Utrophin PMG®

Supports Healthy Uterine Function

The uterus is a major internal female reproductive organ where the fertilized egg is implanted and the fetus develops. The uterus is made up of three different layers called the endometrium, myometrium, and parametrium. The endometrial layer takes its cues from the hormone progesterone and becomes thicker and more vascular during pregnancy and during the last half of the menstrual cycle. The myometrium is the muscular layer of the uterus. Its muscle fibers wrap around the uterus in all directions and contract when called upon in childbirth to expel the fetus. Once the fetus has left the uterus, those same myometrial fibers contract again to close off the blood supply to the placenta. The parametrium is made up of connective tissue and is the outermost layer of the uterus. It is able to increase its size proportionately with the growing fetus by increasing the size of its cells, rather than the number of its cells. Together, these three layers work to sustain, protect, and deliver new life.

How Utrophin 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 bovine uterus PMG™ extract in Utrophin PMG appears to neutralize the circulating antibodies, 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. Calcium is important for the healthy functioning of the nervous system and transmission of nerve impulses. The calcium lactate in Utrophin PMG is derived from pure-vegetable sources of calcium, not dairy sources.†

Introduced in 1953

GF

Content:
90 tablets

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

Supplement Facts:
Serving Size: 1 tablet
Servings per Container: 90

	Amount per Serving	%DV
Calories	1	
Calcium	20 mg	2%
Sodium	20 mg	1%

Proprietary Blend: 192 mg
Bovine uterus PMG™ extract and magnesium citrate.

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

Each tablet supplies approximately: 125 mg bovine uterus PMG™ extract.

Sold through health care professionals.

Please copy for your patients.

GF This product contains less than 10 parts per million of gluten per serving size or less than 20 parts per million per the suggested use listed on each product label.

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

Standard Process®
800-558-8740 | standardprocess.com

Utrophin PMG®

How Utrophin 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 Utrophin PMG Unique

Product Attributes

Contains enzyme factors, minerals, amino acids, and proteins combined with bovine uterus PMG™ extract

› To help support the role of the uterus in supporting a healthy pregnancy†

Contains Protomorphogen™ 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 human tissues

› Important antigenic properties of nucleoprotein-mineral determinants are the foundation of the product†

The calcium lactate in Utrophin 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 Utrophin 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 Utrophin PMG®.*

Akiyama M., et al. 1999. Expression of macrophage inflammatory protein-1alpha (MIP-1alpha) in human endometrium throughout the menstrual cycle. *British Journal of Obstetrics and Gynaecology* 106(7): 725-730.

Anderson L.E. 1998. *Mosby's Medical, Nursing, & Allied Health Dictionary.* 5th ed. St. Louis, MO: Mosby: 1686-1687.

Bazot M., et al. 1998. Anatomic approach to the parametrium: value of computed tomographic *in vitro* study compared to dissection. *Surgical Radiological Anatomy* 20(2): 123-127.

Fujiwara H., et al. 1999. Membrane-bound cell surface peptidases in reproductive organs. *Journal of Endocrinology* 46(1): 11-25.

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.

Hodgson D.A., et al. Microwave endometrial ablation: development, clinical trials and outcomes at three years. *British Journal of Obstetrics and Gynaecology* 106(7): 684-694.

Kashket S., Yaskell T. 1997. Effectiveness of calcium lactate added to food in reducing intraoral demineralization of enamel. *Caries Research* 31(6): 429-433.

Koenig K., et al. 1991. Bioavailability of potassium and magnesium, and citraturic response from potassium-magnesium citrate. *Journal of Urology* 145(2): 330-334.

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

Mizunuma H., et al. 1996. Calcium supplements increase bone mineral density in women with low serum calcium levels during long-term estrogen therapy. *Journal of Endocrinology* 43(4): 411-415.

Murone C., et al. 1999. Localization of bradykinin B2 receptors in the endometrium and myometrium of rat uterus and the effects of estrogen and progesterone. *Endocrinology* 140(7): 3372-3382.

Ohtani M., et al. 1998. Absorbability of calcium from a new calcium supplement prepared from bovine marrow-free bone in rats. *Journal of Nutritional Science Vitaminology* 44(6): 887-895.

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

Simpkin J.C., et al. 1999. Effects of corticotrophin releasing hormone on contractile activity of myometrium from pregnant women. *British Journal of Obstetrics and Gynaecology* 106(5): 439-445.

Tabata M., et al. 1997. Importance of the transitional zone between the cervical stroma and the parametrium in the treatment of cervical carcinoma. *Journal of Obstetrics and Gynaecology Research* 23(2): 111-117.

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 Nephrologists* 10(5): 1090-1094.

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

Wu N., et al. 1994. Effects of magnesium citrate and phytin on reducing urinary calcium excretion in rats. *World Journal of Urology* 12(6): 323-328.

©2008 Standard Process Inc. ©2012 Standard Process Inc. (This is a subsequent edition of the work published in 2008.) All rights reserved. T8125 11/12

Standard Process®
800-558-8740 | standardprocess.com