



## CENTER FOR NEW MEDICINE

# MSM

## Bio-Available Sulfur

Methylsulfonylmethane (MSM) is a naturally occurring, organic sulfur-containing compound that provides a ready source of dietary sulfur for the body's use. Sulfur is the fourth most abundant mineral in the human body. It is required for detoxification pathways, connective tissue metabolism, antibody formation, and the synthesis of other sulfur-dependent compounds including certain enzymes, hormones, and antioxidants.

While MSM is present in food such as fruit, vegetables, grains, and cows milk, it doesn't get absorbed into the body as readily due to food processing, heating and drying. The latest research has shown that supplementing with larger therapeutic doses of MSM gives the body adequate supplies of sulfur for optimum nutrition and health.

### Benefits of MSM

- **Joint and Connective Tissue Support:** Sulfur is needed for the structural integrity of joint and connective tissue such as skin, hair, and nails.
- **Inflammation and Muscle Cramps:** MSM has scientifically proven anti-inflammatory actions, helpful in relieving pain from arthritis and other musculoskeletal disorders. It also has been found to significantly reduce night leg cramps, back cramps, and muscle spasms, as well as reducing lactic acid buildup in muscles from athletic activity.
- **Liver detoxification Support:** Some of the most important detoxification pathways rely on sulfur. In the liver, various sulfur compounds and antioxidants bind with toxins through a process called conjugation, allowing them to be safely excreted. MSM assists detoxification by donating sulfur groups needed for the formation of important sulfur detoxifying agents.
- **Gastrointestinal Upset:** MSM is effective at lessening the gastrointestinal upset produced by ingesting certain pharmaceuticals (e.g. aspirin, Motrin, etc.). It also may improve symptoms such as constipation, diarrhea, nausea, and hyperacidity.
- **Parasitic Infections:** MSM also demonstrates activity against a variety of parasites of the intestinal and urogenital tracts, such as Giardia lamblia ("traveller's diarrhea"), Trichomonads, round worms, and liver flukes. It is believed that MSM affects such parasite infections by competing for binding sites at the mucous membrane surface, preventing or blocking interface between host and parasite.
- **Allergic Response:** MSM may have a beneficial effect in ameliorating diverse allergic responses. It improves allergic reactions to inhalant, ingestant, contact, and infectant allergens. Studies have found a direct correlation between concentrations of MSM supplementation and resistance to allergens. A majority of subjects reported a significant reduction in concurrent anti-allergy medication. Besides environmental allergies such as house dust, pollen, and hair, food and drug allergies such as aspirin, NSAIDS, antibiotics, dairy, cereals, and shrimp are improved with use of MSM.



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- **Chemoprevention and cancer support:** MSM has demonstrated in studies to help the prevention and regression of tumor growth and promotion. Researchers have utilized high doses of MSM as a chemopreventative by way of its COX-independent mechanisms, which theoretically invoke the activation of gene functions that lead to cell differentiation, thereby dismantling the cellular capacity for proliferation.
- Enhances absorption of nutrients from food
- Helps increase circulation
- Helps the body heal itself
- Enhances taurine secretion by tissues
- Neutralizes the toxicity of anticholinesterase, a chemical commonly found in pesticides that inhibits the neurotransmitter acetylcholine. Acetylcholine plays a major roll in the proper functioning of the peripheral, autonomic, and central nervous systems.

### Highest Quality MSM Available

We have done extensive research to locate the highest quality MSM on the market today. Our MSM Bio-Available Sulfur utilizes the patented OptiMSM<sup>®</sup>, an ultra-high quality MSM which is manufactured in the only dedicated MSM production facility in the world. It is made with a state-of-the-art 4-stage distillation process, which yields 99.9% purity for the best bioavailability possible.

### Dosage Recommendations

MSM may be taken orally either by capsule or powder. If by powder it is easily soluble in filtered water. Do not use tap water, as chlorine is believed to weaken the effect of MSM. It has a slightly bitter taste and may be sweetened with stevia as needed.

MSM is believed to be non-toxic and not to be confused with sulfa drugs. Typical therapeutic doses range from 3 grams to 20 grams per day divided with meals. Controlled medical trials utilized 2.6 gram doses per day for a 30-day period with no observed side effects. Consult your healthcare practitioner prior to significant increases in dosage. It is not recommended to take organic sulfur (MSM) while using high doses of aspirin or any blood-thinning medications.

*\*The statements in this document have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.*