There are many “natural” or “non-pharmacological” agents that are being marketed as either cures for arthritis or to help take away the pain that is associated with arthritis. Often there is little scientific evidence to support the claims that are made concerning these products. Of the various remedies that are promoted, glucosamine sulfate has perhaps the greatest scientific support. However, the studies that demonstrate its effectiveness are few, and more research is needed before its use can be recommended with confidence. For those who are seeking to do all they can to preserve remaining cartilage and/or decrease the pain caused by arthritis, it is a possible remedy. The relief it provides is usually not dramatic.

Glucosamine is a naturally occurring chemical found in articular cartilage. Articular cartilage covers the ends of bones, and permits a smooth, gliding action in the joints. The true mechanism of action of glucosamine on articular cartilage is unknown. Current research indicates that glucosamine may have an effect similar to anti-inflammatory drugs. It may take six weeks or longer for glucosamine to have an effect on pain control.

Glucosamine is not a “drug” but is considered a nutritional supplement. It is available without prescription, and can be found in most drugstores and health food stores. It seems to be generally safe, but the widespread use of glucosamine has been relatively recent, and we may learn of deleterious side effects in the future. Compared to traditional oral anti-inflammatory drugs, immediate side effects are infrequent.

Because it is not a prescription medication, and is not considered to be a “drug”, most health plans do not cover the cost of glucosamine. Glucosamine can be expensive, although the price varies greatly among different stores. Taking the recommended treatment dose usually costs about one dollar per day. Remember that high prices do not insure that you are buying a quality product. Since its benefits are not certain, the costs may or may not be justified. This is a personal decision.
Unfortunately, compounds sold by health food stores are not as rigidly controlled as pharmacological agents (drugs), and it is sometimes difficult to be sure exactly what you are buying. In addition, there are products on the market with similar names to glucosamine sulfate. It is unknown whether these compounds are better, worse, or the same as glucosamine. Most of the studies have been done with glucosamine sulfate with a dosage of 500 milligrams taken three times daily.

A second chemical, chondroitin sulfate, has characteristics similar to those of glucosamine. While the evidence supporting chondroitin is not as strong, some physicians recommend the combined use of glucosamine and chondroitin sulfates.

The recommended dosages are:

- Glucosamine Sulfate, 500 mg, three times daily
- Chondroitin Sulfate, 400 mg, three times daily

In summary, if you choose to try glucosamine and/or chondroitin, it is probably best to use them in the above dosages, and to take them for several weeks to see if there is an effect. Whether or not to try these food supplements is strictly a personal decision.

If you have any questions or problems, please call your doctor.