

Zinc HVP Chelate is a supplement based on chelated zinc with hydrolysed vegetable protein. In the chelation process, the mineral has been bound and surrounded by a hydrolysed vegetable protein molecule (amino acids) that facilitates its absorption through the intestinal walls. Each capsule provides 25 mg of elemental zinc.

HEALTH CLAIMS (EU Regulation 432/2012): Zinc contributes to normal acid-base balance; normal carbohydrate, macronutrient, fatty acid and vitamin A metabolism; normal **cognitive function**; normal DNA synthesis; normal **fertility** and **reproduction**; maintenance of normal **testosterone** levels; normal protein synthesis; maintenance of normal bones, hair, nails and skin; maintenance of normal **vision**; normal functioning of the **immune system**; protection of cells from oxidative damage; and the process of cell division.

Ingredients: Bulking agent (microcristalline cellulose), HVP from rice** (zinc chelate), anticaking agents (magnesium salts of fatty acids and silicon dioxide), vegetable capsule (glazing agent: hydroxypropylmethylcellulose; humectant: purified water).

1 capsule (973 mg)	Size and format:
25 mg (250%*)	100 vegetable capsules
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	Recommended daily dose: 1 capsule daily with food. If you are taking medications, take this product a few hours before or after them. Do not exceed the stated recommended daily dose.
	1 capsule (973 mg) 25 mg (250%*)

Indications and uses:

- As an immune system booster. As an antioxidant protector. For heavy metal poisoning.
- Important in male sexual development and prostate health (benign prostatic hyperplasia). Male infertility.
- In cases of acne and skin problems.
- Zinc deficiency states often occur in cases of alcoholism, candidiasis, premenstrual syndrome, during fibrocystic breast disease and in people with rheumatoid arthritis, and zinc deficiency is also linked to the development of Alzheimer's disease.

Cautions: Do not take during pregnancy and lactation. Consult your health care professional before taking this product if you are on medication or have special medical conditions.

DETAILS:

New Roots Herbal's **Zinc HVP Chelat** is a form of chelated zinc. This means that the mineral has been bound to a protein molecule (amino acid), which will facilitate its absorption through the walls of the intestine and thus reach the blood more easily. The protein molecules used are hydrolysed vegetable protein (HVP).

Zinc belongs to the group of so-called trace minerals or trace elements. Although only small amounts of these are necessary, they are important for achieving and maintaining good health.

They are part of the body's tissues and fluids, are essential in nerve responses, muscle contraction, maintenance of body fluid balance and in the production and secretion of hormones.



INGREDIENTS:

<u>ZINC (chelated, PHV</u>): the physiological functions of zinc depend on its bioavailability in tissues, which in turn depends on the intestinal absorption of zinc. Protein-derived peptides can improve zinc absorption and bioavailability. These complexes (chelates) provide stability with gastrointestinal digestion by increasing their intestinal absorption ⁽¹⁾.

Zinc is an essential mineral and cofactor in more than 100 enzyme systems. It has important antioxidant properties. It is an essential component of superoxide dismutase (SOD), an enzyme whose antioxidant effect protects cells against free radicals and heavy metals. Zinc has been shown to provide protection against cadmium, lead, nickel, aluminium and mercury poisoning ⁽²⁻⁴⁾.

It also plays a key role in the synthesis of RNA/DNA nucleic acids responsible for cell division, growth and repair ^(5, 6).

It is considered very important for the immune function as it is able to stimulate T-cell production and improve thymus gland function. It has infection-fighting properties. It prevents the growth of viruses, especially those that cause colds or *Herpes simplex*. There is evidence that AIDS patients are deficient in zinc ^(7, 11).

Zinc is an essential nutrient for prostate health. It plays an important role in the prevention and treatment of BPH. It is accumulated by the prostate gland to regulate excessive DHT production. Zinc is involved in sperm production and therefore positively influences male fertility ⁽¹²⁻¹⁵⁾.

Zinc is an integral part of the insulin hormone and is therefore also involved in insulin metabolism ^(16, 17).

The skin needs significant amounts of zinc, which is why this mineral has a healing effect on the tissues (e.g. after operations). Zinc is an ideal supplement for burns, injuries, wounds, as well as healing disorders (due to diabetes). Zinc treatment also works well for skin diseases (acne, eczema and psoriasis) ⁽¹⁸⁻²⁰⁾.

References:

2) Frassinetti, Stefania, et al. "The role of zinc in life: a review." Journal of environmental pathology, toxicology and oncology 25.3 (2006).

3) Seagrave, JeanClare, Robert A. Tobey, and C. Edgar Hildebrand. "Zinc effects on glutathione metabolism relationship to zinc-induced protection from alkylating agents." Biochemical pharmacology 32.20 (1983): 3017-3021.

4) Afonne, Onyenmechi Johnson, et al. "Zinc protection of mercury-induced hepatic toxicity in mice." Biological and Pharmaceutical Bulletin 23.3 (2000): 305-308.

5) Prasad, Ananda S. "Zinc: an overview." Nutrition (Burbank, Los Angeles County, Calif.) 11.1 Suppl (1995): 93-99.

6) Eckhert, Curtis D., and Lucille S. Hurley. "Reduced DNA synthesis in zinc deficiency: regional differences in embryonic rats." The Journal of nutrition 107.5 (1977): 855-861.

7) Rink, Lothar. "Zinc and the immune system." Proceedings of the Nutrition Society 59.4 (2000): 541-552.

8) Haase, Hajo, and Lothar Rink. "The immune system and the impact of zinc during aging." Immunity & Ageing 6.1 (2009): 9.

9) Mocchegiani, Eugenio, and Mario Muzzioli. "Therapeutic application of zinc in human immunodeficiency virus against opportunistic infections." The Journal of nutrition 130.5 (2000): 1424S-1431S.

10) Read, Scott A., et al. "The Role of Zinc in Antiviral Immunity." Advances in Nutrition (2019).

11) Mocchegiani, Eugenio, and Mario Muzzioli. "Therapeutic application of zinc in human immunodeficiency virus against opportunistic infections." The Journal of nutrition 130.5 (2000): 1424S-1431S.

12) Leitzmann, Michael F., et al. "Zinc supplement use and risk of prostate cancer." Journal of the National Cancer Institute 95.13 (2003): 1004-1007.

13) Wakwe, Victor C., Ehimen Odum, and Collins Amadi. "The impact of plasma zinc status on the severity of prostate cancer disease." Investigative and Clinical Urology 60.3 (2019): 162-168.

14) Gutiérrez-González, Enrique, et al. "Dietary zinc and risk of prostate cancer in Spain: MCC-Spain study." Nutrients 11.1 (2019): 18.

15) Prasad, Ananda S., et al. "Zinc status and serum testosterone levels of healthy adults." Nutrition 12.5 (1996): 344-348.

¹⁾ Udechukwu, M. Chinonye, Stephanie A. Collins, and Chibuike C. Udenigwe. "Prospects of enhancing dietary zinc bioavailability with food-derived zinc-chelating peptides." Food & function 7.10 (2016): 4137-4144.

¹⁶⁾ Islam, Md Rafiqul, et al. "Zinc supplementation for improving glucose handling in pre-diabetes: a double blind randomized placebo controlled pilot study." Diabetes research and clinical practice 115 (2016): 39-46.

¹⁷⁾ Kelishadi, Roya, et al. "Effect of zinc supplementation on markers of insulin resistance, oxidative stress, and inflammation among prepubescent children with metabolic syndrome." Metabolic syndrome and related disorders 8.6 (2010): 505-510.

¹⁸⁾ Lin, Li-Ching, et al. "Zinc supplementation to improve mucositis and dermatitis in patients after radiotherapy for head-and-neck cancers: a double-blind, randomized study." International Journal of Radiation Oncology* Biology* Physics 65.3 (2006): 745-750.

¹⁹⁾ Lansdown, Alan BG, et al. "Zinc in wound healing: theoretical, experimental, and clinical aspects." Wound repair and regeneration 15.1 (2007): 2-16.

²⁰⁾ Lei, Li, et al. "Abnormal serum copper and zinc levels in patients with psoriasis: A meta-analysis." Indian journal of dermatology 64.3 (2019): 224.