

Undenatured Type-II Collagen 20 mg, Hyaluronic Acid 35 mg
Methylsulfonylmethane 200 mg, Turmeric Extract 50 mg
and Boswellia serrata Extract 50 mg

# Composition

Flemo™ Max: Each capsule contains Undenatured Type-II Collagen 20 mg, Hyaluronic Acid 35 mg, Methylsulfonylmethane 200 mg, Turmeric Extract 50 mg (18% curcuminoids) and Boswellia serrata Extract 50 mg (30% AKBA).

## Pharmacology

Undenatured Type II Collagen is derived from chicken sternum cartilage using a patented, low-temperature, nonenzymatic manufacturing process that preserves the natural triple helix molecular configuration and its biological activity.

It contains active binding sites called epitopes which trigger the process of oral tolerization. Through oral tolerization process, active epitopes of Undenatured Type II Collagen interact with Peyer's patches (lymphoid tissue) of small intestine to release collagen-specific regulatory T-cells. Collagen-specific regulatory T-cells then migrate to joint areas and prevent release of T-cells which are destructive for joint cartilage.

It prevents the secretion of collagenase enzymes by macrophages responsible for breakdown of collagen in joint cartilage. It also slows the production of inflammatory cytokines resulting in reduction of inflammation, halting the erosion of joint cartilage and promote cartilage rebuilding.

Hyaluronic acid is naturally present throughout the human body. In the joints, hyaluronic acid has several functions, including:

**Lubrication:** Hyaluronic acid binds well to water, producing a viscous, jelly-like consistency. This viscous fluid provides lubrication and also acts as a shock absorber within the joint.

Growth of cartilage and bone: Hyaluronic acid helps in the growth and development of joint's cartilage and bone by promoting the growth of new cells and tissues.

Reducing inflammation: Hyaluronic acid plays an important role in reducing joint inflammation and pain caused by injury or tissue degeneration.

Methylsulfonylmethane (MSM) has anti-inflammatory and antioxidant effects. Sulphur, which is a major component of MSM, plays an important role in making collagen and glucosamine, both of which are vital for healthy bones and joints. In clinical study, MSM shows significant decrease in WOMAC pain and physical function impairment.

Turmeric extract contains curcumin which has anti-inflammatory, antithrombotic, antioxidant, and antimicrobial activities. The anti-inflammatory effects of curcumin are believed to be a result of inhibiting pro-inflammatory signals such as prostaglandins, leukotrienes, and cyclooxygenase-2. In addition, curcumin has been demonstrated to suppress several pro-inflammatory cytokines and mediators of their release such as tumor necrosis factor-a (TNF-a), IL-1, IL-8, and nitric oxide synthase.

Boswellic acid is the active ingredient in Boswellia serrata which has significant pharmacological activity in the treatment of inflammatory diseases such as rheumatoid arthritis and other inflammatory conditions. Research showed that 3-O-Acetyl-11-keto-beta-boswellic acid (AKBA), present in Boswellia serrata extract, has a powerful inhibitory effect on 5-lipoxygenase (5-LOX).

# Indication

Flemo™ Max capsule is indicated for • Osteoarthritis • Rheumatoid arthritis • Joint pain & inflammation • Difficulties in flexibility • Joint discomfort & stiffness (knee extension)

### Dosage & Administration

One capsule two times daily with meal or as directed by the physician.

#### Contraindication

This combination is contraindicated in patients with known hypersensitivity to Undenatured type II Collagen, Havaluronic Acid, Methylsulfonylmethane, Turmeric Extract or Boswellia serrata Extract.

#### Side effect

Undenatured Type II Collagen, Hayaluronic Acid, Methylsulfonylmethane, Turmeric Extract and Boswellia serrata Extract are well tolerated in recommended dose. Side effects are rare and some may feel stomach problems.

#### Pregnancy & Lactation

No studies have evaluated the use of Undenatured Type II Collagen, Hayaluronic Acid, Methylsulfonylmethane, Turmeric Extract and Boswellia serrata Extract during pregnancy or lactation. It should be taken with caution and medical advice

#### Use in children

The safety and effectiveness under the age of 18 years have not been established.

#### Drug interaction

There is no known drug interaction with Undenatured type II Collagen, Hayaluronic Acid, Methylsulfonylmethane. Turmeric Extract and Boswellia serrata Extract

#### Storage

Store in a cool & dry place below 30° C, protected from direct sunlight & moisture. Keep out of the reach of children.

#### How supplied

Flemo™ Max: Each pack contains 30 capsules in Alu Alu blister pack.

## Manufactured by

# SQUARE PHARMACEUTICALS LTD. HERBAL DIVISION

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