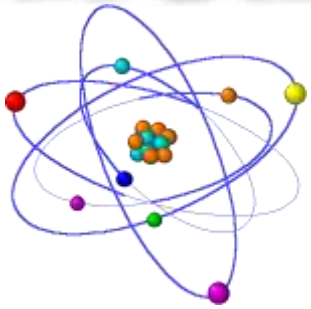
MSM Sulfur



Biological Sulfur and Your Health

MSM and Allergies

SULFUR AND ALLERGIES

Over 40 million people in the U.S. alone are affected by allergies with reactions ranging from somewhat bothersome to potentially fatal. An allergic response occurs when the body's immune system reacts to otherwise harmless substances we call allergens. Your body produces antibodies to fight the allergens. These antibodies then attach themselves to special cells in the respiratory and gastrointestinal tracts where they eventually explode, releasing chemicals including histamine, a powerful compound that actually causes allergic symptoms. Once our immune system decides that a particular type of pollen is a hostile invader, it becomes "sensitized" to it, and can react with allergy symptoms for years, and perhaps a lifetime.

Allergy drugs only suppress symptoms rather than treating the cause of the allergy and often result in unpleasant side effects. Antihistamines, for example, such as Chlor-Trimeton (chlorpheniramine) and Benadryl (diphenhydramine) suppress histamines but also cause drowsiness. Newer, nonsedating antihistamines such as Hismanal (astemizole) and Allegra (fexofenadine) also function to suppress histamines but they have a long list of other possible side effects, including potentially fatal abnormal heart rhythms.

Pollen, dust, mold or animal dander in the air result in sneezing, runny nose, tearing eyes, sore throat, ear infection, stomach cramps, itchy skin or hives, headaches, urinary frequency, stuffiness, fatigue, diarrhea, and possibly asthma--a chronic and sometimes life-threatening respiratory problem that is close to kin allergy. Allergy symptoms are your body's reaction to something foreign in your system. Symptoms are caused by an antibody called immunoglobulin E, or IgE, a protein that the body produces to fight the foreign substance. When there is sufficient MSM in your system, your cells become more permeable, enabling your body to quickly flush out any undesirable foreign particles. If you body is sulfur deficient, the cell walls become hard and stiff, hindering the flow of fluid through the cell walls. MSM softens the cell walls, allowing allergens, foreign proteins, and any free-radicals to be moved out of your system.

Dr. Earl L. Mindell, RPh., Ph.D., recommends allergy sufferers begin taking at least 6,000mg of MSM per day for three weeks and reduce to 3,000mg per day thereafter. Additionally, he recommends people drink more water and increase their intake of Vitamin C to lower histamine levels.

ADDITIONAL ROLES OF SULFUR

- Tests indicate that MSM may present a blocking interface between **parasites** and host (YOU!) by competing for binding, or receptor, sites at the mucous membrane surfaces. One study demonstrated MSM's effectiveness in knocking out Giardia.
- Added flexibility and permeability to the gastrointestinal tract can result in reduced **diarrhea, constipation, nausea, and hyperacidity**.
- Individuals who experience an allergic response to certain foods (**food allergies** -- for example, milk, citrus, wheat, cereals, shrimp) have reported an improved, or complete, tolerance to these substances. MSM again coats the mucous membranes, occupying the binding sites that the food allergens would occupy. This facilitates normal digestion and allows the body to extract the maximum nutritional value from foods.
- MSM has been shown to reduce **cataracts** by allowing proper levels of fluids to flow through optical tissues, removing harmful particles.
- MSM strengthens hair and nails, and aides in wound healing.

Are There Any Side Effects with MSM?

MSM has been used as a dietary supplement for many years with no reports of intolerance or allergic reactions. Long-term studies indicate that MSM exhibits very low toxicity no matter how it is administered. Its toxicity profile is similar to water's! Your body flushes excess MSM after about a 12-hour period. It uses what is needed and the rest is discarded.

How Should MSM Be Used?

Results vary. According to Dr. Earl L. Mindell, RPh., Ph.D., "Due to its positive wide-spectrum effect, particularly in maintaining healthy cell formation, dietary nutritional supplementation of MSM is recommended at a daily rate of 2,000 to 6,000mg. The optimum effective dosage would depend on body size, age, the MSM blood level prior to administration, and the nature and severity of the condition you are treating. This means you can experiment with different doses to find out what works best for you." Sometimes, it takes up to 3 weeks for effects to be noticed.

Ulcers caused by h. Pylori bacteria can be treated with GSE.

Orally ingested methylsulfonylmethane is a significant sulfur donor for the synthesis of numerous organosulfur compounds needed by the body. Studies with radiolabeled MSM show that its sulfur appears in structural tissues (collagen, keratin), amino acids (cystine, cysteine), and serum proteins (transferrin, albumin, immunoglobulins). As an important component of sulfhydryl (-SH) and disulfide (S-S) bonds, MSM helps maintain the three dimensional conformation of proteins

required for their activity. For example, without adequate disulfide bonds, loss of IgG can occur through separation of protein subunits and alteration of the tertiary and quaternary protein structure. Physiologically active IgG is not possible without sufficient disulfide bonds.

Radiolabeled MSM has also been found to bind to the mucosa of the gastrointestinal and respiratory tracts. Here, the methylsulfonyl component of MSM is capable of then binding to a number of foreign and toxic chemicals and allergens that enter the body. This substitution of hydrophilic groups inactivates the foreign molecules, rendering them soluble for subsequent excretion. Ingested MSM which has not been utilized to synthesize other sulfur compounds is excreted largely in the urine.

MSM is rapidly metabolized by the body. Radiolabeled sulfur is found in all tissues measured within 24 hours of oral ingestion. The majority of unused and metabolized MSM occurs within 96 hours following ingestion, although measurable quantities have been reported in urine after 400 hours. Because of this rapid turnover of sulfur, it is important to be sure that sulfur be replenished on a regular basis.

MSM in powdered form is very easy to use. MSM is a white, crystalline powder that is odorless and somewhat bitter tasting. It mixes in water more easily than sugar, but the taste is definitely not sweet. In juice or other beverages, it is undetectable.
More research on MSM and other sulfur-containing compounds is being conducted in clinics and laboratories all over the world.
Search the National Library of Medicine:
There are over 23,000 abstracts on sulfur.

Take one to four capsules daily. Or take one to four grams of powder(one-quarter teaspoon equals just over one gram). For bulk MSM, a certificate of analysis is available. Our MSM is Certified 99.452% pure. The rest is moisture.