



**Presents for your consideration:
Super FMS™**

- ◆ **Chronic musculoskeletal pain**
- ◆ **Aching**
- ◆ **Stiffness**
- ◆ **Subjective soft tissue swelling**

Magnesium, Malic Acid and Fibromyalgia (FM)

The *Journal of Nutritional Medicine* published a study on the combined effects of magnesium and malic acid on FM patients. Oral magnesium and malic acid preparations in an open clinical setting were used. Fifteen patients of the (ages 32 to 60) received 1,200 to 2,400 mg of malic acid with 300 to 600 mg of magnesium for a period of 4 to 8 weeks. The results of the study were very encouraging; all patients had a subjective improvement of myalgia occur within 48 hours of supplementation.

The Problem With Aluminum (Magnesium and Malic Acid May Help)

Aluminum toxicity may play a role in symptoms experienced by magnesium-deficient fibromyalgia patients since magnesium is needed to help the body block the toxic effects of aluminum. This needs to be acknowledged and addressed, since aluminum inhibits glycolysis and oxidative phosphorylation resulting in decreased intramitochondrial ATP production. Additionally, due to its high affinity for phosphate groups, aluminum blocks the absorption and utilization of phosphates vital to the synthesis of ATP. Research has found that, in addition to adequate amounts of magnesium (which helps prevent the toxic effects of aluminum), supplemental

Super FMS™	Amounts per serving
Serving size	2 capsules
Number of servings per container	60
Niacinamide	250 mg.
N-Acetyl L-Cysteine	75 mg.
Vitamin B6 (pyridoxine)	25 mg.
Magnesium (glycinate)	75 mg.
Malic acid	300 mg.
Methylsulfonylmethane (MSM)	300 mg.
Ginger root extract (5% gingerols)	40 mg.
Suggested Dose: Take 2 capsules, three times daily, or as directed by your health care practitioner.	

malic acid can act as a most potent aluminum detoxifier and is especially effective at decreasing aluminum toxicity in the brain. Treatment with malic acid has been shown to significantly increase the fecal and urinary excretion of aluminum, and reduce the concentration of aluminum found in various organs and tissues.

What's Niacinamide and N-Acetyl L-Cysteine Got To Do With It?

Niacinamides may function of action is through its inhibition of the enzyme **poly (ADP-ribose) synthetase (PARS)** and the inhibition of **tumor necrosis factor - α (TNF- α)**, a cytokine that produces higher amounts of **reactive oxygen species (ROS)** which further activates PARS.

This cascade of events takes place when (ROS), most notably peroxynitrite and hydroxyl radicals, induce breaking of DNA strands that lead to the activation of the repair enzyme PARS. As a repair enzyme PARS unfortunately, triggers a very futile energy-consuming cycle, resulting in massive depletion of cellular NAD and ATP, leading to alterations of the cell and eventual cell death, this in turn sets of a related chain of events that involve the activation of α (TNF- α), which in turn produces higher amounts of ROS and this cycle of events will continue on.

N-Acetyl L-Cysteine functions as a powerful antioxidant by providing cysteine, the major precursor in the biosynthesis of

glutathione (GSH). GSH is the principal defense within the body that fights against ROS and is also responsible for the detoxification of drugs, metabolites and other compounds. Like niacinamide, N-acetyl L-cysteine has been shown to inhibit TNF- α production, thus interrupting this chain of events.

Super FMS™ not only features niacinamide combined with N-acetyl L-Cysteine, also added is methylsulfonylmethane.

What's Methylsulfonylmethane Got To Do With It?

MSM (methylsulfonylmethane) may help support the optimal function and health of joints and soft tissue. MSM is a source of organic sulfur found naturally in the human body. MSM is a stable metabolite of DMSO and is 34% elemental sulfur. It supports many functions, including maintenance of connective tissue health. Collagen basement membrane, pro-collagen and collagen are partially dependent on dietary sulfur. MSM has also been found to lessen destructive changes in joints.

Zingiber officinale (Ginger) is an anti-inflammatory, a potent inhibitor of inflammatory prostaglandins and thromboxanes.

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These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

For Quality and Value without Compromise



Is the logical choice!