Dietary supplement **ProStik[®] NEW**

DuoLife MEDICAL FORMULA PROSTIK® NEW is a dietary supplement based on natural ingredients, enclosed in innovative delayed release capsules that improve the absorption of active compounds.



DuoLife MEDICAL FORMULA PROSTIK[®] NEW is primarily collagen and valuable plant extracts that support the motor skills - functions of bones, joint cartilage, ligaments, tendons and muscles, as well as maintaining good condition of the skin to maintain its natural firmness and flexibility. It also supports the processes of cleansing the body, healing of wounds and damaged tissues and proper functions of the cardiovascular system.

When?

Dietary supplement DuoLife MEDICAL FORMULA PROSTIK[®] NEW is intended for use as a preparation supporting the functions of the locomotor system for people:

- with problems related to inflammatory conditions and joint degeneration;
- with increased physical activity; also in cases of strained/overtrained muscles;
- with degenerative lesions and/or inflammatory condition of the spine;
- recovering from bone fractures or joint/muscle injuries;

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- post-menopausal women;
- overweight people;
- elderly people/seniors.

How?

In situations of increased physical activity, with both amateur and professional athletes, as well as those who are exposed to considerable strain on their joints (e.g. overweight people), the daily diet may need to be supplemented with ingredients that support the locomotor system. Similar supplementation is recommended for post-menopausal women and the elderly to help protect weakened bones and joints. DuoLife MEDICAL FORMULA PROSTIK® NEW dietary supplement provides the body with valuable active ingredients, contributing to maintaining it in the best physical condition. The preparation promotes the production of synovial fluid, which is necessary for the proper functioning of joints, and also contributes to ensuring proper mineralization of bones and teeth.

- DuoLife MEDICAL FORMULA PROSTIK[®] NEW usage: 1-2 capsules daily.
- Ingredients: chicory root inulin (FOS), collagen from saltwater fish skin, ProStik[®] (proprietary formula of purple mangosteen fruit (*Garcinia mangostana*)), mumio shilajit extract (*Asphaltum punjabianum*) 10:1, willow bark extract (*Salix alba*) 10:1, devil's claw root extract (*Harpagophytum procumbens*) 10:1, Centella asiatica leaf extract (*Centella asiatica*) 10:1, garden angelica root extract (*Angelica archangelica*) 10:1. Capsule ingredients: hydroxypropyl methylcellulose (HPMC), gellan gum, chlorophyllin and chlorophyll (dye). Anti-caking agent: silica.

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.

Content of ingredients per average daily dosage	1 capsule	2 capsules
Collagen from saltwater fish skin	50 mg	100 mg
ProStik® (proprietary formula of purple mangosteen fruit (<i>Garcinia mangostana</i>))	25 mg	50 mg
Mumio shilajit extract (Asphaltum punjabianum)	25 mg	50 mg
Willow bark extract (Salix alba)	20 mg	40 mg
Devil's claw root extract (Harpagophytum procumbens)	20 mg	40 mg
Centella asiatica leaf extract (Centella asiatica)	20 mg	40 mg
Garden angelica extract (Angelica archangelica)	20 mg	40 mg

The herbal extracts contained in the preparation have **a ratio of 10:1 written next to their names - this** is the so-called DER - what does it mean?

DER (drug extract ratio) specifies a number of milligrams of plant material used to obtain one milligram of the extract.

Thus, when a capsule contains 20 milligrams of willow bark (or other) extract DER 10:1 it means that 200 milligrams of raw material were used to obtain the capsule. The capsules from the Medical Formula NEW line have an increased DER, so the same (or even lower) amount of the extract may provide a larger dose of active substances.

Why use collagen?

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- It supports the proper functioning of the joints^{1,2}.
- It is essential for maintaining the physiological role of articular cartilage and its regeneration^{1,2}.
- It supports the barrier function of the skin, increases its density, helps prevent dehydration and reduces the signs of ageing³.

In the preparation, collagen occurs in the form of hydrolysate with a lower molecular weight. It is a source of amino acids, including exogenous, and their di- and tripeptides, which are well absorbed from the gastrointestinal tract. Once they enter the blood, amino acids and peptides are distributed to the skin, cartilage and other connective tissue structures, where they support the physiological functions of these structures.

What is the effect of the DuoLife MEDICAL FORMULA PROSTIK[®] NEW'S proprietary formula based on mangosteen fruit (Garcinia mangostana)?

Mangosteen fruits are a wealth of coenzyme Q10 and antioxidants; mangosteen is considered to be the richest source of antioxidants in the environment, protecting cells against free radicals⁴. Due to the high content of antioxidants, mangosteen fruit extract may contribute to retarding the body aging process, supports the regeneration of the body during the convalescence period and supports the weight loss process. The proprietary formula helps maintain proper joint function by supporting joint cartilage^{4,5}.

Mumio usually has a form of small, black crystals, resembling resin. Its origin is not fully explained, mumio is probably formed as a product of the process of dying off organic matter: plant remains, algae or lichens that enter the corners of mountain rocks. However, animal or geological origin of this material cannot be excluded. Mumio has a very complex and diverse composition, including over 40 macro and microelements⁶!

- It can support the processes of bone and wound healing.
- It helps strengthen the body and increase its resistance to physical load and stress.
- It contributes to the proper functioning of the heart and circulatory system.
- It supports memory and concentration.

That is why this material is extremely valuable for athletes, elderly, tired, weak and exhausted people⁷.

What connects willow bark extracts (Salix alba) with grapple plant (Harpagophytum procumbens) with centella (Centella asiatica) and with wild celery (Angelica archangelica)?

The health-supporting properties of all these plants help to keep bones, cartilage and muscles in good condition, supporting the body's fight against inflammation, which accompanies rheumatic and degenerative diseases, usually in the joints and spine. They also support the regeneration of strained or overtrained muscles, contributing to the alleviation of the related ailments⁸⁻¹⁷.

Furthermore:

- salicine contained in willow bark can support proper platelet aggregation, positively affecting blood circulation and supporting infarction prevention^{18,19};
- centella has a stimulating effect on collagen synthesis, contributing to the maintenance of skin condition and reduction of stretch marks; it also supports the healing of damaged tissues. It can also affect the accumulation of fat in adipose tissue, supporting weight loss, and improve skin microcirculation, contributing to the elimination of cellulite¹¹⁻¹³;
- grapple plant and centella stimulate the secretion of digestive juices, supporting the work of the digestive tract; both plants also support the processes of body purification^{11,16,17}
- all 4 plants are a valuable source of antioxidants, helping to maintain the proper functioning of the heart and blood vessels, have a positive effect on blood cholesterol levels and support the prevention of chronic diseases⁸⁻¹⁷;
- centella and angelica help to alleviate problems with falling asleep, helping the body fight stress and increased nervous tension¹³⁻¹⁷.

What makes DuoLife MEDICAL FORMULA PROSTIK® NEW DIFFERENT?

- Capsules made of organic cellulose derivative (HPMC), also containing chlorophyll derivatives, without preservatives, gluten and gelatin, with delayed release, with clinical trials* improving the absorption of active compounds contained inside the capsule, which translates into an increased concentration of active substances in the body.
- Packaging free of bisphenol A (BPA), a compound with controversial health effects²⁰.
- ▶ 100% natural ingredients, with an additional content of prebiotic inulin from the common chicory root; inulin stimulates the development of natural intestinal microflora, thus supporting function of the gastrointestinal tract²¹; it has a low glycaemic index.
- Formulation prepared in consideration of the principles of synergy and antagonism.
- Complete ingredients, with their biological background maintained, improving their bioavailability.
- The product DOES NOT contain preservatives, artificial fillers and is GMO FREE the raw materials used to develop the supplement DO NOT originate from genetically modified organisms.
- 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.

1 The references for DuoLife Medical Formula ProStik[®] can be found on a separate binder sheet.

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

ProStik[®] NEW

References

- 1. Kumar, S., Sugihara, F., Suzuki, K., Inoue, N., & Venkateswarathirukumara, S. (2015). A double-blind, placebo-controlled, randomised, clinical study on the effectiveness of collagen peptide on osteoarthritis. Journal of the Science of Food and Agriculture, 95(4), 702-707.
- 2. Chojnacki, M., Kwapisz, A., Synder, M., & Szemraj, J. (2014). Osteoartroza: etiologia, czynniki ryzyka, mechanizmy molekularne. Advances in Hygiene & Experimental Medicine/Postepy Higieny i Medycyny Doswiadczalnej, 68.
- 3. Asserin, J., Lati, E., Shioya, T., & Prawitt, J. (2015). The effect of oral collagen peptide supplementation on skin moisture and the dermal collagen network: evidence from an ex vivo model and randomized, placebo-controlled clinical trials. Journal of cosmetic dermatology, 14(4), 291-301.
- 4. Cieślik, I., Cieślik, E., Mentel, I., & Bartyzel, K. (2017). Działanie lecznicze owoców mangostanu właściwego (Garcinia mangostana L.). *Post. Fitoter, 18*(1), 66-70.
- 5. Cui J, Hu W, Cai Z i wsp. New medicinal properties of mangostins: Analgesic activity and pharmacological characterization of active ingredients from the fruit hull of Garcinia mangostana L. Pharmacol Biochem Behav 2010; 95:166-72.
- 6. Tran, Q. H. (2014). Mumio: natural pharmaceutical material.
- 7. Wydro, D. Adaptogeny przydatne suplementy-alternatywa dla leków.
- 8. Zielonka, A., Łoniewski, I., SAMOCHO-WIEC, L., & Juźwiak, S. (2000). Właściwości farmakologiczne standaryzowanego wyciągu z kory wierzby (Cortex salicis). *Postępy Fitoterapii*, *2*, 23-30.
- 9. Cameron, M., Gagnier, J. J., Little, C. V., Parsons, T. J., Blümle, A., & Chrubasik, S. (2009). Evidence of effectiveness of herbal medicinal products in the treatment of arthritis. *Phytotherapy Research*, 23(11), 1497-1515.
- Vlachojannis, J. E., Cameron, M., & Chrubasik, S. (2009). A systematic review on the effectiveness of willow bark for musculoskeletal pain. *Phytotherapy Research: An International Journal Devoted to Pharmacological and Toxicological Evaluation of Natural Product Derivatives*, 23(7), 897-900.
- 11. Lis, K. (2010). The devilish power of devil's claw. Reumatologia/Rheumatology, 48(2), 128-132.
- 12. Gagnier, J. J., Chrubasik, S., & Manheimer, E. (2004). Harpgophytum procumbens for osteoarthritis and low back pain: a systematic review. *BMC Complementary and Alternative Medicine*, 4(1), 13.
- 13. Bhavna, D., & Jyoti, K. (2011). Centella asiatica: the elixir of life. IJRAP, 2(2), 431-438.
- 14. Ratz-Łyko, A., & Arct, J. (2015). Kosmetyczne i dermatologiczne właściwości Centella asiatica. Polish Journal of Cosmetology, 18(1), 25-30.
- 15. Arora, D., Kumar, M., & Dubey, S. D. (2002). Centella asiatica-A Review of it's Medicinal Uses and Pharmacological Effects. *Journal of Natural remedies*, 2(2), 143-149.
- 16. Sarker, S. D., & Nahar, L. (2004). Natural medicine: the genus Angelica. Current medicinal chemistry, 11(11), 1479-1500.
- 17. Bhat, Z. A., Kumar, D., & Shah, M. Y. (2011). Angelica archangelica Linn. is an angel on earth for the treatment of diseases. International Journal of Nutrition, Pharmacology, Neurological Diseases, 1(1), 36.
- 18. Krivoy, N., Pavlotzky, E., Chrubasik, S., Eisenberg, E., & Brook, G. (2001). Effect of salicis cortex extract on human platelet aggregation. *Planta medica*, 67(03), 209-212.
- 19. McEwen, B. J. (2015, April). The influence of herbal medicine on platelet function and coagulation: a narrative review. In *Seminars in thrombosis and hemostasis* (Vol. 41, No. 03, pp. 300-314). Thieme Medical Publishers.
- 20. Rogala, D., Kulik-Kupka, K., Spychała, A., Śnieżek, E., Janicka, A., & Moskalenko, O. (2016). Bisfenol A–niebezpieczny związek ukryty w tworzywach sztucznych. *Probl Hig Epidemiol*, *97*, 213-219.
- 21. Kolida S., Gibson G.R. 2007. Prebiotic capacity of inulin-type fructans. Journal Nutrition, 137 (11 Suppl), 2503S-2506S.