



MSM

Common Names: *MSM, methyl sulfone*

Scientific Names: *Methylsulfonylmethane*

Bottom Line:

Effectiveness: Currently lack reliable evidence, but some preliminary studies suggest possible benefit in OA

Safety: Generally well tolerated when used in appropriate doses for up to 12 weeks; long term safety is unknown.

What is MSM?

- MSM, or methylsulfonylmethane, is a chemical found in some green plants, vegetables, fruits, grains, and certain animal products. MSM is a source of sulfur used to make certain amino acids in the body.

What it is it used for in people with rheumatic conditions?

- MSM has been used for the management of osteoarthritis to reduce joint pain and improve function.

How is it thought to work?

- Preliminary research suggests that MSM may reduce joint breakdown in animal models of osteoarthritis. It seems to reduce inflammation and act as an antioxidant.

Does it Work? What the Science Says:

MSM 3 grams twice daily; 1.5 grams three times daily in combination with glucosamine

- One small, randomized, placebo-controlled trial assessed the efficacy of MSM 3 grams twice daily in 50 patients with knee OA. The use of MSM was associated with

a small but significant reduction in pain and physical function scores after 12 weeks of use.

- However, when stiffness and total symptoms (combination of pain, function, and stiffness) were assessed, no significant difference was found between placebo and MSM groups.
- Another randomized placebo-controlled trial evaluated the use of MSM 500 mg, alone or in combination with glucosamine, given three times daily in 118 patients with mild-moderate OA. Both MSM and glucosamine groups achieved modest improvement in pain after 12 weeks; the use of a combination of both products was associated with the greatest improvement.
 - Small preliminary trials suggest possible benefit of using MSM in OA.
 - However, long term efficacy and safety unknown.

What are possible side effects and what can I do about them?

- MSM is generally well tolerated when taken orally. Nausea, diarrhea, bloating, headache, fatigue, trouble sleeping, and reduced concentration have been reported.

Interactions

- No interactions between MSM and other drugs, conditions, or natural health products have been reported. However, there is currently not enough evidence to fully assess the safety of MSM.

For more information about MSM, consult your physician and pharmacist.