

JOINT™ FIRST

FOR HEALTHY JOINT AND CARTILAGE



JOINT
FIRST
3x10's
Tablets

GLUCOSAMINE HYDROCHLORIDE
METHYL SULPHONYL METHANE (MSM)
CHONDROITIN SULPHATE
HYALURONIC ACID



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JOINTTM FIRST

**Its Joint pain
and
Joint Pain's
affects your
quality of life**

What is joint pain

Joints form the connections between bones. They provide support and help you move. Any damage to the joints from disease or injury can interfere with your movement and cause a lot of pain. Joints may simply be painful (arthralgia) or also inflamed (arthritis). Joint inflammation is usually accompanied by warmth, swelling (due to intra-articular fluid, or effusion), and uncommonly erythema.

Pathophysiology

Articular sources of pain originate within the joint. Periarticular sources of pain originate in structures surrounding the joint (eg, tendons, ligaments, bursae, muscles).

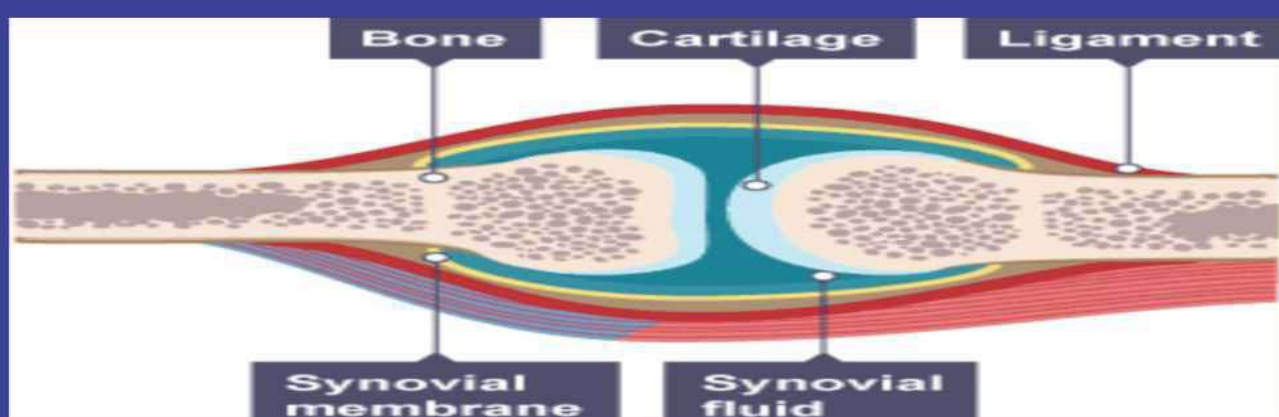
Polyarticular pain caused by articular sources may result from the following:

- Inflammation (eg, infection, crystal-induced arthritis, systemic inflammatory disorders such as RA and psoriatic arthritis)
- Mechanical or other noninflammatory disorders (eg, osteoarthritis, hypermobility syndromes)

The synovium and joint capsule are major sources of pain within a joint. The synovial membrane is the main site affected by inflammation (synovitis). Pain affecting multiple joints in the absence of inflammation may be due to increased joint laxity and excessive trauma.

Chondroitin sulfate

Chondroitin sulfate is a chemical that is normally found in cartilage around joints in the body and it is a sulfated glycosaminoglycan (GAG) composed of a chain of alternating sugars (N-acetylgalactosamine and glucuronic acid). Chondroitin helps to improve the shock absorption in your joint cartilage and increases the Synovial fluid for more joint lubrication. Chondroitin sulfate is an important structural component of cartilage and provides much of its resistance to compression. Along with glucosamine, chondroitin sulfate has become a widely used dietary supplement for treatment of osteoarthritis. It is also approved and regulated as a symptomatic slow-acting drug for osteoarthritis (SYSADOA) in Europe and some other countries.



MSM

Msm (methyl-sulfonyl-methane) is the major form of sulfur in the human body. Sulfur is an important element for all cells and body tissues. It is especially important nutrient for joint tissue where it functions in the stabilization of the connective tissue matrix of cartilage, tendons, and ligaments. Studies have found that 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, and in the production of immunoglobulins, which help immune system.

Clinical evidence: Efficacy of methylsulfonylmethane (MSM) in osteoarthritis pain of the knee: a pilot clinical trial- OsteoArthritis Research Society International. Published by Elsevier Inc

Hyaluronic acid

Hyaluronic acid is a substance that is naturally present in the human body. It is found in the highest concentrations in fluids in the eyes and joints. Hyaluronic acid is essential for healthy cartilage. It's the chemical backbone that holds together the molecules, such as chondroitin sulfate, that make up the cartilage and give joint cartilage its special properties. HA is what makes joint cartilage the smoothest and most friction-free substance in nature. It is the major hydrodynamic nonprotein component of joint synovial fluid (SF).

Clinical evidence: Randomized, double-blinded, trials carried out have proven the effectiveness of HA for the treatment of symptoms associated with synovitis, and particularly, knee pain, relief of synovial effusion or inflammation, and improvement of muscular knee strength. Oral hyaluronan relieves knee pain: a review; Nutrition Journal 2016 15:11; DOI: 10.1186/s12937-016-0128-2

What causes joint pain

Many different conditions can lead to painful joints, including osteoarthritis, rheumatoid arthritis, bursitis, gout, strains, sprains, and other injuries. Knee pain was the most common complaint, followed by shoulder and hip pain, but joint pain can affect any part of your body, from your ankles and feet to your shoulders and hands. As one get older, painful joints become increasingly more common.

Symptoms and signs associated with joint pain can include

JOINT REDNESS

JOINT SWELLING

JOINT WARMTH

JOINT TENDERNESS

LOCKING OF THE JOINT

LIMPING

STIFFNESS

WEAKNESS

LOSS OF RANGE OF MOTION OF THE JOINT



JOINT PAIN AFFECTS YOUR QUALITY OF LIFE

Presenting you JOINT FIRST

why do *joint pain rule your life*

When we could *fix* it for good

JOINT FIRST

an natural joint relief formula

Joint pain and right approach

Fix it with Joint first proven formula

Active ingredients

Glucosamine Sulphate	500 mg	Msm	200 mg
Chondroitin Sulphate	400 mg	Hylotinic Acid	40 mg

Mode of action

Glucosaminesulfate

It is an amino sugar and a prominent precursor in the biochemical synthesis of glycosylated proteins and lipids. Since glucosamine is a precursor for glucosaminoglycans, and glucosaminoglycans are a major component of joint cartilage, supplemental glucosamine may help to rebuild cartilage and treat arthritis. Body produces this joint cartilage building block naturally, but as you get older, you tend to produce less of it. Supplementing can often help to maintain joint health and assist with arthritic joint pain. It is used by the body to produce a variety of other chemicals that are involved in building tendons, ligaments, cartilage, and the thick fluid that surrounds joints.

Joints are cushioned by the fluid and cartilage that surround them. In some people with osteoarthritis, the cartilage breaks down and becomes thin. This results in more joint friction, pain, and stiffness. Glucosamine supplements may either increase the cartilage and fluid surrounding joints or help prevent breakdown of these substances, or maybe both. Researchers stated that the "sulfate" part of glucosamine sulfate is also important. Sulfate is needed by the body to produce cartilage.



Healthy Knee Joint: Nutrient distribution in joint cartilage, synovial fluid & connective tissues.

Clinical evidence: A review article of 18 trials investigating the effectiveness of glucosamine sulphate in treating osteoarthritis was published in Arthritis Research UK review article

Dosage: 1 Tablet twice daily

Conclusion

With Glucosamine sulfate being major component and along Chondroitin sulfate, Msm and Hyaluronic acid JOINT FIRST helps in the maintaining joint health such as reducing pain, stiffness, functional limitation and joint swelling/effusion and more, with a good safety profile.

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.

References

- I. RD Altman, A. Manjoo, A. Fierlinger, F. Niazi, M. Nicholls, et al. The mechanism of action for hyaluronic acid treatment in the osteoarthritic knee: a systematic review. 2004 Apr;12(4):269-76.
- II. DENNIS Y. WEN, M.D., University of Missouri –Columbia Medical School, Columbia, Missouri, et al. Intra-articular Hyaluronic Acid Injections for Knee Osteoarthritis. 2000 Aug 1;62(3):565-570.
- III. Lucio C. Rovati, Federica Girolami, Stefano Persianiet al, Crystalline glucosamine sulfate in the management of knee osteoarthritis: efficacy, safety, and pharmacokinetic properties. 2012 Jun; 4(3): 167–180.
- IV. Beth Anne Fox and Mary M Stephens. Glucosamine hydrochloride for the treatment of osteoarthritis symptoms. 2007 Dec; 2(4): 599–604.
- V.¹ Kim LS, Axelrod LJ, Howard P, Buratovich N, Waters RF. Efficacy of methylsulfonylmethane (MSM) in osteoarthritis pain of the knee: a pilot clinical trial. 2006 Mar;14(3):286-94. Epub 2005 Nov 23.



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