Food supplement DuoLife Medical Formula

ProCholterol®

DuoLife **MEDICAL FORMULA PROCHOLTEROL®** is a food supplement supporting the metabolism of the body. The composition of natural ingredients, including fermented red rice extract and a proprietary prickly pear leaf formula, has been encapsulated in innovative delayed release capsules that improve the absorption of active compounds.

DuoLife MEDICAL FORMULA PROCHOLTEROL® contains plant extracts that support fat metabolism in the body, helping to maintain proper blood cholesterol levels and body weight. The combination of raw materials with adaptogenic and antioxidant properties and the valuable monacolin K provides optimal support for cardiovascular function.

When?

Cardiovascular disease is the leading cause of death worldwide, accounting for approx. 4 million deaths in Europe per year[1]. The risk factors of this global epidemic include obesity, smoking, low physical activity and metabolic disorders[2]. However, the main cardiovascular risk factor is high LDL cholesterol blood levels, most often resulting from a poor diet[1, 2]. Therefore, eating balanced meals with plenty of vegetables and fruits, rich in fibre and low in saturated fatty acids, is an excellent measure to prevent cardiovascular disease. Rational supplementation, based on ingredients that support the metabolic balance of the body, can help to maintain healthy blood LDL cholesterol levels and a healthy body weight. DuoLife MEDICAL FORMULA PROCHOLTEROL® is recommended for:

- people who want to maintain healthy blood cholesterol levels;
- people who want to maintain healthy body weight;
- people who struggle with cardiovascular problems;
- elderly people;
- post-menopausal women.

How?

The ingredients contained in DuoLife MEDICAL FORMULA PROCHOLTEROL® support:

- body metabolism, particularly metabolism of fats;
- normal cholesterol, triglycerides and blood glucose levels;
- cardiovascular system function;
- optimal function of blood vessels, helping to prevent the accumulation of cholesterol in vessel walls;
- antioxidative mechanisms;
- body detoxification processes;
- liver function;
- healthy gut microbiota function.

DuoLife MEDICAL FORMULA PROCHOLTEROL® – usage:
1–2 capsules daily.

Composition table

Content of ingredients per average daily dosage	1 capsule	2 capsules
Indian gooseberry fruit extract (*Phyllanthus emblica*)	80 mg	160 mg
red yeast rice extract	48 mg	96 mg
monacolin K	1,44 mg	2,88 mg
ProCholterol® (proprietary formula extracted from cactus pear (*Opuntia ficus-indica*) leaves)	40 mg	80 mg
garlic extract (*Allium sativum*)	30 mg	60 mg
Gynostemma pentaphyllum leaf extract	30 mg	60 mg
phytosterols extracted from soybean seed oil (*Glycine max Merr.*)	20 mg	40 mg
Brahmi (*Bacopa monnieri*) leaf extract	20 mg	40 mg

Ingredients: chicory root inulin, Indian gooseberry (*Phyllanthus emblica*) extract 5:1, red yeast rice extract 30:1 (3% monacolin K), ProCholterol® proprietary formula extracted from cactus pear (*Opuntia ficus-indica*) leaves, garlic (*Allium sativum*) extract 10:1, *Gynostemma pentaphyllum* leaf extract 5:1, phytosterols extracted from soybean seed oil (*Glycine max Merr.*) 25:1, Brahmi (*Bacopa monnieri*) leaf extract 5:1. Capsule ingredients: hydroxypropyl methylcellulose (HPMC), gellan gum, chlorophyllin and chlorophyll (dye). Anti-caking agent: silica.

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.

The herbal extracts contained in the formula **are marked with a 5:1, 10:1, 25:1 and 30:1 ratio next to their names – this is the so-called DER. What does it mean?**

DER (*drug extract ratio*) specifies the amount of plant material (in mg) used to obtain one milligram of the extract.

If the capsule contains 80 milligrams of Indian gooseberry extract (or other extract) DER 5:1, this means that 400 milligrams of raw material were used to obtain the capsule. The capsules from the Medical Formula line have an increased DER, so the same (or even lower) amount of the extract may provide a larger dose of active substances.

Why is the fermentation process of red rice essential for the extract to work? Why is the monacolin K contained in fermented red rice so valuable?

Red rice does not in itself have any properties that reduce blood lipid levels. It is only during the fermentation process that the yeast enriches the rice with a complex of substances that have a significant effect on the regulation of LDL cholesterol levels in plasma[1]; one of these substances is monacolin K, which gives the fermented extract extraordinary health-promoting properties.

Monacolin K helps to inhibit endogenous cholesterol synthesis in the body. It has one of the most clinically researched biological activity profiles. The compound helps to reduce LDL cholesterol in the plasma and to maintain healthy blood vessels by supporting the proper functioning of the circulatory system[1]. The remaining ingredients of fermented red rice provide an important biological support for monacolin K, promoting its absorption and increasing its efficacy[1, 3, 4].

The supplementation with red fermented rice has been suggested in the main European guidelines, in international consensus documents and by the European Food Safety Authority (EFSA)[1].

What is the supportive effect of the proprietary ProCholterol® formula derived from prickly pear leaves?

Prickly pear helps to regulate fat metabolism in the body, contributing to the reduction of blood LDL cholesterol levels[5]. The polyphenols contained in the raw material help to transport cholesterol in liver cells, thereby reducing its secretion into the blood[6]. Due to its antioxidant properties, prickly pear supports optimal functioning of the cardiovascular system, as well as fat and sugar metabolism[7].

Antioxidants contained in Indian gooseberry fruit extract and garlic extract help to maintain healthy blood LDL cholesterol levels

- Amla (Indian gooseberry) is a valuable source of vitamin C, a strong antioxidants with a number of health benefits[8–10]. Thanks to its antioxidant properties, which neutralise free radicals, vitamin C supports healthy functioning of the heart and blood vessels[11], helps to regulate fat metabolism, promoting optimal blood cholesterol levels[12]. In addition, vitamin C may also help to lower blood pressure and supports proper blood clotting[9].
- Garlic is rich in antioxidant flavonoids that improve the health-promoting properties of the plant[13]. The raw material helps normalize cholesterol and glucose levels in the blood, supports blood vessel health, and helps to maintain healthy blood pressure. Moreover, it supports the liver function and the immune system[13–15].

What are phytosterols? Why is it worth to increase their dietary intake?

Phytosterols are sterol compounds of plant origin, many of which offer numerous health benefits. Sitosterol and stigmasterol are phytosterols derived from soybean oil, which help to reduce LDL cholesterol in the blood by promoting the inhibition of cholesterol absorption from the intestine[16, 17].

What is the adaptogenic effect of Brahmi and Gynostemma leaves?

Adaptogen is a substance that increases the body's resistance to various adverse factors, the so-called stressors[18].

- Gynostemma is an adaptogenic raw materials, which contains bioactive compounds with antioxidant properties and gypenosides with a chemical structure similar to ginsenosides found in ginseng root[18]. Its stimulating properties support healthy heart and liver function, promote optimal cholesterol and blood sugar levels, and help to maintain healthy blood pressure. In addition, it supports fat metabolism, helping to maintain optimal body weight. It also supports the immune system and physical vitality[18–20].
- Brahmi is another raw material with adaptogenic properties[21]. Its active compounds include bacosides, bacopasides and bacosaponins, as well as antioxidant polyphenols and health-promoting phytosterols (stigmasterol and sitosterol). The plant helps protect the liver and heart, has an antioxidant effect, promotes the removal of harmful metabolic products and heavy metals from the body[22] and has a beneficial effect on the blood lipid profile[23].

What makes DuoLife MEDICAL FORMULA PROCHOLTEROL® different?

- **Capsules made of organic cellulose derivative (HPMC),** containing also chlorophyll derivatives, without preservatives, gluten and gelatin, suitable also for vegans and vegetarians (they also have kosher and halal certificates), with delayed release time confirmed in clinical trials* – improving the absorption of active compounds contained inside the capsule, and increasing the concentration of active substances in the body.
- **Packaging free of bisphenol A (BPA),** a compound with adverse health effects[24].
- **Natural ingredients, with an addition of prebiotic –** inulin from the common chicory root; inulin stimulates the development of natural intestinal microflora, supporting healthy digestion[25]; it has a low glycaemic index.
- **Formula prepared taking into account the principles of synergy and antagonism.**

- **Complete ingredients, with their biological background maintained,** improving their bioavailability.
- **The product DOES NOT CONTAIN preservatives and artificial fillers, and IS GMO FREE –** the raw materials used to produce this food supplement ARE NOT DERIVED from genetically modified plants.
- **The product is GLUTEN-FREE –** can be used by people with gluten intolerance.
- **Concentrated formula –** making the supplement easy to use: once or twice a day.

The references for DuoLife Medical Formula ProCholterol® can be found on a separate binder sheet.

*Study conducted in 2013 by Bio-Images Research Laboratory in Glasgow, Scotland

ProCholterol®

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