# **UC-II®** COLLAGEN

# Powerful, Convenient Joint Care



inor aches and pains seem for many people to be a normal part of life. This pain from natural wear and tear on the body is not reserved for the elderly. Joint discomfort and stiffness may be shared by people of all ages. The sad part is how joint discomfort may affect your quality of life and keep you from participating in the many

activities that you miss and love. There is a solution however. Source Naturals makes it possible to take action against joint discomfort with UC-II® COLLAGEN, a safe and effective 40 mg capsule that works

with your immune system to promote joint flexibility and mobility.

UC-II® (trademark and patents held by InterHealth N.I) is standardized to 25% undenatured (native) type-II collagen in powder form for use as a dietary supplement. Source Naturals UC-II® administration Collagen supports one key SystemiCare™ deep metabolic system recognized by Source Naturals to be critical for your health: Structure/ Mobility.





#### **Joint Discomfort**

Joint discomfort may be predominantly experienced by the elderly but it is not exclusive to them. Adolescents and active, young adults may experience joint discomfort through repetition of motion or physical stress. A young pitcher throwing hard to master a curve ball is one such example. Avid tennis players and people who spend long hours working on desktop computers might experience joint or elbow discomfort. This can result when the cartilage covering the ends of bones deteriorates, causing the joints to lose the cushioning action and support that cartilage provides.

#### **Immune Process**

Joint discomfort can result from inappropriate immune reactions. Our immune system uses specialized white blood cells known as T-cells. They are biologically engineered to identify, attack and destroy, almost any foreign invader perceived as threatening to our health. Of the different types of T-cells, the two most common are helper T-cells and killer T-cells. Helper T-cells release factors that may increase or decrease immune response. Killer T-cells attack and destroy foreign substances. Here, joint discomfort is brought on as our killer T-cells attack the collagen in our bodies. Undenatured type II collagen, when taken orally, triggers the deactivation of the body's immune process in the joints so that the body's own system can repair and rebuild its joint cartilage.

## **Cartilage**

Cartilage is a complex structure made up of two main components, proteoglycans and collagen. In mammalian tissues there are at least 19 types of collagen. It is the undenatured form of collagen that is most durable and resistant to proteolytic degradation. Type II collagen is the most abundant fibrous protein found in joint cartilage and is responsible for the strength and toughness of cartilage.



Strategies for Wellness<sup>sm</sup>

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### **Undenatured Type II Collagen**

When taken orally, UC-II® enters the digestive system where enzymes partially break it down. It then travels into our small intestine where it interacts with Peyer's patches which are located directly in the small intestine. This interaction stimulates helper T-cells to be released into the blood stream. When these helper T-cells come into contact with other type II collagen, they secrete cytokines which in turn down-regulate the T-cells that are attacking the type II collagen in our bodies. Researchers believe that when an oral form of type-II collagen gets ingested our bodies will recognize the collagen as a nutrient and suppress or destroy those T-cells that are attacking the cartilage. This shows the almost miraculous nature of the human body when a very small amount of collagen can signal the immune system to cease attacking otherwise healthy tissue.

Source Naturals is committed to enhancing individual potential to enjoy optimal health and well-being through providing superior quality dietary supplements and nutritional education. Source Naturals believes in a philosophy which embraces the individual's right to achieve a greater quality of life with optimal nutrition, healthy lifestyle and alternative health strategies. For more information or purchase locations please visit, http://www.sourcenaturals.com

#### **References:**

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These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.