



## Is Glucosamine Sulfate an Arthritis Cure?

*By Dr. Patrick R. Smith - Chiropractic Physician*

In recent times, glucosamine has grabbed the spotlight in the crowded field of nutritional supplements. It's no wonder since an estimated 50 million Americans suffer with osteoarthritis - a condition characterized by joint degeneration, loss of cartilage and varying degrees of disability. Standard treatments utilize NSAIDs, like ibuprofen, to suppress inflammation and pain - the symptoms associated with arthritis. However, the degenerative process continues. And, in some cases, this approach can actually contribute to the degeneration. This has led many people to search for better options.

Fortunately, there is a better way - using glucosamine as an oral supplement. Glucosamine Sulfate is the most fundamental building block required for the biosynthesis of a class of compounds in the body called mucopolysaccharides which, in plain English, means glucosamine is needed for the human body to make healthy cartilage, tendons, ligaments, blood vessels, joint fluids, skin, nails, heart valves, and mucous secretions of the digestive, respiratory and urinary tracts.

Cartilage covers the ends of the bones that come together to form a joint and is 6 times more slippery than ice. When the cartilage in your joint begins to break down, the joint loses its ability to move smoothly - leading to altered and restricted movement, subluxation, instability, and other degenerative changes - all cardinal features of arthritis. By increasing glucosamine in your system, you can help to maintain the matrix that holds your cartilage together and allows it to resist the "wear and tear" of repetitive movements.

Glucosamine is a small water soluble molecule that is readily absorbed into our intestines. However, outside the body, glucosamine is very unstable and must be bound to another molecule in order to extend its shelf life and make it suitable as an oral supplement. It is commercially available in 3 forms: Nacetyl glucosamine, glucosamine hydrochloride and glucosamine sulfate. Based on current scientific guidelines, glucosamine sulfate (GS) is the compound of choice.

GS has been highly tested, is absorbed almost completely in the intestines, is rapidly incorporated into joint cartilage, and is very stable and safe with no known side effects.

Taking GS promotes the health of your joints by its multitude of benefits. GS helps to improve and maintain joint stability by strengthening cartilage, tendons and ligaments. It rehydrates damaged cartilage -- much like adding water to a dried, cracked kitchen sponge. Also, it allows a joint to move more smoothly by promoting regeneration of cartilage and reducing compounds that cause joint edema (swelling caused by the degenerative process). However, it's important to note that GS will not stop the enzymes that cause inflammation (redness and swelling) during the degenerative process.

An increase of GS in the body increases another compound that helps to strengthen connective tissues, chondroitin sulfate. There is a common misconception that taking chondroitin sulfate with GS will provide superior joint benefits. However, chondroitin sulfate is a large molecule that is poorly absorbed when taken orally (less than 8%), as opposed to the over 90% absorption rate of GS. Studies reveal that chondroitin sulfate only slowed benefits when directly injected into arthritic joints -- not highly practical!



Given the available options in treating osteoarthritis, a natural treatment program makes more sense than taking NSAIDs. In this program, GS is taken -- along with other beneficial supplements -- and, dietary changes are recommended that are deemed appropriate for a particular individual. Other aspects of treatment include physical manipulation and therapeutic exercises. Guidance is provided to make lifestyle changes such as weight loss and postural modification. This multi-faceted approach to treating arthritis through natural methodologies will ease joint pain and swelling, and restore normal joint movement and stability.

GS therapy tends to show more promise with trauma-induced arthritic changes like osteoarthritis and less promise with inflammatory arthritic changes like rheumatoid arthritis. That's why it's important to know what type of arthritis condition you have prior to taking GS as a nutritional supplement. Also, remember to use supplements from a reputable manufacturer -- not all nutritional supplements are created equal.

A treatment program that includes a combination of natural approaches may work slowly in treating arthritis but, in the long run, its effects are more lasting - halting the downward spiral of progressive degeneration and arthritis. Studies have shown that the beneficial effects of this type of treatment will last even after the treatment stops -- unlike the use of NSAID's in which symptom relief stops shortly after stopping their use.

Note: This article by Dr. Patrick Smith was printed in the Independent Press in an abridged form. Due to questions raised by readers, we are offering the complete version of this article. Dr. Smith is a chiropractor at the Berkeley Heights Chiropractic Center, a multi-doctor holistic health care center dedicated to natural healing and optimum health. For more information about glucosamine sulfate or other health-related questions, please contact Dr. Smith at (908) 665-0770.