

## INTEGRATIVE MEDICAL TREATMENT OF ARTHRITIS

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What we call arthritis is actually a number of different inflammatory disease processes that all have in common some involvement of the joints. The most common of these is known as osteoarthritis, or degenerative arthritis where there is progressive loss of the cartilage that keeps the joint lubricated and mobile. It typically involves the joints of the hands, especially the fingers, as well as the hips and knees but can involve almost any joint in the body. In conventional medicine, the cause is not known and is felt to likely be a combination of age and genetics. It can often appear many years after a joint has suffered some form of trauma. The treatments that are usually offered are the non-steroidal anti-inflammatory drugs, like the over-the-counter products ibuprofen and Alleve, or prescription medicines, such as the newer highly advertised drugs like Celebrex and Vioxx. These drugs all inhibit the conversion of a compound called arachadonic acid, which is found in certain foods like dairy products, meat and eggs but is also made in the body, into inflammation-promoting molecules called prostaglandins. One of the problems is that these drugs also irritate the stomach and gastrointestinal tract and may worsen a condition that has been theorized as one of the causes of arthritis, known as the "leaky gut syndrome." There is also some recent evidence that these drugs may actually decrease the flow of oxygen to the cartilage, hastening its loss. Thus, while treating the symptoms, they may actually make the underlying problem worse thereby guaranteeing that they will be needed more and more often.

Nutritionally oriented practitioners, however, are having increasing success using programs designed to naturally decrease the conversion of arachadonic acid to prostaglandins. One of the factors involved seems to be an imbalance in our dietary intake of the two families of essential fats that our bodies must have for proper functioning. These are the omega-6 fats, found in corn, sunflower, safflower, and sesame oils, and omega-3 fats that are found in wild (but not necessarily farm-raised) cold-water fish like salmon and other sources such as flax seeds, walnuts and even some dark green plants. Excess amounts of omega-6 fats, particularly in the presence of the higher levels of insulin that are caused by diets with too much sugar and processed carbohydrates, promote the formation of inflammatory compounds in the body. Therefore, to treat arthritis we want to decrease our intake of the omega-6 oils noted above as well as sugar and products made from flour, like bread, pasta, crackers, cookies, chips, etc., and increase our intake of good cold water fish and fish oils. Flax oil and ground flax seeds can also be helpful.

In some people, other food sensitivities appear to influence arthritis as well. The more common culprits appear to be wheat, corn and dairy products. This can be determined by an allergy elimination diet although it can sometimes take 2-3 months to see a difference. In addition, there is sophisticated, but expensive, blood testing that can be performed to find sensitivities that do not show up on routine allergy testing. Some practitioners have found that about 15-20% of arthritis patients get better if they eliminate the "nightshade" vegetables from their diet, which includes potatoes, tomatoes, bell peppers, and eggplants.

A number of nutritional supplements have the potential to be helpful in arthritis as alternatives to the anti-inflammatory drugs. Foremost among these are glucosamine, at a dose of 2000-3000 mg. a day, and chondroitin sulfate 500-2000mg. a day. These appear to support cartilage health and may actually alter the course of the disease. Many people have also gotten relief from a compound called MSM when used in high doses, 2000-6000 mg. a day. While studies have been done on it, there is no evidence to date that it is harmful.

Other useful anti-inflammatories include enzymes such as bromelain and papain, when taken on an empty stomach, curcumin (found in the curry spice turmeric), the herb boswellia, and grape seed extract. There are also preparations with capsaicin, extracted from cayenne pepper, which when applied topically to an area can help relieve pain and inflammation.

Other supplements that can be helpful are those aimed at healing and restoring balance in the gastrointestinal tract. In theory, and there is some evidence for this, imbalances in the GI tract can lead to a “leaky gut” which promotes sensitivities and inflammation. In some cases, particularly those involving other types of more serious arthritis, such as rheumatoid, a comprehensive program aimed at optimizing gastrointestinal health can be helpful. This would include avoiding all potentially allergenic foods and using such things as demulcent herbs like slippery elm, marshmallow root, and de-glycyrrhizinated licorice, supplements containing the beneficial bacteria *Acidophilus* and *Bifidobacteria*, digestive enzymes, the amino acid glutamine, and sometimes a compound called betaine that turns into acid in the stomach. Comprehensive testing of the stool can sometimes help determine if these types of supplements are necessary.