## <u>DMG</u>

## The natural metabolic enhancer favored by professional trainers and athletes

- The nutrient N,N-Dimethylglycine, found in low levels in many foods
- Helps transport oxygen that breaks down glycogen to fuel the ATP cycle, creating energy in the body
- Supplementation makes additional DMG available to cells throughout the body
- Water soluble and very readily absorbed

**Research Uncovers Role Of DMG** DMG is the popular abbreviation for the nutrient N,N-Dimethylglycine, which is found in low levels in many foods. DMG is also produced within the cells of the body from choline and betaine, and so is classified as an "intermediary metabolite." DMG plays a crucial role in the respiratory cycle of the cells, transporting oxygen and serving as a potent methyl donor. A larger nutrient complex containing DMG was the subject of numerous studies in the Soviet Union during the 1960s. This work led to its adoption as part of the dietary regimen for Soviet athletes. In the mid-1970s, the American biochemist Dr. Roger Kendall identified DMG as the key ingredient of the Soviet formula. Since then, research at several American universities has demonstrated DMG's usefulness in a variety of species, including the horse.

**DMG Inside** The Cell All of the energy available to the horse's body for work comes from a complex chemical reaction called the ATP cycle. This cycle occurs within the mitochondria, small bodies inside the cells often called the "powerhouse of the body". DMG is used to help transport the oxygen that breaks down glycogen ("blood sugar") to fuel the ATP cycle. This function of DMG has led researchers to study its impact on lactic acid production in horses.

**Why Feed DMG?** DMG is primarily found in the body as a product of cellular action. Supplementation makes additional DMG available to cells throughout the body. DMG is a water-soluble nutrient and is readily absorbed. DMG is constantly broken down as it is used in the mitochondria. Since this metabolism occurs quickly, it is recommended that DMG be fed twice daily.

**Less Filler, More DMG** Vita Flex pioneered the use of a higher concentration of DMG in order to improve delivery and reduce the use of fillers. Vita Flex DMG delivers a guaranteed minimum of 1500 mg. premium quality DMG HCl per ounce. Because Vita Flex DMG contains less filler, it gives horsemen more flexibility to adjust feeding programs to fit specific needs.

**Feeding Instructions:** Enclosed scoop holds 1 ounce. Feed 1/2 ounce twice daily. Feed 1 to 1 1/2 ounces twice daily beginning 2 to 3 days before and during performance. Increase feeding of large breeds proportionately according to body weight in excess of 1,000 pounds. Severely stressed horses may benefit from additional amounts. Keep cool and dry. Reseal after each use.

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