

DUOLIFE

Boost Formula FIZZY EASY Q10 COMPLEX

Food supplement

DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX is a food supplement in the form of effervescent tablets, based on active compounds that support antioxidative processes, vitality, normal function of the heart, brain and immune system, as well as the youthful appearance of the skin and optimum condition of the hair, and nails. The product contains coenzyme Q10, resveratrol, lycopene, vitamins: C and E, minerals: zinc and selenium and plant extracts. The product recipe was additionally enriched with BioPerine®* – a reserved, patented formula of natural origin with proven properties enhancing the absorption of nutrients contained in this dietary supplement.



BioPerine®*



Synergy of action



Convenient form of application



Complex composition



Multidirectional action



Complementary application

When to use DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX?

The food supplement in the form of effervescent tablets DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX, containing coenzyme Q10, resveratrol, lycopene, vitamins: C and E, minerals: zinc and selenium, as well as plant extracts provides support for the antioxidative processes taking place in the body, the normal functioning of the heart, brain and immune system, as well as the youthful appearance of the skin and the optimal condition of hair and nails. The product has been further enriched with BioPerine®*, a proprietary patented formula of natural origin with a research-proven effect that promotes the absorption of nutrients contained in the food supplement.

Food supplement DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX is intended for supporting optimum functions of organism in people who want to support:

- ▶ antioxidative processes that delay the ageing process;
 - ▶ the maintenance of young appearance, energy and vitality;
 - ▶ metabolic processes in the body;
 - ▶ normal functioning of the heart and blood vessels;
 - ▶ normal functions of the immune system;
 - ▶ optimal function of the nervous system, especially the brain;
 - ▶ optimal mood;
 - ▶ hair and skin well-being;
 - ▶ the youthful appearance of skin;
 - ▶ protection against UV radiation and skin photoageing;
 - ▶ the processes of cleansing the body of accumulated heavy metals;
 - ▶ fertility and sexual functions
- and also for:
- ▶ knowledge workers;
 - ▶ active people and athletes;

- ▶ elderly people, seniors.

How to use DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX?

DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX is a food supplement based on high-quality ingredients, including the reserved, patented BioPerine®* formula of natural origin distinguished by its scientifically proven properties improving the absorption of nutrients contained in the product.

Ingredients found in DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX support:

- ▶ antioxidative processes;
- ▶ maintaining youth and vitality;
- ▶ slowing down ageing processes;
- ▶ maintaining adequate energy levels;
- ▶ cardiovascular system function;
- ▶ immune system functions;
- ▶ nervous system (including the brain) function;
- ▶ body detoxification functions;
- ▶ metabolic processes, promoting the maintenance of optimal body weight;
- ▶ skin well-being, helping to maintain its firmness and elasticity, and protecting it against premature ageing and UV radiation;
- ▶ hair and skin well-being;
- ▶ fertility and sexual functions;
- ▶ nutrient absorption, including vitamins and minerals.

i **Instructions for use:** dissolve 1 tablet in a glass (200 ml) of cold water and stir. Take two tablets a day. Consume immediately after preparation. Do not exceed the recommended maximum daily dose. The product should not be a substitute for a varied diet. A balanced diet and healthy lifestyle are essential for the proper functioning of the body.

The product is not intended for children or infants. Should you have any doubts concerning the use of the supplement, consult your doctor or pharmacist.

i **DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX can be combined with:**

other products from the lines DUOLIFE Boost Formula FIZZY EASY, DUOLIFE RegenOil Liquid Gold®, DUOLIFE Vita C, DUOLIFE Vita C Powder, DuoLife Day & Night, DUOLIFE Collagen, DUOLIFE Aloes, DUOLIFE My Mind, ProSelect®, ProDeacid®, ProCardiol®, SHAPE CODE® Slim Shake, SHAPE CODE® Protein Shake.

Precautions:

- ▶ Hypersensitivity to any of the ingredients of the product.
- ▶ Do not use in children.
- ▶ Do not use in pregnant or breastfeeding women.
- ▶ Do not take with other sources of caffeine or similar ingredients that have similar effect.
- ▶ If you have a chronic condition or are taking medication, consult your doctor before starting to use the product.

i **Ingredients:** acidity regulators: citric acid, sodium carbonates; bulking agent: sorbitols; aromas; anti-caking agent: polyvinylpyrrolidone; Japanese knotweed (*Polygonum cuspidatum*) extract standardised for 98% resveratrol content; coenzyme Q10; vitamin C (L-ascorbic acid); colourant: riboflavins; lycopene; vitamin E (DL-alpha-Tocopheryl actate); black ginger (*Kaempferia parviflora*) root extract; sweeteners: sucralose, steviol glycosides from stevia; zinc citrate; powdered orange juice – 0.1%; powdered mango juice – 0.1%; powdered passion fruit juice – 0.1%; sodium selenate (IV); BioPerine®* – a proprietary formula from black pepper (*Piper nigrum*) fruit extract 50:1 standardised for 95% piperine content.

Ingredient content in the daily dose of the product	2 tablets
Coenzyme Q10	100 mg
Japanese knotweed root extract including resveratrol	102 mg 100 mg
Vitamin C	80 mg (100% ^{**})
Black ginger root extract	30 mg
Vitamin E	12 mg (100% ^{**})
Lycopene	5 mg
Zinc	5 mg (50% ^{**})
Selenium	27.5 µg (50% ^{**})
BioPerine ^{®*}	2 mg

* *BioPerine[®]* is a *Sabinsa* ingredient protected by the intellectual property (IP) law.

^{**}%NRV – Nutrient Reference Value for an average adult

BioPerine^{®*}, a reserved formula of black pepper (*Piper nigrum*) fruit extract standardised for 95% piperine content

BioPerine^{®*} is a reserved formula of natural origin, basen on black pepper extract, **with a very high content (95%) of the active ingredient – piperine**. Piperine content in a daily serving of DUOLIFE FIZZY EASY Q10 COMPLEX food supplement is 2 mg and constitutes the highest serving of this ingredient allowed in food supplements in Poland since 2022.

It is proven and documented by scientific tests that **BioPerine^{®*}** properties improve bioavailability of nutrients from food and food supplements¹⁻⁷. Thanks to it, the consumed portions of vitamins, minerals and many other active ingredients are better absorbed, which translates into full health benefits of their supplementation. **BioPerine^{®*}** formula contained in **DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX** ensures that nutrients, including vitamins, can be absorbed effectively, even if they are consumed in the form of isolated components with no biological background.

The mechanism of **BioPerine^{®*}** formula is based on fostering the process of structural thermogenesis (increase of metabolic activity and heat release), which leads to an increased need for nutrients and their better absorption. Piperine contained in the formula fosters local blood supply to the digestive tract, thus enhancing microcirculation in intestinal villi and improving penetration of nutrients through intestinal wall^{3,8}.

Using this formula is safe, which has been proven in clinical trials. Piperine contained in **BioPerine^{®*}** is most effective in combination with nutrients (at the same time), and has little influence over the absorption of active ingredients taken at time intervals. For that matter, it doesn't modify the absorption and bioavailability of medication, providing an adequate time interval is observed.

Additionally, piperine has protective (anti-oxidising) properties for cells, helps reduce oxidative stress and inflammatory processes^{1,9,10}.

Coenzyme Q10

Coenzyme Q10 (ubiquinone) is a compound belonging to the so-called vitamin-like substances, naturally occurring in all cells of the body. The name ubiquinone comes from the Latin word "ubitarium" meaning ubiquitous, precisely because of its ubiquity in living organisms. Most **coenzyme Q10** is found in the heart, skeletal muscles

and organs with high energy requirements such as the brain, liver and kidneys. In cells, the greatest amount of coenzyme Q10 is found in the inner membrane of the mitochondrion, where it participates in **the generation of cellular energy** in the form of the so-called **ATP (adenosine triphosphate)** molecules.

ATP molecules cannot be stored, so the process of their production in the mitochondria is continuous. Mitochondria are responsible for the production of sufficient amounts of ATP molecules, which are necessary for the proper functioning of cells and thus individual organs and systems, the brain, muscles or the heart. ATP molecules also contribute to maintaining vitality, youthfulness and supporting protection against premature ageing. It is worth bearing in mind that as the amount of ATP produced increases, e.g. in situations of stress, infection, increased physical or mental activity, the amount of oxygen free radicals produced in the body also increases. Oxidative processes and the formation of unfavourable reactive oxygen species are also linked to cellular ageing processes, including neurodegeneration. Excess oxygen free radicals are not beneficial to the body, so **the mitochondria must be protected from the negative effects of oxidative processes**, mainly through the supply of antioxidants, including suitable nutrients with antioxidative properties.

The maximum concentration of coenzyme Q10 in the body, which is synthesised in all body tissues, is observed at around 20 years of age. As we age, the levels of coenzyme Q10 in the body begin to decrease¹¹. The body's need for a sufficient supply of coenzyme Q10 increases in active people, those who exercise and participate in sports, and the elderly. As muscle activity increases, the body's demand for energy and therefore the supply of coenzyme Q10 increases.

Coenzyme Q10 plays a very broad role in the body. One of its major functions in the body is antioxidative action. The antioxidative action of coenzyme Q10 can be direct, which involves the inactivation of oxygen free radicals preventing initial damage and acting as a first line of defence, and indirect, where coenzyme Q10 is also involved in the regeneration of other antioxidants – vitamin E and vitamin C^{12,13}. In addition, coenzyme Q10 plays a significant role in many other processes in the body. Supports optimal functioning of the cardiovascular system, immune system, nervous system, metabolic processes, detoxification processes of the body, normal sperm motility. It promotes the maintenance of optimal condition of the periodontal tissue, oral mucosa and gums and the improvement of the condition of skin, hair and nails, as well as maintaining skin firmness and reducing the depth of wrinkles^{13,14}.

Fallopia japonica (*Polygonum cuspidatum*) root extract standardised to 98% resveratrol content

Fallopia japonica (*Polygonum cuspidatum*), also known as Japanese knotweed, is a plant native to East Asia, where it has been used for thousands of years as a medicinal plant and as an ingredient in traditional Asian dishes. The raw material is rich in flavonoids (quercetin, luteolin, apigenin), phytosterols, coumarins, tannins and minerals (iron, zinc, selenium, manganese and copper). However, the most valuable component of Japanese knotweed is resveratrol.

Resveratrol is an antioxidant – a polyphenol produced by plants in response to UV radiation, fungal infections, pollution from outside, oxidative stress or tissue damage. Resveratrol has a stronger antioxidative effect than vitamin C **and shows synergy of action with other polyphenols and antioxidants**¹⁵. **Resveratrol** is one of **the strongest antioxidants**, reduces free radicals and protects cells from the effects of oxidative stress. It also promotes the protection of the cardiovascular system, the nervous system, the eyes, as well as reducing inflammatory processes in the body and the protection against bacterial and fungal infections¹⁶⁻¹⁹. Resveratrol has been shown to play an important role in the body's metabolic processes, glucose level control and insulin sensitivity, ensuring normal blood vessel health, and contributing to maintaining optimal blood flow and minimising inflammation²⁰.

Studies also show that co-supplementation of resveratrol and piperine can increase cerebral blood flow²¹.

Vitamin C (L-ascorbic acid)

L-ascorbic acid, that is **Vitamin C**, as most vitamins, **is not produced by the human body and must be taken in**

with food. Its name derives from the Latin word "scorbutus", which is related to the naming of a deficiency of this vitamin in the diet. Vitamin C in the human body is involved in many metabolic processes, and its deficiency can contribute to reduced immunity, a decrease in energy and many other disorders concerning the functioning of blood vessels, muscles, skin and gums²²⁻²⁶. One of the most important functions of vitamin C in the body is to protect cells from oxygen free radicals²⁷⁻²⁹.

Vitamin C contributes to:

- ▶ the protection of cells from oxidative stress;
- ▶ the regeneration of the reduced form of vitamin E;
- ▶ the reduction of tiredness and fatigue;
- ▶ normal psychological function;
- ▶ normal energy-yielding metabolism;
- ▶ normal functioning of the nervous system;
- ▶ the normal function of the immune system;
- ▶ normal collagen formation for the normal function of blood vessels, bones, cartilage, gums, teeth and skin.

Black ginger (*Kaempferia parviflora*) root extract

Black ginger (*Kaempferia parviflora*), also known as Krachaidum or Thai ginseng, is a plant of the ginger family that has been used for centuries in the folk medicine of the Asian tropics (Malaysia, Sumatra, Borneo, Thailand). The herbal raw material is the root, which differs in colour from the commonly known ginger and is dark red inside. What distinguishes the two species is the presence of **methoxyflavone, which is only found in black ginger**, whereas it is not found in ginger³⁰. In addition, black ginger is rich in bioflavonoids, gallic acid, apigenins, tangeretins and beta-sitosterol.

Black ginger supports antioxidative processes, **helping to protect against the adverse effects of oxidative stress**, promotes optimal cardiovascular function, the maintenance of mental wellbeing and physical regeneration processes. Black ginger also contributes to **improving muscle strength and endurance**³¹⁻³⁴. In Asia, the plant is also valued for its use as an aphrodisiac. In frequent travellers and shift-workers, black ginger has been shown to have properties that help **to alleviate circadian rhythm disorders**³⁵. It also helps to reduce the feeling of fatigue and to increase energy expenditure by activating metabolism in brown adipose tissue, so it can promote improved metabolism³⁴.

Vitamin E

Tocopherols (including vitamin E) **also belong to a group of strong antioxidants**, thus helping protect the body against negative consequences of oxidative stress and cell damage. They also foster optimal function of the cardiovascular system^{36,37}. Vitamin E is called **the vitamin of youth**, as it helps preventing early cell ageing and delays skin ageing processes by fostering collagen synthesis³⁸. Vitamin E supports the reproductive system function in both women and men. In females it boosts ovulation, while in men it fosters sperm and hormone production. That's why it's often called **the fertility vitamin**³⁹. The **synergic effect of vitamin E is strengthened by vitamin C** – these compounds support each other in their antioxidant and photoprotective activity⁴⁰.

- ▶ Vitamin E contributes to the protection of cells from oxidative stress.

Lycopene

Lycopene is one of the key compounds among the so-called carotenoids. Carotenoids are yellow, orange, and red pigments synthesized by plants, fungi, bacteria and algae. These colourants participate in many biological processes of plants, are responsible for the colour of many fruit and flowers, and possess strong antioxidising properties. Unlike plants, **humans cannot synthesise carotenoids**, so these must be supplied to the body with food.

Lycopene is a red pigment that is fat-soluble and insoluble in water. Relative to other carotenoids, this pigment

shows a very high rate of elimination of oxygen free radicals⁴¹. Lycopene has strong antioxidant properties, **protecting cells from oxidative stress and the damaging effects of sunlight**, and promotes optimal cardiovascular function⁴¹⁻⁴⁴.

Zinc

Zinc is one of the main trace elements in the body. It is a component of **over 300 enzymes, is involved in many biochemical processes**, in the metabolism of proteins, fats and carbohydrates and is essential for cell division and differentiation of the resulting cells, and for the production and function of many hormones⁴⁵. Other significant functions of zinc include antioxidative effects, support for the removal of heavy metals from the body and involvement in immune processes⁴⁶⁻⁴⁸.

Zinc contributes to:

- ▶ the protection of cells from oxidative stress;
- ▶ normal acid-base metabolism;
- ▶ normal carbohydrate metabolism;
- ▶ normal cognitive function;
- ▶ normal DNA synthesis;
- ▶ normal fertility and reproduction;
- ▶ normal macronutrient metabolism;
- ▶ normal metabolism of fatty acids;
- ▶ normal metabolism of vitamin A;
- ▶ normal protein synthesis;
- ▶ the maintenance of normal bones, hair, nails and skin;
- ▶ the maintenance of normal testosterone levels in the blood;
- ▶ the maintenance of normal vision;
- ▶ the normal function of the immune system.

Selenium

Selenium is a micronutrient essential for normal body functioning. It can be found in two amino acids: **selenomethionine and selenocysteine**, which in turn build up very important enzymes involved in **antioxidative processes**. For this reason, selenium is a contributor to optimal oxygen free radical scavenging, supports optimal immune system function, contributes to normal **functioning of the thyroid gland and normal spermatogenesis**, and helps maintain healthy hair and nails^{49,50}. Selenium also has the ability to **bind with heavy metals to form insoluble compounds**, thereby assisting the body's processes of cleansing heavy metal accumulations⁵¹.

Selenium contributes to:

- ▶ the protection of cells from oxidative stress;
- ▶ the normal function of the immune system;
- ▶ the normal thyroid function;
- ▶ normal spermatogenesis;
- ▶ the maintenance of normal hair and nails.

What makes DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX so special?

- ▶ **A Complex composition based not only on a high portion of coenzyme Q10 but also additional active compounds** supporting vitality, youthfulness, antioxidative processes and optimal functioning of the heart, brain as well as the immune and reproductive systems.
- ▶ Contains an absorption **booster** – the composition of this food supplement has been enriched with **BioPerine®*** – a reserved, patented formula of plant origin with **properties enhancing the absorption of nutrients** from this dietary supplement proven with scientific research.
- ▶ **Synergy** between all components.

- ▶ **Additional substances limited to those necessary from the technological point of view.**
- ▶ **Only natural colourants.**
- ▶ **Comfortable to use** – effervescent tablets which serve to prepare a refreshing, fruit-flavoured drink.
- ▶ The product is **LACTOSE-FREE** and **GMO-free**.
- ▶ The product is **GLUTEN-FREE** – suitable for people with gluten intolerance.
- ▶ The product is **suitable for vegans and vegetarians**.

❶ *Reference list for DUOLIFE Boost Formula FIZZY EASY Q10 COMPLEX formulation can be found in the separate sheet of the binder.*

Boost Formula FIZZY EASY Q10 COMPLEX

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