

Methyl Sulfonyl Methane (MSM)

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What is it?

Methylsulfonylmethane is commonly referred to as MSM. The proper chemical name is dimethyl sulfone, DSMO_2 . This is a naturally existing compound found in a majority of common food products. Some examples include seafood products, meats, fruits, vegetables and cow's milk.

Sulfur's Role

MSM contributes Sulfur to the diet. Sulfur strengthens collagen in the joints which helps stabilize the body and serves as a resistance to wear and tear on the joints. Sulfur also strengthens other various tissues in the joints and is critical to the formation of connective tissue. The sulfur from MSM is not to be confused with the type of sulfur that is used in inorganic medicinal sulfur compounds which some individuals are allergic to.

Do we get enough MSM?

The average individual does not consume enough MSM. Unless the individual's diet is comprised mainly of raw foods, sufficient levels of MSM will not be consumed in a majority of cases. The processing of foods is where most of the naturally occurring MSM is lost. To combat this, some researchers suggest that we take MSM supplementation because recent research has found that MSM taken in supplement form is just as effective as that which occurs naturally.

How can supplementation improve your health?

In addition to strengthening joints in the body, MSM also helps to detoxify the body, increases blood circulation, helps reduce inflammation caused by injury and enables muscles to heal faster and soreness to be reduced. One known side-effect of MSM is that it may cause the fingernails and hair to grow faster and become stronger. The most common reason for MSM supplementation is to reduce the pain caused by osteoarthritis (OA). OA is a seemingly inescapable condition associated with aging that affects more than 40 million Americans over the age of fifty. There is no known cure for OA, however, research has found that MSM can ease the symptoms associated with OA. Some attribute the effectiveness of MSM is likely because of other ingredients it is combined with than the MSM itself. Some researchers advise consuming glucosamine because of its longer proven track record. They believe MSM is most effective as a synergist to glucosamine, making glucosamine more effective.

Methods of MSM intake

MSM can be introduced to the body in one of three ways. It can be taken orally in liquid or tablet form, applied topically (though some believe this ineffective), or through injections that should only be given by a health care professional.

Pilot Clinical Trial Study

This study was completed at the Southwest College of Naturopathic Medicine in March of 2006. This particular study evaluated the effectiveness of MSM in treating OA

pain over a 12-week span. Subjects included in this study were males and females between the ages of 40 and 76. The study was randomized, double-blind, and placebo-controlled. Each subject was given either 3 grams of MSM or 3 grams of placebo twice daily over the 12 week period. The results of this study found a respectable decrease in pain associated with OA. Physical function impairment also decreased, thus ROM increased with decreased associated pain. A newfound ability to complete general day-to-day tasks that once were painful if possible at all was reported by those found to be taking the MSM. It is important to note that the safety and effectiveness of MSM in managing long-term use cannot be confirmed based on the findings of this particular study.

Recommended Intake Amounts

There are no recommended daily values set by the Food and Drug Administration. More research needs to be completed to effectively estimate the needs of MSM supplementation in specific populations. Dosages can run anywhere from 250 to 6,000mg. Because of the benefits believed to be associated with MSM to those over the age of fifty, larger dosages will be required for those susceptible to OA.

Precautions Concerning Supplementation

If produced correctly, synthetically produced MSM is not believed to be toxic. However, due to the relatively low amount of MSM-specific research that has been done, it is advised that children, women who are pregnant or nursing, or people with liver or kidney disease avoid medium to high levels of supplementation without first consulting their physician.

References

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