Complementary medicines and nutritional supplements are a popular addition to “traditional” medicine. Information about these therapies can range from news reports and magazine articles to advertising that may contain false claims. This pamphlet was designed to provide veterans and their families with unbiased information.

The information in this pamphlet is not intended to take the place of advice from your healthcare provider.

Angela Paniagua, Pharm.D., CGP
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Complementary medicines and nutritional supplements are not miracle cures. Do not stop taking your prescription medicine without speaking to your health care provider. Doing so may be dangerous to your health.

**Warning**

Several complementary medications have been found to be unsafe and/or unpure. All patients should avoid:

- 5-HTP
- DHEA
- Shark Cartilage
- Bee Venom
- L-tryptophan

**What is herbal therapy?**

Herbs have been used in medicine for as long as people have been on earth. The use of herbal therapies has been recorded in ancient Greece, Egypt, Rome, India, Russia, and China. Many modern medicines came from Native American remedies.

There are many examples of drugs used today that are from plants. They may come from the plant's leaves, roots, flowers or fruits. Digoxin is a good example of a drug that comes from a plant source. Digoxin is used to treat problems with heart rhythms or heart failure. Psyllium, the ingredient in Metamucil® used to add fiber to a patient's diet, is also a natural product. Taxol®, made from a type of tree bark, is used to treat cancer.

Herbal therapy has been gaining popularity in the United States as a compliment to "conventional medicine". In many other countries herbs are already regulated by the government and available by prescription.

**What are complementary medicines?**

Complementary medicines are available in several different forms. Herbal therapy products are one type of complementary medicine. Taking high doses of vitamins and minerals is also considered complementary medicine. Then there are non-herbal products that act like substances produced naturally by the body. These are all considered “complementary medicines.”
Things to know before you use herbals or other complementary medicines.

Complementary medicines are considered food supplements. The FDA does not control herbal therapies, vitamins or other complementary medicines. This means no government agency is checking to be sure that these products are safe or effective. Unlike traditional drugs, no testing needs to be done before a company can claim their product is effective.

Complementary medicines or supplements are not safe for all people. Most will have some effect on your body, possibly one you weren’t planning on. You may have an allergic or a toxic reaction. The complementary medicine may interfere with your prescribed medicines.

Before starting any new treatment, you should know the risks and benefits. Discuss any medicine, herbal or otherwise, with your healthcare provider before using.

How should I choose an herbal product?

Discuss your choice with your healthcare provider. Then look for brands that standardize their product. This means that the same amount of herb is in each dose. Avoid products that do not list the ingredients and their strengths on the label. The label should list the scientific name of the product, a lot or batch number, the date the product was manufactured, and the expiration date. Only buy products from a reputable source.

Where can I get more information about complementary therapies?

There are many sources of information on complementary therapies. Be sure to get your information from a neutral source, not advertising by a manufacturer.

Your first source of medical information should always be your healthcare providers. Physicians, nurses, physician’s assistants, and pharmacists are all good people to ask.

Your local library or VA library may have books on herbals and complementary therapies.
Aloe Vera

Aloe Vera has been used in medicine for thousands of years. It was brought to America in the 1500’s by the Spaniards.

Uses: Aloe gel is used on burns, scrapes, cuts, and sunburn. Aloe juice has been used internally for constipation.

How it works: On the skin, aloe turns off the chemicals that cause swelling and pain. It may also fight bacteria and fungus. Fresh aloe gel straight from a plant seems to work better than the aloe gel sold in stores.

The aloe juice that you can drink is a very powerful laxative. It stops the intestine from re-absorbing water.

Dose: Aloe gel may be applied to your skin in whatever amount is comfortable for you. The amount of aloe juice to drink is not really known. But it is recommended that you do not drink more than 1 quart per day.

Safety: Because aloe is such a powerful laxative, you may have diarrhea and cramping.

Aloe juice should never be given to children, pregnant women, or elderly patients.

Aloe may affect your absorption of other medicines, and should not be taken within 2 hours of taking any other medicine. Diabetics should monitor blood sugars closely after drinking aloe juice.

Black Cohosh

Uses: People use black cohosh to treat symptoms of menopause and PMS (pre-menstrual syndrome). It has also been used for pain.

How it works: Black cohosh appears to suppress a hormone responsible for menopausal symptoms called luteinizing hormone. Black cohosh may also relax the uterus.
Dose: Standard extract 20-40 mg twice daily.

Safety: Black cohosh should not be used for longer than 6 consecutive months. Black cohosh should be avoided during pregnancy and breastfeeding.

*Patients who are allergic to aspirin should not take black cohosh.*

*Do not confuse black cohosh with blue cohosh.*

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**Cayenne**

Cayenne pepper or capsaicin is from a family of peppers.

Uses: Stimulates circulation, gastric stimulant. Decreases nerve related pain such as diabetic neuropathy and shingles.

How it works: Cayenne depletes a substance in the body that mediates pain.

**Dose:**

On the skin: 0.025% to 0.075% applied four times daily.
Capsules: 100-600 mg three times daily
Tincture (1:10): 10-40 drops three times daily

Safety: Side effects of eating cayenne pepper may include stomach upset, diarrhea, and burning during bowel movements. Increasing the dose of cayenne gradually may help.

When using the capsaicin cream on the skin, the product must be used at least four times a day on a continuous basis to be effective. It may take several weeks of regular use for the effects to be seen. Avoid touching the eyes or any cuts after handling the cream. Vinegar can be used to remove cayenne from the hands.

*Cayenne taken orally may increase bleeding times and should be used with caution by patients taking warfarin.*

*Wash hands completely after applying capsaicin cream. You may want to consider wearing gloves when applying capsaicin cream. Another option is to apply the cream using a foam paint brush.*
Chromium

Chromium is found in tiny amounts in whole grain breads and cereals, wheat germ, brown rice, calf liver and processed cheese.

Chromium picolinate is the form of chromium that has been studied the most.

**Uses:** Medical studies have looked at chromium's effect on diabetes. If diabetics don't get enough chromium in their diet, chromium supplements may help in controlling blood sugar. However, the ADA (American Diabetes Association) has decided that there is not enough proof that chromium is effective for all patients.

Chromium may have some beneficial effects on cholesterol levels, especially in diabetics. However, it takes months before any benefit is noticed.

There is no medical study showing chromium is effective for weight loss or muscle building.

**How it works:** It is believed chromium works by increasing the effects of insulin and increasing insulin receptors.

**Dose:** 50-200 mcg/day

**Safety:** Higher doses of chromium can cause indigestion.

**Warnings:** Patients with kidney problems should use with caution. Diabetics should not use without consulting a healthcare provider, due to the risk of low blood sugars.

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CoEnzyme Q10

Coenzyme Q10 is also known as CoQ-10. Supplements are produced from the fermentation of beets. It is widely used in Japan, Europe, and Russia.

**Uses:** Coenzyme Q10 may be useful for heart disease, after a heart attack, for high blood pressure, and in heart failure. Studies are being conducted in the areas of HIV and AIDS. CoQ-10 is also being studied in other diseases related to nerves and nerve damage.
**How it works:** CoQ-10 is found naturally in the body. It makes energy for the body and cleans up toxins from the system.

**Dose:** 100 mg total per day, taken in two or three equal doses.

**Safety:** CoQ-10 has few side effects in normal doses. It may affect the GI system.

**Warnings:** Patients taking warfarin or antiplatelet drugs (aspirin, clopidogrel) should not take CoEnzyme Q10. Women who are pregnant or nursing should not take CoEnzyme Q10.

*CoEnzyme Q10 has not been proven to extend your life or improve exercise tolerance, as advertised.

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**Cranberry**

**Uses:** Cranberry has been used for centuries to help with urinary tract infections. Cranberry juice may prevent recurrent infections, but will not treat an active infection.

**How it works:** Cranberry is thought to prevent bacteria from attaching to the urinary tract.

**Dose:** Juice: 300 mL (10 ounces) daily

Capsules: 300-400 mg twice daily

**Safety:** Although available, it is unknown if cranberry capsules are as effective as juice or berries.

*Large amounts (3-4 liters per day) of cranberry juice may cause diarrhea. Diabetics should exercise caution before drinking large quantities due to sugar content. When selecting cranberry juice be sure to read the labels. You want cranberry juice, not cranberry cocktail drinks.*

*Cranberry does not replace antibiotics for treating an active infection.*
Echinacea

Echinacea, commonly known as purple coneflower, is a member of the daisy family.

Uses: Echinacea is used externally for wounds, eczema, burns, psoriasis, and other conditions. Internally, it can be used as a preventative at the start of cold and flu symptoms, for chronic respiratory infections, prostatitis, or other diseases.

How it works: Echinacea is believed to stimulate the immune system.

Dose:
Dried root: 1-2 grams three times daily
Freeze dried plant: 325-650 mg three times daily
Tincture (1:5): 3-4 mL three times daily
Fluid extract (1:1): 1-2 mL three times daily

Safety: Patients who are allergic to sunflowers or ragweed should not take Echinacea.

Patients with auto-immune disorders such as multiple sclerosis, lupus, and leukemia, should not take Echinacea. Patients with immune system problems should also not take Echinacea.

Echinacea may cause the tongue to tingle. If you drink freshly pressed juice you may develop a fever.

Echinacea should not be used for more than 8 weeks in a row.

Feverfew

The name of Feverfew comes from its original use as a fever reducer.


How it works: Feverfew is believed to work the same as other products that reduce swelling. It decreases the production of a chemical that causes the swelling and pain. It also stops the release of histamine and serotonin.
**Dose:** The minimum recommended concentration of parthenolide is 0.2%. A single daily dose of 500-2,500 mcg of parthenolide is recommended.

Patients should not stop taking feverfew abruptly. The dose should be tapered off gradually. Stopping too quickly can lead to headache, nervousness, insomnia and joint pain.

**Safety:** The main side effect is irritation of the tongue and the lining of the mouth. Some people also have indigestion.

Patients interested in taking feverfew should be sure to find a good quality product. Many of the available products have been found to contain no active ingredients.

*Patients taking warfarin or other blood thinners should not take feverfew. Feverfew should not be used by women who are pregnant or nursing.*

**Garlic**

Garlic has been used medicinally for thousands of years. In World War I, the English used garlic in dressings and it was credited with saving the lives of thousands of troops.

**Uses:** Garlic has been shown to reduce blood pressure and possibly lower cholesterol. It also has been shown to kill germs. Some believe that garlic also aids in cancer prevention.

**How it works:** The compounds that influence enzyme release explain garlic's effect on blood pressure. Exactly how it reduces cholesterol, kills germs, and prevents cancer is not known.

**Dose:** Garlic preparations standardized for alliin are preferred. The recommended daily dose is 8,000-12,000 mcg of alliin. This is equivalent to 1-2 cloves of fresh garlic. Odor-free preparations are not recommended, since the ingredient you need is the same one that gives garlic its odor. The best garlic preparations have an enteric coating to prevent its destruction by stomach acid.

**Safety:** The most common side effect is offensive odor. A burning feeling in the stomach or intestines has also reported and is related to the amount used.

*Patients taking warfarin should not use garlic as an herbal therapy. Diabetics should monitor blood glucose during use.*
**Ginger**

**Uses:** Treatment and prevention of motion sickness and postoperative nausea. Also has been used for arthritis, muscular pain, and migraine headache.

**How it works:** Ginger contains several active ingredients. One ingredient has been shown to increase movement in the GI tract. Ginger also helps block some mediators of pain and swelling.

**Dose:** Powdered ginger root: 1-4 grams/day.

*Some studies suggest that fresh ginger root may be better (1-2 grams of powder = 1/4 inch slice)*

To prevent motion sickness, 1 gram of ginger should be taken 30 minutes prior to departure and another 500 mg to 1 gram as symptoms begin to occur.

**Safety:** Large doses of ginger may upset stomach. Doses larger than 6 grams daily are not recommended.

*Pregnant women should avoid large quantities of ginger, although the amount normally in food is thought to be safe.*

*Warfarin patients should not use ginger as an herbal therapy. Patients on calcium channel blockers (Amlodipine®, Nifedipine®, Felodipine®, Diltiazem® and Verapamil®) should consult a healthcare provider before using ginger.*

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**Ginkgo Biloba**

The ginkgo tree has existed on earth longer than any other. A Chinese medical book from 2800 BC talks about the use of ginkgo leaves. In 1988, German physicians wrote more prescriptions for ginkgo than any other medication.
**Uses:** Treatment of cerebral vascular insufficiency, peripheral vascular disease, hearing loss, dizziness, asthma, sexual dysfunction, and ringing of the ears. Recent studies have also shown ginkgo to be valuable in treating dementia.

**How it works:** The active ingredients of ginkgo have been shown to protect nerves and may revive damaged nerve cells. They also help the tone and elasticity of blood vessels and increase transmission of brain chemicals.

**Dose:** Look for a ginkgo biloba extract standardized to 24% flavanoid glycosides and 6% lactones. Recommended daily amount is 120-160 mg in divided doses. Doses may be higher for certain conditions. A treatment period of 4-6 weeks is needed to determine effectiveness.

**Safety:** Mild GI disturbances have been reported. Slowly increasing the dose may lessen GI effects. Mild headache, lasting 24-48 hours, has also been reported.

*Patients on Quinidine® should not take ginkgo. Diabetics should take with caution, as ginkgo may elevate blood sugar levels. Patients taking warfarin or other blood thinners should also avoid ginkgo. Patients undergoing surgery should stop taking ginkgo and notify their provider.*

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**Ginseng**

Ginseng is the most widely used of all medicinal herbs. It consists of dried root of several species of ginseng. Although one of the most popular herbs, it is also one of the herbs with very little documented studies to support its use.

**Uses:** Ginseng is most commonly used as a tonic to help get the body back to health.

**How it works:** The active ingredients of ginseng are ginsenosides. Animal studies have shown ginseng lowers blood pressure, lowers cholesterol, and protects against stress ulcers. No studies in humans have duplicated these effects.

**Dose:** The usual dose of ginseng is 1-2 grams daily depending on the ginsenoside content. Other sources recommend 2-4 mL of fluid extract (1:1) taken 1 to 3 times daily.
Safety: Ginseng is the example most often used to encourage the regulation of herbal therapies. Experiments in the late 1970's showed that 60% of the products tested contained so little ginseng as to be worthless, and 25% contained no ginseng at all. Some ginseng products contain entirely different ingredients which may be harmful.

Side effects of ginseng include insomnia, irritability, anxiety, skin eruptions, diarrhea, headaches, low blood sugar, and increased blood pressure.

*People with high blood pressure or diabetes should not take ginseng. Warfarin patients should not take ginseng. Patients on monoamine oxidase inhibitors should not take ginseng.*

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**Glucosamine**

Glucosamine is a protein that is often combined with chondroitin. Glucosamine is available as a sulfate or hydrochloride salt. Glucosamine sulfate is the form studied most often.

**Uses:** Glucosamine is used for joint and tissue diseases, such as arthritis, tendonitis or gout. Glucosamine seems to reduce pain and joint tenderness. It may also help restore joint cartilage to a healthier state. In some studies, glucosamine has been as effective as medicines like Advil® (ibuprofen) or Aleve® (naproxen).

**How it Works:** Synovial fluid is the liquid that acts as a lubricant between bones in a joint. Glucosamine is a protein that can be found in the fluid. The theory behind glucosamine use is that flooding the body with these building blocks increases the synovial fluid and stimulates the production of cartilage.

**Dose:** 1500 mg total per day, in three equal doses.

**Safety:** Glucosamine has very few side effects. It may affect the GI system.

**Warnings:** Benefits from glucosamine do not start overnight. It may take weeks or months for effects to be seen.

Glucosamine with chondroitin is no more effective than glucosamine alone.
Goldenseal

Goldenseal, also known as yellow root, is a member of the buttercup family.

Uses: Goldenseal has been used as a tonic for the mucous membranes, primarily those of the digestive system. It gained popularity when heroin addicts believed that taking large amounts of goldenseal could prevent detection of opiates in the bloodstream. This has since been proven to be untrue. Goldenseal is now believed not to be medically useful.

How it works: Alkaloids found in goldenseal are responsible for whatever actions it has, causing slight vasoconstriction and sedation.

Dose: Tincture 20-90 drops three times daily. Capsules should be standardized to 5% hydrastine; dose is 250-500 mg three times daily.

Safety: Goldenseal may cause low blood sugars in diabetics. Nausea, vomiting and diarrhea have also been reported with goldenseal use.

Goldenseal should not be used by patients with high blood pressure or history of seizures.
Goldenseal should be avoided by women who are pregnant or nursing.

Hawthorn

Compared to other herbal remedies, Hawthorn is relatively new.

Uses: Hawthorn has been used for high blood pressure, disturbances in heart rhythm, hardening of the arteries, chest pain, and to lower cholesterol.

How it works: Hawthorn helps to increase blood supply to the heart tissue. It also helps increase the strength of the heart beat. It blocks an enzyme which lowers blood pressure, in a way similar to drugs such as lisinopril, enalapril, fosinopril, captopril, and quinapril.
Dose: Look for capsules or tablets standardized to 1.8%; dose is 100-250 mg. Also may be taken as 1-2 mL of fluid extract (1:1) three times daily

Safety: Hawthorn’s activity is not immediate and develops slowly over time. High doses of hawthorn may cause low blood pressure and sedation. Very few adverse effects have been reported with low doses, but hawthorn should not be stopped abruptly.

Because hawthorn is used to treat heart conditions it should only be used under the supervision of a physician or other healthcare provider. If hawthorn is used in conjunction with digoxin or ACE inhibitors, the dose of these agents may need to be decreased.

Kava

Kava is a drink of the South Pacific that was first introduced to the modern world by Captain James Cook. Since then, Kava has been served to officials visiting the South Pacific, including Presidents and Pope John Paul II. Most commonly, Kava is served as a tea made of the dried roots.

Uses: Treatment for nervousness, restlessness, and stress.

How it works: It is believed it works in a similar way to the drugs Valium® or Xanax®.

Dose: An extract of 55-70% kavalactones is the current standard. The daily dose of kava should be 140-210 mg in 2-3 doses. It has also been noticed that fresh Kava, not usually available in America, is the most effective.

Safety: When used on a regular basis, Kava can cause a dry scaly rash on the palms of the hands and the soles of the feet. It may also cause the skin, hair or nails to turn yellow. Some patients may be allergic to Kava.

Kava can cause a feeling of giddiness. Patients taking Kava should not drive or operate heavy machinery. Patients should not drink alcohol or take other drugs for treating stress when using Kava. Some people have been arrested for driving under the influence of Kava. Kava should be avoided in patients with liver problems.
Lactobacillus

Lactobacillus is also known as acidophilus lactobacillus. This is known as a “pro-biotic”.

*Uses:* People use lactobacillus to treat irritable bowel syndrome (IBS) or diarrhea associated with C. difficile infection. When used vaginally, lactobacillus may prevent urinary tract infections in women.

*How it works:* All people have bacteria in their intestinal system. Good bacteria help regulate the system and prevent bad bacteria from taking over. But when antibiotics are used for long periods of time (greater than 2 weeks), or when you are exposed to bacteria called C. difficile, the bad bacteria can take over. Additional antibiotics will need to be needed to kill the bad bacteria, but using lactobacillus to re-introduce normal bacteria may also help.

*Dose:* 1 to 10 billion organisms daily split into 3-4 divided doses.

*Safety:* Lactobacillus does not replace treatment with an antibiotic such as metronidazole (Flagyl®). Doses of lactobacillus should be separated from antibiotics by at least 2 hours. Gas is a common side effect of lactobacillus.

*Warnings:* Do not confuse lactobacillus with lactase digestive enzyme. Lactobacillus should be avoided by patients with low immune systems.

Melatonin

Melatonin is a natural hormone that is produced from a gland in the brain. The body produces more at night and less in the daytime. It is believed to be the hormone that helps to control sleep patterns.

*Uses:* Melatonin is used to help sleeping problems and jet lag.

Some people believe melatonin helps slow the spread of certain cancers. It is too early to know if this is true.
**How it Works:** Melatonin supplements mimic the effect of the natural melatonin that your body makes to control your sleep cycle. Melatonin may help people get to sleep sooner and to sleep longer, but the quality of sleep is not improved.

Some studies show melatonin has antioxidant effects, which means it helps clean up toxins from your system.

**Dose:** Most studies suggest taking 0.3 to 3 mg of melatonin daily. It appears that the best time to take melatonin is 2-3 hours before bedtime. Taking higher doses of melatonin can actually cause sleep problems.

**Safety:** Women who are pregnant, or are trying to become pregnant, should not use melatonin. Patients with immune system disorders should not take melatonin.

**Warnings:** Do not mix other sleep medications with melatonin. Do not take melatonin before driving or operating machinery.

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**Milk Thistle**

Milk Thistle is a tall herb with prickly leaves and a milky sap. Use of this herb can be traced back to the Romans of the first century. The fruit of this plant has been found to work best.

**Uses:** When taken with conventional medications, milk thistle helps to reduce blood sugars in type 2 diabetes. It also may reduce cholesterol and triglycerides. Some people use milk thistle for heartburn symptoms. More study is needed, but milk thistle may protect and detoxify the liver. It has been used in patients with liver disorders like cirrhosis and hepatitis.

**How it works:** Milk thistle appears to make the body more sensitive to insulin. This works to lower blood glucose levels. An active ingredient in milk thistle works on the factors that are responsible for liver damage. It protects those liver cells not irreversibly damaged and helps the regeneration process.
**Dose:** The correct dose of milk thistle is based on its silymarin content. The usual dosage range is 200-600 mg daily in divided doses.

**Safety:** European studies show that milk thistle has very low toxicity. Possible side effects may be loose stools and GI upset. People with ragweed allergies may have an allergic reaction to milk thistle.

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**SAMe (S-adenosyl-methionine)**

SAMe is a substance that your body makes naturally in the liver.

**Uses:** SAMe is used to help depression, arthritis and liver disease. Some people believe SAMe helps Alzheimer's and Parkinson's Disease, although no studies have been conducted to prove this.

**How it Works:** It is believed SAMe increases chemicals like serotonin, nor-epinephrine, dopamine and melatonin that are already in your system. These are chemicals that help to regulate your moods.

**Dose:** The typical oral dose of SAMe is 400-1600 mg per day.

**Safety:** Overall, SAMe appears to be a relatively safe product. In high doses nausea may occur. Anxiety may be worsened.

**Warnings:** Patients with a history of bipolar disorder can develop mania when taking SAMe.

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**St. John’s Wort**

St. John's Wort is an herbal remedy that received a lot of attention in the press. It is named for St. John the Baptist, based on when its flowers bloom.

**Uses:** For treatment of mild to moderate depression and treatment of other nervous disorders. It may also be helpful in treating burns.
**How it works:** It is thought to increase the amount of certain brain chemicals, such as serotonin.

**Dose:** Look for a standardized hypericin content of 0.3%. The dose is 300 mg three times daily.

**Safety:** St. John's Wort is only effective in the treatment of mild to moderate depression. It should not be used for more severe conditions. It should not be used if you are taking other drugs to treat mood disorders.

The most common side effect of St. John's Wort is stomach upset. This may be helped by taking with food. Sensitivity to sunlight may also be a side effect.

*Do not take St. John's Wort if you are also taking: antidepressants, cocaine, pergolide, digoxin, pramipexole, ropinirole, warfarin, protease inhibitors (HIV treatment).*

*If you will be having surgery with anesthesia, do not use St. John’s Wort for the 2 weeks before surgery and tell your healthcare provider you are taking it.*

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**Saw Palmetto**

Saw Palmetto is a small, scrubby palm tree.

**Uses:** To treat urinary difficulties associated with an enlarged prostate and prostatitis.

**How it works:** Saw Palmetto blocks the changing of testosterone to DHT. DHT is the chemical that stimulates enlargement of the prostate. Saw Palmetto also relaxes the smooth muscles at the opening of the bladder, making it easier to urinate.

**Dose:** The extract should be standardized to 85-95% fatty acids and sterols. The dose of this extract is 160 mg twice daily.

**Safety:** The most common side effects are headache and upset stomach.

*Before using Saw Palmetto, males should be tested for prostate cancer.*
**Selenium**

Selenium is a natural element found in small amounts in the soil. Most Americans appear to get enough selenium through their diet. Selenium is found in meat, fish, grains, mushrooms, poultry, egg yolks, wheat germ, cucumbers, asparagus, and Brazil nuts.

**Uses:** People take selenium to prevent cancer. There is some evidence to show that selenium does help reduce cancer rates in animals. There have not been enough human studies yet to draw a conclusion.

Other conditions for which selenium is being studied include: cardiovascular disease, rheumatoid arthritis, and HIV. Again, not enough studies have been conducted yet to know if selenium can really help these conditions.

**How it Works:** Selenium works as an antioxidant to neutralize "free-radicals" that are harmful to the body.

**Dose:** Doses between 50-200 mcg per day appear to be safe. Do not take more than 200 mcg per day.

**Safety:** High doses of selenium can cause nausea, vomiting, irritability, and fatigue. High doses can affect blood clotting and liver function. It can also cause hair and nail loss and skin lesions.

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**Valerian**

Valerian is one of the most popular and widely used herbs. It is known as the “Valium of the 1800’s”, even though it has no chemical similarity to that drug.

**Uses:** Sedative, muscle relaxant, antispasmodic.

**How it works:** The active ingredients of valerian have not been identified and exactly how it works is not known.
Dose:
Tincture (1:5): 4-6 mL
Fluid Extract: (1:1): 2-3 mL
Capsules: (1-1.5% valtrate or 0.8% valeric acid): 400-900 mg.
Valerian root is also commonly used as a tea.

Safety: Side effects include morning drowsiness, headache, excitability, and uneasiness. It has been shown to help people fall asleep, but not to stop them from waking during the night.

Don't use Valerian if you are taking prescription sleep aids.
<table>
<thead>
<tr>
<th>Conditions</th>
<th>Herbs</th>
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<tbody>
<tr>
<td>Diabetes</td>
<td>Garlic, Ginger, Ginseng, Hawthorn, Ma huang, Nettle</td>
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<tr>
<td>Hypertension (High Blood Pressure)</td>
<td>Devil's Claw, Ginseng, Goldenseal, Hawthorn, Licorice, Ma Huang, Squill, Yohimbe</td>
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<tr>
<td>Depression</td>
<td>Kava, Valerian</td>
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<tr>
<td>Allergies to ragweed, pollens, etc.</td>
<td>Chamomile, Echinecea, Feverfew, Yarrow, Goldenseal, St. John's Wort, Slippery Elm</td>
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Adapted from the Pharmacist’s Letter (volume 98, number 1)
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<tr>
<td>If you are taking any of these medications:</td>
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<tr>
<td>Anticoagulants (warfarin)</td>
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<tr>
<td>Anticoagulant Antiplatelet drugs (aspirin, NSAIDs, ticlopidine, clopidogrel, ASA/dipyridamole)</td>
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<tr>
<td>CNS Stimulants (decongestants, Ritalin, caffeine, theophylline, appetite suppressants)</td>
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<tr>
<td>CNS Depressants (alcohol, opioids, benzodiazepines, antihistamines)</td>
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<td>Antidepressants (tricyclics, SSRIs, MAO inhibitors)</td>
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Adapted from the Pharmacist’s Letter (volume 98, number 1)
### Quick Reference - Supplements

<table>
<thead>
<tr>
<th>If you have the following conditions:</th>
<th>Avoid taking:</th>
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<tbody>
<tr>
<td>Diabetes</td>
<td>Chromium</td>
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<tr>
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<td>CoEnzyme Q10</td>
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<tr>
<td>Depression</td>
<td>5-HTP</td>
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<tr>
<td></td>
<td>Melatonin</td>
</tr>
<tr>
<td>Parkinsons Disease</td>
<td>5-HTP</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If you are already taking:</th>
<th>Avoid taking:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticoagulants (warfarin)</td>
<td>CoEnzyme Q10</td>
</tr>
<tr>
<td>Antiplatelet drugs</td>
<td>Vitamin E</td>
</tr>
<tr>
<td>(aspirin, NSAIDS, ticlopidine, ASA/dipyridamole, clopidogrel)</td>
<td></td>
</tr>
<tr>
<td>CNS Depressants</td>
<td>Melatonin</td>
</tr>
<tr>
<td>(alcohol, opioids, benzodiazepines, antihistamines)</td>
<td></td>
</tr>
<tr>
<td>Antidepressants</td>
<td>5-HTP</td>
</tr>
<tr>
<td>(tricyclics, SSRIs, MAO inhibitors)</td>
<td></td>
</tr>
<tr>
<td>Carbidopa/Levodopa</td>
<td>5-HTP</td>
</tr>
<tr>
<td>Migraine headache medications (Imitrex, sumatriptan, zolmitriptan)</td>
<td>5-HTP</td>
</tr>
</tbody>
</table>

Adapted from the Pharmacist’s Letter, "Natural Medicines Comprehensive Database."
HERBS THAT ARE UNSAFE

Arnica
Belladonna
Bryony
Calamus
Chaparrel
Coltsfoot
Comfrey
Ephedra (ma-huang)
European Mistletoe
False Hellebore
Foxglove
Germander
Henbane
Indian snakeroot
Ipecac
Licorice
Life Root
Lily of the Valley
Male fern
Mandrake
Pasque Flower
Pennyroyal
Pheasant's eye
Squill
Thorn Apple
Yellow Jasmine
Yohimbe