



Herbal Remedies, Supplements and Acupuncture for Arthritis

Despite new and more effective treatments, many arthritis patients live with chronic pain and disability. Some people turn to herbal medicines and other "natural" remedies in the belief that they are effective and safer than conventional medications. Unfortunately, most information available to the public about these remedies in the media and on the internet is misleading. It is not based on the quality of scientific evidence required by the Food and Drug Administration (FDA) for approval of conventional medications. The purpose of this patient fact sheet is to provide you with objective, sound information so that you can make informed decisions, and to enable you to discuss with your physician the benefits and risks of natural remedies.

Fast facts

- The active ingredients of herbal remedies are chemicals that are similar to conventional medications. There is no scientific basis for the claim that "natural" medicines are gentler and safer than conventional medications. Many traditional herbals cause dangerous, and even fatal, side effects.
- Herbal remedies are not regulated as drugs by the FDA. Their composition is variable and they may be contaminated by prescription medicines or toxic metals.
- There are no herbal medicines whose health claims are supported by sound scientific evidence.

The truth about "natural" remedies

What is a "natural" medicine and how does it differ from prescription and over-the-counter (OTC) medications? Medicines are chemicals that alter body functions, such as lowering blood pressure or blood sugar. These chemicals may produce beneficial or harmful effects. Prescription and OTC drugs are purified chemicals whose ingredients, benefits and effects have been studied extensively.



Herbal medicines are plant extracts that contain dozens of chemicals whose actions are unknown. It is no more “natural” to swallow a mixture of plant chemicals than to swallow a single chemical: a drug is a drug. In fact, there is no scientific basis for advertising claims that natural remedies are gentler and safer than conventional medications.

What are the differences between “natural” and conventional (prescription and OTC) medicines?

Although natural and conventional medicines may work in similar ways, there are important differences between them.

1. Which is regulated?

Prescription and OTC medications are regulated by the Food and Drug Administration (FDA), an agency of the United States government. Before prescription drugs are made available to the public, the FDA requires they be tested to assure they are safe and will actually benefit the medical condition they target. Manufacturers of herbal drugs are not required to perform safety studies before selling “natural” products. Until December 2007, they were not even required to maintain records of adverse events or to report them to the FDA.

2. What’s in the bottle?

Regulated prescription and OTC medications drugs are purified compounds. This means they are tested to determine what is a safe dose, and each dose must be the same as every other dose. For example, each time you take an aspirin, you can be sure the same amount of medicine is delivered to your body. In contrast, each bottle of an herbal remedy can differ vastly from another bottle of the same remedy. Further, analyses conducted by government and consumer organizations have revealed that the contents of many herbal products do not match the ingredients listed on the labels. These extracts can also contain many dangerous chemicals, including pesticides, lead or mercury, any of which can affect your body. Even more disturbing, some herbal remedy manufacturers include prescription or OTC drugs in their “natural” preparations. Studies have shown that herbal products can contain cortisone-like hormones, diuretics, Viagra, aspirin and/or tranquilizers. A number of “natural herbal” remedies for arthritis have been found to contain conventional arthritis medications such as indocin and prednisone.

3. Are herbal medicines safe?

Although some people assume that remedies used for centuries must be safe, we have learned in recent years that many traditional herbals have dangerous, and even fatal, side effects. For instance, herbal medicines called birthwort or snakewort, made from extracts of *Aristolochia* plants, have been used all over the world for more than 1,000 years. We now know that these plants contain aristolochic acids, substances that can cause kidney failure and cancer of the kidney. Yet herbal remedies that contain aristolochic acids can still be purchased in retail stores or on the Internet.

4. Do “natural” products work?

To gain approval from the FDA claims made for health benefits of conventional drugs must be supported by solid data based on placebo-controlled trials. Health benefits claimed for “natural” products are based mainly on tradition, and little or no scientific data. No health claims made for herbal medicines are based on the quality of evidence required by the FDA for regulated medicines.



Herbal remedies for arthritis

Herbal remedies promoted for the treatment of arthritis include, ginger, Chinese Thunder God Vine, willow bark extract, feverfew, cat's claw and stinging nettle.

While there is some evidence that ginger and willow bark extract may relieve pain, these remedies contain chemicals that are similar to FDA-approved [nonsteroidal anti-inflammatory compounds](#) (NSAIDs) like naproxen (Aleve) and ibuprofen (Advil). NSAIDs, whether purified or in herbal mixtures, may cause inflammation of the stomach and intestines. Further, they can interfere with blood clotting and lead to fluid retention, causing problems for people with high blood pressure or heart failure.

Chinese Thunder God Vine also relieves pain and inflammation, but chronic use may cause weakening of the immune system and bones ([osteoporosis](#)).

Supplements for arthritis

Supplements are also marketed over the counter for treatment of rheumatologic symptoms. Patients should consider the best information available before taking these products.

S-adenosylmethionine (SAME), a naturally occurring chemical in the body, has been used in Europe for some time as a prescription drug for depression as well as for relief of arthritis pain and inflammation. Not only is the role of its anti-depressant action in providing subjective relief from arthritis unclear, there are other deterrents. When taken by mouth, SAME is not efficiently absorbed into the body, nor are there any large, well-controlled studies of its effectiveness. Further, this very expensive supplement can cause gastrointestinal distress as well as reported incidents of extreme agitation. Like other unregulated products, many commercial preparations of SAME do not contain the quantity of drug indicated on the label.

Chondroitin sulfate and glucosamine sulfate supplements are promoted separately, or in combination, for patients with degenerative arthritis ([osteoarthritis](#)). Studies paid for by manufacturers suggest that these products can relieve arthritis pain. Independent trials, including a large study paid for by the National Institutes of Health, have found no benefit beyond that provided by a placebo. A recent review by a government agency, the Agency for Healthcare Research and Quality, also concluded that there was no evidence that glucosamine, chondroitin, or injections of hyaluronic acid were beneficial for osteoarthritis.

That said, these products appear to be relatively safe, and may be worth considering for people who have severe pain despite conventional treatments.

Fish oils that contain omega-3 fatty acids have been reported to relieve pain and joint tenderness in patients with rheumatoid arthritis. The benefits are modest and may take several months to appear. Side effects may include gastrointestinal distress and a fishy odor to the breath. Those who consider fish oil supplements should be aware that some fish oil supplements may contain high levels of mercury or vitamin A, which could be toxic.



Placebo Effects

During the last 50 years all new medications have been tested to establish whether they provide any benefit beyond a placebo effect. A placebo is a substance or a procedure that has no specific activity. For example, when a new medication for arthritis is tested for its ability to relieve pain, half of the people in the trial receive a pill or capsule that is identical in appearance to the medication but contains no active ingredients. Approximately 30-40% of people who receive a placebo report a marked improvement in their symptoms. The benefit results from trust in the physician who administers the medication and in the expectation of relief. Many medications that were thought to be effective before placebo-controlled trials were found to have no benefit beyond a placebo effect.

Acupuncture

As developed in Asian countries over 2000 years ago, acupuncture needles are inserted into the skin at specific points along meridians or channels. Selected groups of points are used to treat different diseases. In traditional Chinese medicine acupuncture is part of a comprehensive treatment plan that may also include herbal therapy, diet and exercise, but it is increasingly used as a stand-alone treatment by Western health care providers.

There have been many studies of the use of acupuncture for relief of pain caused by [osteoarthritis](#) (degenerative arthritis) of the knee. Early trials found that patients treated with acupuncture experienced less pain than patients who received only conventional treatment. However, in recent years traditional acupuncture has been compared to a variety of “sham” or unconventional acupuncture controls, including insertion of needles at non-acupuncture points, non-insertion of needles, and use of telescoping needles that appeared to be inserted into the skin. Sham and conventional acupuncture provided significant relief of pain compared to no treatment. However, there was little or no difference between the benefit produced by conventional or sham acupuncture.

The interpretation of these studies is that the relief of pain resulted from placebo effects that can be elicited by contact of the skin with needles, or their insertion at random points. The pain caused by osteoarthritis of the knee can be severe and may be incompletely relieved by conventional treatments. Although the best current evidence suggests that acupuncture relieves pain because it is an unusually potent placebo, it is safe and can be considered as an adjunct to conventional treatment.

Points to remember

- Most kinds of arthritis are chronic and may not be controlled completely by conventional treatments. People may seek additional relief from herbal remedies or supplements, or may use these substances instead of conventional medications.
- Because the FDA is currently unable to regulate the quality of herbal remedies and supplements, or to verify their effectiveness or safety, the use of herbal remedies is not recommended.
- Acupuncture is safe and may provide pain relief for some patients with osteoarthritis, but it appears to work by eliciting a placebo effect.

To find a rheumatologist

For a listing of rheumatologists in your area, [click here](#).

Learn more about [rheumatologists](#) and [rheumatology health professionals](#).



For more information

Many books, magazines and web sites provide advice about using herbal medicines and other dietary supplements. These sources promote the use of these remedies in an unscientific manner and do not provide adequate information about potential dangers. Three recent books that provide more sound advice are listed below. The most reliable and accessible information is provided through health newsletters published by nonprofit consumer organizations and medical schools. Sources of more technical information are listed below.

The American College of Rheumatology has compiled this list to give you a starting point for your own additional research. The ACR does not endorse or maintain these web sites, and is not responsible for any information or claims provided on them. It is always best to talk with your rheumatologist for more information and before making any decisions about your care.

Books

Hurley D. [Natural Causes: Death, Lies, and Politics in America's Vitamin and Herbal Supplement Industry](#). Broadway Books, NY, 2006.

Bausell, RB. [Snake Oil Science: The Truth about Complementary and Alternative Medicine](#). Oxford University Press, New York, 2007.

Singh S, Ernst E. [Trick or Treatment: Alternative Medicine on Trial](#). Bantam Press, London, 2008.

Web Links

U.S. Food and Drug Administration, Center for Food Safety and Nutrition
<http://www.cfsan.fda.gov/~dms.supplmnt.html>

Office of Dietary Supplements of the National Institutes of Health
<http://ods.od.nih.gov/>

The Agency for Healthcare Research and Quality
<http://www.ahrq.gov>

National Center for Complementary and Alternative Medicine
<http://nccam.nih.gov/>

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Written by Donald M. Marcus, MD, and reviewed by the American College of Rheumatology Patient Education Task Force.

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