

Livaplex®

A Whole Food Multivitamin for the Liver

The liver is the body's largest organ and performs over 500 different functions including the synthesis and utilization of carbohydrates, fats, and proteins, the metabolism and excretion of toxins from the body, and the storage of glycogen and several other nutrients. Livaplex is a special formula comprised of several Standard Process ingredients designed to support the liver. This product encourages healthy bile production and flow; the breakdown of fats, liver detoxification support, and the improvement of blood flow through the liver. All the above, in addition to zinc, copper, and iron, enhance the ability of the liver to function normally.†

How Livaplex Keeps You Healthy

Provides several essential vitamins and minerals to support cellular health and metabolism of macronutrients

Vitamin A supports healthy cellular growth and helps the body maintain healthy mucous membranes. At the cellular level, zinc supports DNA synthesis, cell signaling, and supports protein and cell structure and function. Zinc also plays a role in releasing hormones and supporting nerve impulse transmission. Copper is involved in producing cellular energy, supporting the body's natural antioxidant functions, and aiding in iron metabolism. Iron is required for oxygen transport and storage, energy metabolism, and many nutrient interactions. The B vitamins are important building blocks for many metabolic processes throughout the body. Vitamin B₆ supports the metabolism of carbohydrates through its facilitation of glycogen breakdown and niacin aids in carbohydrate, protein, and lipid synthesis. B₆ is also important for the formation and function of red blood cells. Iodine is a trace mineral required for thyroid hormone synthesis.†

Supports the liver's natural antioxidant functions

The liver is essential in eliminating toxins from the body. Cruciferous vegetables, like Spanish black radish, contain phytochemicals that stimulate enzymatic activity required to support liver detoxification.†

Supports digestive function

Betaine hydrochloride provides a supplemental source of hydrochloric acid (HCl), an acid found in the gastric juice of the stomach, to help breakdown food during digestion.†



Introduced in: 1969

Content: 90 Capsules

Supplement Facts:

Serving Size: 1 capsule

Servings per Container: 90

| | | %DV |
|------------------------|----------|-----|
| Calories | 3 | |
| Vitamin A | 1,260 IU | 25% |
| Niacin | 2.8 mg | 15% |
| Vitamin B ₆ | 0.8 mg | 40% |
| Iron | 2.7 mg | 15% |
| Iodine | 9.6 mcg | 6% |
| Zinc | 5.5 mg | 35% |
| Copper | 109 mcg | 6% |

Proprietary Blend: Bovine liver PMG™ extract, Spanish black radish (root), bovine liver, calcium lactate, carrot (root), *Tillandsia usneoides*, beet (root), dried beet (leaf) juice, oat flour, betaine hydrochloride, magnesium citrate, choline bitartrate, soy (bean), potassium bicarbonate, bovine kidney, bovine prostate, bovine adrenal Cytosol™ extract, defatted wheat (germ), bovine liver fat extract, bovine orchic extract, ascorbic acid, flaxseed oil extract, and mixed tocopherols (soy).

Other Ingredients: Gelatin, zinc liver chelate, iron liver chelate, water, calcium stearate, niacinamide, copper liver chelate, colors, pyridoxine hydrochloride, arabic gum, starch, sucrose, vitamin A palmitate, and prolamine iodine (zein).

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

Warning: Accidental overdose of iron-containing products is a leading cause of fatal poisoning in children under 6. Keep this product out of reach of children. In case of accidental overdose, call a doctor or poison control center immediately.

Sold through health care professionals.

Please copy for your patients



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Livaplex®

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What Makes Livaplex Unique

Product Attributes

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

- ▶ Extracts from bovine tissues provide cellular support and rehabilitation to the corresponding tissues in humans
- ▶ Vitamins, minerals, and nutrients from plants and animal tissues work synergistically for maximum effect†

Contains Protomorphogen™ extracts

- ▶ Standard Process uses a unique manufacturing method of deriving tissue cell determinants from animal glands and organs
- ▶ Important antigenic properties of nucleoprotein-mineral determinants are the foundation of the product†

Certified 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 Livaplex 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

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

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 Livaplex®.

Bender, DA. Novel functions of vitamin B₆. *Proc Nutr Soc*, 1994. 53(3): p. 625-30.

Cervantes-Laursan D, McEvaney NG, Moss J, Niacin. In: Shils M, Olson JA, Shike M, Ross AC, eds. *Modern Nutrition in Health and Disease*. 9th ed. Baltimore: Williams & Wilkins; 1999:401-411.

Cousins, R. J. (2006). Zinc. In B. A. Bowman, Russell, R.M. (Ed.), *Present Knowledge in Nutrition* (9th ed., Vol. 1, pp. 445-457). Washington D.C.: ISI Press.

Dakshinamurti, S, Dakshinamurti, K., Vitamin B₆. In *Handbook of Vitamins*, J. Zempleni, Rucker, R.B., McCormick, D.B., Suttie, J.W., Editor. 2007. CRC Press (Taylor & Francis Group): New York. p. 315-359.

Dunn, J. T. (1998). What's happening to our iodine? *J Clin Endocrinol Metab*, 83(10), 3398-3400.

Hankon, P. R., Wettber, D. M., & Barnes, D. M. (2007). Aqueous extract from Spanish black radish (*Raphanus sativus* L. var. *niger*) induces detoxification enzymes in the HepG2 human hepatoma cell line. *J Agric Food Chem*, 55(16), 6439-6446.

Harris, E. D. (1997). Copper. In B. L. O'Dell, Sunde, R.A. (Ed.), *Handbook of nutritionally essential minerals* (pp. 231-273). New York: Marcel Dekker, Inc.

Hietzel, B. S., Clugston, G.A. (1999). Iodine. In M. Shils, Olson, J.A., Shike, M., Ross, A.C. (Ed.), *Modern Nutrition in Health and Disease* (9th ed., pp. 253-264). Baltimore: Williams & Wilkins.

Jacob R, Swenseid M. Niacin. In: Ziegler EE, Filer L.J., eds. *Present Knowledge in Nutrition*. 7th ed. Washington D.C.: ISI Press; 1996:185-190.

Leklem, JE. Vitamin B₆. In *Handbook of Vitamins*; L. Machlin, Editor. 1991. Marcel Dekker Inc: New York, p. 341-378.

Lugasi, A., Blazowicz, A., Haggmasi, K., Kocsis, I., & Kory, A. (2005). Antioxidant effect of squeezed juice from black radish (*Raphanus sativus* L. var. *niger*) in alimentary hyperlipidaemia in rats. *Phytother Res*, 19(7), 587-591.

Mackey, AD, Davis, S.R., Gregory, J.F. Vitamin B₆. In *Modern Nutrition in Health and Disease*, M.E. Shils, Shike, M., Ross, A.C., Caballero, B., Cousins, R.J., Editor. 2006. Lippincott Williams & Wilkins: Philadelphia. p. 452-461.

McCormick, DB. Vitamin B₆. In *Present Knowledge in Nutrition*, B.A. Bowman, Russell, R.M., Editor. 2006. International Life Sciences Institute: Washington, D.C. p. 269-277.

Trumbo, P., Yates, A. A., Schlicker, S., & Poos, M. (2001). Dietary reference intakes: vitamin A, vitamin K, arsenic, boron, chromium, copper, iodine, iron, manganese, molybdenum, nickel, silicon, vanadium, and zinc. *J Am Diet Assoc*, 101(3), 294-301.

Turnlund, J. R. (2006). Copper. In M. E. Shils, Shike, M., Ross, A.C., Caballero, B., Cousins, R.J. (Ed.), *Modern Nutrition in Health and Disease* (10th ed., pp. 289-299). Philadelphia: Lippincott Williams & Wilkins.

Uluy, R., Olivares, M., & Gonzalez, M. (1998). Essentiality of copper in humans. *Am J Clin Nutr*, 67(5 Suppl), 952S-959S.

Yip, R., Dallman, P.R. (1996). Iron. In E. E. Ziegler, Filer, L.J. (Ed.), *Present Knowledge in Nutrition* (7th ed., pp. 277-292). Washington D.C.: ISI Press.

