

Please Copy for Your Patients

# A Chelated Zinc Product That Contains Iron and Copper Along With Bovine Liver and Oat Flour

The fact that zinc is not often mentioned in today's nutritional dialogue in no way reflects upon the important role this mineral plays in the body's general health and wellbeing. Zinc plays primary and secondary roles in everything from reproductive health to our senses of smell and taste. It is intimately involved with metabolic processes and actively supports immune response. Iron is necessary for making hemoglobin, supplying oxygen to the body's red blood cells, and is important for normal growth. Copper is essential to the formation of bone and works with zinc and vitamin C to form elastin—the protein that forms the greater portion of elastic tissue fibers.†

# How Chezyn Keeps You Healthy

## Maintains a healthy skeletal system

Zinc is essential in forming collagen—the protein that makes up inelastic fibers of tendons, ligaments, and connective tissue. The body needs copper to maintain healthy joints. Iron is important for appropriate and consistent growth patterns.†

#### Enhances metabolic efficiency

Zinc is part of over 80 enzymatic systems in the body and aids in the function of many glands and organs, especially those of the reproductive system. Zinc is needed to metabolize reproductive hormones. Iron is essential for many enzymes, including catalase, which is responsible for breaking down hydrogen peroxide into water and oxygen. $^{\dagger}$ 

#### Stimulates healthy cell division and growth

Iron is needed to combine with protein and make hemoglobin for red blood cells. Hemoglobin is responsible for carrying oxygen from the lungs to all the tissues of the body. All cells depend upon the presence of iron to complete ongoing oxygen exchange. Zinc supports DNA synthesis and cell replication cycling. Adequate amounts of zinc in the circulating blood cells work to stabilize cell membranes and increase intracellular efficiency.†

#### Supports a healthy immune system

Zinc promotes a healthy systemic immune response. Iron also supports a healthy immune system and is involved in energy production.  $\dagger$ 



Introduced in:
1981
Content:
90 Tablets

Supplem	nent Fact	s:
Serving Size: 1 tablet Servings per Container: 90		
Col thigg po. c.	oritation: 55	%DV
Calories	2	
Iron	5 mg	30%
Zinc	10 mg	70%
Copper	0.2 mg	10%





## What Makes Chezyn Unique

## **Unique Product Attributes**

Combines the synergistic and complementary mineral complexes of zinc, iron, and copper

 Provides superior support to a multitude of physiological systems not found in single nutrient products+

### Multiple nutrient and mineral product from plant and animal sources

- · Extracts from bovine 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†

## **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 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 Chezyn 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: Bovine liver, beet (root), dried beet (root) juice, and oat flour.

Other Ingredients: Zinc liver chelate, iron liver chelate, honey, copper liver chelate, arabic gum, and calcium stearate.

Suggested Use: One tablet per day, or as directed

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

Sold to health care professionals.

Kretsch M.J. 1998. Cognitive function, iron status, and hemoglobin concentrations in obese dicting women. European Journal of Clinical Nutrition 52(7): 512-518.

Oginara H., et al. 1995. Plasma copper and antioxidant status in Wilson's disease. Pediatric Research 37(2): 219-226.

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

Palupi L., et al. 1997. Effective community intervention to improve hemoglobin status in preschoolers receiving once-weekly iron supplementation.

American Journal of Clinical Nutrition 65(4): 1057-1061.

Pennington J.A. 1996. Intakes of minerals from diets and foods: is there a need for concern? Nutrition Journal 126(9 Suppl): 2304S-2308S.

Perhington JA. 1995. Linkased or minerals from netes and toods; is there a need not concern Nutrition Journal 16(9) Supply: 2308-2308.

Polenik P. 1995. Zinc in etiology of periodottal disease. Medical Hypotheses 40(3): 182-185.

Prasad A.S. 1996. Zinc: The Biology and Therapeutics of an Ion. Annals of Internal Medicine. Annals of Internal Medicine 125: 142-144.

Probaska JR., Lukasecuyz O. A. 1981. Copper deficiency suppresses the immune response in mice. Science 213,559.

Reyes J.G. 1996. Zinc transport in mammalian cells. Am J Physiol 270(2 Pt 1): C401-C410.

Rossowska 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.

Rossowska M. J., et al. 1995. Effect of dietary caffeine and zinc on the activity of antioxidant enzymes, zinc, and copper concentrations of the heart and liver in fast-growing rats. Journal Research Science 218-266.

and liver in fast-growing rats. Biology Trace Element Research 50(3): 229-236.

Russell P, Twer DE 1989: The Nutrition and Health Encyclopedia. 2nd ed. New York, NY: Van Nostrand Reinhold: 130-131, 285-287, 584-585.

Shils ME., Young VR. 1983. Modern Nutrition in Health and Disease. 7th ed. Philadelphia, PA: Lea & Febiger: 193-221, 238-529.

Southon S., et al. 1986. Intestinal microflora, morphology and enzyme activity in zinc-deficient and Zn-supplemented rats. British Journal of Nutrition 55(3): 603

Nutrition 55(3), 603.
Stamp T.C. 1988. Mineral Metabolism. Journal: Nutrition in the clinical management of disease. 2nd ed. London, UK. Edward Arnold: 290-325.
Turnbull A.J., Thompson R.P. 1989. Zinc. – a precious metal. B-N-F-Nutr-Bull-Br-Nutr-Foundation 14(1): 23-35.
Willett W. 1990. Nutritional Epidemiology. New York, NY: Oxford University Press: 179-180, 184-186.
Wilson E.D., et al. 1965. Principles of Nutrition. 2nd ed. New York, NY: John Wiley & Sons, Inc. 156-165, 189-193.
Yang R.S. 1995. Supplemental dietary cysteine elevates kidney metallothionein in rats by a mechanism involving altered zinc metabolism. Nutrition Journal 125(5): 1167-1174.

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 Chezyn\*.

Anderson L.E. 1998. Mosby's Medical, Nursing. & Allied Health Dictionary. 5th ed. St. Louis, MO: Mosby: 399-400, 746, 874, 1746.

Anderson LE. 1998. Mosby's Medical, Nursing. & Allied Health Dictionary. 5th ed. St. Louis, MO: Mosby: 399-400, 746,874, 1746.
Aggar J. 1985. Zinc and reproduction. Annual Review Nutrition Journals 5-43.68.
Aggar J., Everett G.A. 1991. Low zinc intake affects maintenance of pregnancy in guinea pigs. Journal of Nutrition 121(2): 192-200.
Arakawa T., et al. 1992. Zinc status in liver and gastrointestinal diseases. Journal of Nutritional Science and Vitaminology Spec No: 526-529.
Bronner E. 1995. Nutrition and Health, Topics and Controversies. Boca Raton, Et. CRC Press, Inc. 166-167.
Carola R., et al. 1995. Human Anatomy and Physiology. 3rd ed. New York, NY. McGraw-Hill, Inc.: 606, 874-877, 888-926.
Cohen A. M., et al. 1982. Effect of opper on carbohydrate metabolism in rats. In Plud Sci 18, 804-844.
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.
Elblom B. 1997. Micronutrients: effects of varietion in [Hb] and iron deficiency on physical performance. Nutrition and Fitness-Metabolic and behavioral aspects in health and disease. World Rev Nutr Diet 82: 122-130.
Favier A.E. 1992. The role of zinc in reproduction. Hormonal mechanisms. Biology Trace Element Research 32: 363-382.

Favier A. E. 1992. The role of zinc in reproduction. Hormonal mechanisms. Biology Trace Element Research 32: 363-382. Feller D.J., et al. 1982. Alterations in neurotransmitter receptor binding in discrete areas of the copper deficient rat brain. Journal of Neurochemistry 38;519.

50,319.

Feller D.J., O'Dell B.L. 1980. Dopamine and norepinephrine in discrete areas of copper deficient rat brain. Journal of Neurochemistry 34, 1259.

Graham T.W. et al. 1994. Serum zinc and copper concentrations in relation to spontaneous abortion in cows: implications for human fetal loss Journal of Reproductive Fertility 102(1): 253-262. Guyton A.C., Hall J.E. 1997. Human Physiology and Mechanisms of Disease. 6th ed. New York, NY: W.B. Saunders Company: 275-287

Ingoyen M., et al. 1991. Randomized, placebo-controlled trial of iron supplementation in infants with low hemoglobin levels fed iron-fortified formula. Journal of Pediatrics 88(2): 320-326.

Kare M.R., Brand J.G. 1986. Interaction of the Chemical Senses with Nutrition. Orlando, FL: Academic Press, Inc. Published by Harcourt Brace

Klevay L.M. 1984. Journal of Reproduction. US Department of Agriculture. Res. Serv. [415] 29