

Thymus PMG[®]

7975

Please Copy for Your Patients

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

The thymus gland is the development center of the immune system, especially during the growing years. It preprocesses T lymphocytes following their production in bone marrow. Once taking up residence in the thymus gland, they divide rapidly and develop diversity to react appropriately against different specific antigens. The thymus gland selects which lymphocytes to release to waiting lymphoid tissue throughout the body.

The thymus also ensures that any T lymphocytes it releases will not react adversely against proteins or other antigens present in and compatible with the body's own tissues. This is a natural safeguard function of the body which protects life.

How Thymus 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 thymus PMG[™] extract in Thymus 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 Thymus 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:
1952
Content:
90 Tablets

Supplement Facts:		
Serving Size: 1 tablet		
Servings per Container: 90		
		%DV
Calories	1	
Calcium	18 mg	2%

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

Thymus PMG®

What Makes Thymus PMG Unique

Unique Product Attributes

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

- To help support the development and diversity of lymphocytes for reacting against different specific antigens and to not react against proteins or other antigens that are present in the body's own 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 Thymus 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 Thymus 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 185 mg bovine thymus PMG™ extract.

Proprietary Blend: *Bovine thymus 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 Thymus PMG®.

Anderson L.E. 1998. *Mosby's Medical, Nursing, & Allied Health Dictionary*. 5th ed. St. Louis, MO: Mosby: 1615.

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. *Textbook of Medical Physiology*. 9th ed. 446.

Guyton A.C., Hall J.E. 1996. White blood cells and chemotactic attraction. *Textbook of Medical Physiology*. 9th ed. 435.

Lederman S., Suciu-Foca N. 1999. Antigen presenting cells integrate opposing signals from CD4+ and CD8+ regulatory T lymphocytes to arbitrate the outcomes of immune responses. *Human Immunology* 60(7):533-561.

Leibovitz B. 1991. *Nutrition Update* 5(2).

Pfeiffer C.C. 1978. Magnesium, Zinc and Other Micro-nutrients 102.

Sacedon R., et al. 1999. Partial blockade of T-cell differentiation during ontogeny and marked alterations of the thymic microenvironment in transgenic mice with impaired glucocorticoid receptor function. *Journal of Neuroimmunology* 98(2): 157-167.

Schmiel A., et al. 1998. Reappraisal of the quantity and nature of renal calcifications and mineral metabolism in the magnesium-deficient rat. Effects of treatment with potassium citrate or the combination magnesium citrate and potassium citrate. *Urol Int* 61(2):76-85.

Takahashi N., et al. 1999. Effect of histamine H2-receptor antagonist on the phosphorus-binding abilities of calcium carbonate and calcium lactate in hemodialysis patients. *Journal of the American Society of Nephrology* 10(5): 1090-1094.

van Mossevelde B. 1997. Culinary Cures: Calcium Fortification. *Food Product Design* 69-70.