ProMigren[®] NEW

DuoLife **MEDICAL FORMULA PROMIGREN® NEW** is a dietary supplement supporting the proper functioning of nervous system. The composition of natural ingredients, including the proprietary mangosteen fruit formula, has been encapsulated in innovative delayed release capsules that improve the absorption of active compounds.



DuoLife MEDICAL FORMULA PROMIGREN® NEW contains plant extracts and vitamin B2. The preparation is a valuable source of active compounds, contributing to the proper functioning of the brain and maintaining mental fitness, helping to protect the body against migraine attacks and supporting it in a situation of mood deterioration.

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When?

Serotonin is an important neurotransmitter in the central nervous system. Together with nore-pinephrine, it contributes to maintaining proper communication between the neurons in the brain. As a result, mental fitness is maintained: optimal mood, good concentration and memory¹. The correct release of serotonin from nerve endings can also help protect the body from migraine². An adequate diet and a healthy lifestyle are conducive to maintaining a healthy nervous system. Support is also provided by supplementation, helping to maintain optimal communication between neurons. DuoLife MEDICAL FORMULA PROMIGREN[®] NEW will prove to be a supportive supplement for people:

- willing to maintain good mental capacity;
- suffering from migraine headaches with accompanying symptoms such as nausea and sensitivity to sounds and light;
- struggling with lowered mood;
- women during menopause, helping to alleviate its symptoms (mood swings, hot flashes).

How?

DuoLife MEDICAL FORMULA PROMIGREN® NEW supports:

- brain functions;
- production of serotonin;
- processes of neurotransmission;
- memory and cognitive processes;
- metabolic processes;
- immune system functions;
- antioxidative mechanisms;
- physiological intestinal flora function.

DuoLife MEDICAL FORMULA PROMIGREN® NEW - usage:

1-2 capsules daily.

Composition table

Content of ingredients per average daily dosage	1 capsule	2 capsules
ProMigren® (proprietary formula of mangosteen fruit (<i>Garcinia mangostana</i>))	100 mg	200 mg
roseroot extract (Rhodiola rosea)	50 mg	100 mg
evening primrose seed extract (Oenothera biennis)	10 mg	20 mg
feverfew leaf extract (Tanacetum parthenium)	7 mg	14 mg
riboflavin	0,7 mg 50% NRV*	1,4 mg 100% NRV*

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

Ingredients: chicory root inulin (FOS), proprietary formula ProMigren[®] from mangosteen fruit (*Garcinia mangostana*), roseroot extract (*Rhodiola rosea*) 3:1, evening primrose seed extract (*Oenothera bien-nis*) 5:1, feverfew leaf extract (*Tanacetum parthenium*) 3:1, riboflavin (vitamin B2). Capsule ingredients: hydroxypropyl methylcellulose (HPMC), gellan gum, chlorophyllin and chlorophyll (dye). Anti-caking agent: silica.

Do not exceed the recommended daily intake. 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.

• The herbal extracts contained in the preparation have a ratio of 3:1 and 5:1 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.

If the capsule contains 7 milligrams of feverfew extract (or other extract) DER 3:1, this means that 21 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.

Feverfew and vitamin B2 help to protect the body from migraine attacks and alleviate the the symptoms accompanying painful seizures.

- The most important active compounds in feverfew include sesquiterpenic lactones, especially parthenolide, which is responsible for the action supporting the prevention of migraine; parthenolide affects the neuronal release of serotonin, not only helping to prevent pain attacks but also alleviating additional accompanying ailments such as hypersensitivity to light and sound, nausea and vomiting²⁻⁴.
- Vitamin B2 has a positive effect on cellular respiration processes in the mitochondria, so it can support the prophylaxis of migraine attacks and contribute to the alleviation of accompanying symptoms^{5,6}.

Golden root is a plant that supports memory and good mood. It also has an adaptogenic effect - what is it?

Adaptogen is a substance that increases the body's resistance to various adverse factors, the so-called stressors¹.

The adaptogenic action of golden root contributes to improving the body's resistance to stress, protecting the nervous system and heart from damage¹. The plant regulates the homeostasis of the organism, favouring the improvement of resistance to diseases and the improvement of the reaction to stress factors (including migraine), facilitating a quick recovery from stressors^{1,7}.

The plant owes its health-supporting properties to, among other things, phenylpropanoids (known as rosavins) and phenolic acids (mainly salidroside). Golden root has a positive effect on the central nervous system, improves memory, reflexes and concentration and reduces fatigue, also having a protective effect on the heart and antioxidant properties¹. The influence of the raw material on the central nervous system is based on the regulation of release of serotonin and norepinephrine from the areas responsible for cognitive processes (memory, learning and concentration) and serotonin and norepinephrine in areas controlling emotional tension and mood^{1,7}.

The proprietary formula of mangosteen fruit and evening primrose extract support the functions of the nervous system and help alleviate menopause symptoms.

- The health-supporting properties of mangosteen fruit depend on the content of coenzyme Q10 and xanthones: alpha- and gamma-mangostin and mangiferin. The plant is considered to be the richest source of antioxidants in nature⁸. Due to the high content of antioxidants, the raw material can support the protection of nerve cells against free radicals and the destructive effects of oxidative stress⁹. Moreover, it regulates serotonin-dependent neurotransmission, positively influencing the emotional state¹⁰; it also helps alleviate menopause symptoms⁸.
- Evening primrose contains unsaturated omega-6 fatty acids: linoleic and gamma-linolenic, which form the building blocks for phospholipids of neuronal cell membranes in the central nervous system. This way the plant supports the proper functioning of nerve cells and may contribute to the alleviation of symptoms of neuropathy, premenstrual syndrome and menopause (hot flashes)¹¹⁻¹³.

What makes DuoLife MEDICAL FORMULA PROMIGREN® NEW different?

- Capsules made of organic cellulose derivative (HPMC), containing also chlorophyll derivatives, without preservatives, gluten and gelatin, suitable also for vegans and vegetarians (plus kosher and halal certificates), with delayed release time, with clinical trials* improving the absorption of active compounds contained inside the capsule, which translates into increased concentration of active substances in the body.
- Packaging free of bisphenol A (BPA), a compound with controversial health effects¹⁴.
- 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 tract¹⁵; 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 and artificial fillers, and IS GMO FREE the raw materials used to develop the 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.

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

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

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References

- Tajer, A. (2011). Rhodiola rosea L. jako przykład rośliny adaptogennej. In Annales Academiae Medicae Silesiensis (Vol. 65, No. 4).
- 2. Studzińska-Sroka, E., Znajdek-Awiżeń, P., & Gawron-Gzella, A. (2013). Badania nad działaniem przeciwmigrenowym złocienia maruny (Tanacetum parthenium (L.) Sch. Bip.) Studies on the antimigraine action of Feverfew (Tanacetum parthenium (L.) Sch. Bip.).
- 3. Palevitch, D., Earon, G., & Carasso, R. (1997). Feverfew (Tanacetum parthenium) as a prophylactic treatment for migraine: a double-blind placebo-controlled study. *Phytotherapy Research: An International Journal Devoted to Medical and Scientific Research on Plants and Plant Products*, 11(7), 508-511.
- 4. Ernst, E., & Pittler, M. H. (2000). The efficacy and safety of feverfew (Tanacetum parthenium L.): an update of a systematic review. *Public health nutrition*, *3*(4a), 509-514.
- 5. Schoenen, J., Jacquy, J., & Lenaerts, M. (1998). Effectiveness of high-dose riboflavin in migraine prophylaxis A randomized controlled trial. *Neurology*, *50*(2), 466-470.
- 6. Condo, M., Posar, A., Arbizzani, A., & Parmeggiani, A. (2009). Riboflavin prophylaxis in pediatric and adolescent migraine. *The journal of headache and pain*, *10*(5), 361.
- 7. Brown, R. P., Gerbarg, P. L., & Ramazanov, Z. (2002). Rhodiola rosea. A phytomedicinal overview. HerbalGram, 56, 40-52.
- 8. Cieślik, I., Cieślik, E., Mentel, I., & Bartyzel, K. (2017). Działanie lecznicze owoców mangostanu właściwego (Garcinia mangostana L.). *Post. Fitoter, 18*(1), 66-70.
- 9. Zarena, A. S., & Sankar, K. U. (2009). A study of antioxidant properties from Garcinia mangostana L. pericarp extract. *Acta Scientiarum Polonorum Technologia Alimentaria*, 8(1), 23-34.
- 10. Oberholzer, I., Möller, M., Holland, B., Dean, O. M., Berk, M., & Harvey, B. H. (2018). Garcinia mangostana Linn displays antidepressant-like and pro-cognitive effects in a genetic animal model of depression: a bio-behavioral study in the flinders sensitive line rat. *Metabolic brain disease*, *33*(2), 467-480.
- 11. Lamer-Zarawska E., 1993. Właściwości biologiczne oleju wiesiołkowego. Wiad. Ziel. 35 (6), 14.
- 12. Kleijnen, J. (1994). Evening primrose oil. 1994, 824-825.
- 13. Farzaneh, F., Fatehi, S., Sohrabi, M. R., & Alizadeh, K. (2013). The effect of oral evening primrose oil on menopausal hot flashes: a randomized clinical trial. *Archives of gynecology and obstetrics*, *288*(5), 1075-1079.
- 14. 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.
- 15. Kolida S., Gibson G.R. 2007. Prebiotic capacity of inulin-type fructans. Journal Nutrition, 137 (11 Suppl), 2503S-2506S.