

# **OptiMSM®**

## **Natural Sulfur • Methylsulfonylmethane**

*with Acerola (25% Vitamin C)*

MSM, a naturally occurring, simple sulfur compound, has gained well-deserved recognition in recent years as being extremely important in all of the body's healthy functioning. Taken as a nutritional supplement, it is highly recommended as a natural remedy for pain, but that is only one aspect of its many health-giving benefits. You will find many products containing MSM for both internal and external use. We use Bergström OptiMSM® which is the highest quality MSM currently available. We have also upgraded our vitamin C source to acerola.

Sulfur is a mineral found in rather high concentrations in our body tissues. About half of the body's total sulfur content is concentrated in the muscles while the other half is found in the brain, bones, hair, skin, and nails. Sulfur comprises 0.25 percent of our body weight. Sulfur has a vital relationship with protein; sulfur is found in the amino acids methionine, cystine, and cysteine. These sulfur-bearing amino acids are considered to be the essential building blocks of protein. The amino acid methionine is absolutely essential to health. This means it must be supplied by live food or the food supplement MSM. Lack of proper protein in our diet implies a lack of vital organic sulfur necessary to good health. Proteins contain sulfur while carbohydrates and fats do not.

MSM is short for methylsulfonylmethane which is an important and beneficial derivative of DMSO. DMSO has been well-known and used for years as a treatment for various ailments and diseases. It was determined that it was the MSM part of DMSO that produces the health benefits and alleviates pain and suffering. Furthermore, MSM provides its benefits without the nuisance side effects found with DMSO.

It is estimated that the human body uses 1/2 teaspoon of MSM each day. That amount needs to be replaced every day! MSM is a natural form of organic sulfur found in all living organisms and is present in low concentrations in our body fluids and tissues. It is found in a variety of fresh foods including fruits, vegetables, meat, fish, and milk. However, unless your diet is composed primarily of raw foods, it is unlikely that you are receiving enough MSM, for when we process our foods with heat or drying, we lose most of the MSM that we need.

Sulfur from MSM goes into making the sulfur-containing amino acids that then go into building proteins. MSM also helps provide the flexible bond between proteins. New cells become rigid if they don't receive the proper amount of MSM. When tissues lose their flexibility, problems can develop, commonly resulting in aches and pains; MSM brings elasticity back into tissues and joints. MSM is important, for example, in the synovial fluid that lubricates our joints, therefore in keeping them healthy and improving articular mobility. MSM also plays an important role in tissue breathing, the process whereby oxygen and other substances are used to build cells and release energy. MSM has an important role in the energy-producing processes of mitochondria.

MSM has many other roles. It is necessary for collagen synthesis. Collagen is an insoluble fibrous protein found in vertebrates as the dominant component of connective tissue, cartilage, and bones. MSM, therefore, helps build and strengthen all connective and structural tissues. MSM helps our bodies maximally utilize the vitamins that we eat. It operates as a synthesizer and activator with the B vitamin thiamine, vitamin C, biotin, and pantothenic acid which are needed for a healthy metabolism and to calm nerves. MSM helps maintain overall body balance between acidity and alkalinity and works with the liver to secrete bile. MSM detoxifies the body by taking foreign proteins out of the bloodstream. It also helps increase blood circulation.

Another most important health role of MSM is carbohydrate metabolism which is crucial for hypoglycemics and diabetics. Sulfur is a significant component of insulin, the protein hormone secreted by the pancreas, and is essential to the metabolism of carbohydrates.

It is with pain relief where MSM has especially gained its reputation. Aspirin shuts off the nerves recording pain but damaged tissues go unrepaired. MSM relieves pain, not by masking it or shutting it out, but by actually helping damaged tissues heal. MSM is an anti-inflammatory, allowing water to flow freely through cell walls, while taking toxins out and letting nutrients in. MSM is therefore good for relieving joint swelling. It has been used for repetitive stress injuries such as carpal tunnel syndrome, tendinitis, and bursitis. It also permits muscles to heal and prevents them from becoming sore after exertion. If you play sports and normally get sore muscles the next day, take MSM before playing and you should notice a difference. If taken after play, soreness should go away faster. It also helps alleviate muscle spasms. Many do feel a greater sense of well-being after taking MSM because of its effectiveness in alleviating all of the body's minor aches and pains. A whole range of ailments have been treated successfully with MSM including osteoarthritis, rheumatoid arthritis, scleroderma, lupus, interstitial cystitis, fibromyalgia, myasthenia gravis, various respiratory and lung conditions, and allergies.

MSM is a free radical scavenger and detoxifier so allergies to foods and pollens should clear up with its use. MSM also prevents overreaction to medicines and does not work against other medications. MSM controls acidity in the stomach so it can help control ulcers. MSM is also an anti-parasitical; it coats the intestinal tract so that parasites lose the ability to hang on. They can then be flushed away. Colon problems are thus prevented. It is also good to use against yeast infections and also for chronic constipation.

MSM has one side effect. Fingernails and hair will grow faster and become stronger. This is because MSM is used to make the keratin protein in our hair and nails. Many topical lotions and skin care products now contain MSM because of its ability to soften and hydrate the skin. Besides keeping skin healthy and supple, the healing properties of MSM help lessen the pain of burns and clear up scar tissue. It helps reduce UV damage caused by sunburn. Sulfur has been referred to as nature's "beauty mineral" for keeping the skin, hair, and nails healthy.

It is recommended that vitamin C be taken with MSM as they work hand-in-hand with collagen synthesis and are needed conjointly for the healthy maintenance of all the body's cell membranes. Our MSM now contains acerola, a potent, naturally occurring vitamin C, at 25%. The just-ripening (green) acerola berry is used. Acerola also contains B vitamins, vitamin K, bioflavonoids, minerals, complex carbohydrates, and pantothenic acid; it is a powerful antioxidant. It helps the immune system fight colds with healing wounds and bruises. It is good for capillary functioning. Using acerola is an upgrade from straight ascorbic acid as a vitamin C source. Though more costly, we have not raised our price.

MSM is no more toxic than water. If you take more than you need, the extra MSM becomes inert and passes through your system.

Our vegicaps are made from cellulose fiber. There are no fillers, excipients, binders, or magnesium stearates in the capsule material.

### **120 Vegicaps / bottle**

Each 800 mg capsule contains 600 mg Bergström Opti-MSM® and 200 mg Acerola (25% Vitamin C) in a full bioflavonoid complex. All ingredients are non-GMO.

Special thanks to Stanley Jacob & Jeremy Appleton, authors of *MSM, The Definitive Guide*, for much of the information in this profile.