L-lysine
Nutritional therapy

DESCRIPTION
L-lysine fulfills many functions in the body. It is concentrated in muscle tissue, helps in the absorption of calcium from the gastrointestinal tract, promotes bone production and collagen formation. Vitamin C is required for the conversion of lysine to hydroxylysine, which is then built into collagen.

EFFECT
The most striking effect of L-lysine is its effect against viral infections. Especially herpes infections, for example cold sores (herpes simplex) or shingles (herpes zoster) can be effectively treated with L-lysine. There is less evidence of its effectiveness in genital herpes.

After the initial discovery that arginine had a growth-stimulating and lysine an inhibiting effect on the growth of fluid herpes cultures, a clinical study was performed. This revealed that when the balance of lysine to arginine can be kept at the right levels, the replication of viral particles can be checked. It is suspected that the effect is based on the absorption (by the virus) of lysine which, in terms of its chemical structure, is very similar to arginine. Arginine and lysine compete with one another in absorption from the intestinal tract, and when there is sufficient excess of lysine, this will effectively reduce the absorption of arginine. L-lysine is also needed for the formation of antibodies.

Vegetarians often have a lysine deficiency, because this amino acid is significantly underrepresented in certain grain-based proteins. Symptoms of a lysine deficiency are (among others) reduced ability to concentrate, chronic fatigue, dizziness, growth inhibition and reduced immunity.

INDICATIONS
- Herpes infections
- Viral infections in general
- Skin conditions that are linked to a herpes infection (cold sore, shingles, chicken pox, ulcers)
- Reduced ability to concentrate
- Vegetarianism/veganism

CONTRA-INDICATIONS
There are no known contra-indications of L-lysine at the indicated dose.

SIDE EFFECTS
As far as is known L-lysine causes no known side effects at the indicated dose. Higher doses are also safe. Studies have demonstrated that it is perfectly safe to take 8000 mg a day for a long period of time.

INTERACTIONS
As carnitine is formed in the body from lysine, in the event of a deficiency in lysine, an L-carnitine deficiency can also easily arise. Interactions with mainstream or natural medicines are possible. Consult an expert about this.

DOSAGE
Recent research has shown that when suffering from a viral infection, an effective dose of L-lysine is 1500 mg a day, to be taken half an hour before meals with water. When no more symptoms are present, a dose of 500 mg a day will suffice. Food must also be low in arginine and high in lysine (also see “synergism”).

SYNERGISM
Arginine-rich foods have to be avoided. Foods that contain high amounts of arginine include: chocolate, carob, full grains, nuts and seeds, peanuts, coconut, oats, gelatine, onions and mushrooms. Foods with a good lysine-arginine balance are animal proteins (fish, chicken, beef, lamb, milk, cheese, eggs), beans, millet, avocado, brewer’s yeast and bean sprouts. The majority of vegetables have an excess of lysine when compared to arginine. Vitamin C and bioflavonoids have a protective effect on the levels of lysine in the body. A basic supplementation of a good multi, vitamin C and bioflavonoids is therefore recommended in addition to the aforementioned dietary measures.

REFERENCES