



WPB - 08/10

## Weekly Practice Builder

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In response to increasing demand from our Practitioners, Biotics Research has implemented a new e-mail program to bring important, leading-edge information and literature to you, thereby helping facilitate the growth of your practice. Biotics Research products are available exclusively through Healthcare Providers.

### Our featured supplement of the week is **Mg-Zyme™**

**Why do your patients need Mg-Zyme™?** Magnesium (Mg) is a macromineral which plays an indispensable role in a wide variety of metabolic functions in the human body. In fact, it is difficult to find a metabolic process which does not require magnesium. Of the approx. 25 grams of Mg found in the human body, ~60-65% is located in bone, ~27% is intramuscular, and ~7% is found in other cell types and bodily fluids. Over 300 known & distinct different essential enzymatic reactions in the body require Mg. Energy production, including fat and carbohydrate metabolism as well ATP production are Mg dependent. RNA and DNA synthesis also require the presence of Mg. Structurally, Mg is crucial, as it is part of the bone's crystal lattice. It is also found in concentration on the cortical surface of bones where it is believed to be stored until it is needed during times of deficiency. As a constituent in cell membranes, Mg also plays a pivotal role in ion transport, regulating calcium and potassium across the cellular membrane, thus preventing the over excitation of nerves and thereby promoting the relaxation of muscle. The cardiovascular system, nervous system, muscles, kidneys, liver, brain, hormone-secreting glands, and gastrointestinal tract all rely on Mg for their metabolic function. Due to this pervasiveness, deficiency symptoms can widely vary. Some of the most common presentations associated with Mg deficiency include: hypomagnesemia, hypocalcemia, hypoglycemia, elevated serum fats, increased blood pressure, muscle weakness, tremor, and spasm. A softening or weakening of bone, headaches, nausea and vomiting have also been noted. Decreased absorption of Mg has been associated with individuals with gastrointestinal dysfunction, renal impairment, alcoholism, glucose metabolism disorders, and also with seniors. Diuretics, certain antibiotics, anticoagulants, corticosteroids, and oral contraceptives may all lower magnesium status. Consuming a diet high in cooked foods, fiber, or excess zinc may also impair Mg absorption.



### Why choose **Mg-Zyme™** from Biotics Research Corporation?

'Chelated' and 'Non-chelated' are the two basic forms of Mg found in dietary supplements. In the case of Mg, the most common chelates fall into the category of amino acid chelates, where the Mg molecule is attached to an amino acid building block. There is some research that indicates that chelated Mg (i.e. magnesium glycinate, magnesium aspartate, etc.) is better absorbed than many non-chelated forms such as magnesium oxide. Biotics Research Corporation has formulated **Mg-Zyme™** with an ideal blend of three forms of magnesium recognized for their bioavailability and decreased risk of gastric distress. These forms include magnesium aspartate, magnesium gluconate, and magnesium glycinate, and make **Mg-Zyme™** an indispensable formula for the neuromusculoskeletal practitioner. As always, you can count on Biotics Research Corporation to offer superior nutritional products supplying "The Best of Science and Nature."

Questions? Concerns?  
Comments? Biotics Research  
wants to hear from you!



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

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