# Hypothalamus PMG®

## Supports Healthy Hypothalamus Gland Function

The hypothalamus is one of the central elements of the brain and comprises the neuronal circuitry that controls emotional behavior and motivational drives. The hypothalamus allows communication between the endocrine and central nervous systems. It is the chief region for the integration of sympathetic and parasympathetic activities. Without proper hypothalamic function, the two systems fail to respond appropriately to each other's signals. The hypothalamus gland also produces secretions that are important to the management of cardiovascular function, uterine contractility, and lactation. Certain metabolic activities, such as the delicate maintenance of water balance, sugar and fat metabolism, body temperature control, appropriate sleep programming, appetite and thirst responses, and the secretion of hormones are all facilitated by the hypothalamus gland. It is also involved in the control of the pituitary gland.

## How Hypothalamus 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. These compounds include degenerative products of the tissues themselves. They strongly activate the macrophage system, and within a few hours, the macrophages begin to devour the destroyed tissue byproducts. At times, the macrophages can

also affect the structure of the remaining healthy cells. The porcine hypothalamus PMG $^{\text{\tiny TM}}$  extract in Hypothalamus PMG appears to neutralize the circulating antibodies, thereby contributing to the maintenance of cellular health. $^{\dagger}$ 

#### 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. Calcium is important for the healthy functioning of the nervous system and transmission of nerve impulses. The calcium lactate in Hypothalamus

PMG is derived from pure-vegetable sources of calcium, not dairy sources.



Introduced in 1986



Content: 60 tablets

**Suggested Use:** One tablet per day, or as directed.

**Supplement Facts:**Serving Size: 1 tablet
Servings per Container: 60

	per Serving	%DV
Calories	1	
Cholesterol	5 mg	2%
Calcium	15 ma	2%

**Proprietary Blend:** 205 mg Porcine hypothalamus PMG<sup>™</sup> extract and magnesium citrate.

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

Each tablet supplies approximately: 145 mg porcine hypothalamus PMG™ extract.

Sold through health care professionals.





# Hypothalamus PMG®

How Hypothalamus PMG Keeps You Healthy (continued)

### 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.

## What Makes Hypothalamus PMG Unique

#### **Product Attributes**

Supplies approximately 145 mg porcine hypothalamus PMG extract per tablet

Provides support for the hypothalamus<sup>†</sup>

## Contains Protomorphogen<sup>™</sup> extracts

- Standard Process uses a unique manufacturing method of deriving tissue cell determinants from animal glands and organs
- > Help provide cellular support and rehabilitation to the corresponding
- > Important antigenic properties of nucleoprotein-mineral determinants are the foundation of the product<sup>†</sup>

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

> Not derived from a dairy source

## Manufacturing and Quality-Control Processes Low-temperature, high-vacuum drying technique

> Preserves the enzymatic vitality and nutritional potential of ingredients

### Not disassociated into isolated components

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

Degreed microbiologists and chemists in our on-site laboratories continually 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

Our founder, Dr. Royal 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 isolated nutrients. Following this philosophy, even a small amount of a whole food concentrate will offer enhanced nutritional support, compared to an isolated or fractionated vitamin. Therefore, one should examine the source of nutrients rather than looking at the quantities of individual nutrients on product labels.

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 Hypothalamus PMG

Carola R., et. al. 1995. *Human Anatomy and Physiology*. 3rd ed. McGraw Hill, Inc. 385, 386, 389, 406, 409-410, 489-490, 534, 553-554, 556, 880-881, 948, 975-976.

860-861, 946, 976-976.

Gayli Gray Anatomy, Crown Publishers, Inc.: New York. 1257, 1977.

Guyton A.C., Hall J.E. Behavioral and Mothetional Mechanisms of the Brain.

Textbook of Medical Physiology. 752.

Guyton A.C., Hall J.E. 1997. Human Physiology and Mechanisms of

Disease. 6th ed. W.B. Saunders Company: Philadelphia. 485-655.

Kare M.R., Brand J. 1986. Interaction of the Chemical Senses With
Nutrition. Academic Press, Inc. Harcourt Brace Jovanovich: Orlando. 205, 350, 338-339.

Mosby's Medical, Nursing, & Allied Health Dictionary, 5th ed. 1998. Mosby Year Book Inc. 802. Russell P., Tver D.F. 1989. The Nutrition and Health Encyclopedia. 2nd

ed. Van Nostrand Reinhold: New York. 274.

Shils M., Young V.R. 1988. Modern Nutrition in Health and Disease. 7th ed. Lea & Febiger. 559, 565.

Taber's Cyclopedic Medical Dictionary. 18th Ed. 1997. 1123.



800-558-8740 | standardprocess.com