

Selenium

Code: FE1459 – 100 vegetable capsules



Selenium is a trace mineral, considered an important essential antioxidant for increasing levels of the enzyme glutathione peroxidase, which helps reduce lipid oxidation. Selenium protects the immune system by stimulating antibody production, especially when combined with vitamin E, with which it works in synergy. It intervenes in numerous metabolic processes. The “L-selenomethionine” form has been chosen for its greater absorption and bioavailability.

Ingredients: Bulking agent: microcrystalline cellulose, l-selenomethionine, anti-caking agent: magnesium salts of fatty acids and silicon dioxide, vegetable capsule (glazing agent: hydroxypropylmethylcellulose; purified water).

Size and format:

100 vegetable capsules

Nutritional information:

2 capsules
(538 mg)

Selenium	200 µg (364%*)
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Recommended daily dose:

1 capsule twice daily.
Do not exceed the stated recommended daily dose.

*NRV: Nutrient Reference Value in %.

Indications and uses:

- It stimulates antibody production, improving immune function.
- Selenium is essential for male reproduction.
- It can help improve mood.
- It's an important supplement for diseases of the heart and high blood pressure. It may increase energy levels.
- It can help improve pancreatic function. It regulates thyroid hormone metabolism.
- Smoking and certain chronic diseases increase the need for an extra supply of dietary selenium.
- Selenium is a good antioxidant and anti-inflammatory.

Cautions:

Consult with a professional before using this product if you have a history of non-melanoma skin cancer. Since fiber can decrease mineral absorption, fiber and minerals should be taken at different times.

SELENIUM: Selenium improves immune function by increasing antibody production. Supplementation with selenium has shown marked immune-stimulating effects, including greater T cell proliferation T⁽¹⁾. Associated with immune function, selenium deficiency is associated with a greater risk of mortality in HIV patients⁽²⁾, and its supplementation as adjuvant treatment can help reduce the progression of this disease⁽³⁾.

It can be helpful for the prevention of cancer, especially in patients with low blood selenium levels⁽⁴⁾. Many studies have indicated a relationship between selenium intake and mortality by cancer⁽⁵⁻⁶⁾. Selenium supplementation may reduce not only the risk of cancer, but also that of its progression and metastasis⁽⁷⁻⁸⁾.

It is essential for testicular function and reproduction. Several studies show that selenium deficiency causes infertility. Sperm contains large quantities of this trace mineral, which is lost in considerable amounts during ejaculation, so the need for selenium is greater in men. It improves sperm quality and fertility⁽⁹⁻¹⁰⁾.

Low selenium levels are related with mood disorders, with a higher incidence of depression, anxiety, etc. Its supplementation improves mood (anxiety, depression and fatigue)⁽¹¹⁻¹²⁾.

Selenium is present in the active site of important proteins for thyroid hormone metabolism. Selenium supplementation affects thyroid function by decreasing serum concentrations of TSH and FT4⁽¹³⁻¹⁴⁾.

There is extensive evidence on the role of selenium in the cardiovascular system. It improves the plasma lipid profile, reduces insulin levels, and improves other markers of cardiovascular risk⁽¹⁵⁻¹⁶⁾.

Due to its antioxidant and anti-inflammatory activity, selenium can be of help for diseases related with oxidative stress and inflammation, such as rheumatoid arthritis, pancreatitis or asthma⁽¹⁷⁻²⁰⁾.

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References:

- 1) Kiremidjian-Schumacher, Lidia, et al. "Supplementation with selenium and human immune cell functions." *Biological trace element research* 41.1-2 (1994): 115-127.
- 2) Baum, Marianna K., et al. "High risk of HIV-related mortality is associated with selenium deficiency." *JAIDS Journal of Acquired Immune Deficiency Syndromes* 15.5 (1997): 370-374.
- 3) Hurwitz, Barry E., et al. "Suppression of human immunodeficiency virus type 1 viral load with selenium supplementation: a randomized controlled trial." *Archives of internal medicine* 167.2 (2007): 148-154.
- 4) Duffield-Lillico, Anna J., et al. "Baseline characteristics and the effect of selenium supplementation on cancer incidence in a randomized clinical trial: a summary report of the Nutritional Prevention of Cancer Trial." *Cancer Epidemiology and Prevention Biomarkers* 11.7 (2002): 630-639.
- 5) Clark, Larry C., Kenneth P. Cantor, and W. H. Allaway. "Selenium in forage crops and cancer mortality in US counties." *Archives of Environmental Health: An International Journal* 46.1 (1991): 37-42.
- 6) Knekt, Paul, et al. "Is low selenium status a risk factor for lung cancer?." *American journal of epidemiology* 148.10 (1998): 975-982.
- 7) Rayman, Margaret P. "Selenium in cancer prevention: a review of the evidence and mechanism of action." *Proceedings of the Nutrition Society* 64.4 (2005): 527-542.
- 8) Bardia, Aditya, et al. "Efficacy of antioxidant supplementation in reducing primary cancer incidence and mortality: systematic review and meta-analysis." *Mayo Clinic Proceedings*. Vol. 83. No. 1. Elsevier, 2008.
- 9) Mistry, Hiten D., and Lesia O. Kurlak. "Selenium in Fertility and Reproduction." *Handbook of Fertility*. 2015. 261-272.
- 10) Safarinejad, Mohammad Reza, and Shiva Safarinejad. "Efficacy of selenium and/or N-acetyl-cysteine for improving semen parameters in infertile men: a double-blind, placebo controlled, randomized study." *The Journal of urology* 181.2 (2009): 741-751.
- 11) Finley, John W., and James G. Penland. "Adequacy or deprivation of dietary selenium in healthy men: clinical and psychological findings." *The Journal of Trace Elements in Experimental Medicine: The Official Publication of the International Society for Trace Element Research in Humans* 11.1 (1998): 11-27.
- 12) Benton, David, and Richard Cook. "Selenium supplementation improves mood in a double-blind crossover trial." *Psychopharmacology* 102.4 (1990): 549-550.
- 13) Olivieri, Oliviero, et al. "Low selenium status in the elderly influences thyroid hormones." *Clinical Science* 89.6 (1995): 637-642.
- 14) Winther, Kristian Hillert, et al. "Does selenium supplementation affect thyroid function? Results from a randomized, controlled, double-blinded trial in a Danish population." *European journal of endocrinology* 172.6 (2015): 657-667.
- 15) Rayman, Margaret P., et al. "Effect of supplementation with high-selenium yeast on plasma lipids: a randomized trial." *Annals of internal medicine* 154.10 (2011): 656-665.
- 16) Raygan, Fariba, et al. "Selenium supplementation lowers insulin resistance and markers of cardio-metabolic risk in patients with congestive heart failure: a randomised, double-blind, placebo-controlled trial." *British Journal of Nutrition* 120.1 (2018): 33-40.
- 17) Peretz, Anne, et al. "Adjuvant treatment of recent onset rheumatoid arthritis by selenium supplementation: preliminary observations." *Rheumatology* 31.4 (1992): 281-282.
- 18) Kuklinsky, B., and R. Schweder. "Acute pancreatitis, a free radical disease; reducing the lethality with sodium selenite and other antioxidants." *J Nutr Environ Med* 6 (1996): 393-394.
- 19) McCloy, Rory. "Chronic pancreatitis at Manchester, UK." *Digestion* 59.Suppl. 4 (1998): 36-48.
- 20) Allam, Mohamed Farouk, and Rosario A. Lucena. "Selenium supplementation for asthma." *Cochrane Database of Systematic Reviews* 2 (2004).