

DUOLIFE

# Collagen

Food supplement

**DUOLIFE Collagen** is a food supplement based on ingredients of natural origin, designed for people wishing to support maintaining "the eternal youth". It contains a unique composition of active ingredients which supports the condition of skin, bones and joints. The supplement has been also enriched with plant extracts rich in silica and antioxidants which contribute to maintaining beautiful hair and strong nails.



100% natural origin



IHHP™ fixation



Preservative  
and GMO-free



Glass bottle



Gluten-free



## When to use DUOLIFE Collagen?

The elasticity and resilience of the skin is the base for a youthful appearance. Unfortunately, with age, the condition of the skin deteriorates along with the first signs of its ageing, such as wrinkles or dryness, associated, among others, with a decrease in the number of collagen fibres. Collagen and other connective tissue components such as hyaluronic acid, glucosamine and chondroitin are essential for the proper functioning not only of the skin, but also of cartilage and joint smear, and also have a positive effect on the well-being of hair and nails.

Supplementing such ingredients as: collagen, hyaluronic acid, glucosamine and chondroitin supports in case of noticeable first signs of skin ageing or problems with hair and nails condition, and helps during the convalescence process, after bone fractures or joint injuries, and works as a support for the proper functioning of cartilage, ligaments and tendons.

## How to use the DUOLIFE Collagen food supplement?

DUOLIFE Collagen contains not only collagen, glucosamine, chondroitin and hyaluronic acid, but also valuable plant extracts, rich in silica (horsetail, nettle and bamboo shoot extracts) and vitamin C (acerola fruit extract). Furthermore, all plant extracts and mango fruits present in the product are natural sources of antioxidants.

In the DUOLIFE Collagen formulation, we used collagen obtained from marine fish skin – with lower molecular weight compared to collagen obtained from farm animals, which increases its absorption from the digestive tract. This constitutes a support for people wishing to maintain a good condition of muscles and joints, as well as a youthful appearance of the skin. Glucosamine sulphate (1000 mg/50 ml), chondroitin sulphate (300 mg/50 ml) and hyaluronic acid (50 mg/50 ml) – thanks to the high concentration and availability of these ingredients, DUOLIFE Collagen supports the optimal functioning of the osteoarticular system, articular cartilage and muscles. The addition of plant extracts contributes to a good condition of skin, hair, nails, and antioxidants and minerals contained in these extracts, in combination with glucosamine, help maintain a good condition of skin, reducing signs of ageing.

**Instructions for use:**

25–50 ml/day, before meal.

Do not exceed the recommended daily dose. Food supplements should not be a substitute for a varied diet. A balanced diet and healthy lifestyle are essential for the proper functioning of the body.



**Ingredients:** mango fruit puree, marine **fish** skin collagen (2500 mg/50 ml), glucosamine sulphate from **crustaceans** (1000 mg/50 ml), 50:1 acerola (*Malpighia glabra*) fruit extract standardised for 50% vitamin C content, chondroitin sulphate from **shark** (300 mg/50 ml), nettle (*Urtica dioica*) extract (250 mg/50 ml), bamboo (*Bambusa vulgaris*) shoot extract standardised for silica content, horsetail (*Equisetum arvense*) extract standardised for silica content (150 mg/50 ml), hyaluronic acid (50 mg/50 ml).

Ingredients:	25 ml	50 ml
Vitamin C	101.0 mg (126%*)	202.0 mg (252%*)
Silicon	75 mg	150 mg

\* NRV – Nutrient Reference Value for an average adult.

## Why is it worth using collagen and hyaluronic acid?

- ▶ Both compounds support the proper functioning of joints<sup>1,2</sup>.
- ▶ They are essential for maintaining the physiological role of articular cartilage and its regeneration<sup>1,2</sup>.
- ▶ Collagen supports the barrier function of the skin, helps increase its density, maintains an optimum hydration of the skin and reduces signs of ageing<sup>3</sup>.
- ▶ Hyaluronic acid helps maintain skin smoothness, supporting its hydration<sup>4</sup>.
- ▶ Both collagen and hyaluronic acid support the functions of sight, contributing to maintaining it in good condition<sup>5</sup>.

## What is a result of a combination of chondroitin sulphate and glucosamine sulphate?

- ▶ Glucosamine plays an important role in building cell membranes, bones, tendons and blood vessels, and fosters maintaining an optimum appearance of the skin<sup>6</sup>.
- ▶ Glucosamine is essential for building natural cartilage components such as chondroitin sulphate and hyaluronic acid<sup>6</sup>.
- ▶ Combining glucosamine and chondroitin contributes to maintaining normal bone and joint function<sup>7–9</sup>.

## What is the effect of silicon contained in nettle, bamboo shoots and common horsetail?

- ▶ Silicon participates in collagen biosynthesis, so it protects nails against cracking, contributes to skin well-being by increasing its elasticity and elimination of fine wrinkles<sup>10</sup>.
- ▶ Its level in the body decreases with age, which causes greying and weakening of hair and brittleness and fragility of nails<sup>11</sup>.

## What makes DUOLIFE Collagen so special?

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- ▶ **The liquid form of the preparations with the preserved biological background of the components,** facilitating the release of active compounds and their absorption into the bloodstream, as well as increased absorption, translate into more efficient distribution to the place of action (beneficial effect on LADME processes\*\*).
- ▶ **The product is preserved using 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.
- ▶ **100% natural ingredients,** also standardised for the content of active substances; the collagen contained in the preparation is in the form of a water-soluble low molecular weight polypeptide hydrolysate (average 2000 Da). It is a source of amino acids, including exogenous amino acids, and their di- and tripeptides, which are well absorbed from the gastrointestinal tract. After penetrating into the bloodstream, amino acids and peptides are distributed to the skin, cartilages and other connective tissue structures, where they are a substrate for the synthesis of the natural collagen type 1 and 2, induce the synthesis of hyaluronic acid, and stimulate growth and migration of fibroblasts. The synergy of action of collagen and vitamin C components contained in the product is also valuable – vitamin C is essential for collagen synthesis in the organism<sup>5</sup>, hence the combined supplementation of these compounds is beneficial.
- ▶ **A formulation taking into account the principles of synergy and antagonism of ingredients.** A blend of these ingredients is not commonly found in other products of a similar type. A composition selected in this way allows for synergy of action, which might translate into even more effective support for the body.
- ▶ **The product DOES NOT CONTAIN preservatives and is GMO-FREE** – the raw materials used to develop the supplement ARE NOT DERIVED from genetically modified organisms.
- ▶ **The product is GLUTEN-FREE** – can be used by people with gluten intolerance.
- ▶ **Special bottle made of pharmaceutical-grade glass** – the coloured glass protects against light and temperature fluctuations, and is resistant to release to the formulation of mineral substances from its inner surface.
- ▶ **Umbrella brand** – the effect of the liquid form is complemented by cosmetics with a high naturalness index from the DUOLIFE Beauty Care Collagen line.

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

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\*\* 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

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