

Neuroplex®

Maintains Healthy Function of the Nervous and Endocrine Systems

The use of glandular therapy, in which specific animal organ and gland tissues are ingested for the concentrated nutrients present in them, has had a long history of use across a variety of cultures. The basic premise in glandular therapy is “like heals like.” Neuroplex contains bovine, porcine, and ovine glands and tissues including brain, pineal, hypothalamus, pituitary, liver, and spleen to provide concentrated nutrients that are especially supportive to their parallel tissues in the human body. Vitamins and minerals contained in Neuroplex enable enzymes and hormones to function properly, contributing to the healthy maintenance of the nervous, endocrine, and immune systems, as well as other control functions for the body.†

How Neuroplex Keeps You Healthy

Promotes healthy endocrine and nervous system functions

The pineal gland is the site at which the hormone, melatonin, is produced and released in response to changes in light. Melatonin plays a critical role in the body’s biological clock, causing induction of sleep through its influence on circadian rhythms. Melatonin serves as the eyes to the body’s organs. Since melatonin passes through all cell membranes, all cells receive the information that regulates the body’s biological clock.†

Thiamine (vitamin B₁) influences mental attitude and is related to maintaining a healthy nervous system. It enhances cognitive activity and brain function. Pyridoxine (vitamin B₆) plays a predominant role in metabolic processes in the central nervous system and is necessary for normal brain function. It also helps regulate water balance throughout the body. Riboflavin (vitamin B₂) enhances the effectiveness of the thyroid hormone and is involved in adrenal gland function. Niacin (vitamin B₃) is important for normal nervous system function and also synthesizes the sex hormones.†

Maintains cellular health

Excess free radicals cause severe damage to normal tissues and healthy cells. Antioxidants are substances that neutralize free radicals. Melatonin is the most efficient free radical scavenger among the body’s natural antioxidants. Most scavengers work only in certain cells and in all limited cell locations. Melatonin, however, can permeate any cell throughout the body and provides special protection for the nucleus. Zinc, copper, and riboflavin support the immune system’s antibody function. Vitamin B₆ is required for DNA and RNA synthesis. Thiamine plays a vital role in energy release for all cells during carbohydrate metabolism.†

Please copy for your patients.



Introduced in 1986

Content:

40 capsules

Suggested Use: Two capsules per day, or as directed.

Supplement Facts:

Serving Size: 2 capsules

Servings per Container: 20

	Amount per Serving	%DV
Calories	5	
Cholesterol	5 mg	2%
Thiamine	0.9 mg	60%
Riboflavin	0.9 mg	50%
Niacin	40 mg	200%
Vitamin B ₆	8.9 mg	450%
Iron	8.9 mg	50%
Zinc	17.7 mg	120%
Copper	0.3 mg	20%

Proprietary Blend: 585 mg

Tillandsia usneoides, bovine orchic Cytosol™ extract, porcine brain PMG™ extract, bovine spleen, ovine spleen, defatted wheat (germ), bovine hypothalamus, bovine anterior pituitary, bovine liver, calcium lactate, para-aminobenzoate, bovine pituitary PMG™ extract, porcine brain, and ascorbic acid.

Other Ingredients: Gelatin, zinc liver chelate, iron liver chelate, niacinamide, water, pyridoxine hydrochloride, copper liver chelate, calcium stearate, colors, cocarboxylase, and riboflavin.

Two capsules supply approximately: 30 mg bovine hypothalamus, 50 mg porcine brain PMG™ extract, 25 mg bovine anterior pituitary, 89 mg bovine and ovine spleen, 89 mg bovine orchic Cytosol™ extract, and 180 mg tillandsia powder.

Sold through health care professionals.

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.



800-558-8740 | standardprocess.com

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

Neuroplex[®]

How Neuroplex Keeps You Healthy (continued)

Supports enzyme function

Riboflavin combines with a number of substances and proteins to produce coenzymes essential to cell metabolic functions. Vitamin B₆ acts as a coenzyme with other enzymes involved in cell growth and division. All cells depend upon iron to complete oxygen exchange because of its role in the function of most cell enzymes. Zinc and copper are essential to the structure and function of many enzymes. Copper-containing enzymes form a number of brain nerve transmitters.[†]

What Makes Neuroplex Unique

Product Attributes

Multiple nutrients from a variety of plant and animal sources

- › *Tillandsia usneoides* has long been known for its content of hormone precursors and vitamin E complex
- › Anterior pituitary, hypothalamus, pineal, brain PMG[™] extract, and orchic Cytosol[™] extract stimulate and provide support to the corresponding tissues in humans
- › Vitamins, minerals, and nutrients from plants and animal tissues work synergistically for maximum effect[†]

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 Neuroplex 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

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 Neuroplex[®].

Agte V.V., et al. 1998. Effect of riboflavin supplementation on zinc and iron absorption and growth performance in mice. *Biologic Trace Element Research* 65(2): 109-115.

Anderson L.E. 1998. *Mosby's Medical, Nursing, & Allied Health Dictionary*. 5th ed. St. Louis, MO: Mosby: 1366, 1427.

Aggar J. 1985. Zinc and reproduction. *Annual Review Nutrition Journal* 5: 43-68.

Arakawa Y., et al. 1992. Zinc status in liver and gastrointestinal diseases. *Journal of Nutritional Science and Vitaminology* 52(6): 529.

Arendt J. 1989. Melatonin: A New Probe in Psychiatric Investigation? *Br J Psychiatry* 155: 585-590.

Arendt J. 1994. Clinical Perspectives for Melatonin and Its Agonists [editorial]. *Biol Psychiatry* 35(1): 1-2.

Balch J.F., Balch P.A. 1997. *Prescription for Nutritional Healing*. 2nd ed. Garden City Park, NY: Avery Publishing Group: 14-16.

Bartsch H., Bartsch C. 1992. Antitumor Activity of the Pineal Gland: Effect of Unidentified Substances Versus the Effect of Melatonin. *Oncology* 49(1): 27-30.

Bailey D.W., Eckhart C.D. 1991. Analysis of flavins in ocular tissues of the rabbit. *Investigational Ophthalmology Visual Science* 32(7): 1981-1985.

Bender D.A. 1989. Vitamin B₆ requirements and recommendations. *European Journal of Clinical Nutrition* 43(5): 289-309.

Benedikt J., et al. 1996. Influence of different dietary vitamin B₆ supply during pregnancy and lactation on total vitamin B₆ concentration (pyridoxine, pyridoxal and pyridoxamine) in blood and milk. *International Journal of Vitamin and Nutrition Research* 66(2): 146-150.

Berndtner C.D. 1995. *Advanced Nutrition Micronutrients*. Boca Raton, FL: CRC Press: 88-105.

Bernstein A.L., Dinesen J.S. 1993. Brief communication: effect of pharmacologic doses of vitamin B₆ on carpal tunnel syndrome, electroencephalographic results, and pain. *Journal of the American College for Nutrition* 12(1): 73-76.

Betsandor L., et al. 1996. Thiamine, thiamine phosphates, and their metabolizing enzymes in the human brain. *Journal of Neurochemistry* 66(1): 250-258.

Beyer C.E., Steketee J.D., et al. 1998. Antioxidant Properties of Melatonin—An Emerging Mystery. *Biochem Pharmacol* 56(10): 265-272.

Blumenkorn D.H., et al. 1993. Beneficial effects of colestipol-niacin therapy on the common carotid artery: Two- and four-year reduction of intima-media thickness measured by ultrasound. *Circulation* 88(1): 20-28.

Bowden S., et al. 1994. Alcohol, thiamin deficiency, and neuropsychological disorders. *Alcohol Suppl* 2: 267-272.

Brady J.A., et al. 1995. Thiamin status, diuretic medications, and the management of congestive heart failure. *Journal of the American Dietetic Association* 95(5): 541-544.

Brent G.E., Bartley E.E. 1984. Thiamin and niacin in the rumen. *Journal of Animal Science* 59(3): 813-822.

Brown N.A., et al. 1998. Nutrition supplements and the eye. *Eye* 12(Pt 1): 127-133.

Brussaard J.H., et al. 1997. Micronutrient status, with special reference to vitamin B₆. *European Journal of Clinical Nutrition* 51(Suppl 3): S32-S38.

Butterworth R.F. 1995. Pathophysiology of alcoholic brain damage: synergistic effects of ethanol, thiamine deficiency and alcoholic liver disease. *Metabolic Brain Disorders* 10(1): 1-8.

Caster W.O., Meadows J.S. 1980. The three thiamin requirements of the rat. *International Journal of Vitamin Nutrition Research* 50(2): 125-130.

Chillard Y., Ollou J.F. 1995. Duxedrol infusion of oil in midlactation cows. 7. Interaction with niacin on responses to glucose, insulin, and beta-agonist challenges. *Journal of Dairy Science* 78(11): 2452-2463.

Cho K.S., et al. 1999. Reactive oxygen species-induced apoptosis and necrosis in bovine corneal endothelial cells. *Investigational Ophthalmology Visual Science* 40(5): 911-919.

Coffey C.J. 1988. *Melatonin*. 1st ed. Madison, CT: Fence Creek Publishing: 68, 69, 85.

Cohen A.M., et al. 1982. Effect of copper on carbohydrate metabolism in rats. *Isr J Med Sci* 18: 840-844.

Dakshinamurti K. 1994. *Vitamin receptors: Vitamins as Ligands in Cell Communication*. Cambridge, Great Britain: Cambridge University Press: 139-140, 156-168.

Davis C.D., Greger J.L. 1992. Longitudinal changes of manganese-dependent superoxide dismutase and other indexes of manganese and iron status in women. *American Journal of Clinical Nutrition* 55(3): 747-752.

DeCava J.A. 1997. Glandular Supplements. *Nutrition News and Views* 1(3): 1-10.

DeFrance F., Ouere-Sakva M.A. 1998. Therapeutic Applications of Melatonin and Related Compounds. *Horm Res* 49(3/4): 142.

Favler M., Hnninger I. 1997. Vitamins: B₆, B₁₂, B₉. Consequences of a deficiency, of excessive vitamins and value of systematic supplementation. *J Gynecol Obstet Biol Reprod (Paris)* 26(Suppl 3): 100-108.

Foreman J.W., et al. 1996. Nutritional intake in children with renal insufficiency: a report of the growth failure in children with renal diseases study. *Journal of the American College of Nutrition* 15(6): 579-585.

Garfinkel D., Berner Y.N. 1998. Antioxidants and Aging: Is Melatonin a Possible, Practical New Hope? *Nutrition* 14(9): 712-713.

Graham T.W. 1994. Serum zinc and copper concentrations in relation to spontaneous abortion in cows: implications for human fetal loss. *Journal of Reproduction and Fertility* 102(1): 253-262.

Huelther G. 1996. Melatonin as an Antiangiogenic Drug: Between Facts and Fantasy. *Gerontology* 42(2): 87-96.

Ingoen M., et al. 1991. Randomized, placebo-controlled trial of iron supplementation in infants with low hemoglobin levels fed iron-fortified formula [published erratum appears in *Pediatrics* 1992; 90(3): 474]. *Journal of Pediatrics* 88(2): 320-328.

Jacob S.W., Francane C.A., Lissow W.J. 1982. *Structure and Function in Man*. 5th ed. Philadelphia, PA: W.B. Saunders Company: 509.

Jan J.E., Espenosa H., et al. 1994. The Treatment of Sleep Disorders with Melatonin. *Dev Med Child Neurol* 36(2): 87-107.

Leeda M., et al. 1998. Effects of folic acid and vitamin B₆ supplementation on women with hyperhomocysteinemia and a history of preeclampsia or fetal growth restriction. *American Journal of Obstetrics and Gynecology* 179(1): 135-139.

Leibmann P.M., Woller A., et al. 1997. Melatonin and the Immune System. *Int Arch Allergy Immunol* 112(3): 203-211.

Mann W.A., et al. 1995. Trials of the effects of drugs and hormones on lipids and lipoproteins. *Current Opinions in Lipidology* 6(6): 354-359.

Mission A.O., Teas J., et al. 1995. Meditation, Melatonin and Breast/Prostate Cancer: Hypothesis and Preliminary Data. *Med Hypothesis* 44(1): 39-46.

Oyama T., et al. 1994. Efficiency of serum copper/zinc ratio for differential diagnosis of patients with and without lung cancer. *Biologic Trace Element Research* 42(2): 115-127.

Perev P.D., Zee P.C. 1997. Melatonin: A Clinical Perspective. *Ann Neurol* 42(4): 545-553.

Phoenix J., et al. 1998. Effect of vitamin B₆ supplementation in McArdle's disease: a strategic case study. *Neuromuscular Disorders* 8(3-4): 210-212.

Reiter R.J. 1991. Melatonin: The Chemical Expression of Darkness. *Mol Cell Endocrinol* 79(1-3): C153-C158.

Reiter R.J. 1992. The Aging Pineal Gland and Its Physiological Consequences. *Bioessays* 14(3): 169-175.

Ronco A.L., Halberg F. 1996. The Pineal Gland and Cancer. *Anticancer Res* 16(4A): 2033-2039.

Rossowski M.J. 1995. Effect of dietary caffeine and zinc on the activity of antioxidant enzymes, zinc, and copper concentration of the heart and liver in fast-growing rats. *Journal of Biological Trace Element Research* 50(3): 229-236.

Shils M.E., Young V.R. 1988. *Modern Nutrition in Health and Disease*. 7th ed. Philadelphia, PA: Lea & Febiger: 376-381.

Turnrow V. 1998. Melatonin for Insomnia and Jet Lag [editorial]. *Amer Acad Pediatrics* 97(3): 439-441.

Twer D.F., Russell P. 1989. *The Nutrition and Health Encyclopedia*. 2nd ed. New York, NY: Van Nostrand Reinhold: 445-446.

Van Wynsberghe D., et al. 1995. *Human Anatomy and Physiology*. 3rd ed. New York, NY: McGraw-Hill, Inc: 877.

Van Wynsberghe D., Noback C.R., Carola R. *Human Anatomy and Physiology*. 3rd ed. New York, NY: McGraw-Hill, Inc: 872.

Webb S.M., Puig-Domingo M. 1995. Role of Melatonin in Health and Disease. *Clin Endocrinol* 42(3): 221-234.

Willett W. 1990. *Nutritional Epidemiology*. New York, NY: Oxford University Press: 186.

Wilson D.J., et al. 1995. *Principles of Nutrition*. 2nd ed. New York, NY: John Wiley & Sons, Inc: 156-165.

Wurtman R.J. 1986. Melatonin in Humans. *J Neural Transm Suppl* 21: 1-8.

Zangen A., Shainberg A. 1997. Thiamine deficiency in cardiac cells in culture. *Biochemical Pharmacology* 54(5): 575-582.

