## What is MSM ?

MSM is the abbreviation of Methyl-Sulfonyl-Methane and also known as Organic Sulfur (OS).

- OS/MSM is one of the five basic elements of life, critical to the formation of connective tissue.

- OS/MSM helps provide the flexible bond between cells promoting the growth of healthy new cells, and repairs damaged cells.

-OS/MSM is a food supplement readily absorbed by the body, with an amazing array of benefits listed below.

Unfortunately sulphur levels decrease with age, resulting in symptoms of fatigue, tissue and organ degeneration, and increase susceptibility to disease.

Organic Sulphur/MSM deficiency can be associated with slow wound healing, scar tissue, brittle nails, brittle hair, gastrointestinal problems, inflammation, lung dysfunction, immune dysfunction, arthritis, allergies, acne, and other skin conditions.

# Therefore, Sulphur is an important nutrient for the maintenance of healthy organs, joints, tendons, ligaments and other connective tissue.



MSM and Vitamin C work in synergy to help build healthy new cells.

Drinking plenty of water is very important for anyone wishing to have good health. The fact that MSM detoxifies means that you need to keep water moving into the body so that the toxins can be eliminated without stressing other organs of the body, such as the kidneys.

#### **MSM Benefits - amazing !**

**Cell wall Permeability and Detoxification:** The body has been masterfully designed to flush cells of unwanted debris, however when the diet is deficient and as we age, the cell walls become hard and stiff and this hinders fluid flow through the cell walls. One of the most important features of MSM is that it makes your cells more *permeable*. MSM softens the cell walls, providing an exit for toxins and waste products to be washed out of cells, whilst opening a gate for essential nutrients and hydration to the cells. MSM has a remarkable ability to break up the bad calcium that's at the root of degenerative diseases. If enough MSM is taken, foreign particles can be flushed from your system, increasing over-all health, immunity and resistance to allergies.

**Treats Inflammation and Arthritis:** MSM is a powerful anti-inflammatory due to its ability to allow metabolic wastes to be removed from the cells.

When the water pressure inside a cell is greater than the water pressure on the outside of the cell, there is inflammation and swelling...the outer and intercellular fluid pressures are not equal. MSM enhances the permeability of the cell walls, therefore allowing the pressure on both sides of the wall to equalise, thus relieving the inflammation. MSM takes inflammation out of soft tissue and since pain comes from nerves in inflamed soft tissue,

there is often relief from the pain of such inflammatory ailments as arthritis, osteoarthritis, rheumatoid arthritis, bursitis, fibromyalgia, gout, and many other rheumatic conditions, and hip dysplasia. Adding MSM can help get the flexibility back into joints & improve tissue very rapidly, and reduce stiffness, swelling & pain, improve circulation, and cell vitality.

**Diabetics and Hypoglycaemia:** MSM (OS) is used by the pancreas to produce insulin. The sugar the blood transports to the cells of diabetics cannot be absorbed if the cell wall is impermeable as suggested in some studies of diabetics. MSM makes cell walls more permeable. Permeable cell walls can easily receive blood sugar so less insulin is demanded, resulting in less overuse of the pancreas assisting the regulation of insulin production.

Several months of consistent MSM increases the body's ability to produce insulin, thus possibly reducing dependency on insulin injections and reducing hypoglycaemia.

**Joint Flexibility and Muscle Cramps:** Collagen is the dominant component of connective tissue and bones. Collagen cannot be made in the body unless MSM supplementation is present, so damaged cartilage cannot be repaired without MSM. Clinical research has shown that MSM is highly effective in improving joint flexibility, reduces stiffness and swelling. It helps to produce flexible skin and muscle tissue.

MSM relieves muscle cramps, spasms and night leg cramps; reduces muscle inflammation, promotes healing in the muscles and prevents them from becoming sore. Athletes, in particular, benefit from this as the intake of additional MSM dramatically increases their recovery time. Lactic acid and other by-products cause pain and soreness in the body. MSM increases the ability of the body to eliminate waste products at the cellular level. This speeds recovery and frees up more energy for rebuilding.

**Naturally Increases Energy:** Due to the increased permeability of the cells, less energy is required to deal with the accumulation of toxins. This results in more energy being redirected towards activity and necessary healing. Digestion is the biggest energy requirement of the body (approximately 70-80% of your energy is spent on digestion each day). MSM increases the absorption of nutrients so that the energy expenditure on digestion is vastly reduced.

**Healthy Skin, Hair and Nails:** Collagen is critical for the production of healthy skin, hair and nails. Sagging skin and wrinkles, as well as dry, cracked skin are a result of a loss of collagen. MSM provides the sulphur needed to normalise collagen formation, and so revitalise the skin. It is one of the main ingredients in moisturizing creams. MSM also contributes to exceptional strength & thickness of the hair & nails, which may occur in just a couple of weeks of consistent use. It has been shown to be highly effective in the treatment of skin conditions like acne, eczema and psoriasis as it strengthens weakened immune system, often a precursor to such conditions.

**Helps Weight Reduction:** Excess weight on the body may actually be inflammation. The cells of the body may be chronically inflamed, retaining by-product toxins. Sulphur needs to be present in order for these toxins and wastes to be removed from the body. MSM provides that sulphur, and in so doing presents an exit route for metabolic wastes to be removed from the cells. When these toxins can be removed from the system, then the cells can also dispose of excess fluids that were being stored as a buffer to the by-products toxins. What may result is a natural & effective reduction in unwanted weight.

Vitamin Absorption: MSM supplementation helps our body utilize the vitamins that we

take, providing the means to derive the maximum benefit from them. Co-enzyme Q10 locks with MSM, which means that in order for the body to fully utilize this nutrient, it must have MSM (sulphur) with it. MSM works with Pantothenic acid, Vitamins A, C, D, and E, inter-enzymes, amino acids, selenium, calcium, germanium, collagnol and dismuzyme. A lot of the vitamins we take go through the body without being fully used. With more MSM in the body, vitamins can be utilized more effectively, and therefore become much more beneficial.

**Helps Eliminate Internal Parasites:** MSM coats the intestinal wall with a smooth, resistant coating so parasites lose their ability to hang on. Hatching worms, having nothing to grab on to, and so are flushed out. MSM has the ability to repair the parasite affected tissue.

**MSM and Protein:** Sulphur has a vital relationship with protein, since sulphur is found in the amino acids methionine, cystine, and cysteine. These amino acids are known as the sulphur bearing amino acids, and considered the building blocks of protein. Sulphur as found in MSM is the flexible bond between proteins.

**Improves Lung function:** MSM detoxifies and increases the blood's circulation of oxygen. There are case histories of people who have had emphysema to the degree they could hardly get out of a chair, who improved immensely after just a short time on MSM.

**Reduction or Elimination of Allergies:** An allergic reaction is simply your body's reaction to something foreign in your system. These foreign proteins & free radicals invade your body and cause reactions and problems. Your body responds with a sneeze, wheeze, swollen, puffy eyes, etc. MSM eliminates so-called "free radicals" and so allergies may be eliminated.

**Reduction or Elimination of PMS:** The monthly cycle can be a shock to the system. Many women suffer headaches, cramps, or muscle pain associated when their hormones are out of balance. When MSM is taken regularly the hormones are brought into balance, the body functions normally, and these painful problems can be vastly reduced or eliminated.

**MSM helps Relieve Chronic Constipation:** Chronic constipation is a real medical concern which afflicts many people. Those suffering from constipation have had prompt and continuing relief by supplementing their diet with MSM and Vitamin C.

**Anti-Cancer:** MSM has been studied for possible anti-cancer effects as it oxygenates the cells which in turn creates an aerobic environment unfavourable to cancer.

**Sports & Athletes Nutrition**: MSM can restore vitality for busy daily activities with its restorative support of connective tissues.

Snoring: MSM has been shown to help reduce, and even eliminate snoring.

**Neutralise Chlorine & Fluoride:** MSM taken to neutralise high concentrations of chlorine & fluoride which inhibit oxygen and sulphur distribution, and uptake.

**Increases Enzymes:** MSM increases enzyme production within the glands in the body, thus increasing overall resistance to illness.

**Vast Improvement:** MSM studies have revealed outstanding improvement, and even reversal of osteoporosis, Alzheimer's disease, and Parkinson's disease.

**Better Kidney Function:** MSM helps promote better kidney function more efficiently. Water retention problems due to bad kidney function can be improved or even alleviated

Alleviates Chronic Headaches: MSM helps alleviate chronic headaches by increasing circulation to the brain cells.

**Alleviates Eye Problems:** MSM can help alleviate eye problems. Dissolve 1 teaspoon of MSM in 120ml of water and us as eye drops as frequently as you like.

Increases Alertness: MSM increases alertness, and enhances the ability to concentrate.

**Depression:** Taken regularly, MSM can reduce depression symptoms.

**Increases Blood Circulation:** MSM increases blood circulation and may aid in lowering high blood pressure.

**Improves Digestion:** MSM improves digestion: Sulfur is used by the liver to manufacture bile, a key element in digestion.

**PH Balance:** MSM is essential in maintaining the bodys' crucial acid/alkaline pH balance.

Ulcers: MSM helps control acidity in the stomach, so it can help ulcers.

**MSM and Animals:** MSM is also an effective supplement for cats, dogs & horses. Animals suffering from arthritis, inflamed joints, pain etc can benefit from taking MSM too. The success rate of breeding horses is greatly increased when both the mare & the stallion are supplemented with MSM. Race horses recover faster after heavy training, or a race. It has been found to be an effective treatment for chronic muscle soreness, epiphysis's, acute laminitis, pleuritis, recurring digestive tract disorder and arthritis.

#### And the list goes on...

#### How Much MSM Do I Use ?

**Suggested protocol:** MSM is a detoxifier, and so as with any detox it is advised to start small and work up to higher doses. Since MSM is detoxifying the body, it is important to drink plenty of water so the body can flush the toxins out, otherwise those toxins can put a load on the kidneys.

Dosage may vary considerably per individual. MSM recommend from 1 - 6 grams dissolved in a glass of water, or juice per day to start with. One needs to gauge their own body. If you experience discomfort do not increase dosage until the discomfort dissipates. After a few days, you can increase dosage to one teaspoon morning and night. You may maintain that as your dosage, or increase further to two teaspoons morning and night, or more.

For maximum absorption MSM should be taken with vitamin C at a ratio of approx. 4 parts

MSM to 1 part vitamin C.

Pharmacokinetic studies have indicated that there may be a cumulative effect to a point where equilibrium is reached. Initially the body will distribute, deposit, and use MSM to feed those cells most in need, and continue to distribute MSM throughout the body replenishing cells. The body will use what it needs and if there is excess it will be flushed from of the body. To maintain good healthy cells, take your MSM supplement in the morning and evening.

### How Long Before I See Results ?

Some may begin to notice improvements within about two weeks, others may take weeks or sometimes months, as we are all different.

Please note: the information contained herein has been compiled from various sources. Some of these statements have been substantiated by the Australian TGA, and others not. We provide information only, and the information is not intended to supersede sound medical/practitioner advice.