

# Circuplex®

## Circuplex Supports the Healthy Function of the Circulatory and Parasympathetic Nervous Systems

The B-complex family of vitamins work together as a team to keep us healthy, either directly or by playing a “behind-the-scenes” role in multiple physiological processes throughout the body. They directly affect the health and general well-being of most of our major organ systems, influencing things like nerve conduction, immune response, skin health, visual acuity, gastrointestinal efficiency, liver function, and energy production, just to name a few. The niacin (vitamin B<sub>3</sub>) found in Circuplex can help encourage proper circulation and keep the skin healthy. Vitamin B<sub>3</sub> also plays a part in nervous system function and assists in metabolizing carbohydrates, fats, and proteins. Vitamin B<sub>6</sub> is involved with more bodily processes than nearly any other nutrient, affecting physical and mental health alike. Vitamin B<sub>6</sub> helps regulate the delicate fluid balance in the body, promotes red blood cell formation, enhances brain function, and is necessary in synthesizing RNA and DNA, which carry our unique genetic coding to regulate cellular growth and reproduction.†

### How Circuplex Keeps You Healthy

#### *Promotes healthy nervous system function*

Both niacin and vitamin B<sub>6</sub> play a role in nervous system function. Vitamin B<sub>6</sub> is intimately involved in numerous metabolic processes within the central nervous system and is necessary for normal brain function.†

#### *Keeps your heart healthy*

Niacin helps promote healthy cholesterol levels in the blood in individuals with healthy levels. Vitamin B<sub>6</sub> discourages the formation of homocysteine and helps the body maintain healthy levels.†

#### *Maintains cellular health*

Niacin functions as two important coenzymes that are key to cell respiration, carbohydrate and protein metabolism, and lipid synthesis. Vitamin B<sub>6</sub> plays a direct role in regulating proper cell growth and division. Vitamin B<sub>6</sub> also promotes red-blood-cell formation and helps maintain the sodium/potassium balance, which is important in helping maintain proper water levels in the body.†

#### *Supports digestive function*

Both niacin and vitamin B<sub>6</sub> are needed to produce hydrochloric acid, which is needed to digest food. Niacin is involved with normal bile secretion and stomach fluids.†

*Please copy for your patients.*



**Introduced in 1964**

**Content:**

150 capsules

**Suggested Use:** One capsule per meal, or as directed.

**Supplement Facts:**

Serving Size: 1 capsule

Servings per Container: 150

	Amount per Serving	%DV
Calories	2	
Niacin	30 mg	150%
Vitamin B <sub>6</sub>	4.7 mg	240%

**Proprietary Blend:** 420 mg

Ribonucleic acid, arrowroot flour, dried buckwheat (leaf) juice, buckwheat (seed), bovine liver, phosphoric acid, porcine stomach, bovine spleen, ovine spleen, soy (bean), calcium lactate, defatted wheat (germ), para-aminobenzoate, bovine adrenal Cytosol™ extract, porcine brain, inositol, ascorbic acid, and magnesium citrate.

Other Ingredients: Gelatin, niacinamide, water, pyridoxine hydrochloride, calcium stearate, and colors.

**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

# Circuplex<sup>®</sup>

## What Makes Circuplex Unique

### Product Attributes

#### Multiple nutrients from a variety of plant and animal sources

- › Extracts from bovine, ovine, and porcine tissues provide nutrients and support to the corresponding tissues in humans
- › Vitamins, minerals, and nutrients from plants and animal tissues work synergistically for maximum effect<sup>†</sup>

### Organic Farming

A healthy ecosystem is created by using organic farming techniques, such as rotating crops, fertilizing the soil with nutrient-rich cover crops and byproducts from our processing, practicing strict weed-control standards, and continually monitoring the health of our plants

- › Assures the soil is laden with minerals and nutrients
- › Ensures plants are nutritionally complete and free from synthetic pesticides

### Manufacturing and Quality-Control Processes

Upon harvesting, nutrient-rich plants are immediately washed and promptly processed

- › Preserves nutritional integrity

### Low-temperature, high-vacuum drying technique

- › Preserves the enzymatic vitality and nutritional potential of ingredients

### Not disassociated into isolated components

- › The nutrients in Circuplex 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 Circuplex<sup>®</sup>.

- Agle V.V., et al. 1997. Effect of nicotinic acid on zinc and iron metabolism. *Biomaterials* 10(4): 271-276.
- Anderson L.E. 1998. *Mosby's Medical, Nursing, & Allied Health Dictionary*, 5th ed. St. Louis, MO: Mosby; 1108-1109, 1366.
- Azen S.P., et al. 1996. Progression of coronary artery disease predicts clinical coronary events. Long-term follow-up from the Cholesterol Lowering Atherosclerosis Study. *Circulation* 93(1): 34-41.
- Balch J.F., Balch P.A. 1997. *Prescription for Nutritional Healing*, 2nd ed. Garden City Park, NY: Avery Publishing Group; 15-16.
- Bender D.A. 1989. Vitamin B<sub>6</sub> requirements and recommendations. *European Journal of Clinical Nutrition* 43(5): 289-309.
- Benedikt J., et al. 1996. Influence of different dietary vitamin B<sub>6</sub> supply during gravidity and lactation on total vitamin B<sub>6</sub> concentration (pyridoxine, pyridoxal and pyridoxamine) in blood and milk. *International Journal of Vitamin and Nutrition Research* 66(2): 146-150.
- Berdanier C.D. 1995. *Advanced Nutrition Micronutrients*. Boca Raton, FL: CRC Press; 94-105.
- Bernstein A.L., Dinesen J.S. 1993. Brief communication: effect of pharmacologic doses of vitamin B<sub>6</sub> on carpal tunnel syndrome, electroencephalographic results, and pain. *Journal of the American College for Nutrition* 12(1): 73-76.
- Bhattacharyya M., et al. 1988. Microviscosity in lecithin liposomes: effect of nicotinic acid. *Archives of Biochemical Biophysics* 263(1): 117-120.
- Blankenhorn 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.
- Brussaard J.H., et al. 1997. Micronutrient status, with special reference to vitamin B<sub>6</sub>. *European Journal of Clinical Nutrition* 51(Suppl 3): S32-S38.
- Chillard Y., Ottou J.F. 1995. Duodenal 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.
- Coffee C.J. 1998. *Metabolism*, 1st ed. Madison, CT: Fence Creek Publishing; 68-69, 85.
- Favier M., Hingier I. Vitamins: B<sub>6</sub>, B<sub>12</sub>, B<sub>9</sub>. Consequences of a deficiency, of excessive vitamins and value of systematic supplementation. *J Gynecol Obstet Biol Reprod (Paris)* 26(Suppl 3): 100-108.
- Folkers K., et al. 1993. The activities of coenzyme Q<sub>10</sub> and vitamin B<sub>6</sub> for immune responses. *Biochem Biophys Res Commun* 193(1): 88-92.
- 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.
- Giri S.N., et al. 1994. Amelioration of bleomycin-induced lung fibrosis in hamsters by dietary supplementation with taurine and niacin: biochemical mechanisms. *Environmental Health Perspectives* 102(Suppl 1): 137-147.
- Guyton A.C., Hall J.E. 1997. *Human Physiology and Mechanisms of Disease*, 6th ed. Philadelphia, PA: W.B. Saunders Company; 588-589.
- Jacob S.W., Francone C.A., Lossow W.J. 1982. *Structure and Function in Man*, 5th ed. Philadelphia, PA: W.B. Saunders Company; 509.
- Jacobson T.A., et al. 1994. Fluvastatin and niacin in hypercholesterolemia: a preliminary report on gender differences in efficacy. *American Journal of Medicine* 96(6A): 64S-68S.
- Johansson J.O., et al. 1997. Nicotinic acid treatment shifts the fibrinolytic balance favourably and decreases plasma fibrinogen in hypertriglyceridaemic men. *Journal of Cardiovascular Risk* 4(3): 165-171.
- Kirschmann J.D. 1979. *Nutrition Almanac*. Revised ed. New York, NY: McGraw-Hill Book Company; 25-27, 36-37.
- Lapuerta P., et al. 1995. Use of neural networks in predicting the risk of coronary artery disease. *Computed Biomedical Research* 28(1): 38-52.
- Leeds M., et al. 1998. Effects of folic acid and vitamin B<sub>6</sub> supplementation on women with hyperhomocysteinemia and a history of pre-eclampsia or fetal growth restriction. *American Journal of Obstetrics and Gynecology* 179(1): 135-139.
- 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.
- Miller G.D., et al. 1996. Age considerations in nutrient needs for bone health. *Journal of the American College of Nutrition* 15(6): 553-555.
- Miller L.T., et al. 1985. The effect of dietary protein on the metabolism of vitamin B<sub>6</sub> in humans. *Journal of Nutrition* 115(12): 1663-1672.
- Morishita S., et al. 1986. Strains and species differences in experimental hyperlipidemia. *Nippon Yakurigaku Zasshi* 87(3): 259-264.
- Phoenix J., et al. 1998. Effect of vitamin B<sub>6</sub> supplementation in McArdle's disease: a strategic case study. *Neuromuscular Disorders* 8(3-4): 210-212.
- Pitchford P. 1993. *Healing With Whole Foods*. Revised ed. Berkeley, CA: North Atlantic Books; 122, 402-403.
- Rimland B., et al. 1978. The effect of high doses of vitamin B<sub>6</sub> on autistic children: a double-blind crossover study. *American Journal of Psychiatry* 135(4): 472-475.
- Rimm E.B., et al. 1998. Folate and vitamin B<sub>6</sub> from diet and supplements in relation to risk of coronary heart disease among women. *JAMA* 279(5): 359-364.
- Shils M.E., Young V.R. 1988. *Modern Nutrition in Health and Disease*, 7th ed. Philadelphia, PA: Lea & Febiger; 370-381.
- Stone N.J. 1996. Lipid management: a current diet and drug treatment options. *American Journal of Medicine* 101(4A): 4A40S-4A48S, 48S-49S.
- Sugihara J., et al. 1988. Studies on intestinal lymphatic absorption of drugs. II. Glyceride prodrugs for improving lymphatic absorption of naproxen and nicotinic acid. *Journal of Pharmacokinetics* 11(8): 555-562.
- Tully D.B., et al. 1994. Modulation of steroid receptor-mediated gene expression by vitamin B<sub>6</sub>. *FASEB J* 8(3): 343-349.
- Tver D.F., Russell P. 1989. *The Nutrition and Health Encyclopedia*, 2nd ed. New York, NY: Van Nostrand Reinhold; 366-368, 445-446.
- Van Wynsberghe D., Noback C.R., Carola R. 1995. *Human Anatomy and Physiology*, 3rd ed. New York, NY: McGraw-Hill, Inc; 872.
- Wilson E.D., Fisher K.H., Fuqua M.E. 1965. *Principles of Nutrition*, 2nd ed. New York, NY: John Wiley & Sons, Inc; 272-284, 290-294.

