

A combination of ingredients for strong immunity and effective protection from viruses and bacteria.

ONE SACHET CONTAINS:

- 4000 IU VITAMIN D3
- 15 MG ZINC
- 55 μG SELENIUM
- 300 MG VITAMIN C

The strongest combination of active ingredients **Strengthens the immune system** Reduces tiredness and fatigue



PLEASANT ORANGE FLAVOUR

Vitamins D and C and minerals zinc and selenium contribute to the normal function of the immune system. Vitamin D and zinc contribute to the maintenance of normal bones and skin and to normal muscle function. Vitamin D contributes to the maintenance of normal teeth.

INSTRUCTIONS FOR USE:





The strongest dose for the best protection of immunity



What is vitamin D₃?

Vitamin D is one of the fat-soluble vitamins.

Structurally speaking, it is a prohormone and the only vitamin that can be synthesized in the body.

Synthesis in the body

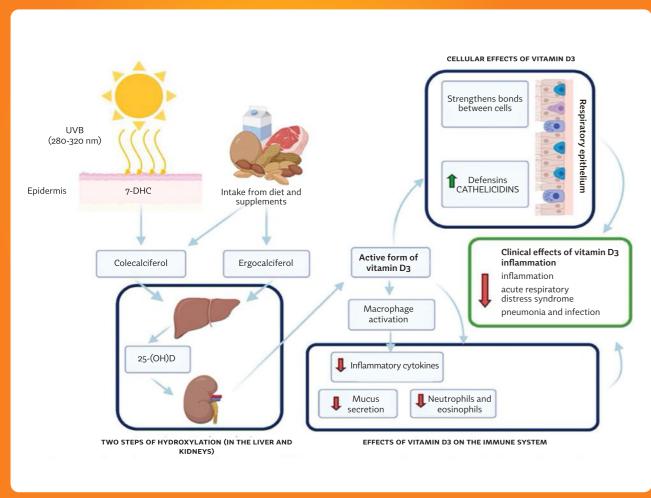
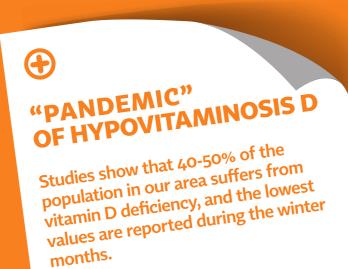


Figure 1: Immunomodulatory effect of vitamin D3

Causes of vitamin D deficiency

- Reduced sun exposure
- Use of sunscreens
- Insufficient intake of vitamin D from food sources
- Pregnancy and breastfeeding
- Obesity
- Autoimmune diseases
- Ageing



Vitamin D and immunity

- Modulates innate and adaptive immunity
- Activates macrophages
- Reduces the formation of proinflammatory cytokines and promotes the formation of anti-inflammatory cytokines
 controlled immune response, prevents the so-called cytokine storm and reduces the lung tissue damage

Effect of vitamin D on the cells of the respiratory system

- Preserves the integrity of the respiratory epithelium
- Tightens tight junctions between cells
- Stimulates the formation of antiviral proteins (cathelicidins and defensins)

REDUCES THE PENETRATION OF VIRUSES
AND BACTERIA INTO THE LUNG CELLS

CLINICAL EFFECT OF VITAMIN D IN RESPIRATORY INFECTIONS:

- Reduces inflammation
- Reduces the risk of acute respiratory distress syndrome
- Reduces the risk of pneumonia and infection

RECOMMENDED DOSES

The European Food Safety Authority (EFSA) issued a document on the maximum acceptable dosage of vitamin D₃ stating that the tolerable upper intake level for vitamin D₃ is:

- for infants 0-12 months of age 25 μg (1000 IU)
- for children 1-10 years of age 50 μg (2000 IU), and
- from 11 years of age and above, including pregnant and breastfeeding women 100 µg (4000 IU).



TRUTHS AND MYTHS ABOUT VITAMIN D

Since vitamin D is fat-soluble, obese people should take it less. - MYTH

Vitamins stored in adipose tissue are not available to the body for utilization. People with more fat tissue should increase their vitamin D intake because only free vitamin D may be activated and used in the body.

Vitamin D can be stored in the body and vitamin D intoxication occurs easily. - MYTH Although the body has the possibility of vitamin D storage, in order for toxic effects to appear, it would be necessary to take a daily dose of 50 000 IU for several months.

Vitamin D intake is recommended to all age groups. - TRUTH

Although in clinical practice vitamin D was intended for infants and elderly people, new studies have shown that all age groups need to take vitamin D in the months (from October to April) when sun exposure is insufficient in order to prevent chronic vitamin D deficiency present in over 40% of the population.

Symptoms of vitamin D3 deficiency

- Susceptibility to viruses
- Chronic fatigue
- Back and bone pain
- Depressive mood
- Muscle pain
- Hair loss