

MSM

Fundamental Sulfur Capsules

DESCRIPTION

MSM (Fundamental Sulfur) provided by Douglas Laboratories®, contains 750 mg of methylsulfonylmethane (MSM) per capsule. MSM, a derivative of DMSO, is a naturally occurring compound of biologically available sulfur.

FUNCTIONS

Sulfur is an indispensable element in human nutrition. As part of the amino acids methionine and cysteine, sulfur is required for the structural integrity and function of almost every protein in the body, including enzymes, serum proteins, and the keratin of skin, hair, and nails. Sulfur is also an essential element for the glycosaminoglycans of connective tissues and cartilage, and assumes a major role in liver detoxification as part of the hepatic sulfur conjugation pathways. Proper detoxification of xenobiotics, such as phenols, and many endogenous and foreign food- or air-borne compounds depends on an adequate supply of biologically active sulfur.

Dietary MSM serves as a versatile donor of metabolically active sulfur for the synthesis of numerous organosulfur compounds and proteins in the body. As such, MSM helps maintain normal immune response, lung function, connective tissue metabolism, and muscle contraction. MSM occurs naturally in a variety of foods, such as fruits, vegetables, cereal grains, milk, and fish. However, MSM is volatile and easily lost during cooking. MSM is very well absorbed by the intestinal tract and rapidly distributed within the body.

INDICATIONS

MSM may be a useful dietary supplement for individuals desiring support of joint/connective tissue function, hair and skin support, and liver health.

FORMULA (#MSMC)

One capsule contains:

Methylsulfonylmethane (MSM)* 750 mg

*OptiMSM (distilled methylsulfonylmethane) is a proprietary ingredient exceeding industry standards for optimal purity. OptiMSM® is a registered trademark of Bergstrom Nutrition, Inc.

SUGGESTED USE

The suggested dose is one capsule three times daily, or as directed by a healthcare professional.

SIDE EFFECTS

No adverse side effects have been reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES

Baker DH. Utilization of isomers and analogs of amino acids and other sulfur-containing compounds. *Progr Food Nutr Sci* 1986;10:133-178.

Childs SJ. Dimethyl sulfone (DMSO₂) in the treatment of interstitial cystitis. *Urol Clin North Am* 1994;21:85-88.

Herschler RJ. Methylsulfonylmethane and methods of use. U.S. Patent No. 4,296,130; October 21, 1981.

Herschler R. Methylsulfonylmethane and composition comprising it. U.S. Patent No. 4,616,039; October 7, 1986.

McCabe D, O'Dwyer P, Sickie-Santanello B, Woltering E, Abou-Issa H, James A. Polar solvents in the chemoprevention of dimethylbenzanthracene-induced rat mammary cancer. *Arch Surg* 1986;121:1455-1459.

Morton JI, Siegel BV. Effects of oral dimethyl sulfoxide and dimethyl sulfone on murine autoimmune

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lymphoproliferative disease. Proc Soc Exp Biol Med 1986;183:227-230.

O'Dwyer PJ, McCabe DP, Sickle-Santanello BJ, Woltering EA, Clausen K, Martin EW, Jr. Use of polar solvents in chemoprevention of 1,2-dimethylhydrazine-induced colon cancer. Cancer 1988;62:944-948.

Pereira RR, Harper WJ, Gould IA. Volatile sulfur compounds in milk. I. Effect of chemical form of sulfur-35 on selective labeling of milk constituents and free sulfur compounds. J Dairy Sci 1966;49:1325-1330.

Richmond VL. Incorporation of methylsulfonylmethane sulfur into guinea pig serum proteins. Life Sci 1986;39:263-268.

Wright J and Littleton K. Defects in sulphur metabolism. Intl Clin Nutr Rev 1989;9:118-119.

Wright J and Kirk FR. Defects in sulphur metabolism II: apparent failure of sulphur conjugation. Intl Clin Nutr Rev 1989;9:182-184.

For more information on MSMC visit douglaslabs.com

† These statements have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure, or prevent any disease.

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**You trust Douglas Laboratories.
Your patients trust you.**