



What Patients
Need to Know About
**Alternative
Medicines &
Nutritional
Supplements**

VA  **PAHCS**
Veterans Affairs Palo Alto Health Care System

3801 Miranda Avenue
Palo Alto, CA 94304
(650) 493-5000

*Prepared by:
Angela Paniagua, Pharm.D.
Veterans Affairs Medical Center
Milwaukee, Wisconsin
Reprinted with permission
August, 2001*

Why do I need a pamphlet about alternative medicines and nutritional supplements?

Alternative 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 health care provider.

Alternative 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.

What are alternative medicines?

Alternative medicine is available in a number of different forms. Herbal therapy products are one type of alternative medicine. Herbal therapy is often considered more “natural”, since it is produced from plants. The VA Palo Alto Health Care System pamphlet, “What Patients Need to Know About Herbal Therapy,” contains information about some of the dangers of herbal therapy. Taking high doses of vitamins and minerals is also considered alternative medicine. Then there are non-herbal products that act like substances produced naturally by the body. These are all included in the broad term “Alternative Medicines.”

What should you know before you decide to use an alternative medicine?

Alternative medicines are still considered food supplements. The FDA does not control herbal therapies, vitamins or other alternative 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. Alternative medicines or supplements are not safe for all people. Many alternative therapies will have some effect on your body, possibly one you weren't planning on. You may have an allergic reaction or a toxic reaction. The alternative medicine may interfere with the actions of your other prescribed medicines. Before starting any new treatment, you should know the risks and benefits. Discuss any medicine, herbal or otherwise, with your health care provider before use.

How do I choose an alternative medicine product?

Discuss your choice with your health care provider. Then look for brands that standardize their products. This means an exact amount of product is in each dose. Avoid products that do not list strengths or ingredients. 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.

*Where can I get more information
about alternative therapies?*

There are many sources of information on alternative therapies. Be sure it is from a neutral source, not advertising by a manufacturer.

The first source of medical information should always be your health care provider. Physicians, nurses, physician's assistants, and pharmacists are all good people to ask.

Local libraries may carry books on alternative therapies. The VA Palo Alto Health Care System libraries also have books on the subject.



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 thought 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 physician, due to the risk of low blood sugars.



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. It may effect the GI system.

Warnings: CoQ-10 does not have any known drug interactions.

 **DHEA**

Uses: Benefits of DHEA use have not been proven.

How it works: DHEA is dehydroepiandrosterone. It is the building block of hormones in the body, including estrogen and testosterone.

Dose: The most common dose of DHEA is 25-50 mg per day. Some experts advise against doses greater than 25 mg/day.

Safety: Side effects include acne, hair loss, decrease in “good” cholesterol, and liver damage. It may also increase the risk of prostate cancer.

Warnings: DHEA supplements should not be used.

5-HTP

5-HTP is 5-hydroxytryptophan. It is one of the supplements associated with the most safety concerns.

Uses: 5-HTP is advertised as a cure for depression, anxiety, and muscle stiffness.

How it works: 5-HTP increases the level of serotonin, a chemical in the brain that sends relaxing messages to the rest of the body.

Dose: The suggested dose of 5-HTP varies.

Safety: Side effects of 5-HTP include: nausea, vomiting, diarrhea, restlessness, anxiety, and agitation.

Warnings: People with ulcers, bleeding problems, and kidney disease should not use 5-HTP.

Antidepressants should not be used along with 5-HTP.



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. There have been some reports of GI effects.

Warnings: If diabetics take glucosamine it may increase blood sugars. Benefits from glucosamine do not start overnight. It may take weeks for effects to be seen. Glucosamine with chondroitin is no more effective than glucosamine alone.



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 be sure 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 to have antioxidant effects, which means it helps to 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 or 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.

 **SAMe**

(S-adenodyl-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: SAMe is used to help make or activate other hormones and chemicals in your body.

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.

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



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 rheumatoid arthritis, and HIV. Again, not enough studies have been conducted.

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.

Shark Cartilage

Shark cartilage gained popularity due to a book called, “Sharks don’t get Cancer.”

Uses: Shark cartilage is supposed to prevent cancer. No studies have been done to confirm these claims. There is also no proof that shark cartilage helps psoriasis or rheumatoid arthritis.

How it Works: The fact that sharks don’t get cancer doesn’t mean its cartilage will prevent humans from getting cancer.

Safety: Shark cartilage does not work to prevent cancer. It can cause damage to the liver and elevate calcium levels in the body. Other side effects include a bad taste in the mouth, nausea, vomiting, heartburn, and constipation.

Warnings: It is extremely important that people do not avoid traditional cancer treatment in the hope that shark cartilage will cure them.

Quick Reference

If you have any of the following conditions:	Be cautious about using these herbs:
Diabetes	Chromium CoEnzyme Q10 Glucosamine
Depression	5-HTP Melatonin
Parkinsons Disease	5-HTP
If you are already taking:	Avoid taking:
Anticoagulants (warfarin) Antiplatelet drugs (aspirin, NSAIDS, ticlopidine, clopidogrel)	CoEnzyme Q10 Vitamin E
CNS Depressants (alcohol, opioids, benzodiazepines, antihistamines)	Melatonin
Antidepressants (tricyclics, SSRIs, MAO inhibitors)	5-HTP
Carbidopa/Levodopa	5-HTP
Migraine headache medications (Imitrex, sumatriptan)	5-HTP

Adapted from the Pharmacist's Letter, "Natural Medicines Comprehensive Database."



(650) 493-5000