MSM 900





CLINICAL APPLICATIONS

- Provides Natural Elemental Sulfur (34% by Weight)
- Supports Connective Tissue Health Including Cartilage and Collagen Production
- Supports Healthy Immune and Respiratory Function
- Helps Maintain Healthy Inflammatory Balance
- Maintains Healthy Skin and Hair

MUSCULOSKELETAL HEALTH

Methylsulfonylmethane (MSM) is a naturally occurring compound that provides a high-concentration of elemental sulfur. Sulfur is a key mineral with numerous healthpromoting properties, which include boosting the body's antioxidant mechanisms, supporting detoxification pathways, and supporting immune response. Each highconcentration capsule contains 900 mg of MSM for multidimensional soft tissue and immune support.

Overview

Sulfur is an essential element for all of life and is naturally found in foods such as garlic and onions, as well as proteincontaining foods, such as poultry, fish and eggs. Sulfur ranks as the third-highest substance by weight in the body's chemistry, behind water and gases, and plays a major role in maintaining the body's overall health. In recent years, the typical American diet has progressively declined in sulfur content, leaving many susceptible to depletion. The concentration of MSM in the body also decreases with age, making it difficult for the body to generate new cells. MSM contains about 34% sulfur by weight, making it an ideal supplement for those that want to naturally increase their sulfur levels and obtain its significant health benefits.

Sulfur plays a major role in the body's detoxification and antioxidant pathways. Without sulfur, the body's major antioxidant, glutathione, cannot work. Supporting glutathione production is crucial for protecting against oxidative damage secondary to free radical activity and maintaining healthy liver detoxification. Research has shown that supplementation with MSM significantly supports connective tissue health and promotes normal levels of inflammation, which is crucial for maintaining healthy joints, skin and hair.

Connective Tissue and Joint Health⁺

Several studies have examined the effects of MSM on joint and connective tissue health. A randomized study of 118 patients provided subjects with either 500 mg of glucosamine, 500 mg of MSM, both glucosamine and MSM, or placebo capsules, three times daily for 12 weeks. The researchers found that glucosamine, MSM, and the combination of the two helped to maintain connective tissue and joint health, compared to placebo. MSM was particularly helpful in supporting joint comfort and maintaining healthy fluid levels.^[11] An additional randomized, double-blind, placebo-controlled trial including 49 men and women, 40-76 years of age, examined the effects of 3 g MSM given twice per day, or placebo, for 12 weeks. In this study, MSM was also shown to support joint comfort and physical function, compared to placebo.^[2]

Respiratory Function⁺

Studies have also found that MSM supports respiratory and immune health during seasonal challenges. Among 55 subjects given 2,600 mg of MSM orally per day for 30 days, MSM was shown to support respiratory health beginning on day seven of the trial. In addition, energy levels increased significantly by day 14 and continued to do so through day 30.^[3]

Skin and Hair Health⁺

As a source of bio-available sulfur, MSM helps maintain disulfide bonds that keep collagen strands strong and preserves connective tissue pliancy, which is crucial for supporting healthy skin. MSM has been shown to significantly increase plasma glutathione levels, an additional benefit in maintaining skin's defensive mechanisms against oxidative stress.^[4] In a double-blind, placebo-controlled study examining the effects



of MSM on 46 patients affected with facial redness, it was shown that MSM helped support skin texture, skin color and hydration. $^{\rm [5]}$

Directions

1 capsule three times per day or as recommended by your health care professional.

Does Not Contain

Gluten, corn, yeast, artificial colors and flavors.

Cautions

If you are pregnant or nursing, consult your physician before taking this product.

References

- Usha PR, Naidu MU. Randomised, Double-Blind, Parallel, Placebo-Controlled Study of Oral Glucosamine, Methylsulfonylmethane and their Combination in Osteoarthritis. *Clin Drug Investig.* 2004;24(6):353-63.
- 2. Debbi EM, Agar G, Fichman G, Ziv YB, Kardosh R, Halperin N, Elbaz A, Beer Y, Debi R. Efficacy of methylsulfonylmethane supplementation on osteoarthritis of the knee: a randomized controlled study. BMC Complement Altern Med. 2011 Jun 27;11:50.
- 3. Barrager E, Veltmann JR Jr, Schauss AG, Schiller RN. A multicentered, open-label trial on the safety and efficacy of methylsulfonylmethane in the treatment of seasonal allergic rhinitis. *J Altern Complement Med*. 2002 Apr;8(2):167-73.
- 4. Babak Nakhostin-Rooh, et al. Effect of chronic supplementation with methylsulfonylmethane on oxidative stress following acute exercise in untrained healthy men. J of Pharm and Pharmacol 2011: 63: 1290–1294.
- Berardesca E, Cameli N, Cavallotti C, Levy JL, Piérard GE, de Paoli Ambrosi G. Combined effects of silymarin and methylsulfonylmethane in the management of rosacea: clinical and instrumental evaluation. *J Cosmet Dermatol.* 2008 Mar;7(1):8-14.

Supplement Facts

Serving Size 1 Capsule Servings Per Container 180

1 capsule contains	Amount Per Serving	% Daily Value
Methylsulfonylmethane	e 900 mg	*
* Daily Value not established		

ID# 581180 180 Capsules

