

DuoLife

Boost Formula FIZZY EASY Electrolyte COMPLEX

Food supplement

DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX is a food supplement in the form of effervescent tablets, based on elements and active compounds that support the maintenance of proper water and electrolyte balance, osmotic pressure, muscle work and recovery, and the transmission of nerve impulses. Dissolve the tablet to obtain a rehydration drink consisting of the key ingredients for the body: sodium (the primary electrolyte to help regulate water distribution in the body), potassium (to help regulate the osmotic pressure of body fluids), and glucose (essential for maintaining normal heart and brain function). Thanks to its composition, the DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX food supplement quickly replenishes fluid loss in the body. 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 food supplement.



BioPerine®*



Synergy of action



Convenient form of application



Complex composition



Multidirectional action



Complementary application

When to use DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX?

One of the most important factors responsible for the proper functioning of the body is the adequate supply of fluids and electrolytes. DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX contains key ingredients for the body, such as sodium, potassium, and glucose, that support the maintenance of proper water and electrolyte balance, osmotic pressure, muscle work and recovery, and the transmission of nerve impulses. The product recipe was additionally enriched with BioPerine®*, a proprietary, patented formula of natural origin with proven properties enhancing the absorption of nutrients contained in the food supplement.

DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX food supplement is intended to support optimum functions of the body in:

- ▶ active people and athletes;
- ▶ those who are in the course of an infection accompanied by diarrhoea, vomiting, or high fever resulting in intense sweating;
- ▶ those who want to promote the reduction of the effects of excessive alcohol consumption, including the removal of harmful metabolic products;
- ▶ wishing to stay in a good physical and mental shape and maintain their energy and vitality;
- ▶ those who experience fatigue, weakness, or drowsiness;
- ▶ those who experience frequent muscle spasms, especially in the calves, and trembling of the eyelids or lips;
- ▶ those who experience dry mouth;
- ▶ those who experience dry skin and mucous membranes;
- ▶ elderly people/seniors.

How does DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX work and how to use it?

DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX is a food supplement based on high-quality ingredients, including the proprietary, patented BioPerine®* formula of natural origin with proven properties enhancing the absorption of nutrients contained in the product.

DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX supports:

- ▶ adequate hydration of the body;
- ▶ the body's increased need for electrolytes that occurs during excessive sweating, chronic vomiting, diarrhoea, or intense physical effort;
- ▶ normal energy metabolism;
- ▶ the body's function in the event of excessive alcohol consumption;
- ▶ removal of toxins and harmful metabolic products from the body;
- ▶ maintaining blood pressure at an appropriate level;
- ▶ function of the heart;
- ▶ kidney function;
- ▶ proper muscle contractility;
- ▶ normal brain function;
- ▶ normal metabolism;
- ▶ maintaining the acid–base homoeostasis of body fluids;
- ▶ proper functioning of the immune system;
- ▶ nutrient absorption, including vitamins and minerals.

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

The product is not intended for children or infants. In case of any doubts regarding the use of the supplement, please consult a doctor or a pharmacist.

DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX is beneficial when combined with: other DuoLife Boost Formula FIZZY EASY products, DuoLife Chlorofil, SHAPE CODE® Protein Shake, SHAPE CODE® Slim Shake, DuoLife Medical Formula ProDeacid®, DuoLife My Blood Moja Krew, DuoLife Collagen, and DuoLife Medical Formula ProStik®.

Precautions:

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

Ingredients: sodium bicarbonate; acidity regulator: citric acid; glucose; acid: malic acid; potassium bicarbonate; bulking agent: sorbitols; L-ascorbic acid; anti-caking agent: polyvinylpyrrolidone; flavours; sweeteners: sucralose, steviol glycosides; BioPerine®* – a proprietary 50:1 black pepper (*Piper nigrum*) fruit extract formula standardised to 95% piperine content; colourant: carotenes; red beet juice concentrate powder; orange juice powder – 0.1%; peach juice powder – 0.1%.

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

| Ingredient contents in the daily serving of the product | 3 tablets |
|---|----------------------------------|
| Glucose | 1500 mg |
| Sodium | 900 mg |
| Potassium | 300 mg (15% NRV ^{**}) |
| Vitamin C | 240 mg (300% NRV ^{**}) |
| BioPerine ^{®*} | 2 mg |

^{**}NRV – Nutrient Reference Value for an average adult (8400 kJ/2000 kcal).

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 Electrolyte 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 Electrolyte COMPLEX** makes 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}.

Sodium

Sodium is one of the most important elements necessary for the body to function properly. Together with chlorine and potassium, it makes up the so-called membrane electrolytes, i.e. substances that regulate the water and electrolyte balance of all body cells in ionic form in aqueous solution.

Sodium is present in all human body fluids, with the largest amounts found in the extracellular fluid, mainly the blood plasma. Together with potassium, it is a part of the sodium-potassium pump located in cell membranes that is responsible for maintaining normal membrane potential and cell volume¹¹. The sodium-potassium pump regulates the transport of nutrients and water inside the cell and allows waste to escape, thus influencing most physiological processes. It influences the regulation of skeletal muscle and cardiac muscle tone, as well as the efficient conduction of impulses in the nervous system¹².

Sodium ions are also responsible for maintaining the correct pH of body fluids and preserving the correct amount and location of water in the body, thus ensuring an optimum acid-base balance¹³. Under normal bodily conditions, the total amount of sodium in the diet is excreted by the kidneys. This process is regulated by the relevant hormones and the nervous system (thirst is the symptom of elevated sodium concentration and water intake restores sodium to the optimal level). The impairment of the function of these mechanisms may result in poor sodium metabolism and symptoms of abnormal fluid regulation, such as dehydration, oedema, and impaired consciousness¹³.

Potassium

Potassium is an electrolyte that acts as a sodium antagonist. It supports the regulation of the body's water balance, the maintenance of the acid-base balance of body fluids, and the regulation of insulin secretion¹⁴.

One of the key functions of potassium is to support muscle function, including the heart muscle. Its deficiency in the body results in immediate muscle cramps. It is also involved in the synthesis of proteins that make up muscle.

Furthermore, **potassium** is an essential element for the correct conduction of nerve impulses, improving thought processes and concentration¹². Potassium also maintains normal blood pressure¹⁵. Symptoms of potassium deficiency (known as hypokalaemia) include abnormal heart rate, abnormal blood pressure, muscle cramps or tremors, and numbness in the limbs. A deficiency of this micronutrient in the body is also caused by excessive alcohol consumption. This is because alcoholic beverages increase the amount of urine and minerals essential for the body's proper functioning are removed with it. The unpleasant symptoms of alcohol intoxication are caused, among others, by the deficiency of minerals. Electrolytes replenish the deficiencies and alleviate the discomfort associated with alcohol intoxication.

Vitamin C (L-ascorbic acid)

L-ascorbic acid, or vitamin C, it is a strong antioxidant (it protects against free oxygen radicals, preventing cell destruction caused by oxidative stress):

- ▶ it is a strong antioxidant (it protects against free oxygen radicals, preventing cell destruction caused by oxidative stress)¹⁸;
- ▶ 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 exercise¹⁹;
- ▶ it is involved in the collagen synthesis and thus reduces the risk of injury, improves joint flexibility, and promotes proper bone function^{20, 21};
- ▶ supports the functions of the nervous system: takes part in the synthesis of norepinephrine and serotonin²⁰.

Glucose

Glucose is a simple sugar that is the primary energy substrate for the body's cells. It is essential for the proper functioning of the body. All ingested carbohydrates are converted to glucose as this is the only form in which they can be absorbed from the gastrointestinal tract and utilised by the body's cells²².

Consuming glucose with electrolytes in the right proportions is even more effective in promoting optimal hydration. The whole process is based on reaching the concentration balance. When nutrients, such as glucose or mineral salts, are absorbed in the intestines and transported into the bloodstream and body cells, their concentration increases. To reduce the concentration of nutrients, the body absorbs water more quickly from the intestinal lumen and transports it further to make more water available for dissolution.

Glucose and electrolytes such as sodium and potassium also work together to increase energy levels and endurance. Note that glucose is essential for proper muscle function, especially after intense physical effort²³.

In the event of symptoms of dehydration, such as dry mouth, fatigue, weak muscles or muscle cramps, and dizziness, a combination of electrolytes and glucose can help to rehydrate the body faster and support a quicker recovery. These symptoms can also result from excessive alcohol consumption. Alcohol intoxication, regardless of the degree of severity, leads to adverse metabolic changes and significant dehydration of the body. Glucose, as a simple sugar, effectively helps to inhibit these processes. Taking a large dose of alcohol also causes energy loss in the body. Glucose compensates for this loss and contributes to a faster improvement in well-being²⁴.

What makes DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX so special?

- ▶ **Comprehensive ingredients package** to effectively support optimal hydration of the body.
- ▶ 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 food supplement proven with scientific research.
- ▶ **Synergic** action of all ingredients.
- ▶ **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 (orange and peach flavour).
- ▶ The product **CONTAINS NO lactose** and is **GMO free**.
- ▶ The product is **GLUTEN-FREE** – can be used by people with gluten intolerance.
- ▶ The product is **suitable for vegans and vegetarians**.

i Reference list for DuoLife Boost Formula FIZZY EASY Electrolyte COMPLEX formulation can be found in the separate sheet of the binder.