

## GLUCOSAMINE SULPHATE AND OSTEOARTHRITIS

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Millions of Canadians suffer from osteoarthritis, the most common form of arthritis. Osteoarthritis accounts for more trouble with climbing stairs and walking than any other disease, and is the number one reason for total hip and knee replacement surgeries. It is one of the most common disabling ailments in our society, but when it comes to joint pain or relief from joint pain, many people have discovered the healing powers of glucosamine sulphate. Learn more about how this natural compound, combined with other preventative strategies can help minimize the negative and disabling effects of osteoarthritis.



It is important to first understand what osteoarthritis is. The joints in our body have smooth cartilage surfaces that glide against each other. This allows two or more opposing bones to move freely and perform a specific movement. A joint becomes arthritic when there is wearing down of these cartilage surfaces, and a change in the composition of the bone underneath the cartilage occurs. Soft tissue structures in and around the joint are also affected, which often leads to muscle tightness and weakness. An arthritic joint does not mechanically function like it is supposed to, and as a result, pain and local inflammation occur. Weight-bearing joints are most commonly affected, but osteoarthritis can affect any area of the body, including the hands, neck, and low back. The causes of osteoarthritis are many, and can include but are not limited to; advancing age, genetic predisposition, decreased bone density, mechanical overload from occupational and recreational activities, obesity, poor dietary habits, lack of exercise, and direct joint injury.

Glucosamine is a natural compound that is found in healthy cartilage. Glucosamine sulphate is a normal element of cartilage matrix and joint fluid. As we age, our bodies slow down the production of glucosamine sulphate, which results in erosion of joint cartilage. Glucosamine sulphate provides the body with the building blocks necessary to repair damage to our joints. Several scientific journals, including *The Lancet* and the *Journal of the American Medical Association* have published research articles highlighting the proven benefits of glucosamine sulphate for arthritic patients, particularly for those individuals with mild to moderate osteoarthritis of the knees. Research also suggests that glucosamine sulphate may help prevent the development of joint degeneration if taken before cartilage erosion occurs.

Glucosamine sulphate supplementation has been shown to be extremely safe and effective in doses of 1,500 mg per day. Doses should be divided into 500 mg units, three times daily. It may take up to 90 days before the positive effects of glucosamine sulphate supplementation are realized. It remains unclear if glucosamine alters blood sugar levels. Special caution is advised in patients with diabetes or low blood sugar. The effectiveness of glucosamine sulphate can also be enhanced when taken in conjunction with natural anti-inflammatory compounds. These natural compounds



help fight inflammation which often accompanies osteoarthritis, and unlike traditional pharmaceuticals, have not been found to cause gastro-intestinal distress, damage to the liver, or the kidneys, and do not accelerate joint cartilage damage. These natural compounds include: *MSM, quercetin, bromelain, curcumin, boswelina, and white willow bark extract.*

Poor dietary habits can also influence arthritic symptoms in a number of ways. Eating foods high in trans-fats, and the over-ingestion of unhealthy oils promotes inflammatory pathways in the body. The analogy here is like throwing gasoline on a smoldering fire. Including healthy omega-3 essential fats in your diet has the opposite affect. Foods rich in antioxidants such as fruits and green leafy vegetables also have a strong anti-inflammatory influence in the body. Individuals with poor dietary habits also tend to be overweight and may not get enough exercise. For every extra pound of weight that someone carries, they put an extra 3 to 5 pounds of stress on a weight bearing joint. You can now begin to understand the long-term cumulative effects of mechanical stress on the joints. Regular exercise can allow an individual to keep their weight down, and their muscles and joints flexible and strong. Being physically fit also allows us to withstand occupational and recreational stresses to our body more efficiently, therefore decreasing the chances of joint injury.



Natural therapies can also be very beneficial in helping people cope with arthritis. Chiropractic care allows for the normal movements of joints to be restored by influencing the joints directly, the surrounding muscles, and the nervous system. Massage therapy can help those with tight and weak muscles, which will also allow joints to move through their normal ranges of motion. Acupuncture is a treatment option that is growing in popularity. It helps to decrease pain, restore normal muscle and joint motion, and stimulate healing in arthritic or injured areas. Chiropractic, massage, and acupuncture can be used individually or in combination with each other, and have clinically shown to relieve arthritic symptoms.

With advancing treatment options available to those suffering from arthritic pain, there appears to be hope for the millions afflicted with this disease. Glucosamine sulphate and anti-inflammatory supplementation along with healthy nutrition and regular exercise are powerful tools in minimizing the negative effects of osteoarthritis. Arthritic pain does not have to be viewed as an inevitable process of life. There are choices that are readily available that can have a significantly positive impact.

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