

DALE KOMAI

Your Premier MSM Organic Sulfur Distributor

MSM vs. Organic Sulfur: What's the Difference?



Public awareness of MSM as a food supplement is more likely to be found among advocates of alternative health care rather than those who rely on conventional medicine. Explaining the relationship and difference between MSM and organic sulfur is the purpose of this report.

What is MSM (Methylsulfonylmethane)?

Methylsulfonylmethane is a natural substance found in many foods such as meat and cruciferous vegetables like broccoli. Methylsulfonylmethane is produced commercially and known as a nutritional supplement under its acronym, MSM.

As specified by its $(\text{CH}_3)_2\text{SO}_2$ chemical structure, MSM consists of two methyl group molecules (CH_3) bonded with a sulfur dioxide (SO_2) molecule. The transfer of methyl groups from one substance to another is called methylation and occurs mostly in the liver. A number of important bodily functions occur during methylation and require various cofactors and nutrients such as folate to work in an optimal fashion.

The Dietary Importance of Sulfur

Sulfur is one of the six building blocks of life (the others being carbon, hydrogen, nitrogen, oxygen, and phosphorus). Sulfur in bioavailable form helps to make cell membranes more permeable so that the oxygen that sulfur transports through the lymphatic system can more easily enter the cells. Sulfur's role as an oxygen transporter facilitates cellular regeneration and healthy gene expression.

Starting in the mid-1950s when the first ammonia-based fertilizers became readily available, commercial farmers began to dispense with the use of organic fertilizers like manure. The adoption of inorganic fertilizers is one of the factors that has severely reduced the amount of sulfur in farmland soil, so that this essential nutrient is largely absent in conventionally grown crops that are used for food. Due to the lack of sulfur in our diet, many diseases that were virtually unheard of a few generations ago have reached near-epidemic levels.

Autoimmune Disease Statistics

50 million Americans with an Autoimmune Disease

\$591 million dollars spent by the NIH on AD research compared to the \$6.1 billion spent on cancer.

#1 most popular health topic requested by callers to the National Women's Health Information Center

Source: American Autoimmune Related Diseases Assn

<https://www.aarda.org/news-information/statistics/>

How is Organic Sulfur different from MSM?

Organic Sulfur is somewhat of a misnomer in that it is not an organic form of raw sulfur mined out of the earth. Sourced from the lignans of the Louisiana maritime pine tree, Organic Sulfur is an unadulterated form of MSM that comes out of the precipitator as odorless, white crystals. Commercial manufacturers typically crush their sulfur crystals into a powder to expedite packaging and production. This common procedure reduces MSM's potency by as much as 85%. Inclusion of anti-caking agents such as magnesium stearate and silicon dioxide degrades the product even more. Pill and capsule formulations of MSM invariably contain one or more of these additives, as noted by this screenshot:

Supplement Facts		
Serving Size: 1 Tablet		
Servings per Container: 120		
	Amount Per Serving	% Daily Value
Methylsulfonylmethane (MSM)	1500 mg	*
*Daily value not established.		

Other Ingredients: Microcrystalline cellulose, vegetable stearic acid, calcium carbonate, vegetable magnesium stearate, croscarmellose sodium, silicon dioxide, hydroxypropyl methylcellulose and vegetable glycerin.

How can I tell whether I'm taking pure Organic Sulfur?

Sulfur has been called the "Beauty Mineral" because of its relationship to the health of our hair, skin, and nails. If you are taking organic sulfur, try this simple exercise:

Take photographs of your face spread out over a period of time and look for positive changes in your appearance. Photograph yourself from the top of your head to the base of your neck. Compare the views. Taking pure organic sulfur orally on a consistent basis has been found to reduce or even eliminate scars.

Quick Facts at a Glance

- Sulfur is a part of every cell in the body
- Two sulfur-based amino acids, methionine and cysteine, may be present in certain foods that we eat
- Sulfur-based amino acids help regulate protein metabolism
- Vitamins B1 (thiamine) and B7 (biotin) are sulfur-based vitamins
- Glutathione, the master antioxidant that the body synthesizes from three amino acids with the aid of sulfur, helps remove free radicals from the bloodstream and reduce oxidative stress
- Due to its chemical composition, Organic Sulfur can serve as a methyl donor to facilitate biological functions
- Except for small amounts that are stored in the joints, hair, skin, and nails, sulfur exits the body via the bowels, so to maintain a fresh supply throughout the day, take a dose of Organic Sulfur at roughly 12 hour intervals

Disclaimer

This report contains information about MSM and organic sulfur that has not been reviewed by the FDA or any other health authority. The content is provided for educational purposes, only. None of the information is intended to serve as professional medical advice. All medical decisions should be made only with the guidance of your personal health care practitioner.

References

Methylsulfonylmethane

From Wikipedia, the free encyclopedia

<https://en.wikipedia.org/wiki/Methylsulfonylmethane>

American Autoimmune Related Diseases Association

<https://www.aarda.org/news-information/statistics/>

The Early Earth and the Building Blocks of Life

The Physics of the Universe

https://www.physicsoftheuniverse.com/topics_life_early.html

The building blocks of life are much more common than we thought

By Jessica Hall | ExtremeTech

February 23, 2017

<https://www.extremetech.com/extreme/244818-building-blocks-life-much-common-thought>

Transsulfuration Pathway

ScienceDirect

<https://www.sciencedirect.com/topics/biochemistry-genetics-and-molecular-biology/transsulfuration-pathway>

Super Sulfur
The Beauty Arcana

<https://www.thebeautyarcana.com/health-benefits-of-sulfur-msm/>

Enzymes: How they work and what they do

By Tim Newman | Reviewed by Elaine K. Luo, MD

Last updated: January 11, 2018

<https://www.medicalnewstoday.com/articles/319704.php>

Organic sulfur crystals are a miracle food that provides amazing health benefits

by: Ethan A. Huff | Natural News

July 22, 2010

https://www.naturalnews.com/029263_sulfur_joint_health.html

Methylation

<http://www.herbaltransitions.com/methylation.html>

Methylation and Homocysteine

Food for the Brain

<https://www.foodforthebrain.org/alzheimers-prevention/methylation-and-homocysteine.aspx>

10 Natural Ways to Increase Your Glutathione Levels

healthline

<https://www.healthline.com/nutrition/how-to-increase-glutathione#section1>

Antioxidants and Free Radicals

Nutrex

<https://www.nutrex-hawaii.com/blogs/learn/benefits-of-antioxidants>

Mechanisms through which sulfur amino acids control protein metabolism and oxidative status.

Métayer S1, Seiliez I, Collin A, Duchêne S, Mercier Y, Geraert PA, Tesseraud S.

J Nutr Biochem. 2008 Apr;19(4):207-15. Epub Aug 17, 2017

<https://www.ncbi.nlm.nih.gov/pubmed/17707628>