



MSM

Stock# 4059-4 (90 tablets)

MSM (methylsulfonylmethane) is a naturally-occurring source of organic sulfur found in most raw, unprocessed foods, including fresh fruits, vegetables, eggs, milk, and meat. The richest source of MSM is breast-milk. Unfortunately, the MSM content in foods is easily destroyed during cooking, processing and storing.¹⁻⁴

MSM is found in virtually every cell in the body and plays a role in nearly all bodily functions. Yet, preliminary studies show levels of MSM decline with age. Among its many functions, MSM is necessary for manufacturing important enzymes and antibodies. MSM is also utilized in the production of glutathione (an essential antioxidant) and connective tissue, including cartilage, collagen, hair, nails and skin. Not surprisingly, the highest concentrations of organic sulfur in the body are found in the joints, nails, hair and skin.^{2,4-6}

Another important function of MSM is its role in the formation of amino acids—the building blocks of protein—particularly the sulfur-containing amino acids cysteine and methionine. A deficiency of MSM and other sulfur compounds contributes to the degeneration of protein structures in the body—especially connective tissues—which in turn, can lead to a variety of debilitating disorders. Sulfur deficiency may actually be a prominent factor in the development of degenerative forms of arthritis.^{2,4,5,7}

MSM has been found to enhance the process of cell renewal, facilitating the production of healthy and flexible cells. Methionine—an essential amino acid which must be derived from food sources or dietary supplements, such as MSM—is crucial to the formation of cellular genetic material (RNA/DNA) and assists in detoxifying harmful substances such as arsenic, cadmium, lead, and mercury. Thus, insufficient levels of MSM directly inhibit the body's ability to repair and replace damaged tissues, leading to an accumulation of dysfunctional cells and a weakened state of health which contributes to an increased susceptibility to illness and disease.^{7,8}

MSM has been documented as a promising treatment for numerous health problems, including allergies, asthma, arthritis, emphysema, some vascular conditions, and wound healing (especially when taken along with vitamin C). MSM has also been shown to relieve various symptoms of gastrointestinal dysfunction, including chronic constipation, hyperacidity, gastroesophageal reflux (heartburn), and certain food allergies. Study participants—chronic users of antacids and H2 antagonists—preferred MSM for controlling hyperacidity due to its effectiveness and lack of side-effects.^{2,3,7,9}

Preliminary studies suggest MSM can assist in the treatment of lung dysfunction and other respiratory diseases, snoring, anxiety, depression, adverse psychological stress, and eye problems, including cataracts, irritation, blurred vision, and floaters. Skin problems have also responded favorably, since MSM facilitates collagen formation which in turn, contributes to the production of new skin. Sulfur-containing products have even been found an effective natural treatment for acne. Incidentally, various sulfur compounds present in garlic and onions are believed to be responsible for the benefits these foods have on cardiovascular health, including the ability to inhibit synthesis of cholesterol, fatty acids, and triglycerides.^{2,6,7,10,11}

Research indicates a direct correlation between MSM supplementation and resistance to allergens and environmental toxins, confirming its ability to stabilize allergic reactions. Individuals with chronic to severe allergies to environmental substances report significant to complete relief of symptoms following daily MSM supplementation.⁷

MSM, with its ability to promote healthy, flexible cells, has been shown to relieve the pain associated with systemic inflammatory conditions such as arthritis. The flexibility of healthy cell walls enables toxic substances like lactic acid to flow out for elimination, while also allowing essential nutrients to flow in. However, a deficiency of MSM leaves cell walls rigid and impermeable, thus causing a buildup of toxic fluids within the cells which leads to inflammation. This same mechanism also applies to inflammation associated with muscle soreness, leg cramps, and postathletic fatigue syndrome. Not surprisingly, arthritis sufferers have been found to have lower levels of sulfur and sulfur compounds than healthy control subjects. Clinical data as early as the 1930's reports that by increasing body levels of sulfur, pain and swelling were eliminated.^{5,7,10}

MSM may benefit diabetics by helping to stabilize blood sugar levels. Sulfur is not only a component of insulin, but also glucokinase—the enzyme responsible for glucose utilization. Thus, a sulfur deficiency can result in a decrease in insulin production. Additionally, researchers postulate that as a sulfur deficiency causes cells to become hardened and impermeable, their resistance to insulin would increase, resulting in the inability to absorb blood sugar and hence, higher blood levels of glucose. In support of this theory, studies have demonstrated that regular supplementation with MSM renews the permeability of cell walls, enabling proper glucose absorption and a return to balanced blood sugar

levels.^{5,7,9}

Organic, dietary sulfur is nonallergenic and should not be confused with synthetic *sulfa* drugs or *sulfites* (used as preservatives) which can trigger allergic responses in many individuals. There are no known side-effects of MSM, which may be due to the fact that excess sulfur is eliminated in both the urine and feces.^{2,5}

Each tablet provides 750mg of the highest quality MSM.

References:

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