

DUOLIFE

Day and Night

Food supplements

DUOLIFE Day and Night are 100% natural food supplements, created for people wishing to stay in a good physical and mental shape. Both products are sources of additional energy, allowing for a whole day of intense work, and support body's regeneration process at night. A combination of as many as 26 extracts and fruit juices helps to support the functions of the cardiovascular system, the gastrointestinal tract and the immune system, detoxify the body, improve the function of the brain, liver and kidneys. Thanks to the abundance of such active ingredients as anti-oxidants, amino acids, vitamins and mineral ingredients, not only your every day, but also every night will be special.



Adapted to the daily rhythm



Broad spectrum of action



Vegan



100% natural origin

When to use DUOLIFE Day and Night?

The human body functions in a different way in the day and in the night. The function of many organs depends on the daily cycle, and their proper interaction is the basis of good physical and mental condition. In 2017, a Nobel Prize in physiology and medicine was awarded for research in molecular mechanisms responsible for the circadian rhythm, being an expression of how important it is to adjust the body's physiology to the stages of the day for human well-being.

DUOLIFE Day and Night work based on the principle of synergy, while taking into account the physiological circadian rhythm of the body, supporting its optimal functioning for people:

- ▶ wishing to stay in a good physical and mental shape and maintain their energy and vitality;
- ▶ weakened, during periods of physical and mental exhaustion;
- ▶ exposed to chronic stress;
- ▶ wishing to maintain a normal rhythm of sleep and wake;
- ▶ wishing to maintain correct blood parameters;
- ▶ suffering from gastrointestinal disorders, especially in connection to indigestion;
- ▶ suffering from recurring infections, including in the urinary tract;
- ▶ reconvalescents;
- ▶ elderly people/seniors;
- ▶ post-menopausal women.

How to use DUOLIFE Day and Night food supplements?

The ingredients of the DUOLIFE Day and Night food supplement support:

- ▶ antioxidative processes;
- ▶ immune system functions;
- ▶ functions of the gastrointestinal tract and the liver;
- ▶ cardiovascular system function;
- ▶ function of the hematopoietic system;

- ▶ physiological intestinal flora function;
- ▶ body detoxification functions and correct body weight;
- ▶ lipid and carbohydrate metabolism of the system;
- ▶ acid-base homeostasis of body fluids;
- ▶ urinary system function;
- ▶ normal sleep and brain function;
- ▶ recovery of the body;
- ▶ connective tissue function, including bone and joint system function;
- ▶ skin well-being, helping to maintain its firmness and elasticity;
- ▶ repair processes in tissues, wound healing.

Instructions for use:

DUOLIFE Day: 25 ml daily in the morning, preferably during the meal.

DUOLIFE Night: 25 ml daily in the evening, preferably during the meal.

The best results are achieved when DUOLIFE Day (morning) and DUOLIFE Night (evening) are used together, due to the synergistic effects of their active ingredients.

The products should not be used as a substitute for a varied diet. A balanced diet and healthy lifestyle are essential for the proper functioning of the body. Should you have any doubts concerning the use of the formulation, consult a doctor or a pharmacist.

25 ml = 2 tablespoons

Ingredients:

DUOLIFE Day: grape fruit juice, rosehip fruit juice, elderberry fruit juice, hawthorn fruit juice, large cranberry fruit juice, pomegranate fruit juice, noni fruit juice, sea buckthorn fruit juice, raspberry fruit juice, rosehip fruit extract (*Rosa canina*), acai berry extract (*Euterpe oleracea*), alfalfa herb extract (*Medicago sativa*) 10:1 (45.8 mg/25 ml), ginseng root extract (*Panax ginseng*) (27.49 mg/25 ml, including 3.79% of ginsenosides – 1.04 mg/25 ml), aloe leaf extract (*Aloe vera*) 200:1 (9.16 mg/25 ml).

DUOLIFE Night: beetroot juice, plum juice, grape fruit juice, chokeberry juice, acerola fruit extract (*Malpighia glabra*), goji berry extract (*Lycium barbarum*), artichoke leaf extract (*Cynara scolymus*) 20:1 (45.82 mg/25 ml), alfalfa herb extract (*Medicago sativa*) 10:1 (45.82 mg/25 ml), melissa herb extract (*Melissa officinalis*) 10:1 (45.82 mg/25 ml), white mulberry leaf extract (*Morus alba*) 10:1 (45.82 mg/25 ml), milk thistle seed extract (*Silybum marianum*) (45.82 mg/25 ml), nettle leaf extract (*Urtica dioica*) 20:1 (45.82 mg/25 ml), vilcacora stalk extract (*Uncaria tomentosa*) 20:1 (45.82 mg/25 ml).

The ratio, e.g. 10:1, listed next to the plant extracts, is the so-called DER – what does it mean?

DER (drug extract ratio) specifies a number of milligrams of the plant material used to obtain one milligram of the extract. Thus, when 25 ml of formulation contains 45.8 milligrams of the alfalfa (or other) extract, DER 10:1 means that to obtain one portion of the product (25 ml) 458 milligrams of raw material were used.

DUOLIFE Day contains plant components supporting physical activity and mental functions of the body, immunity, blood-forming processes, good skin condition, brain, heart, urinary tract and joint function

- ▶ Rosehip and sea buckthorn fruit are a true wealth of natural, well absorbed vitamin C, which supports collagen synthesis and red blood cell production; vitamin C also helps absorb iron, helping to maintain proper blood morphology; a valuable source of iron is alfalfa contained in the product¹⁻⁴.

- ▶ Hawthorn contributes to the proper functioning of the heart, helps maintain favourable blood cholesterol levels and supports the condition of blood vessels⁵.
- ▶ Cranberry supports the function of urinary system and helps maintain the correct pH of the urinary tract, thus contributing to its protection against bacterial infections⁶.
- ▶ Noni fruit supports the function of many systems and organs, including the nervous, immune, cardiovascular, joint and bone systems. It helps maintain proper memory and cognitive functions and a good mood⁷.
- ▶ Aloe vera supports the processes of body cleansing and maintaining the correct body weight; it also supports the correct function of the intestines, ensuring a favourable bacterial balance in the large intestine⁸.
- ▶ Ginseng promotes physical and mental well-being, supports memory processes and concentration, and helps maintain proper sexual functions^{9, 10}.
- ▶ Pomegranate fruits are valuable for women, as they help alleviate the symptoms of menopause; they also stimulate the growth of physiological microflora in the digestive tract^{11, 12}.
- ▶ Elderberry, raspberry, acai berries, sea buckthorn and alfalfa support the body's immune system in the fight against infections^{3, 4, 13–15}.
- ▶ The simple sugars contained in fruit juices – glucose and fructose, are an easily assimilable source of energy so necessary for intensive work every day^{1, 3, 5–8, 11–14, 16}.

DUOLIFE Night is based on plant ingredients that support metabolism, recovery and purification processes, as well as calm, soothing sleep. It contains juices and extracts that support liver, digestive tract and bone function

- ▶ Artichoke has a positive effect on the functioning of liver and biliary tract, helps regulate metabolism, supports protection and regeneration of liver cells^{18, 19}. As cleaning of the gallbladder, regeneration of the liver cells, and metabolic processes in the liver are most intense at night, the artichoke extract is most effective when used in the evening, and hence its presence in DUOLIFE Night.
- ▶ Milk thistle, especially the bioflavonoid complex contained in it: silymarin, supports the recovery and protection of the liver^{20, 21}.
- ▶ White mulberry affects the body's carbohydrate balance; it helps maintain normal blood glucose levels, contributing to slowing the absorption of glucose from meals²².
- ▶ Melissa supports normal sleep, contributes to soothing the body in states of nervous arousal, anxiety, insomnia and related disorders of heart rhythm and digestive tract work^{23, 24}.
- ▶ Vilcacora supports the immune system and cleansing processes²⁵.
- ▶ Acerola fruit is rich in vitamin C, which supports, among other things, the condition of the skin, helps maintain its firmness and elasticity and supports wound healing^{2, 26}.
- ▶ Plum has a beneficial effect on bone functions, contributes to their strengthening, density improvement and regeneration, and is particularly valuable for the elderly and postmenopausal women²⁷.
- ▶ Beetroot juice supports the blood-forming process, helps maintain proper blood pressure and cholesterol levels in blood^{28, 29}.
- ▶ Nettle is a source of silica, affects the well-being of skin, hair and nails, contributes to the proper function of joints^{30, 31}.

All plant juices and extracts contained in DUOLIFE Day and Night are a wealth of antioxidants with free radical neutralizing properties, protecting cells from oxidative stress and premature aging^{1–31}

Natural antioxidants (polyphenols, vitamin C and E) have valuable health-supporting properties^{32–34}:

- ▶ they contribute to maintaining proper triglyceride, cholesterol and glucose levels in the blood;
- ▶ they help keep blood vessels in good condition, contributing to maintaining proper blood pressure and protecting against arteriosclerosis;
- ▶ they support the removal of harmful metabolites;
- ▶ they support the body in the fight against inflammatory processes and infections, support the regeneration of damaged tissues;
- ▶ they help maintain normal neuronal function, contributing to protection against neurodegenerative processes.

What makes DUOLIFE Day and Night so special?

- ▶ **Proper distribution of ingredients in both products** for better adjustment of their functions to the daily cycle of the body – comprehensive support for the functioning of individual organs and systems, especially taking into account their natural daily rhythms, is very valuable for the body.
- ▶ **The liquid form of the preparations 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 products are 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 as well as preservation of the natural nutritional and sensory values, compared to products preserved using conventional 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 plant ingredients and 100% of their content in each preparation; natural vitamins and minerals are found in plants together with the “biological background” (flavonoids and other active compounds), which has a stabilizing and synergistic effect, also facilitating their assimilation³⁵.
- ▶ **A formulation taking into account the principles of synergy and antagonism of ingredients.**
- ▶ **The products are preservative-, gluten- and GMO-free.**
- ▶ **Special bottles made of pharmaceutical-grade glass** – the dark glass protects against light and temperature fluctuations, and is resistant to the release of mineral substances from the inner surface of the bottle to the formulation.

i Reference list for DUOLIFE Day and Night formulation can be found in the separate sheet of the binder.

* LADME – an 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.

Day and Night

References

1. Cendrowski, A., Kalisz, S., & Mitek, M. (2012). Właściwości i zastosowanie owoców róży w przetwórstwie spożywczym. *Żywność Nauka Technologia Jakość*, 19(4).
2. Zawada, K. Znaczenie witaminy C dla organizmu człowieka The importance of Vitamin C for human organism. *HERBALISM*, 22
3. Suryakumar, G., & Gupta, A. (2011). Medicinal and therapeutic potential of Sea buckthorn (*Hippophae rhamnoides* L.). *Journal of Ethnopharmacology*, 138(2), 268-278.
4. Mielmann, A. (2013). The utilisation of lucerne (*Medicago sativa*): a review. *British Food Journal*, 115(4), 590-600.
5. Król, D. (2011). Głóg (*Crataegus monogyna* (L.), *Crataegus oxyacantha* (L.)) – cenną rośliną leczniczą. *Postępy Fitoterapii*, 2.
6. Pérez López, F. R., Haya, J., & Chedraui, P. (2009). *Vaccinium macrocarpon*: an interesting option for women with recurrent urinary tract infections and other health benefits. *Journal of Obstetrics and Gynaecology Research*, 35(4), 630-639.
7. Ali, M., Kenganora, M., & Manjula, S. N. (2016). Health benefits of *Morinda citrifolia* (Noni): A review. *Pharmacognosy Journal*, 8(4).
8. Atherton, P. (1998). Aloe vera: magic or medicine?. *Nursing Standard (through 2013)*, 12(41), 49.
9. Lu, J. M., Yao, Q., & Chen, C. (2009). Ginseng compounds: an update on their molecular mechanisms and medical applications. *Current vascular pharmacology*, 7(3), 293-302.
10. Coon, J. T., & Ernst, E. (2002). Panax ginseng. *Drug safety*, 25(5), 323-344.
11. Mertens-Talcott, S. U., Jilma-Stohlawetz, P., Rios, J., Hingorani, L., & Derendorf, H. (2006). Absorption, metabolism, and antioxidant effects of pomegranate (*Punica granatum* L.) polyphenols after ingestion of a standardized extract in healthy human volunteers. *Journal of agricultural and food chemistry*, 54(23), 8956-8961.
12. Khajuria, V., Chopra, V. S., & Raina, A. S. (2008). Dietary Supplements in Menopause. *JK Science 2008*, 10(1), 2-4.
13. Liszka, K., Najgebauer-Lejko, D., & Tabaszewska, M. (2016). Owoce Czarnego Bzu (*Sambucus Nigra* L.) – Charakterystyka I Możliwości Wykorzystania W Przemysle Spożywczym. *Innowacyjne Rozwiązania W Technologii Żywności I Żywieniu Człowieka*, 102.
14. Baranowska, A., Radwańska, K., Zarzecka, K., Gugala, M., & Mystkowska, I. (2015). Właściwości prozdrowotne owoców maliny właściwej (*Rubus idaeus* L.). *Problemy Higieny i Epidemiologii*, 96(2), 406-409.
15. Ulbricht, C., Brigham, A., Burke, D., Costa, D., Giese, N., Iovin, R., ... & Windsor, R. (2012). An evidence-based systematic review of acai (*Euterpe oleracea*) by the Natural Standard Research Collaboration. *Journal of dietary supplements*, 9(2), 128-147.
16. Kopeć, A., Piątkowska, E., Leszczyńska, T., & Biezanowska-Kopeć, R. (2011). Prozdrowotne właściwości resweratrolu. *Żywność Nauka Technologia Jakość*, 18(5).
17. Li, S. H., Zhao, P., Tian, H. B., Chen, L. H., & Cui, L. Q. (2015). Effect of grape polyphenols on blood pressure: a meta-analysis of randomized controlled trials. *PLoS One*, 10(9), e0137665.
18. Nurzyńska-Wierdak, R., Sałata, A., & Stepaniuk, R. (2018). Prozdrowotne Właściwości Karczocha Zwyczajnego (*Cynara Scolymus* L., Asteraceae). *Kosmos*, 67(4), 823-831.
19. Salem, M. B., Affes, H., Ksouda, K., Dhoubi, R., Sahnoun, Z., Hammami, S., & Zeghal, K. M. (2015). Pharmacological studies of artichoke leaf extract and their health benefits. *Plant foods for human nutrition*, 70(4), 441-453.
20. Flora, K., Hahn, M., Rosen, H., & Benner, K. (1998). Milk thistle (*Silybum marianum*) for the therapy of liver disease. *The American journal of gastroenterology*, 93(2), 139-143.
21. Tamayo, C., & Diamond, S. (2007). Review of clinical trials evaluating safety and efficacy of milk thistle (*Silybum marianum* [L.] Gaertn.). *Integrative cancer therapies*, 6(2), 146-157.
22. Chan, E., Phui-Yan, L., & Siu-Kuin, W. (2016). Phytochemistry, pharmacology, and clinical trials of *Morus alba*. *Chinese journal of natural medicines*, 14(1), 17-30.
23. Nowak, G. (2009). Surowce roślinne o działaniu przeciwlękowym i antydepresyjnym. *Herba Polonica*, 55(1).
24. Alijaniha, F., Naseri, M., Afsharypuor, S., Fallahi, F., Noorbala, A., Mosaddegh, M., ... & Sadrai, S. (2015). Heart palpitation relief with *Melissa officinalis* leaf extract: double blind, randomized, placebo controlled trial of efficacy and safety. *Journal of ethnopharmacology*, 164, 378-384.
25. Keplinger, K., Laus, G., Wurm, M., Dierich, M. P., & Teppner, H. (1998). *Uncaria tomentosa* (Willd.) DC. – ethnomedicinal use and new pharmacological, toxicological and botanical results. *Journal of ethnopharmacology*, 64(1), 23-34.
26. Majewski, J., Orylski, M., Całkosiński, A., & Majewski, M. (2018). Acerola – tropikalny owoc z ogromną dawką witaminy C.
27. Igwe, E. O., & Charlton, K. E. (2016). A systematic review on the health effects of plums (*Prunus domestica* and *Prunus salicina*). *Phytotherapy Research*, 30(5), 701-731.

28. Maheshwari, R. K., Parmar, V., & Joseph, L. (2013). Latent therapeutic gains of beetroot juice. *World Journal of Pharmaceutical Research*, 2(4), 804-820.
29. Cai, Y., Sun, M., & Corke, H. (2003). Antioxidant activity of betalains from plants of the Amaranthaceae. *Journal of agricultural and food chemistry*, 51(8), 2288-2294.
30. Prokop, P., & Astel, A. (2017). Rola suplementacji w zbilansowanym żywieniu człowieka. Cz. 1. *LAB Laboratoria, Aparatura, Badania*, 22.
31. Randall, C., Meethan, K., Randall, H., & Dobbs, F. (1999). Nettle sting of *Urtica dioica* for joint pain—an exploratory study of this complementary therapy. *Complementary therapies in medicine*, 7(3), 126-131.
32. Grajek, W. (2004). Rola przeciwutleniaczy w zmniejszaniu ryzyka wystąpienia nowotworów i chorób krążenia. *Żywność Nauka Technologia Jakość*, 11(1), 3-11.
33. Włodek, L. (2004). Reaktywne formy tlenu (RFT) w warunkach fizjologicznych i patologicznych, komórkowe systemy antyoksydacyjne. *Far. Polska*, 60(9), 404-419.
34. Flora, S. J. S. (2007). Role of free radicals and antioxidants in health and disease. *Cellular and Molecular Biology*, 53(1), 1-2.
35. Thiel, R. J. (2000). Natural vitamins may be superior to synthetic ones. *Medical hypotheses*, 55(6), 461-469.