# Circuplex Combines Key Components of the Vitamin B Complex-Vitamin B<sub>3</sub> and Vitamin B<sub>6</sub>-Plus Other **Important Nutrients**

All the members of 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. It also promotes red blood cell formation. Vitamin B<sub>6</sub> helps maintain the sodium/potassium balance, important in helping maintain proper water levels in the body.†

## Supports digestive function

Both niacin and vitamin B6 are needed to produce hydrochloric acid, which is needed to digest food. Niacin is involved with normal bile secretion and stomach fluids.†



Introduced in: 1964 Content: 150 Capsules

## **Supplement Facts:**

Serving Size: 1 capsule Servings per Container: 150

		%DV
Calories	2	
Niacin	30 mg	150%
Vitamin B <sub>6</sub>	4.7 mg	240%
Potassium	5 mg	<1%



# Circuplex<sup>®</sup>

## What Makes Circuplex Unique

## **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+

## **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 by-products 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

### **Unique Processing**

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

Preserves nutritional integrity

## Exclusive 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 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.

Proprietary Blend: 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), bovine adrenal Cytosol™ extract, inositol, porcine brain, ascorbic acid, and magnesium

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

Suggested Use: One capsule per meal, or as

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 Circuplex®.

Agte VV, et al. 1997. Effect of nicotinic acid on zinc and iron metabolism. Biometals 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

Azen S. P. et al. 1996. Progression of coronary artery disease predicts clinical coronary events. Long-term follow-up from the Cholesterol Lowering Atherosciencies 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.

Bended P.A. 1999. Visinain Bg. requirements and recommendations. European Journal of Clinical Nutrition 43(5): 289-309.

Benedikt J., et al. 1996. Influence of different citerary vitamin Bg. supply during gravidity and lactation on total vitamin Bg. 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 Microrativistics. Boas Raton, EL-CRC Press: 94-105.

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

Bhattacharyya M., et al. 1938. Microviscosity in lecithin liposomes: effect of incotnic acid. Archives of Buchemical Biophysics 263(1): 117-120.

Blankenhorn D.H., et al. 1998. Beneficial effects of colestipol-niacin therapy on the common carotid artery. Two- and four-year reduction of intimamedia thickness measured by ultrasound. Circulation 88(1): 20-28.

Blankenhorn D.H., et al. 1993. Beneficial effects of colestipol-niacin therapy on the common carotid artery. Two- and four-year reduction of intimamedia 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 Natrition 51(Suppl 3): 532-538.

Chilliard V., Ottou J. 1995. Duodenal infusion of oil in midiactation cows 7. Interaction with niacin on responses to glucose, insulin, and betaagonist challenges. Journal of Dairy Science 78(11): 2452-2463.

Goffee C.J. 1998. Metabolism. 1st ed. Madison, CT. Fence Creek Publishing 68-69, 85.

Favier M.-Hininger I. Vitamins: B<sub>1</sub>B<sub>6</sub>B<sub>2</sub>J<sub>2</sub>. 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. 1993. The activities of ocentryme 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. 1993. Uniformal 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 nechanisms. Environmental Health Perspect 102(Suppl 10): 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.
Leeda M., et al. 1998. Effects of folic acid and vitamin B<sub>6</sub> supplementation on women with hyperhomocysteinemia and a history of preeclampsia 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. 1986. Effect of vitamin B<sub>2</sub> supplementation in McArdle's disease: a strategic case study. Neuronuscular 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<sub>2</sub>, et al. 1978. The effect of high doses of vitamin B<sub>2</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( 359-364.

Shils M.E.; Young V.R. 1988. Modern Nutrition in Health and Disease. 7th cd. 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): 4A405-4A485, 485-495.

Sugihara J., et al. 1988. Studies on intestinal lymphatic absorption of drugs. II. Glyceride prodrugs for improving lymphatic absorption of naproxer and nicotinic acid. Journal of Pharmacobiodynamics 11(8): 555-562.

Tully D.B., et al. 1994. Modulation of steroid receptor-mediated gene expression by vitamin B.g. FASEB J B(3): 343-349.

Twer D.F., Russell P. 1989. The Nutrition and Health Encyclopedia. 2nd ed. New York, NY Yan Nostrand Reinhold: 366-368, 445-446.

Van Wynsherghe D., Noback C.F., Carola R. 1995. Human Anatomy and Physiology. 3rd ed. New York, NY: Mofraw-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.