

Dietary supplement

Liquid Gold®

DuoLife REGENOIL LIQUID GOLD® is a 100% natural dietary supplement based on 13 unrefined, cold-pressed vegetable oils, which are a source of essential unsaturated fatty acids. Formula enriched with natural vitamins K2 MK7 from natto and D3 derived from lichens, also suitable for vegans and vegetarians. "Golden ratio" of omega-3 to omega-6 fatty acids, additionally protected by antioxidants contained in unprocessed oils and plant extracts. The product is recommended for maintaining good condition of bones, supporting the immune and the cardiovascular systems functions, and the function of the brain and eyes.



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When?

Fats consumed by humans are an important source of energy for a healthy body. However, in order to enjoy good health and well-being for a long time, the daily diet should contain mainly polyunsaturated fatty acids, with valuable health-supporting properties. Among the unsaturated acids, special attention should be paid to the essential fatty acids (EFA), which the human body cannot synthesize and which ensure the optimal functioning of many organs^{1,2} and should absolutely be included in a healthy diet of each of us. For this reason, EFAs are also called vitamin F because, like any other vitamin, they must be supplied with food.

There are two families of EFA acids: omega-3 with a broad health-supporting effect, and omega-6, which also perform important functions in the body, but the consumption of which must maintain a proper proportion of omega-3 acids³. According to the recommendations, the ratio of omega-6 to omega-3 should be no more than 5:1; meanwhile, the average European has a diet according to the ratio as high as 20:13. In order to maintain proper intake of omega-3 vs. omega-6 acids, it is worth to reach for DuoLife REGENOIL LIQUID GOLD®, because the preparation was composed in such a way as to maintain the recommended „golden ratio“ of EFAs.

Supplementation is also recommended for people who, due to their diet, age, life span or season, may be at risk of vitamin K2 MK7 and D3 deficiencies. The preparation will also work perfectly for people:

- ▶ wishing to maintain normal functions of the immune system;
- ▶ caring for proper condition of their bones;
- ▶ post-menopausal women and elderly people, to support the protection of weaker bones and joints and the function of the cardiovascular system;
- ▶ performing hard mental and/or physical work;
- ▶ recovering from bone fractures.

How?

DuoLife REGENOIL LIQUID GOLD® supports:

- ▶ antioxidative mechanisms;
- ▶ immune system function;
- ▶ functions of the bone and joint system and of muscles;
- ▶ cardiovascular system function;
- ▶ brain functions - cognitive functions and concentration;
- ▶ assimilation of fat-soluble vitamins: A, D, E, K.

**DuoLife REGENOIL LIQUID GOLD® – usage:**

5 ml once per day, preferably during the meal.



Ingredients: sunflower oil, linseed oil, corn oil, sunflower oil with sea buckthorn fruit extract, hemp oil, walnut oil, sunflower oil with rosehip extract, wheat germ oil, grape seed oil, sesame seed oil, milk thistle seed oil, macadamia nut oil, cedar nut oil, natural vitamin K2 MK7 (menaquinone) obtained from natto extract, natural vitamin D3 (cholecalciferol) extracted from lichens, natural vitamin E (d-alpha-tocopherol) extracted from sunflower oil, antioxidant – a mixture of tocopherols from sunflower oil.

Ingredients	5 ml	50 ml	100 ml
Vitamin K2 MK7 (metachinon)	75 µg (100% NRV*)	750 µg (1000% NRV*)	1500 µg (2000% NRV*)
Vitamin D3 (cholecalciferol)	37,5 µg (1500 j.m.) (750% NRV*)	375 µg (7500% NRV*)	750 µg (15000% NRV*)
Vitamin E (d-alpha-tocopherol)	12 mg (100% NRV*)	120 mg (1000% NRV*)	240 mg (2000% NRV*)

*NRV – reference daily intake for an average adult (8400 kJ/2000 kcal)

Do not exceed the recommended daily dose. 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.

DuoLife REGENOIL LIQUID GOLD® contains up to 13 unrefined, cold-pressed vegetable oils!

The raw material for the production of cold-pressed oils is the seeds and fruits of oil plants, which are characterized by a high fat content. Plant oils are an important source of EFAs from the omega-3 and omega-6 groups¹. The qualitative composition and proportions of the preparation have been developed in such a way that the ratio of omega-3 to omega-6 acids is favourable („golden ratio“). It ranges from 1:1 to 1:5, and this is consistent with recommendations³ and guarantees a health promoting effect of oils contained in the formulation.

Health-supporting properties of omega-3 acids^{3,4}:

- ▶ help maintain correct level of cholesterol in blood;
- ▶ support the proper function of blood vessels, helping to protect against arteriosclerosis, hypertension, ischemic heart disease and coronary heart disease;
- ▶ support antioxidant processes,
- ▶ support normal skin function;
- ▶ contribute to the prevention of type II diabetes, obesity and osteoporosis;
- ▶ improve the functions of the immune system;
- ▶ have a positive effect on brain and retina functions.

Omega-6 acids, consumed in the right proportion to omega-3 acids, are also valuable for the body: they help strengthen the skin barrier by preventing excessive transepidermal water loss, help protect the skin from infections, and support vision and brain function¹.

Why are unrefined oils better than refined oils?

Unrefined oils belong to unprocessed products, pressed at low temperature (cold), thus preserving both EFAs and other bioactive components (including antioxidants), which, in the case of refined oils, are partially destroyed or removed during the refining process^{5,6}. Antioxidant compounds contained in unrefined oils protect fatty acids against oxidation: an unfavourable process, significantly reducing health-supporting and nutritional value of EFA7. This is supported by DuoLife REGENOIL LIQUID GOLD® plant extracts from sea buckthorn and

wild rosehip^{8,9} plus natural tocopherols (including vitamin E)¹⁰. Thanks to antioxidants, unrefined oils used in the preparation are characterized by high oxidative stability⁷.

The action of EFA is supported by vitamin K2 MK7 obtained from natto extract.

Vitamin K2 MK7 is obtained by fermentation of soybean seeds under the influence of *Bacillus subtilis* Natto bacteria^{11,12}. Fermented soybeans (called natto) are much easier to absorb by the body and are commonly used in Japanese cuisine.

Vitamin K2 MK7 supports normal blood clotting, prevention of osteoporosis and cardiovascular diseases¹¹. It has been shown that K2 is essential for the biosynthesis of osteocalcin - the protein responsible for calcium binding in bones; vitamin K2 deficiency in blood contributes to the development of osteoporosis¹². K2 MK7 also helps prevent the deposition of calcium in blood vessels; in 2004 the so-called Rotterdam study, involving nearly 8,000 people, was published, which proves that vitamin K2 (but not K1!) contributes to the protection of vessels from calcification, supporting the prevention of coronary artery disease¹³.

Vitamin D3 supplements vitamin K2 MK7 in supporting perfect bone condition.

Vitamin D3 (cholecalciferol) contained in the preparation comes from lichens; lichens are symbiotic organisms - a combination of fungi and algae. The content of vitamin D3 in lichens is particularly valuable due to the fact that the most common sources of this form of vitamin D are fish and fish oils, while plants and fungi mainly provide vitamin D2 (ergocalciferol), less effective for humans¹⁴. For this reason DuoLife REGENOIL LIQUID GOLD® is also suitable for vegans and vegetarians, who also receive an optimal supply of vitamin D3.

Vitamin D3 has a multi-directional health-supporting effect - it affects bones, muscles, kidneys, intestines, heart, blood vessels, brain, adrenals and pituitary gland¹⁵. This vitamin is a key compound responsible for regulating the correct levels of calcium and phosphorus in the body; it also has a significant impact on the well-being of the skeletal system and supports immune processes. Beyond doubt, vitamin D deficiency increases the risk of osteoporosis and leads to bone weakness; vitamin D3 deficiency is also associated with an increased risk of hypertension, autoimmune diseases (including asthma, rheumatoid arthritis), diabetes, cancer and heart disease¹⁴⁻²⁰.

Man can synthesise vitamin D3, so why does he need supplementation?

Vitamin D3 is synthesized in the skin from provitamin D3, under the influence of sunlight (UVB radiation), only under demand conditions; the organism does not store the vitamin D3 it synthesizes. In winter, the supply of sunlight is limited (short exposure time, covered body), so the synthesis of vitamin D3 in the skin decreases and a shortage of it may occur (the body has no own reserves of its own). During this period it is particularly advisable to supplement it^{14,20}. People with little sunshine, susceptible to infections, elderly people and women after the menopause may require vitamin D3 supplementation throughout the year^{21,22}.

What makes DuoLife REGENOIL LIQUID GOLD® different?

- ▶ **The „golden ratio“ of unsaturated omega 6 to omega 3 fatty acids** for optimal health-supporting effect.
- ▶ **The liquid form of the preparation 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 the method is high health quality

and durability and preservation of the natural nutritional and sensory qualities, compared to products preserved by classical 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 and 100% of their content in the preparation;** including unrefined, cold-pressed oils and natural vitamins K2 MK7 and D3; vitamin D3 obtained from lichens, making the product also suitable for vegans and vegetarians.
- ▶ **Formulation prepared in consideration of the principles of synergy and antagonism.**
- ▶ **The product DOES NOT contain preservatives and is GMO FREE** - the raw materials used to develop the supplement DO NOT originate from genetically modified plants/fungi.
- ▶ **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 release to the formulation of mineral substances from its inner surface.
- ▶ **Concentrated homogeneous formula - a mixture of as many as 13 vegetable oils** - comfortable to use: only once a day.

i *The references for DuoLife RegenOil Liquid Gold® can be found on a separate binder sheet.*

*LADME – is an English 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