthy younger people who are taking ginkgo as a "smart drug" to improve their memory or make them more alert, however, I'm afraid you're out of luck: I'm not convinced that this herb will offer any significant benefit to a normally functioning brain.

HISTORY & RESEARCH Originating in China 200 million years ago, ginkgo—which you'll now find planted along many city streets in this country—is the world's oldest living tree species. In China, ginkgo seeds and fruits have been used as both food and medicine since 2800 B.C., but it's the dried

green leaves, first extracted in Europe about 30 years ago, that are the source of today's herbal medicine. A number of studies conducted in Europe have shown that the herb's active ingredients—flavonoids and terpene lactones—exert an antioxidant effect, inhibit blood clotting, and improve circulation by making the membranes of red blood cells more elastic. One 1992 review of 40 controlled studies concluded that ginkgo was as valid a treatment for reduced blood flow to the brain (which can lead to dementia) as a widely prescribed pharmaceutical drug, and last year a major study in the *Journal of the American*

Medical Association found that Alzheimer's patients who took the herb showed improvements in reasoning ability and daily living skills over a six-month trial period. (My belief is that this effect may have been due to ginkgo's

Ginkgo biloba



improving symptoms of atherosclerosis in the subjects rather than affecting the course of Alzheimer's disease itself.)

There's much less evidence, on the other hand, for ginkgo as an all-purpose brain booster. One 1988 study did find that young volunteers who took a large single dose of the extract (600 mg) performed better on short-term memory tests. However, I would advise healthy adults that there are simpler, cheaper, and more reliable ways to keep your brain in top form, such as eating a nutritious diet and getting plenty of rest.

On the other hand, ginkgo *can* be useful for circulation-related conditions elsewhere in the body: One researcher at the University of California at San Francisco is currently studying ginkgo as a treatment for sexual dysfunction in men and women caused by antidepressants—a syndrome which may be vascular in origin—and has reported favorable early results. People with intermittent claudication (painful leg cramps due to poor circulation) may also find ginkgo helpful.

HOW TO USE IT In all cases, the dosage I recommend is the same: 120 to 240 mg of ginkgo leaf extract a day, in two or three separate doses. Ginkgo works slowly; however, so expect to wait at least eight weeks before seeing improvement. Older people may want to experiment with using ginkgo preventatively as a daily tonic.

CAUTIONS Ginkgo rarely causes any side effects, with the exception perhaps of mild stomach upset or headache. It may have additive effects when combined with prescribed anticoagulants, especially coumadin, so use caution if you are taking this category of drug.

buying tips

- Look for capsules or tablets whose labels say "24/6," which means the product has been standardized to contain 24 percent flavone glycosides and 6 percent terpenes.
- The product used in most European studies is manufactured in the United States as Ginkgold (Nature's Way) and Ginkoba (Pharmaton Natural Health Products).
- Avoid unprocessed ginkgo products such as teas: They contain ginkgolic acids, which are potent allergens related to a chemical in poison ivy.

Ginseng

ANCIENT PANACEA

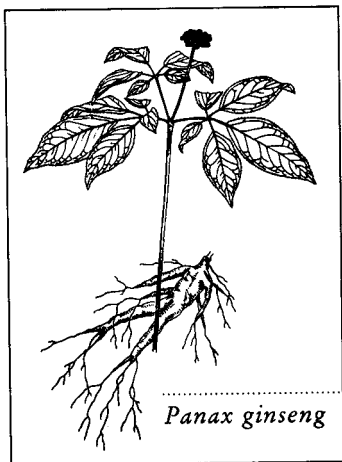
Ginseng sales are booming: Each year American consumers in search of better energy and endurance are buying up some 120 million capsules of the leading brand alone. In my experience, this ancient tonic herb is an effective adaptogen (a substance that helps bring the entire system into balance), and I often recommend it to chronically ill patients and to those who are debilitated or lacking in vitality. I've known ginseng to increase energy, vitality, and sexual vigor; improve skin and muscle tone; and confer resistance to stress of all sorts. On the other hand, I am less convinced about claims that ginseng can help younger people improve athletic performance, as recent studies have not borne this out. Since good ginseng is pricey, you may want to heed the words of a Chinese man who advised me against wasting this herb in youth, but to save it for old age and then see what it can do.

HISTORY & RESEARCH True ginseng (not to be confused with Siberian ginseng, a distant cousin) comes from the fleshy root of two different species in the genus *Panax*—a name derived from the same root as the word

panacea, or “cure-all.” Asian ginseng (*Panax ginseng*) has been used for 2,000 years in the Far East, where it's considered, among other things, the ultimate sexual restorer for men. American ginseng (*Panax quinquefolius*) was discovered by French Jesuits in the 1700s and cultivated largely for export to the Asian market.

The biologically active compounds in both forms are the ginsenosides, which have been shown to improve immune function and affect hormone balance and metabolism. One large epidemiological study done in Seoul, Korea, showed a significantly lower risk of developing cancer—especially gastric and lung cancers—

among people who regularly consumed ginseng powder or an extract of the herb. (Risk began to decrease with one year of ginseng use and declined progressively over 20 years.) While European studies have shown ginseng to



enhance physical and mental performance, studies done in this country have been inconsistent: One recent study done at Wayne State University, for example, found that ginseng supplementation had no effect on aerobic capacity, as measured by oxygen consumption and heart rate.

HOW TO USE IT While ginseng is available in an array of forms—from the whole dried root to gum, brandy, tea, or candy—you're much better off buying a standardized extract and following dosage instructions on the label (a typical dose is two 100 mg capsules daily). If you're using ginseng as a general tonic, give it a two-month trial before expecting to see results, then continue taking it regularly. Another option is to limit your use of ginseng to times of increased stress.

Because the Asian variety can raise blood pressure in some people and cause irritability and insomnia, I'd recommend trying American ginseng first, unless you *want* to feel stimulated or are a man looking for increased sexual drive.

CAUTIONS Both Asian and American ginseng may have estrogenic activity and should be avoided by women with hormonal imbalances or with estrogen-dependent ailments such as uterine fibroids; fibrocystic breasts; endometriosis; and breast, uterine, or cervical cancer. In addition, children of both sexes should not be given ginseng, especially during periods of sexual maturing. High doses of ginseng may cause diarrhea or skin problems in some people, so stick to the recommended dosage.

buying tips

- More than almost any other herb on the market, the quality of ginseng varies enormously: A recent *Consumer Reports* article showed that some products had 10 to 20 times as much ginseng content as others. Shop around for a high-quality product and be prepared to pay for it: Cheap ginseng is probably not true ginseng.
- Choose a reputable brand of ginseng extract—liquid, capsules, or tablets—whose label clearly states that it is standardized to contain at least 4 percent ginsenosides.

Kava

ANXIETY AID

This newly popular herb—also called kava-kava—has earned the nickname “nature’s Valium” for its ability to relieve anxiety and induce relaxation. In general, I don’t usually go for quick-fix solutions to conditions such as anxiety and stress. But for the 65 million Americans who suffer from anxiety and related insomnia, I see this calming herb as a much better alternative than prescription tranquilizers, which can have serious side effects and are highly addictive.

HISTORY & RESEARCH Derived from the knotty root of a large tropical shrub in the black-pepper family, kava has a rich history. In cultures of the South Pacific, it has been cultivated for centuries as a traditional psychoactive drug believed to have religious significance. In that part of the world, it is generally prepared as a drink made from the fresh or dried root and consumed at religious ceremonies and social gatherings. Today the herb is widely used in Europe as a natural relaxant and sleep aid, and Germany’s Commission E—the national agency that evaluates and regulates botanical

medicines—gave kava its stamp of approval in 1990 for conditions of nervous anxiety and stress.

Studies have shown that kava’s relaxing properties are due to some 15 chemical compounds known as kavalactones (also called kavapyrones), which act on the central nervous system and serve as muscle relaxants. Several well-designed German studies have demonstrat-

Piper methysticum



ed the herb’s positive effects. One double-blind randomized trial in 1996 showed that a standardized extract of kava improved symptoms of anxiety after just one week of use, with no adverse effects. An earlier study, which used EEG monitoring to measure the effects of kava versus Valium and a placebo, found that kava caused significant changes in brain activity that suggested a sedative mechanism different from that of the synthetic drug.

Interestingly, the subjects who took kava showed improved performance on reaction-time tests of mental acuity, while those taking Valium did not.

HOW TO USE IT For times of particularly high anxiety, such as that caused by a death in the family or a job crisis, start by taking one capsule of standardized kava extract a day and building slowly to three a day if necessary.

If you're having insomnia due to anxiety and muscle tension, try taking a single dose of two or three capsules maybe an hour before going to bed (but don't take more than three capsules in any given day).

While kava does not appear to be addictive, I would limit its use to no longer than two months without medical supervision. If you're still suffering from significant anxiety after that time, I recommend that you consult a mental-health professional.

CAUTIONS Some people who take very large doses of the herb for longer than two months develop a yellowing and thinning of the skin (which goes away when they stop using it), so be sure to keep to recommended doses. Don't mix kava with other depressants such as alcohol, prescription sedatives, or valerian, as it may intensify their effects, and monitor kava's effects on you before driving. Kava is not recommended for Parkinson's patients, as it may cause increased muscular twitching in people with this disease.

buying tips

- Look for kava extract in capsule form.
- The kavalactone content of kava root can vary widely, so be sure to select a reliable brand of the extract that is standardized to 70 to 85 mg of kavalactones (or kavapyrones) per capsule.

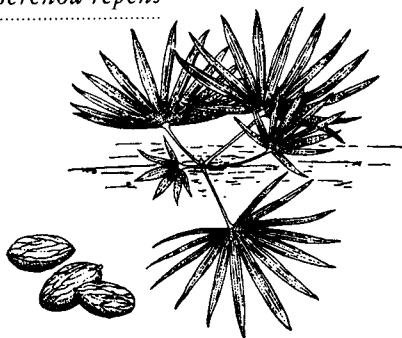
Saw Palmetto

PROSTATE PROTECTOR

If you're a man over 50, chances are you'll at some point suffer from an enlarged prostate. The good news? The berries of this shrubby palm tree may provide relief. Saw palmetto is the most effective herbal treatment for benign prostatic hypertrophy (BPH), a noncancerous enlargement of the prostate that affects most older men due to the long-term effects of testosterone on the gland. I'd recommend saw palmetto to any man in this age group who is experiencing symptoms of BPH: frequent urination (making for annoying trips to the bathroom at night), weaker flow, and the uncomfortable feeling that you can't quite empty your bladder.

HISTORY & RESEARCH The saw palmetto tree, also called sabal, grows wild in the southeastern United States, especially Florida. Native Americans used its dark berries as an aphrodisiac and tonic for the male reproductive system, and in the first half of this century some physicians prescribed saw palmetto for a variety of urinary and genital ailments. Recently the herb has seen a major revival, especially in Europe, as a top treatment for BPH, due to its ability to protect the prostate from excess testosterone and promote shrinking of the gland, improving urinary function. Saw palmetto has also

Serenoa repens



become a best seller in this country, with annual sales of some \$18 million a year. While it's not yet fully understood which compounds are responsible for saw palmetto's therapeutic properties, evidence indicates that certain fatty acids and sterols in its fruit produce hormone-related effects.

In the last two decades, saw palmetto's effectiveness in treating BPH has been supported by numerous well-designed European studies. One

multicenter study of more than 1,000 men, published in 1996 in the journal *Prostate*, found that 26 weeks' supplementation with saw palmetto produced results comparable to the prescription drug finasteride (Proscar)—

relieving BPH symptoms in two thirds of subjects—but without the drug's side effects of decreased libido and impotence. Another controlled study indicated that the extract significantly reduced excessive urination in 85 percent of study participants over the course of a three-year trial.

HOW TO USE IT If you're bothered by the symptoms of an enlarged prostate, I recommend that you try taking 160 mg of a standardized extract of saw palmetto twice a day. (Teas made from saw palmetto are decidedly *not* effective against BPH, as the fatty acids that contribute to the herb's beneficial effects don't extract well into water.) You should notice improvement in your symptoms in about four to six weeks. The herb's only apparent side effect is stomach upset in some people, so you may want to take it with food. I do not recommend that men take saw palmetto as a preventative in the absence of symptoms.

CAUTIONS You should not self-diagnose an enlarged prostate without first checking with a doctor to rule out more-serious conditions such as a kidney infection or prostate cancer. I also advise anyone taking saw palmetto to inform your doctor before having a PSA (prostate-specific-antigen) blood test for prostate cancer, as treatment with this herb may affect your results.

buying tips

- Choose an oil-based extract standardized for 85 to 95 percent fatty acids and sterols.
- While the pure extract is my first choice, you can also look for a combination formula that includes extracts from the bark of an African evergreen known as *Pygeum africanum* (also called *Prunus africanum*), another herb that protects the prostate.

St. John's Wort

DEPRESSION LIFTER

There's been an explosion of interest in this shrubby perennial over the last couple of years, so much so that health-food stores have had trouble keeping bottles of St. John's wort in stock. This is one trendy development that I see as good news, having long championed St. John's wort as a safe and effective means of treating depression. To my mind, enough evidence is in to support the use of St. John's wort as a viable treatment for mild to moderate depression, as well as the symptoms of seasonal affective disorder (SAD). It has not yet been tested on major depression, however, so if you're severely depressed, I'd strongly advise that you seek help from a mental-health professional.

HISTORY & RESEARCH Used in folk medicine for 2,400 years, St. John's wort is named for the feast day of St. John the Baptist in June, when its bright yellow flowers bloom. It has been widely used in Europe in recent years as a treatment for depression, with prescriptions for it in Germany now outnumbering Prozac's some 25 to 1.

There is a growing body of evidence to justify such widespread clinical use: One 1996 meta-analysis in the prestigious *British Medical Journal* looked at 23 randomized trials of the plant involving 1,757 depressed patients and concluded that the herb worked just as well as standard antidepressants, while causing far fewer side effects. A single-blind German study indicated that it may be effective for seasonal affective disorder (SAD) as well. Meanwhile, in this country, a three-year, \$4.3 million trial of the herb, initiated by the National Institute of Mental Health (NIMH) and the National Institutes of Health's Office of Alternative Medicine (OAM), is currently under way at Duke University Medical Center.

Hypericum perforatum



buying tips

- Look for an extract in capsule form standardized to contain 0.3 percent hypericin—this is the type used in most studies.
- For a list of reliable brands and sources, you may want to refer to the book *Hypericum & Depression* by Harold Bloomfield, M.D. (Prelude Press, 1996) or check out Dr. Bloomfield's Web site at www.hypericum.com.

HOW TO USE IT The optimum starting dose of St. John's wort based on medical studies is 300 mg of the standardized extract three times a day, with food. Don't expect instant results, however: St. John's wort takes longer than prescription antidepressants to reach optimum effectiveness, with improvement in symptoms generally noticeable after six weeks of daily use. Side effects tend to be mild and infrequent, but if you notice any gastric upset, itching, restlessness, or fatigue, try lowering your dose to give your body a chance to adjust. If this doesn't work, discontinue use—side effects will disappear soon after you stop taking the herb.

CAUTIONS St. John's wort will in high doses cause photosensitivity: The only known fatalities caused by the herb occur in sheep who ingest massive quantities of the flowers, then stand out in the sun. If you're sensitive to the sun, use extra sunscreens precautions while ingesting this herb. Even more important is that you work with a doctor on making a gradual transition if you're already taking prescription antidepressants: Don't stop or change your prescription dose without consulting your practitioner (the "rebound" effect can be severe) and don't combine St. John's wort with other antidepressants. We just don't know much about such interactions.

Valerian

GENTLE SLEEP AID

With insomnia such a common affliction in our culture, a natural alternative to synthetic sleep aids is a valuable commodity—and the effective sedative herb valerian certainly fits the bill. I keep valerian around my house and in my travel kit, and would recommend it for temporary use to anyone suffering from sleeplessness, nervous tension, restlessness, or anxiety. Unlike prescription sedatives, valerian doesn't suppress rapid-eye-movement sleep (necessary for dreaming); cause morning hangovers; or interfere with memory, mental function, or mood—and best of all, it's not addictive.

HISTORY & RESEARCH Prepared from the rhizome and roots of a tall, perennial European plant, valerian has a colorful history. For one thing, it's attractive to cats (it contains chemicals common to catnip) and is said to be the substance used by the Pied Piper to lure rats from the village of Hamelin. Medicinally, valerian has been in use since the first century, when Greek physicians called it *phu* (a word that shares a root with our “pew!”

—a commentary on the root's pungent aroma, which has been likened to that of old socks). The main sedative in use in Europe and America before the invention of barbiturates in the early part of this century, valerian has recently seen a great resurgence: In Germany it's the active ingredient in numerous over-the-counter tranquilizers and sleep aids, some geared specifically to children.

Scientists are still trying to determine which of valerian's compounds are responsible for its therapeutic properties, but it appears that those found in the root are the most potent.

Scores of studies on valerian have been published over the last three decades, primarily in Europe: In one placebo-controlled, 1989 trial, 89 percent of those who ingested the herb reported “improved sleep” and 44 percent reported “perfect sleep.” More recently, a study of 20 volunteers found a standardized valerian/lemon balm product as effective a sleep-inducer as the



Valeriana officinalis

prescription tranquilizer Halcion—without causing daytime sedation or impairing concentration.

HOW TO USE IT For most people, one teaspoonful of tincture of valerian taken in an ounce or two of warm water will induce sleep within 30 minutes. (If you're using capsules or tablets, follow package directions.) Children aged 3 to 12 need only half the adult amount. Valerian doesn't

work for everyone—in particular, people who are dependent on strong pharmaceutical sedatives may find the herb ineffective, but it may serve as an aid in weaning them off the drugs. Some who are especially sensitive may notice morning-after sluggishness (if you find this to be a problem, lower the dose), and in rare cases, valerian may produce stimulation rather than sleep.

CAUTIONS Though valerian is mild compared to pharmaceutical sedatives—and I have never known it to cause addiction—it is a depressant of the central nervous system, and I recommend against using it every night. Don't combine valerian with other sedatives, as this may cause an additive effect, and don't take it before driving or performing tasks that require your full alertness.

buying tips

- While I prefer the tincture, if you find the smell offensive you can opt for capsules.
- Combination products that include other sedative herbs such as hops and passionflower may not add much to valerian's effect.
- Avoid any combination remedy that contains skullcap, which may be adulterated with toxic material.

For More Information

If you would like to learn more about herbs, consult the following resources:

ORGANIZATIONS

The American Botanical Council ▶ 6200 Manor Rd., Austin TX 78723
• (512) 926-4900 • www.herbalgram.org • Publishes quarterly magazine on herbs (*HerbalGram*) and the English translation of the German Commission E monographs (\$189).

The Herb Research Foundation ▶ 1007 Pearl St. #200, Boulder CO 80302
• (303) 449-2265 • www.herbs.org • Nonprofit educational organization has brochures and research packets on herbs.

TO LOCATE A PRACTITIONER

American Herbalist Guild ▶ PO Box 70, Roosevelt UT 84066
• www.healthy.net/herbalists/Index.html • Send \$5 to receive a member directory/referral list of herbalists in the United States, Canada, Australia, and New Zealand.

American Association of Naturopathic Physicians ▶ 601 Valley St., Suite 105, Seattle WA 98109 • (206) 298-0125 • fax (206) 298-0129
• Send \$5 check or money order to receive directory/referral list of naturopaths and list of naturopathic schools. Can also fax request with credit-card information.

ON THE INTERNET

Ask Dr. Weil ▶ www.drweil.com • Dr. Weil's Web site includes the popular "Ask Dr. Weil" daily Q & A column, newsgroups, excerpts from his book *Natural Health, Natural Medicine*, and links to other resources. The site also has a referral directory of herbalists and other practitioners of alternative medicine.

NEWSLETTER

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