# **HYALURONIC JOINT COMPLEX**<sup>TM</sup> with Glucosamine, Chondroitin, and MSM The Next Generation in Joint Formulas



Every movement you make requires your joints to help your body flex, bend and twist into that next position. But with time and use, your joints can begin to break down, resulting in discomfort.

Source Naturals understands how difficult it is to live with joint discomfort. That's why we developed

HYALURONIC JOINT COMPLEX. This powerful formula combines the most popular, scientifically researched ingredients for joint health—hyaluronic acid, glucosamine, chondroitin,

and MSM. Together, these ingredients promote joint, tendon and ligament flexibility and easy joint movement.

Joints are cushions made of flexible and protective cartilage—containing outer layers that surround a lubricating fluid. It is this design of your joint and other connective tissues that gives your body structure, height and the ability to move without damaging the bones and muscles that hold you up. HYALURONIC JOINT COMPLEX provides the key nutrients needed to support this complex structure.





Strategies for Wellness

# **BioCell Collagen II®—Hyaluronic Acid**

Hyaluronic acid is a polysaccharide chain found throughout the body. It is a major component of joint tissue that helps to hold lubricating moisture in joints and cartilage, affecting their resilience, elasticity, and strength. BioCell Collagen II® is a patented hyaluronic acid, which has undergone an absorption enhancing hydrolyzation process that yields low molecular weight hyaluronic acid, chondroitin sulfate, and Collagen Type II peptides, unlike other preparations that have not been hydrolized. The low weight allows these compounds to deliver greater support for your joints.

#### Glucosamine—An Amino Sugar

Glucosamine is an amino sugar-a molecule made from an amino acid and a simple sugar. Amino sugars are the basis of virtually all connective tissues and lubricating fluids in the body. Just as amino acids are the building blocks of proteins, amino sugars are the building blocks of giant molecules called glycosaminoglycans (GAG's), also known as proteoglycans and mucopolysaccharides. GAG's are large, spongy, waterholding molecules that form the glue that holds us together. This substance is found in all connective tissue and mucous membranes.

Numerous double-blind, placebo-controlled studies have examined the positive effects of oral administration of 1,500 mg of glucosamine-the amount in one daily use of HYALURONIC JOINT COMPLEX. To aid optimal absorption, this formula contains glucosamine sulfate, N-acetyl glucosamine and glucosamine HCl.

### **Chondroitin Sulfate**

Chondroitin sulfate is the most abundant GAG in the body. Its main role is in keeping cartilage fluid and elastic. It is found naturally in the body, where it is one of the critical compounds that makes up connective tissue. Connective tissue is responsible for building and supporting cartilage found in the joints and elsewhere.

## **Dietary Sulfur for Joint Lubrication**

Both glucosamine sulfate and chondroitin sulfate provide an additional source of sulfur, a mineral that is important for healthy connective tissue. HYALURONIC JOINT COMPLEX also

features MSM, or methylsulfonylmethane, a naturally occurring form of organic sulfur found in body fluids and tissue, cow's milk, plants and most natural foods. Sulfur may promote joint flexibility due to its role in supporting joint lubrication and movement. A double-blind, placebocontrolled study evaluated the effects of MSM with promising results.

#### Supporting Ingredients for Joint Health: Manganese and Vitamin C

Manganese is involved in the production of a wide variety of enzymes. These enzymes influence such biological processes as the production of collagen and the metabolism of protein and cholesterol. Manganese is also necessary for the growth and maintenance of tissues, cartilage and bones.

The manganese ascorbate used in this formula also provides 55% vitamin C. Vitamin C is essential for the production and stability of collagen, the major protein in cartilage and connective tissue. It also protects cells from harmful free radicals.

Innovative natural products, such as HYALURONIC JOINT COMPLEX, are an integral part of the Wellness Revolution. Taking personal responsibility for your health is at the heart of this revolution. Your local health food outlet is your source for nutritional education and advanced natural products. Source Naturals is pleased to partner with these outlets to bring you HYALURONIC JOINT COMPLEX-the next generation in joint formulas.

#### **References:**

Altman, RD. 2003. Status of hyaluronan supplementation therapy in osteoarthritis. Curr Rheumatol Rep, Feb; 5(1) 7-14. Abstract only.

Lawrence, R. MD, PhD. MSM Research. Accessed February 2005. Available at http://www.naturalwellness.com/arthritis/

Braham, R. et al. 2003. The effect of glucosamine supplementation on people experiencing regular knee pain. Br. J. Sports Med. 37:45-49.



is a trademark of Biocell BioCell Collagen Technology LC, Newport Beach, California USA (US patent 6,025,327 - other USA andforeign patents pending).



is a trademark of Cardinal Nutrition.





The above information has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

© 2008 Source Naturals, Inc., P.O. Box 2118, Santa Cruz, CA 95062