



Profile - kolla2®

US Patent #6,838,440, other w.w. patents pending

100 % Chicken Sternal Cartilage

Naturally contains Collagen Type II, Hyaluronic Acid, Chondroitin, and Glucosamine

WHAT IS COLLAGEN?

The word “collagen” is derived from *kolla*, the Greek word for glue. Collagen is the primary protein in the body. There are many types of collagen protein throughout the body however, the most widely researched types of collagen are Type I, II, and III. Types I & III are the major components of skin, hair, nails, muscles, tendons, ligaments, bones, gums, teeth, eyes, and blood vessels. Type II is the major component of joint cartilage.

WHAT IS KOLLA2®?

Kolla2® is a patented Chicken Sternal Cartilage Collagen Type II powder or liquid concentrate. Kolla2® is a new food supplement that provides necessary nutrients to promote healthy joint cartilage and to repair the damage that causes the pain and swelling associated with arthritis diseases. Advanced exclusive technology is used to extract kolla2® from young chicken sternum cartilage. It contains 65-70% Collagen Type II and naturally contains 25-30% carbohydrates (chondroitin, glucosamine & hyaluronic acid), the major components of joint cartilage.

HOW DOES AGING AFFECT COLLAGEN IN THE BODY?

Aging affects the body’s collagen in two ways:

- a) As we age, the body’s ability to make collagen protein slows down so there is insufficient new collagen to make skin, joints and other parts of the body.
- b) Collagen fibers lose their moist texture and become rigid. Much of this damage is caused by *free radicals*: unstable molecules created when the body uses oxygen.

WHAT IS THE DIFFERENCE BETWEEN THE COLLAGEN TYPES?

COLLAGEN TYPE I & III:

Scientific studies show that more than 90% of the collagen found in the body is Collagen Type I & III. The protein

composition consists of nineteen amino acids responsible for growth, maintenance and repair of the body with unusually high proportions of the amino acids glycine and proline, as well as hydroxyproline and hydroxylysine, all found in skin and muscle.

COLLAGEN TYPE II :

Collagen Type II is the major component of articular joint cartilage. The protein content of Kolla2® is between 65% to 70% (less than Type I and III) and naturally occurring mucopolysaccharides (carbohydrates) 25% to 30%. The mucopolysaccharides consist of Glucosamine, Chondroitin, and Hyaluronic Acid, the makeup of synovial fluid and sugar aminos required to make collagen type II cells.

The composition of Kolla2® Chicken Type II Collagen protein consists of eighteen amino acids. The percentage and molecular weight of each amino acid is different than those found in Type I & III. In addition, Type II is low in hydroxyproline and trace of hydroxylysine, the primary difference in comparison with Type I and III gearing type II to address cartilage tissue properties.

HOW DOES *kolla2*® WORK?

kolla2® is taken orally as a dietary supplement working naturally within the body as a food source that is bioavailable, meaning it is a ready source of nutrition. It is substantially more effective than just the supplementation of the carbohydrates Glucosamine and Chondroitin. Kolla2® *naturally* supplies the nutrients necessary to rebuild cartilage.

Kolla2® is processed from chicken sternum cartilage using patented low-temperature manufacturing to maintain its natural low molecular weight structure and to maintain the integrity of its delicate molecules. The long chain of amino acids is left intact ensuring the body’s own superior natural enzymes recognize the precise genetic code for maximum assimilation for ultimate joint health. It is safe, effective and classified as a food. All manufacturing processes are under the strictest quality control to meet USDA approval.



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The recommended daily supplementation of Kolla2® is 2,400-3,600mg. taken on empty stomach for optimum utilization. Wait 20 minutes before eating.

HYDROLYZED VS. UNHYDROLYZED

Hydrolyzed collagen protein is pre-digested outside the body breaking down the amino acid chain by a process of adding synthesized enzymes, chemicals. Then it is spray-dried into powder using very high temperatures. This is effective for bovine collagen type I & III to make it more absorbable, such as in Collagen+C™ supplements. When chicken sternal cartilage collagen type II protein is exposed to high temperature however, the delicate hyaluronic acid and sugar amino molecules present in the chicken cartilage may become less effective. *kolla2®* uses a low temperature process that ensures biological activity for maximum results.

Advanced exclusive technology extracts the *kolla2®* from young chicken sternum cartilage yielding healthy active cells.

WHO NEEDS *kolla2®*?

One of every three Americans over the age of 60 suffers from Osteoarthritis. It is a natural wear and tear of our joint cartilage, even active younger adults suffer from joint damage. As we age, the body's ability to make the protein Type II Collagen slows down. This is the protein needed to maintain and rebuild cartilage tissue. *kolla2®* is a nutritional dietary supplement that supplies necessary elements to help the body support joint health. The rising number of baby boomers will be more than 60 million in the 21st century. The demand for arthritis prevention will surpass the demand for treatment. A daily supplement of *kolla2®* is the natural answer.

OSTEOARTHRITIS VS RHEUMATOID ARTHRITIS

Rheumatoid arthritis is an autoimmune disease whereby the body's own immune system mistakenly attacks healthy joint cartilage cells causing joint deformity and painful conditions.

Osteoarthritis is a degenerative joint disease due to the wear and tear of joint cartilage. The damaged joint inflames causing a painful condition. *kolla2®* contains natural nutrients to supply the body with all the ingredients required to make collagen Type II protein and support the joints.

UNDENATURED VS. DENATURED COLLAGEN TYPE II

Undenatured collagen Type II is native collagen purified from raw sternum without changing its original large molecules and active sites. Undenatured active sites are recognized in the small intestine, and are theorized to turn off the signal that creates the attack on the body's cartilage. *kolla2®* unHydrolyzed exclusive low temperature process lowers the molecular weight for assimilation and is recognized as a nutrient as the building blocks for damaged cartilage.

CLINICAL RESEARCH

kolla2® is currently the subject of a major clinical trial overseen by medical professionals to evaluate its long-term efficacy for Osteoarthritis and other joint diseases. Preliminary results are so far positive.

The rising number of baby boomers will be in excess of 140 million in the 21st century. The demand for arthritis prevention will surpass the demand for treatment. A daily supplement of *kolla2®* is the natural answer.