

# L- Lysine

Code: FE0252 – 100 vegetable capsules



**L-Lysine** is a food supplement based on **L-lysine** which provides **500 mg per capsule** in its **free, natural** form.

**Ingredients:** L-Lysine monohydrochloride, anticaking agents (magnesium salts of fatty acids and silicon dioxide), vegetable capsule (glazing agent: hydroxypropylmethylcellulose; purified water).

#### Nutritional information:

**1 capsule  
(733 mg)**

L-Lysine

500 mg

#### Size and format:

100 vegetable capsules.

#### Recommended daily dose:

1 to 3 capsules per day, half an hour before meals. Check with your doctor if using it for more than 6 months.

Do not exceed the stated recommended daily dose.

#### Indications and uses:

- *Herpes simplex* virus in the mouth or genital area.
- Mouth sores.
- Prevention of cardiovascular diseases.
- Osteoporosis.
- This product can be described as very positive for post-operative recovery and sports injuries.

#### Cautions:

Do not use if pregnant or breastfeeding, or in children.

#### DETAILS:

L-Lysine is one of the 9 essential amino acids necessary for balanced nutrition and good health. It is necessary for bone formation and development, especially in childhood. It promotes calcium absorption and regulates the appropriate nitrogen level in adults. It aids in the production of antibodies, hormones and enzymes, it promotes collagen formation and tissue repair, and aids gastric function as well as promoting appetite.

Because of its antiviral activity and its blocking effect on the production of arginine (which stimulates the development of herpes) lysine has a very positive proven effect in fighting and preventing the *Herpes simplex* virus, as well as the development of mouth sores and genital herpes. This feature is particularly enhanced if foods rich in the amino acid arginine (peanuts, almonds, walnuts, oats, chocolate) are eliminated from the diet and if this amino acid is taken together with bioflavonoids and vitamin C, which protects lysine levels in the body.

Lysine deficiencies can result in anaemia, enzyme problems, hair loss, lack of concentration, irritability, lack of energy, lack of appetite, reproductive problems, weight loss and developmental delay.

#### INGREDIENTS:

**L-LYSINE:** The most promising use of lysine is for the management and prevention of painful and unsightly sores caused by the herpes simplex virus (HSV). Lysine supplementation works by tipping the balance between lysine and arginine in favour of lysine. This enhances herpes outbreaks because the herpes virus depends on the presence of arginine for replication<sup>(1-3)</sup>.

Lysine has also proven useful in the prevention of atherosclerosis, a hardening of the artery walls caused by lipoprotein (fat) deposits. Lysine may loosen and prevent the creation of such deposits, thereby keeping arterial walls flexible. Therefore making the person less susceptible to hypertension (high blood pressure). Hypertension is an important factor in heart attacks and strokes<sup>(4-6)</sup>.

Lysine supplementation increases calcium absorption and may reduce its excretion. As a result, some researchers believe that lysine may eventually be shown to play a role in the prevention and treatment of osteoporosis. Lysine works with other essential amino acids to maintain growth, lean body mass and the body's nitrogen reserve. <sup>(7-9)</sup>.

Thanks to its contribution to the formation of protein in muscles and collagen in bones, cartilage and connective tissue, its effect on post-operative recovery and sports injuries can be described as very positive <sup>(10,11)</sup>.

#### References:

- 1) Harlow, Kirsten. "L-Lysine Hydrochloride: An Alternative Prophylactic Therapy Reducing the Recurrence Rate of Herpes Labialis." (2015).
- 2) Mailoo, Venthan J., and Sanketh Rampes. "Lysine for Herpes Simplex Prophylaxis: A Review of the Evidence." *Integrative Medicine: A Clinician's Journal* 16.3 (2017).
- 3) Pedrazini, Maria Cristina, Vera Cavalcanti Araújo, and Victor Angelo Martins Montalli. "The effect of L-Lysine in recurrent herpes labialis: pilot study with a 8-year follow up." *RGO-Revista Gaúcha de Odontologia* 66.3 (2018): 245-249.
- 4) Shimomura, Akihiro, et al. "Dietary L-lysine prevents arterial calcification in adenine-induced uremic rats." *Journal of the American Society of Nephrology* 25.9 (2014): 1954-1965.
- 5) Ivanov, Vadim, et al. "Anti-atherogenic effects of a mixture of ascorbic acid, lysine, proline, arginine, cysteine, and green tea phenolics in human aortic smooth muscle cells." *Journal of cardiovascular pharmacology* 49.3 (2007): 140-145.
- 6) Xiao, Chao-Wu, Carla Wood, and Jesse Bertinato. "Dietary supplementation with l-lysine affects body weight and blood hematological and biochemical parameters in rats." *Molecular biology reports* (2018): 1-10.
- 7) Fürst, P. "Dietary L-lysine supplementation: a promising nutritional tool in the prophylaxis and treatment of osteoporosis." (1993): 71-72.
- 8) Fini, M., et al. "Effect of L-lysine and L-arginine on primary osteoblast cultures from normal and osteopenic rats." *Biomedicine & pharmacotherapy* 55.4 (2001): 213-220.
- 9) Civitelli, Robert, et al. "Dietary L-lysine and calcium metabolism in humans." *Nutrition (Burbank, Los Angeles County, Calif.)* 8.6 (1992): 400-405.
- 10) Sato, Tomonori, Yoshiaki Ito, and Takashi Nagasawa. "Dietary L-lysine suppresses autophagic proteolysis and stimulates Akt/mTOR signaling in the skeletal muscle of rats fed a low-protein diet." *Journal of agricultural and food chemistry* 63.37 (2015): 8192-8198.
- 11) Flodin, Nestor W. "The metabolic roles, pharmacology, and toxicology of lysine." *Journal of the American College of Nutrition* 16.1 (1997): 7-21.