

- Arthritis
- Tendonitis
- Ligaments laxity
- Sprains
- Sports injury
- Bursitis

Ligaflex is specifically formulated for the musculoskeletal system. Ligaflex contains nutrients and botanicals that have traditionally been used for the treatment of joints, ligaments and tendons.

The nutrients L-cysteine, collagen and RNA protein are integral parts of cellular development, particularly in joints. A study of patients with rheumatoid arthritis who were given oral administration of collagen showed excellent results¹. Cysteine has also been cited in a number of studies, showing that it plays a positive role in promoting cell proliferation and re-epithelialization^{2, 7, 8}.

Ligaflex also incorporates the botanicals of Horsetail (*Equisetum arvense*), which is rich in silica, Gota Kola (*Centella asiatica*) and Black seed (*Nigella sativa*). Horsetail has traditionally been used in poor wound healing, rheumatic diseases, ulcers, swellings and fractures³. In animal models it has been shown that asiaticosides found in Gota Kola facilitates wound healing by increasing peptidic hydroxyproline content, tensile strength, collagen synthesis, angiogenesis and epithelialization³. Black seed has traditionally been used for thousands of years in the Middle East, Far East and Asia as an herbal health aid for such conditions as rheumatism and related inflammatory diseases, digestive disturbances, immune system dysfunction, and maldigestion⁴.

Glucosamine is an important nutrient for joint health as it stimulates the manufacture of glycosaminoglycans, a key structural component of cartilage. Glucosamine also promotes the incorporation of sulphur into cartilage. Glucosamine has a role in the synthesis of cell mem-

brane lining, collagen, osteoid, and bone matrix. Glucosamine is also required for the formation of lubricants and protective agents such as mucin and mucous secretions. In seven out of nine randomized, controlled trials of glucosamine sulfate in osteoarthritis, it was found that glucosamine was always superior in efficacy compared with placebo. In two randomized controlled trials comparing glucosamine to ibuprofen, glucosamine was superior to NSAIDs in one and equivalent in action to another⁵. Another study found glucosamine sulfate caused a statistically significant stimulation of proteoglycan production by chondrocytes from human osteoarthritic cartilage⁶.

Another compound that is vital to cellular health is MSM (methylsulfonylmethane) which is a natural, organic sulfur compound found in all living things. This form of organic sulfur is the fourth most prevalent mineral in the human body. MSM is believed to increase the body's ability to eliminate wastes and toxins from the cells. Sulphydryl containing compounds such as MSM & cysteine have been shown to stimulate the healing of ulcerated tissues^{7, 8}.

Ligaflex also contains Enzogenol, a powerful antioxidant derived from the bark of the *Pinus radiata* trees. Enzogenol is a blend of antioxidants containing many flavonoids, including proanthocyanidins and organic acids. The bark is a rich source of natural antioxidants that protect tissues and cells from free radical damage. Antioxidants such as Enzogenol help the body to recover faster from soft tissue damage, and has been shown to improve joint movements⁹.

Injury to the musculoskeletal system is a common occurrence. Physical trauma from sports, work-related activities, surgical procedures as well as the aging process are factors that can result in injury to the soft tissues of the body. Ligaments and tendons are known to be slow healing. Studies now show that support from vital nutrients enables the body to repair and regenerate more effectively¹⁻⁹. Without such support, recovery may be slowed and optimal function may not be regained. However, the constituents found in Ligaflex provide the nourishment specific to the needs of the body's repairing cells. The blend of vital nutrients and botanicals make Ligaflex an important supplement to joint and connective tissue health.



These enzyme formulas have been specially formulated and manufactured for Biomed by Specialty Enzymes and Biochemicals Co.



Composition: One capsule contains:

Ingredients:

L-Cysteine monohydrate	50mg
Collagen	50mg
RNA protein concentrate	25mg
Gotu Kola (<i>Centella asiatica</i>)	30mg
Black seed (<i>Nigella Sativa</i>)	25mg
Horsetail (<i>Equisetum arvense</i>) extract	1mg
Glucosamine sulfate (sodium free)	200mg
MSM (fine powder)	100mg
Enzogenol (Pine bark extract)	12.5mg

Mode of Action:

Soft tissue damage and joint pain/dysfunction
Soft tissue damage and joint pain/dysfunction
Soft tissue damage and joint pain/dysfunction
Anti-inflammatory, enhances wound healing, tonic effect on venous system, ulcer protective
Carminative
Mild diuretic, spasmolytic, astringent
Building block of connective tissues
Stimulates skin, hair and nail growth; needed by the body for healthy connective tissues and joint function
Antioxidant

Other ingredients: Microcrystalline cellulose, magnesium stearate

Contraindications: Do not take during pregnancy or lactation. Do not use in individuals with known or suspected sensitivity to any of the above listed ingredients. Horsetail is not recommended for those with edema due to heart or kidney impairment.

DOSAGE: ACUTE: 2 capsules 4x/day with food

CHRONIC: 2 capsules 2x/day with food

References available on request