

Nutra-Mend w/MSM



DESCRIPTION:

Nutra-Mend w/ MSM provides nutrients that aid in the repair of connective tissue and provides nutritional support during the healing and rehab phase of an injury. It also improves muscle and ligament tone, and aids in elasticizing muscles and ligaments. Nutra-Mend w/ MSM improves blood flow to the connective tissues and enhances vein and capillary integrity.

ACTIVES:

Manganese- is essential in the formation of connective tissue. Manganese gives strength and elasticity to muscles, tendons, ligaments and cartilage. Manganese ascorbate is one of the only type manganese preparations that has the ability to carry other nutrients to feed the tissues and discs of the back area by the process of osmosis.¹ Manganese Sulfate is another special, highly absorbable form of manganese recommended in the Cox program. Sulfate is essential to the synthesis of mucopolysaccharides of the discs, tendons, and ligaments.

MSM- Clinical studies have shown that MSM: Facilitates collagen synthesis, reduces pain and inflammation, increases cell membrane permeability, reduces stiffness and swelling improving joint flexibility, promotes blood flow, helps the healing process, and reduces painful muscle spasms.

Injured players treated with MSM returned to the playing field up to 75% faster than those not treated with MSM. Beth M. Ley, Ph.D states that vitamin C and other minerals are needed in conjunction with MSM for optimal results.⁴⁻⁷

Gotu Kola (Centella asiatica)- Enhanced development of normal connective tissue matrix is perhaps the prime therapeutic action of Gotu Kola. Gotu Kola exerts remarkable wound healing activity. Studies on the mechanism of action of Gotu Kola's enhancement of wound healing have shown that asiaticoside produced the following effects:

- Exerts a balancing effect on connective tissue
- Increases the development and maintenance of blood vessels into connective tissue, strengthening the veins and capillaries.
- Increases the formation of mucin and structural components such as hyaluronic acid and chondroitin sulfate.²

Zinc Arginate- is a patented amino acid chelate from Albion Laboratories, providing all the benefits of both zinc and arginine together in a single highly absorbable molecule.

•Arginine- promotes wound healing, stimulates the release of human growth hormone increasing protein synthesis and increases blood flow.^{13,14}

•Zinc- It has been well established that zinc plays an essential role in the process of tissue healing.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent disease.

120 tablets per bottle

One tablet provides:

Vitamin C (ascorbic acid)	100 mg
Calcium (calcium citrate)	25 mg
Zinc Arginate (providing 135 mg arginine and 15 mg zinc*)	150 mg
Manganese (50% manganese citrate/ 50% manganese sulfate)	50 mg
Chromium (chromium chelate*)	100 mcg
Methylsulfonylmethane (MSM [®])	250 mg
Chondroitin Sulfate	50 mg
Bioflavonoid Complex	50 mg
Gotu Kola (Standardized extract 10% asiaticoside leaf)	25 mg

Other ingredients: Cellulose, Vegetable Stearate and Silica.

* U.S. Patent # 4,599,152 Albion Laboratories.

** MSM[®] is the registered trademark for licensed methylsulfonylmethane, a naturally-occurring source of fundamental dietary sulfur.

CLINICAL INDICATIONS:

- Subluxations • Sprains • Strains • Whiplash • Tortocollis
- Lax Muscles and Ligaments • Poor Muscle Tone • Back Pain

SUGGESTED USAGE:

Take 2 tablets with breakfast and 2 tablets with dinner.

CONTRAINDICATIONS: Sulfur Sensitivity

DRUG INTERACTIONS: None known

REFERENCES:

1. Huan-Chang Chow Tsai and Gladys J. Everson, Dept. of Nutrition, University of California, Davis, California.
2. Keen CL, Ensunsa JL, Watson MH, et al. Nutritional aspects of manganese from experimental studies. *Neuroscience Letters*. 1999; 261:21-24.
3. Nielsen FH. Ultratrace minerals. In: Shils ME, Olson JA, Shike M, Ross AC, eds. *Modern Nutrition in Health and Disease*, 9th ed. Baltimore, MD: Williams and Wilkins; 1999:283-303.
4. Lawrence, M.D., Ph.D., and Martin Zucker.
5. *The MSM Miracle: Enhance Your Health with Organic Sulfur* by Earl L. Mindell, R, Ph., Ph.D.
6. *MSM: On Our Way Back to Health with Sulfur* by Beth M. Ley.
7. *MSM (Methylsulfonylmethane)*, "by Stanley W. Jacob, M.D., Total Health, Feb./ Mar 1998
8. Arpaia MR, Ferrone R, Amitrano M, Nappo C, Leonardo G, del Guercio R, Effects of Centella asiatica extract on mucopolysaccharide metabolism in subjects with varicose veins. *Int J Clin Pharmacol Res*, 10:229-33, 1990
9. Belcaro GV; Grimaldi R; Guidi G. Improvement of capillary permeability in patients with venous hypertension after treatment with TTFCA. *Angiology* 1990 Jul;41(7):533-40.
10. Bonte F; Dumas M; Chaudagne C; Meybeck A. Influence of Asiatic acid, madecassic acid, and asiaticoside on human collagen I synthesis. *Planta Med* 1994 Apr;60(2):133-5.
11. Maquart FX, Bellon G, Gillery P, Wegrowski Y, Borel JP. Stimulation of collagen synthesis in fibroblast cultures by a triterpene extracted from Centella asiatica. *Connect Tissue Res*, 24:107-20,1990.
12. Shukla A; Rasik AM; Dhawan BN. Asiaticoside-induced elevation of antioxidant levels in healing wounds. *Phytother Res* 1999 Feb;13(1):50-4.
13. Barbul A.; Fishel, R. S.; Shimazu, S.; Wasserkrug, H.I.; Yoshimura, N.N.; Tao, R.C.; and Efron, G. "Intravenous Alimentation with High Arginine Levels Improves Wound Healing and Immune Function." *Journal of Surgical Research*, 38 (1985) 228-334.
14. Copinschi, G.; Wegienka, L. C.; Hane, S.; and Forsham, P.H. "Effect of Arginine on Serum Levels on Insulin and Growth Hormone in Obese Subjects." *Metabolism*, 16 (1967) 485-491.

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