

Spleen PMG®

7550

Please Copy for Your Patients

Spleen PMG is a Special Combination Formula Containing Bovine Spleen PMG™ Extract, Calcium Lactate, and Magnesium Citrate

The spleen, an organ of the lymphatic system, forms both red and white blood cells in the fetus, however, it produces only the white blood cells following birth. The white blood cells of the spleen attack pathogens of all types in the circulating blood. The spleen is responsible for disposing of exhausted red blood cells. The white blood cells remove old red blood cells and debris from circulation. Many of the red blood cells destroyed elsewhere in the body meet their final demise in the spleen. The rupture of red blood cells forms bilirubin (from the release of heme of the hemoglobin). This waste product is then excreted via the intestinal tract. Because it is so vascular, the spleen is also a special reservoir that holds large quantities of extra red blood cells for release when the body needs them in an emergency. Iron is transported to the spleen to synthesize hemoglobin. Hemoglobin carries vital oxygen from the lungs to all tissues.

How Spleen PMG Keeps You Healthy

Maintains cellular health

Protomorphogen™ extract is the brand name of Standard Process' extracts derived from nucleoprotein-mineral molecules. The foundation for the function of these uniquely-formulated nucleoprotein-mineral extracts comes from the antigen-antibody reaction that takes place during normal cell maintenance. The antigenic properties promote healthy cellular division, function, and growth. When a tissue needs support, at least a dozen different compounds are formed that can cause white blood cells to travel together toward the compromised area. They include degenerative products of the tissues themselves. These substances strongly activate the macrophage system, and within a few hours, the macrophages begin to devour the destroyed tissue by-products. At times, the macrophages can also affect the structure of the remaining healthy cells. The bovine spleen PMG™ extract in Spleen PMG appears to neutralize the circulating antibody, thereby contributing to the maintenance of cellular health.†

Improves calcium absorption and supports nervous system function

Calcium lactate is a highly soluble calcium salt and naturally bioavailable—it changes to calcium bicarbonate (the type used by the body) in one chemical step. Unlike some other forms of calcium that are less soluble in water and need higher acid concentrations to be absorbed, calcium lactate exists near a more neutral pH and does not require acid conditions to work. The calcium lactate in Spleen PMG is derived from pure-vegetable sources of calcium, not dairy sources. Calcium is important for the healthy functioning of the nervous system and transmission of nerve impulses.†

Sustains metabolic efficiency

While magnesium is present in most cells in only minute quantities, it plays an important role in human metabolism, as does its partner, calcium. It functions in such reactions as nerve conduction and nerve excitability, transfer of energy, muscular activity, and many other specific processes. Magnesium functions as a cofactor, assisting enzymes in catalyzing many chemical reactions. Magnesium and calcium are synergistic, meaning that what they do for the body together, they cannot perform on their own.†



Introduced in:

1955

Content:

90 Tablets

Supplement Facts:

Serving Size: 1 tablet
Servings per Container: 90

| | | %DV |
|----------|---|-----|
| Calories | 2 | |

Spleen PMG® 7550



800-558-8740 • www.standardprocess.com

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

Spleen PMG®

What Makes Spleen PMG Unique

Unique Product Attributes

Contains enzyme factors and proteins combined with bovine spleen PMG™ extract

- To help support the spleen's filtration and cleansing of the blood, the reabsorption of useful materials from the blood, and the synthesis of hemoglobin, which is vital in providing oxygen to the tissues†

Contains Protomorphogen™ extracts

- Standard Process' unique manufacturing method of deriving tissue cell determinants from animal glands and organs
- Help provide cellular support and rehabilitation in corresponding human tissues
- Important antigenic properties of nucleoprotein-mineral determinants, the foundation of the product†

The calcium lactate in Spleen PMG is a pure-vegetable source of calcium

- Not derived from a dairy source

Unique Processing

Exclusive low-temperature, high-vacuum drying technique

- Preserves the enzymatic vitality and nutritional potential of ingredients

Not disassociated into isolated components

- The nutrients in Spleen PMG are processed to remain intact, complete nutritional compounds

Degreed microbiologists and chemists in our on-site laboratories constantly conduct bacterial and analytical tests on raw materials, product batches, and finished products

- Ensures consistent quality and safety

Vitamin and mineral analyses validate product content and specifications

- Assures high-quality essential nutrients are delivered

Whole Food Philosophy

Dr. Lee challenged common scientific beliefs by choosing a holistic approach of providing nutrients through whole foods. His goal was to provide nutrients as they are found in nature—in a whole food state where he believed their natural potency and efficacy would be realized. Dr. Lee believed that when nutrients remain intact and are not split from their natural associated synergists—known and unknown—bioactivity is markedly enhanced over synthetic nutrients. Following this philosophy, even a small amount of a whole food concentrate will offer enhanced nutritional support, compared to a synthetic or fractionated vitamin. Therefore, one should examine the source of nutrients rather than looking at the quantities of individual nutrients on product labels.

Each tablet supplies 115 mg bovine spleen PMG™ extract.

Proprietary Blend: Bovine spleen PMG™ extract, and magnesium citrate.

Other Ingredients: Calcium lactate, cellulose, and calcium stearate.

Suggested Use: One tablet per meal, or as directed.

Sold to health care professionals.

Studies on nutrients generally use large doses and these studies, some of which are cited below, are the basis for much of the information we provide you in this publication about whole food ingredients. See the supplement facts for Spleen PMG®.

Anderson L.E. 1998. *Mosby's Medical, Nursing, & Allied Health Dictionary*. 5th ed. St. Louis, MO: Mosby: 1526.
Fujie T., et al. 1999. Generation of specific antitumor reactivity by the stimulation of spleen cells from gastric cancer patients with MAGE-3 synthetic peptide. *Cancer Immunology Immunotherapy* 48(4): 189-194.
Germing U., et al. 1999. Congenital asplenia detected in a 60 year old patient with septicemia. *European Journal of Medical Research* 4(7): 283-285.
Goddard M., et al. 1986. Short-term effects of calcium carbonate, lactate, and gluconate on the calcium-ovary-thyroid axis in normal elderly men and women. *American Journal of Clinical Nutrition* 44(5): 653-658.
Guyton A.C., Hall J.E. 1996. Genetic Control of Protein Synthesis, Cell Function, and Cell Reproduction. *Textbook of Medical Physiology*. 9th ed. 37.

Guyton A.C., Hall J.E. 1996. Inflammation and function of macrophages. *Textbook of Medical Physiology*. 9th ed. 439.
Guyton A.C., Hall J.E. 1996. White blood cells and chemotactic attraction. *Textbook of Medical Physiology*. 9th ed. 435.
Leibovitz B. 1991. *Nutrition Update* 5(2).
Lindberg J., et al. 1990. Effect of magnesium citrate and magnesium oxide on the crystallization of calcium salts in urine: changes produced by food-magnesium interaction. *Journal of Urology* 143(2): 248-251.
Pfeiffer C.C. 1978. Magnesium. *Zinc and Other Micro-nutrients* 102.
Ruml L.A., et al. 1999. Effect of potassium magnesium citrate on thiazide-induced hypokalemia and magnesium loss. *Am J Ther* 6(1): 45-50.
Tsugawa N., et al. 1995. Bioavailability of calcium from calcium carbonate, DL-calcium lactate, L-calcium lactate and powdered oyster shell calcium in vitamin D-deficient or -replete rats. *Biol Pharm Bull* 18(5): 677-682.
van Mossevelde B. 1997. Culinary Cures: Calcium Fortification. *Food Product Design* 69-70.