



## Osteo-Bi-Flex



Osteo-Bi-Flex is a naturally occurring dietary supplement that contains a combination of clinically studied ingredients, Glucosamine and Chondroitin, critical nutrients in joints that help improve flexibility, comfort and range of motion.

Glucosamine is one of the building blocks of articular cartilage. Glucosamine helps keep cartilage lubricated and maintains its slippery texture.

Chondroitin helps attract fluid into the cartilage, acting as a natural shock absorber.

Taken together, the Glucosamine and Chondroitin work naturally with the body to promote healthy flexible joints.

### Mechanism of Action

Unlike NSAIDs, Glucosamine is neither anti-inflammatory nor analgesic. Instead, Glucosamine has been shown to stimulate proteoglycan synthesis in a dose dependent manner and it has been found in articular cartilage after oral administration. Thus, Glucosamine has the potential to stimulate production of cartilaginous matrix, thereby countering the degradative loss of articular cartilage in arthritis or injury.

Chondroitin Sulfate has also been shown to stimulate the production of cartilage precursors. In addition, it inhibits collagenase and other proteolytic enzymes that can degrade articular cartilage. In humans with osteoarthritis of the knee, orally administered Chondroitin Sulfate was localized to the synovial fluid. When taken in combination, Glucosamine and Chondroitin Sulfate can stimulate synthesis of cartilage precursors and synovial fluid as well as limit the degradation of existing cartilage in loss of joint integrity. This nutritional approach to joint health can alter the natural progression of osteoarthritis.

### Is Osteo-Bi-Flex Safe?

In Europe, both Glucosamine and Chondroitin have been used for almost 20 years without significant adverse effects. Products containing Glucosamine and Chondroitin Sulfate or their combinations have been marketed with a safe history of use as nutritional supplements in the United States for many years, but a shorter period of time than in Europe. They have been used safely in the United States as they have



been in Europe for more than 20 years.

Both Glucosamine and Chondroitin are derived from natural sources. No drug interactions or disease state interactions have been reported for either Glucosamine or Chondroitin Sulfate.

More than 15 trials of Osteo-Bi-Flex have been conducted and the authors of these studies concluded that the compounds are safe and have some efficacy in treating osteoarthritis symptoms.

### **Are there any undesirable side effects?**

In my experience with Osteo-Bi-Flex over several years, I have only had one patient complain that Osteo-Bi-Flex seemed to cause stomach upset. In many large patient studies of Osteo-Bi-Flex, the only reported adverse effects were related to the gastrointestinal system such as mild abdominal pain, dyspepsia or nausea.

### **Shellfish Allergies**

If a person truly has a documented allergy to shellfish, it would probably be best to avoid the use of Osteo-Bi-Flex. This is the only contraindication that I know to the use of Osteo-Bi-Flex.

### **High Quality**

Osteo-Bi-Flex is tested for conformity to rigid finished product specifications including potency, micro-biological purity and physical parameters (hardness, weight and desintegration). The manufacturer of Osteo-Bi-Flex, Rexall Sundown, has consistently been awarded the highest quality rating of its facilities by a leading independent quality compliance auditing firm used by many of the pharmaceutical and supplement companies. The name of this firm is Shuster Laboratories, Inc.

Osteo-Bi-Flex is manufactured under the highest standards for product quality including purity, potency and product safety and meets or exceeds all USP Good Manufacturing Practices.

The same cannot be said for the plethora of other Glucosamine and Chondroitin supplements that fill the shelves in your pharmacy or discount store.

Persons interested in obtaining more information about Osteo-Bi-Flex would do well to access the Osteo-Bi-Flex website at [www.osteobiflex.com](http://www.osteobiflex.com).



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**Please consult Dr. Haverbush or a physician for specific treatment recommendations.**

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