

DUOLIFE food supplement

# DUOLIFE Pro Collagen VITA

**DUOLIFE Pro Collagen VITA** is a food supplement in the form of capsules that contains only natural ingredients. The preparation is composed of natural ingredients of the highest quality. It is a combination of fish collagen, bladderwrack extract and tocopherol and tocotrienols complex.

Active ingredients found in DUOLIFE Pro Collagen VITA support the natural synthesis of collagen in the body and repair processes which fosters the maintenance of optimal osteoarticular system health and hampering the effects of skin ageing. They also help protect the cells against oxidative stress.



EDUCATIONAL CARD

## When should you use DUOLIFE Pro Collagen VITA?

DUOLIFE Pro Collagen VITA is a food supplement that supports optimal body functions in people:

- taking care of proper functioning of the articular system – bones, joints, ligaments, muscles and tendons;
- engaging in increased physical activity;
- wishing to support optimal functioning of the osteoarticular system on a daily basis;
- wishing to maintain a youthful appearance of their skin;
- wishing to postpone the appearance of the first signs of ageing;
- wishing to support antioxidative processes in the body.

## How does DUOLIFE Pro Collagen VITA works and how to use the product?

Ingredients found in the DUOLIFE Pro Collagen VITA food supplement support:

- proper functioning of the osteoarticular system;
- optimal functioning of bones, articular cartilage, ligaments and tendons;
- skin well-being, helping to maintain its firmness and elasticity;
- antioxidative processes.



### DUOLIFE Pro Collagen VITA - directions for use:

2 capsules during or after the meal.



### Composition table

Ingredient content in the daily dose of the product	2 capsules
Bladderwrack extract	290 mg
Freeze-dried <b>fish</b> collagen	100 mg
Vitamin E	12 mg (100% NRV*)
Tocotrienol and tocopherol blend	2.80 mg
including tocotrienols	1.10 mg
including tocopherols	0.69 mg

\*NRV – Nutritional Reference Value for an average adult

**Ingredients:** 1:1 citrus (*Citrus limon*) fruit extract, 4:1 bladderwrack (*Fucus vesiculosus*) stalk extract, freeze-dried **fish** collagen, anti-caking agent: magnesium oxide, vitamin E (d-alpha-tocopheryl acid succinate), tocotrienol and tocopherol blend. Capsule shell: **fish** gellatin. / *May contain derivatives of: cereals containing gluten, crustaceans, molluscs, eggs, nuts, soy, milk, celeriac, mustard, sesame, lupin, sulphur dioxide and sulphites.*

Do not exceed the recommended daily intake. The product should not be used as a substitute for a varied diet. Balanced diet and a healthy lifestyle are the basis for proper functioning of human body.

**i** The herbal extracts contained in the preparation **have a ratio of 4:1 written next to their names - this is the so-called DER - what does it mean?**

**DER** (*drug extract ratio*) specifies a number of milligrams of the plant material used to obtain one milligram of the extract. Thus, when a capsule contains 290 milligrams of the bladderwrack extract, DER 4:1 means that 1,160 milligrams of raw material were used to obtain the capsule.

## Why use collagen?

**Collagen** is a basic protein that makes connective tissue. It is a key building block of skin, cartilage, and bones. Starting at the age of 25–30, collagen production in our body decreases. As we age, the process intensifies; from around the age of 60, the body does not produce any endogenous collagen<sup>1</sup>. Increased physical activity and engaging in extreme sports, hormonal changes, excessive exposure to sun, inclement weather may accelerate the breakdown of collagen fibres, which weakens the osteoarticular system. The skin loses its firmness and first wrinkles emerge.

Collagen supplementation:

- fosters normal joint function<sup>2,3</sup>;
- is essential for maintaining the physiological role of articular cartilage and its regeneration<sup>2,3</sup>;
- it supports the barrier function of the skin, increases its density, helps prevent dehydration and reduces the signs of ageing<sup>4</sup>.

The collagen in the formulation is in the form of a lyophilisate sourced from fish skin.

## Lyophilised collagen - a concentrated form of raw material

Lyophilisation is a gentle method of preservation of bio-based raw materials that allows a **concentrated form of collagen** to be obtained with minimal technological intervention. In the lyophilisation process, water is removed from the raw material in low temperature and under low pressure. This reduces protein degradation and **retains its natural aminoacid profile that is rich in glycine, proline and hydroxyproline**. The use of lyophilised collagen allows for the delivery of concentrated high-quality collagen raw material in a compact, easy-to-use, flavourless form. Owing to that, lyophilised collagen is a perfect solution for supplements in a capsule form, where one capsule may contain only a limited amount of bioactive ingredients.

## A full range of active forms of vitamin E

**D-alpha-tocopheryl succinate** is a natural derivative of alpha-tocopherol of higher stability. In the body, it is transformed into biologically active alpha-tocopherol – one of vitamin E's most active forms.

**Tocopherols and tocotrienols** are compounds belonging to the vitamin E family. They're naturally present in numerous products of plant origin, particularly in vegetable oils, wheat sprouts, barley and some kinds of nuts and cereals. As of now, we are aware of eight separate vitamin E homologues. The following may be distinguished among them: the most widely known alpha- ( $\alpha$ -T) and beta- ( $\beta$ -T)tocopherol, gamma ( $\gamma$ -T) and delta- ( $\delta$ -T) tocopherol as well as tocotrienols: alpha ( $\alpha$ -T3), beta ( $\beta$ -T3), gamma ( $\gamma$ -T3) and delta ( $\delta$ -T3).

Research suggests that tocotrienols may have stronger **antioxidative properties and free radical scavenging effect**. Their potentially higher activity within this scope may arise out of their more effective distribution in the lipid layers of cell membranes compared to alpha-tocopherol. Moreover, tocotrienols may exhibit a wide range of other properties, including **the minimisation of inflammation, neuroprotective support and impacting cholesterol metabolism**. These effects are related not only to their antioxidative properties, but also their involvement in cellular signalling processes<sup>5-7</sup>.

## Bladderwrack - a natural source of iodine and polysaccharides

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**Bladderwrack** (*Fucus vesiculosus*) is a seaweed; a green-brown algae rich in iodine and polysaccharides (fucoidans, laminarin, and alginates). It is also a source of dietary fibre and minerals such as magnesium, sodium, potassium, calcium, manganese, zinc, phosphorus, copper and vitamins: A, C, and B vitamins<sup>8</sup>. Thanks to iodine content, bladderwrack **fosters normal thyroid function. Fibre found in the algae supports metabolism and gastrointestinal passage**, and promotes regular bowel movements. Thanks to the content of fucoidan – a polysaccharide found in abundance in cellular walls of brown algae – it helps minimise inflammations and supports antioxidative processes<sup>9,10</sup>.

## What sets apart the DUOLIFE Pro Collagen VITA food supplement?

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- **100% naturally sourced ingredients;**
- **concentrated** lyophilised **collagen**: a gentle process allows to preserve **the natural structure of protein** and its characteristic aminoacid profile;
- an alternative for those that appreciate a convenient and flavourless form of administration as a capsule: perfect for individuals seeking a simple and convenient way to handle daily supplementation and appreciating mobility and comfort of use e.g. when travelling;
- tocotrienols and tocopherols complex - **a full range of vitamin E;**
- a formula taking into account **the principles of synergy and antagonism of ingredients;**
- capsules with fish-based coating - the product is suitable for **pescetarians;**
- the product **DOES NOT CONTAIN** preservatives and artificial fillers, and **IS GMO FREE** - raw materials used to develop the supplement **ARE NOT DERIVED** from genetically modified organisms;
- umbrella brand – the effects of active ingredients found in the inner capsule is complemented by cosmetics with a high natural origin index from the DUOLIFE Pro Collagen line.

 *The references for DUOLIFE Pro Collagen VITA can be found on a separate binder sheet.*

# DUOLIFE Pro Collagen VITA

## References

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