



Store Hours:
Thurs. 9AM - 8PM
Fri. 8AM - 8PM
Sat. 8AM - 6PM



MSM
(Methylsulfonylmethane)

Visit our internet store at: www.shaffervitamins.com We feature over 700 Brand Names Featuring over 14,000 Products! **SAVE at least 30%-40% on Every Order! NO COMPUTER - NO PROBLEM!** Call (484) 695-9496 if you need assistance or if you would like us to place the order for you! We are listed at <http://www.fairgroundfarmersmkt.com> listed under Merchants — Specialty Shops. Check out our in store monthly specials!

TOTAL HEALTH - VOLUME 2C 10. 1

One dietary supplement receiving international attention is MSM (methylsulfonyl methane, also known as dimethyl sulfone), and it is what many people are calling the discovery of the century. Dr. Stanley W. Jacob is Gerlinger professor in the Department of Surgery at Oregon Health Sciences University in Portland, and has devoted 19 years of his life to the development and study of MSM. He has used it every day for 20 years and remains a soft-spoken gentleman with a sharp, orderly mind at age 73. He is a practicing medical doctor, surgeon and research scientist who received his medical degree from Ohio State University, a research fellowship from Harvard Medical School, was awarded the German Science award in 1964 and, among his many honors (accomplishments), was named Humanitarian of The Year in 1983 by the National Health Federation.



What is MSM?

MSM is a naturally-occurring nutrient, a sulfur compound, found in normal human diets and the diets of all other vertebrates. Sulfur is an element present in all living organisms. It belongs in the same chemical family which includes oxygen. For organisms living in environments where there is no oxygen, sulfur often replaces oxygen as the source of chemical energy that drives life. It is not a pharmaceutical drug but a dietary supplement.

What are MSM's Essential Functions?

Sulfur's low level in our own oxygen-rich biosphere at the surface of the planet does not reflect its real importance. Without sulfur, life as we know it would not exist. Some of the essential functions that make sulfur possible for us to live include maintaining the structure of the proteins of the body, helping in the formation of keratin, which is essential for hair and nail growth, aiding in the production of immunoglobulin which maintains the normal immune system, catalyzing the chemical reactions which change food into energy and neutralizing or eliminating toxins from the body. (Sulfur is needed to create/hold the molecular structure, particularly the sulfur amino acids: methionine, cysteine, taurine.)

Where Does MSM Come From?

MSM and its related compounds provide the source of 85 percent of the sulfur found in all living organisms. The cycle of these naturally-occurring sulfur compounds begins in the

ocean where microscopic plants called plankton release sulfur compounds. These salts are transformed in the ocean water into

Why Do We Not Get MSM as Nature Intended?

What's happening in our lives today is that we're processing too many foods. The highest concentration of MSM is found in milk. MSM is a natural component of many fresh fruits, vegetables, seafoods and meat. However, heat and processing reduce the MSM in foods. Onions, garlic, asparagus, cabbage, broccoli and Brussels sprouts are sulfur-rich foods, but not as rich as eggs and red peppers. Food preparation like washing and steaming will reduce the levels of MSM.

Not only with age, but because of the way we make our foods, eat at fast food restaurants and the like, we are taking less MSM into our bodies than we require. It does diminish in our bodies with advancing age. We can take a blood sample or urine sample and find MSM in all of us. But when we eat a lot of fast foods, the MSM in those foods has been destroyed during preparation; so over the years the normal aging which reduces MSM brings about even lowered MSM content in our bodies.

Almost everyone is deficient but with age the deficiency grows even more pronounced.

Anti-allergenic, Naturally

One of the major properties of MSM is that it is excellent therapy for preventing allergies. I would say that it is probably the most important substance we have had for the prevention of allergies since the advent of the anti-histaminic agents, and that was over four decades ago. People taking MSM orally or sometimes supplementing that with nose drops will not have the conventional burning of the eyes or the running nose or the hoarseness associated with allergies to pollens, dust and molds.

Anti-parasitic, Naturally

MSM has anti-parasitic properties. We have studied the two most common parasites in the gastrointestinal tract. The giardia is a parasitic infection of the small intestine, which causes absorption of nutrition in humans. It is the most frequent cause of water-carried diarrhea in the U.S. MSM is quite effective when taken orally in controlling the symptoms and fighting the invading organism.

Many women complain of yeast infections, which are caused by a parasite called trichomonas. The symptoms include increased itching and discharge which may be malodorous and discolored. Both the topical and oral supplements are effective therapy.

ANTI-AGING AND LONGEVITY

Control hyperacidity/heartburn, Naturally Patients who have used antacids and products like Tagamet and Zantac make themselves worse by becoming dependent upon medications. MSM is a nutritional supplement that has been shown to be more effective in stabilizing the digestive process and environment in doses of 3,000 mg per day.

MSM in Lab Studies

Rheumatoid Arthritis: Researchers at Oregon Health Sciences University studied a strain of mice that were prone to the spontaneous development of joint lesions similar to those in rheumatoid arthritis. They found that animals that were fed a diet that included a three percent solution of MSM as drinking water from two months to five months of age suffered no degeneration of articular cartilage. In a control group of mice receiving only tap water, 50 percent of the animals were found to have a focal degeneration of articular cartilage.

Snoring. Of the 16 patents granted to MSM, one is for relief from snoring. Research at Oregon Health Sciences University on 35 subjects suffering from chronic snoring has shown that MSM as a 16 percent water solution administered to each nostril 15 minutes before sleep provided significant reduction in 80 percent of the subjects after one to four days of use.

As a control, in eight patients showing relief with MSM, saline solution was substituted for MSM without their knowledge. Seven of eight patients resumed loud snoring. The change occurred within 24 hours of the substitution. After the MSM treatment was restored, these eight again showed a significant reduction of snoring.

Dr. Stanley W Jacob's Personal Experience:

"When I first began to work with MSM, I decided that I was going to give myself an ounce of MSM (30 grams) per day. I wanted to do this to be certain that it was not harmful. I have been taking this daily for twenty years and there has been no harm in my case. I have regular physical examinations, X-rays, blood studies and the like. Prior to my taking MSM

I would have a cold or the flu two or three times a year. Since I've been taking

the MSM, I've not had a single cold or the flu. I can't say with certainty that it is the MSM which prevented my cold or the flu, but it is a fascinating observation. I can say with certainty that there has been no harm to me within the parameters we studied."

More than 12,000 patients have been treated at the Oregon Health Sciences University with MSM at levels above two grams daily with no serious toxicity. About as toxic as water, even common table salt can be more toxic than MSM, which is a crystalline solid that is odorless, tasteless and readily dissolves in water.

References available upon request from total health magazine.

While researchers make no claims for MSM as a food supplement or dietary ingredient, the following conditions seen in the clinic have responded to oral MSM:



- Allergies
- Arthritis
- Acne
- Cancer: Breast, Colon
- Hyperacidity/heartburn
- Constipation
- Burns (thermal)
- Brittle/soft nails
- Diabetes
- Eye health
- Hypersensitivity to drugs
- Insect bites
- Lung disease
- Lupus

- Mental acuity
- Muscle soreness/pain
- Oral/dental health
- Parasites
- Rheumatoid Arthritis
- Scar tissue
- Snoring
- Skin, hair, and nails
- Stress
- Sunburn
- MSM combined with Glucosamine for joint health



MSM is present in most green plant foods and certain algae, but is destroyed with dehydration and heat. Simply stated, if you cook your food, you're eliminating important nutritional benefits, including MSM.

Proteins are essential for proper cellular metabolism and soft tissue synthesis. Proper protein synthesis can only be achieved with amino acid monomers which maintain the correct molecular framework for soft and connective tissue throughout the human body.

Because protein is the main ingredient in most soft tissue, beneficial effects from regular usage of MSM have been reported. These benefits include: alleviating arthritis, improved flexibility, smoother skin, healthier hair and nails, and faster and better healing from surgical procedures or traumatic events.

MSM

ONE OF NATURE'S MOST POWERFUL REMEDIES

MSM is the transport molecule for elemental sulfur which is required for proper assimilation of the amino acids methionine and cysteine. In addition, the peptide hormone insulin requires sulfur in its molecular structure, and numerous other proteins, catalysts, and enzymes incorporate sulfur into their molecular framework.

ABOUT MSM



MSM (methylsulfonylmethane), a naturally occurring dietary derivation of DMSO, serves as an important source of bio-available dietary sulfur and when administered orally, is effective in ameliorating symptoms of physiological response to stress including gastrointestinal upset, inflammation of the mucous membranes, pain associated with musculoskeletal system disorders, and infant allergens. MSM has proved useful as a dietary supplement for both children and adults, including geriatric patients.

MSM is a naturally occurring sulfur-containing compound that facilitates multiple functions in the body. MSM is naturally present in body fluids and tissues and is found in milk and a variety of fruits, vegetables, and grains in small amounts. At low levels of ingestion, it functions as a normal dietary ingredient and an assimilable source of essential dietary sulfur. At higher levels it functions as a pharmaceutically active agent which can be used safely and effectively for a variety of purposes.

The development of MSM as a dietary supplement stemmed from research on DMSO (Dimethylsulfoxide). As a stable, odorless dietary metabolite of DMSO, MSM possesses certain biomedical properties similar to DMSO together with additional biological activity not possessed by DMSO. Unlike DMSO, MSM is a dietary factor and is free of the unpleasant odor found with the use of DMSO. MSM, like DMSO, enhances urinary taurine secretion produced by aromatic hydrocarbons in man and neutralizes the toxicity of anticholinesterases, thereby providing protection against insecticide exposure or ingestion.

MSM and many precursor compounds which are readily converted to MSM in the body, are found in most natural, unprocessed foods. However, because of its volatility, it is readily lost when fresh food is processed and/or stored. Unless the diet consists largely of raw, unprocessed, foods, it is unlikely that sufficient MSM will be ingested to contribute significantly to the daily nutritional requirements, thus furthering the high incidence of sulfur deficient diets which exist globally.

Sulfur plays an indispensable role in human nutrition which is often overlooked. It is responsible for the conformation of body proteins through the formation of disulfide bonds, thereby holding connective tissue together. Thiol (i.e. sulfhydryl) groups are vital for the catalytic function of

several body enzymes. To perform these roles, constant intake of assimilable sulfur is needed by the body.

Although MSM has not yet been established to be a vitamin, it does have a vitamin-like moderating or normalizing activity for various body functions, as there appears to be high correlation between abnormal physiological symptoms and low MSM blood levels in human beings. Although MSM is found as a natural constituent of food stuffs, like vitamin D, the principle supply is believed to be synthesized by the body using one of its naturally occurring precursor compounds. Also, excretion data shows that MSM occurs in lower concentrations with increasing age. Too low a body concentration of MSM may potentially result in adverse physical and psychological stress, tissue and organ malfunction, fatigue and increased susceptibility to disease.



- Necessary for collagen synthesis: skin, hair, nails -- keeps cells from becoming rigid, softens tissue (the beauty mineral)
- Relief from stress, asthma, arthritis, inflammation, constipation, candida
- Detoxifies the body, increases blood circulation
- Reduces muscle cramps, leg cramps, back pain
- Removes inflammation, permits muscles to heal
- Increases energy, alertness, mental calmness, ability to concentrate
- Free radical scavenger - relieves allergies to foods and pollens
- Helps liver produce choline
- Controls acidity in stomach and ulcers
- Coats intestinal tract so parasites lose ability to hang on
- Helps with hypersensitivity to drugs
- Increases body's ability to produce insulin and important for carbohydrate metabolism
- Speeds wound healing

MSM is a food supplement (nutrient)

No therapeutic claims are made or implied.