Ultra Joint Forte
Comprehensive Joint Health Formulation with Astaxanthin

DESCRIPTION
Ultra Joint Forte, provided by Douglas Laboratories, contains a synergistic combination of glucosamine, chondroitin, methylsulfonylmethane (MSM®), and astaxanthin. Glucosamine HCl is a well-absorbed source of glucosamine, an important precursor for the synthesis and maintenance of connective tissues. Chondroitin sulfate also supports formation of connective tissues, primarily joint cartilage, and helps protect existing cartilage. MSM®, a derivative of DMSO, is a naturally occurring compound of biologically available sulfur. Astaxanthin is a natural carotenoid that can help modulate the body’s normal inflammatory response.

FUNCTIONS
Glucosamine is a naturally occurring amino sugar found ubiquitously in glycoproteins and glycosaminoglycans. Glycosaminoglycans, formerly named mucopolysaccharides, are an integral component of all connective tissues. Connective tissue, a fibrous type of body tissue, has various functions. It supports and connects internal organs (ligaments), forms bone, cartilage, and the walls of blood vessels, attaches muscles to bones (tendons), and replaces tissues that have been damaged following injury.

Chondroitin sulfate, a glycosaminoglycan formed in the body, is also used for the synthesis and maintenance of connective tissue, primarily within the cartilage matrix. In addition, chondroitin sulfate protects existing cartilage by reducing water loss from the matrix and by inhibiting the enzymatic breakdown of the cartilage. Sulfur is an indispensable element in human nutrition. As part of the amino acids methionine and cysteine, sulfur is required for the structural integrity and function of almost every protein in the body, including enzymes, serum proteins, and the keratin of skin, hair, and nails. Taurine, another sulfur-containing amino acid is known for its role in bile salt synthesis, cell membrane stability, neuronal excitability and the regulation of osmotic pressure. Sulfur is also an essential element for the glycosaminoglycans of connective tissues and cartilage, and assumes a major role in detoxification as part of the hepatic sulfur conjugation pathways. Proper detoxification of xenobiotics, such as phenols, and many endogenous and foreign food- or air-borne compounds depends on an adequate supply of biologically active sulfur.

Dietary MSM serves as a versatile donor of metabolically active sulfur for the synthesis of numerous organosulfur compounds and proteins in the body. As such, MSM helps maintain normal immune response, lung function, connective tissue metabolism, and muscle contraction.

The degradation of arachidonic acid to certain leukotrienes and prostaglandins via the cyclooxygenase and lipoxygenase pathways can cause an imbalance in normal inflammatory markers. By inhibiting the enzymatic activity of certain pro-inflammatory cytokines such as cyclooxygenase, the body’s normal response to inflammatory markers can be moderated. Research indicates that astaxanthin, a natural carotenoid, may play an important role in the moderation of the body’s normal inflammatory response. Human studies also have reported its usefulness in maintaining normal joint and connective tissue structure and function. As a powerful antioxidant, it also can help protect cells from oxidative and free radical damage.

INDICATIONS
Ultra Joint Forte may be a useful dietary supplement for individuals wishing to support normal joint and connective tissue structure and function.
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FORMULA (#99075)
3 Tablets Contain:
Calcium (dicalcium phosphate) ................................................................. 275 mg
Phosphorus (dicalcium phosphate) ............................................................. 240 mg
Glucosamine HCl ............................................................................... 1,500 mg
Chondroitin Sulfate ........................................................................ 1,200 mg
Methylsulfonylmethane (MSM®) ......................................................... 500 mg
Astaxanthin ....................................................................................... 1 mg

SUGGESTED USE
Adults take 3 tablets daily with meals or as directed by physician.

SIDE EFFECTS
No adverse side effects have been reported.

STORAGE
Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES
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For more information visit douglaslabs.com

† 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.