

DUOLIFE

Vita C

Food supplement

DUOLIFE Vita C – a 100% natural, complete vitamin C that meets the requirements of those looking for a product with ingredients that promote optimal wellbeing and replenish vitamin and mineral deficiencies in the body.



100% natural origin



IHHP™ fixation



Preservative and GMO-free



Glass bottle



Gluten-free



When to use DUOLIFE Vita C?

Everyone should regularly take vitamin C in their food because, like any typical vitamin, it is not produced by the human body. Its deficiency can contribute to lowered immunity, decreased energy and a weakened body. The first symptoms of vitamin C deficiency include: rapid fatigue, lack of appetite, tendency to bruise, bleeding gums, and joint and muscle pains.

In the period of increased demand for vitamin C, i.e. in the autumn and winter season, which is conducive to colds, as well as in states of weakness – in the course of viral infections and in the period of convalescence, it is worthwhile to increase the supply of this valuable vitamin through appropriate supplementation.

How to use the DUOLIFE Vita C food supplement?

DUOLIFE Vita C is a natural vitamin C in liquid form, containing not only natural L-ascorbic acid but also its valuable natural "biological background", which includes bioflavonoids, carotenoids, plant enzymes, zinc, magnesium, and vitamins B2 and B6. In this form, in its natural complex environment, vitamin C is better absorbed and more effective¹. Thus, the ingredients of DUOLIFE Vita C help to maintain optimal wellbeing and provide energy.



Instructions for use:

25–50 ml/day; 25 ml = 363.50 mg of vitamin C (454% NRV*)

* NRV – Nutrient Reference Value for an average adult.

Recommended vitamin C intake standards for different age groups.

Age	Nutrient Reference Value ²
Infants (0–12 months)	20 mg
Children (1–9 years)	40–50 mg
Children (10–12 years)	50 mg

Children (13–18 years)	65–75 mg
Women aged 19 and over	75 mg
Men aged 19 and over	90 mg
Pregnant women	80–85 mg
Breastfeeding women	115–120 mg

Ingredients: rosehip juice, acerola fruit juice made from acerola fruit puree, acerola fruit (*Malpighia glabra*) extract standardised to 50% vitamin C content, Camu Camu berry (*Myrciaria dubia*) extract.

Why use vitamin C? Its effect is multidirectional and very important for the good condition of the body!

- ▶ Vitamin C supports the functions of the immune system: it can protect against colds and shorten the duration of infection^{3,5}.
- ▶ It is a strong antioxidant (it protects against free oxygen radicals, preventing cell destruction caused by oxidative stress)⁴.
- ▶ It is essential in the production of collagen, supporting the function of joints, blood vessels, gums, skin and teeth^{2,5}.
- ▶ It supports the absorption of iron from the digestive tract^{5,6}.
- ▶ An appropriate amount of vitamin C in the body accelerates the regeneration after exercise, lowers the level of cortisol and supports the processes of fat burning during exercise⁷.
- ▶ It supports cardiovascular function⁸, and promotes regulation of lipid metabolism (cholesterol levels)⁹.
- ▶ It supports the functions of the nervous system: takes part in the synthesis of norepinephrine and serotonin¹⁰.

What makes DUOLIFE Vita C so special?

- ▶ **100% natural origin** – only ingredients **of plant origin**.
- ▶ **Liquid form**, i.e. the form closest to that in which vitamin C occurs in nature, facilitating its release and absorption into the bloodstream; increased absorption translates into a more efficient distribution to the place of action (beneficial effect on LADME processes**).
- ▶ **The product is preserved using a IHHP™ by DUOLIFE** (Innovation High Hydrostatic Process™ by DUOLIFE), a method based on the concept of "minimal processing". The advantage of this method is high health quality and durability as well as preservation of the natural nutritional and sensory values, compared to products preserved using conventional methods. The technological process employed is conducted at a low temperature (to protect active ingredients) and is based on the principle of synergy of multiple fixatives, allowing to maintain the highest quality of the product without using preservatives.
- ▶ **A formulation taking into account the principles of synergy and antagonism of ingredients.**
- ▶ **The product DOES NOT contain preservatives, flavour stabilisers and is GMO FREE** – the raw materials used to develop the supplement are NOT DERIVED from genetically modified plants.
- ▶ **The product is GLUTEN-FREE** – can be used by people with gluten intolerance.
- ▶ **Special bottle from pharmaceutical-grade glass** – the dark glass protects against light and temperature fluctuations and is resistant to the release of mineral substances from its inner surface to the formulation.
- ▶ **Concentrated formula** – convenient application: only once a day.
- ▶ **Umbrella brand** – the supportive action of the liquid form is complemented by the DuoLife Vita C Powder food supplement and a cosmetic with a high naturalness index from the DUOLIFE Beauty Care line – a hand cream that improves skin condition and smooths, moisturises and protects it.

i Reference list for DUOLIFE Vita C formulation can be found in the separate sheet of the binder.

** LADME – an abbreviation describing processes to which an active substance is subjected in the body: release from the preparation form -> absorption into a bloodstream -> distribution in the body -> metabolism -> excretion.

References

1. Thiel, R. J. (2000). Natural vitamins may be superior to synthetic ones. *Medical hypotheses*, 55(6), 461-469.
2. Normy żywienia dla populacji Polski – Instytut Żywności i Żywienia, 2017, str. 147, 150
3. Van Straten, M., & Josling, P. (2002). Preventing the common cold with a vitamin C supplement: a double-blind, placebo-controlled survey. *Advances in therapy*, 19(3), 151.
4. Bendich, A., Machlin, L. J., Scandurra, O., Burton, G. W., & Wayner, D. D. M. (1986). The antioxidant role of vitamin C. *Advances in Free Radical Biology & Medicine*, 2(2), 419-444.
5. Deruelle, F., & Baron, B. (2008). Vitamin C: is supplementation necessary for optimal health?. *The Journal of Alternative and Complementary Medicine*, 14(10), 1291-1298.
6. Vitamin and mineral requirements in human nutrition, Second Edition, WHO, str. 130-139
7. Peters, E. M., Anderson, R., Nieman, D. C., Fickl, H., & Jogessar, V. (2001). Vitamin C supplementation attenuates the increases in circulating cortisol, adrenaline and anti-inflammatory polypeptides following ultramarathon running. *International journal of sports medicine*, 22(07), 537-543.
8. Osganian, S. K., Stampfer, M. J., Rimm, E., Spiegelman, D., Hu, F. B., Manson, J. E., & Willett, W. C. (2003). Vitamin C and risk of coronary heart disease in women. *Journal of the American College of Cardiology*, 42(2), 246-252.
9. Jacques, P. F. (1992). Effects of vitamin C on high-density lipoprotein cholesterol and blood pressure. *Journal of the American College of Nutrition*, 11(2), 139-144.
10. Zawada, K. Znaczenie witaminy C dla organizmu człowieka The importance of Vitamin C for human organism. *HERBALISM*, 22.