

My Mind

DuoLife My Mind is a liquid dietary supplement that contains natural botanicals, including proprietary formulas COGNIVIA™* and ARONVIT® enriched with inositol and active form of vitamin B12 (methylcobalamin). The preparation is composed of highest-quality raw ingredients supporting concentration, memory and cognitive processes in both the young and elderly. It's a valuable source of vitamins and plenty of active compounds found in standardised plant extracts. Health-oriented effect of ingredients in this dietary supplement was proven by clinical trials and documented in scientific reports.



When?

Memory and concentration problems affect more and more people of different ages. It is estimated that around 50 millions of people worldwide suffer severe memory problems¹ and the number of people affected by troubles with memorising and concentration is growing. Memory is a cognitive activity allowing for temporary or permanent remembering, storing and retrieving information. It is divided into short-term memory, responsible for temporary information storage and perception, and long-term one, responsible for information preservation, memories or skills.

Appropriate brain parts are in charge of memory and cognitive processes, learning, and concentration. For these processes to proceed smoothly, appropriate communication between neurons (nerve cells) is needed, thus requiring appropriate level of so-called neurotransmitters responsible for relaying nerve impulses. A neurotransmitter called acetylcholine plays an important role in the emergence of short-term memory. Long-term memory emerges as a result of processing fresh memory and is stored in various centers in brain cortex². Maintaining proper acetylcholine level helps preserve concentration, as well as cognitive and executive functions such as memory, thinking, understanding, attention and orientation. This also applies to people affected by dementia - a progressive decline of mental capability. Optimal functioning of neurons may also be affected when there is a decrease in the amount of neurotransmitters in brain, as well as a result of oxidative stress triggered by the accumulation of the so-called oxygen free radicals. Healthy lifestyle and properly balanced diet, as well as appropriate supplementation, foster optimal functioning of the nervous system.

DuoLife My Mind dietary supplement is intended for use as use as support for optimal optimal brain functions for:

- ▶ people who want to support concentration, memory, and cognitive processes on a daily basis;
- ▶ active professionals;
- ▶ knowledge workers, including students and pupils;
- ▶ the elderly;
- ▶ people with memory problems and symptoms of dementia;
- ▶ people with concentration problems, at risk of chronic stress;
- ▶ people dedicated to keeping the nervous system healthy;
- ▶ people with lowered energy, vitality;
- ▶ people with lowered mood.

How?

DuoLife My Mind stands for 100% natural botanical extracts and additional ingredients of natural origin: inositol and vitamin B12.

The dietary supplement contains:

- ▶ proprietary botanical formula **COGNIVIA™*** based on two sage types with clinically proven effectiveness;
- ▶ proprietary chokeberry fruit extract formula – **ARONVIT®**, standardised to 25% anthocyanins content;
- ▶ valuable herbal extract of: Chinese magnolia-vine fruits (*Schisandra chinensis*), Ginkgo biloba leaf (*Ginkgo biloba*), rose root (*Rhodiola rosea*), rosemary leaves (*Rosmarinus officinalis*), bacopa monnieri/Brahmi leaves (*Bacopa monnieri*), acerola fruits (*Malpighia glabra*);
- ▶ proprietary formula based on methylcobalamin - active form of vitamin B12 – **MECOBALACTIVE®****;
- ▶ inositol.

DuoLife My Mind supports in both young and older people:

- ▶ proper memory functions;
- ▶ optimal cognitive processes;
- ▶ concentration;
- ▶ the learning process;
- ▶ energy and vitality;
- ▶ optimal health of the nervous system;
- ▶ optimal mood;
- ▶ antioxidative processes.

Thanks to properties of the ingredients found in the product, the supportive effect of memory and cognitive processes and concentration starts – and is noticeable – after just 1 hour after taking a single dose. It is then further strengthened with each day the supplement is taken!



DuoLife My Mind - recommended intake:

People above the age of 12 years: 25–50 ml in the morning, with meal. Do not exceed the recommended maximum daily dose.

The product cannot be used as a substitute (replacement) for a varied diet. A balanced diet and a 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.



Ingredients: Chokeberry fruit juice concentrate, red grape juice concentrate, inositol, COGNIVIA™* – a proprietary formula based on organic garden sage extract (*Salvia officinalis*) 5:1 and organic microencapsulated essential oil from lavender sage (*Salvia lavandulifolia*), acerola fruit extract (*Malpighia glabra*) standardised for 50% vitamin C content, Chinese magnolia-vine extract (*Schisandra chinensis*) 10:1 (200 mg/50 ml) standardised to 10% schisandra content, Ginkgo biloba leaf extract (*Ginkgo biloba*) 50:1 (100 mg/50 ml), Rose root extract (*Rhodiola rosea*) 3:1 (100 mg/50 ml), ARONVIT® – a proprietary formula of chokeberry fruit extract (*Aronia melanocarpa*) standardised to 25% anthocyanin content, rosemary leaf extract (*Rosmarinus officinalis*) 10:1, bacopa leaf extract/Brahmi (*Bacopa monnieri*) 5:1 (50 mg/50 ml), MECOBALACTIVE®** – a proprietary active form of vitamin B12 (methylcobalamin).

* COGNIVIA™ is a trademark of Nexira.

** MECOBALACTIVE® is a trademark of HEALTHTECH BIO ACTIVES, S.L.U.

Content per serving of the product	25 ml	50 ml
Inositol	1.5 g	3 g
COGNIVIA™* – a proprietary organic formula of garden sage extract and microencapsulated lavender sage oil	300 mg	600 mg
Vitamin C from acerola (<i>Malpighia glabra</i>) fruit extract	52.5 mg (66% NRV*)	105 mg (131% NRV*)
Vitamin B12 MECOBALACTIVE®** (methylcobalamin)	100 µg (4000% NRV*)	200 µg (8000% NRV*)

The herbal extracts in the preparation have **5:1, 3:1, 10:1 ratios 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 the plant material used to obtain one milligram of the extract. If one 50 ml dose of the supplement contains 100 mg extract of Ginkgo biloba leaf 50:1 (or other herbal extract), it means that as much as 5000 mg (5 grams) of raw ingredient was used to obtain one dose.

What is COGNIVIA™* and why is it such a valuable ingredient of DuoLife My Mind?

COGNIVIA™* is a proprietary, organic, **synergistic** plant-based formula **developed around two species of sage, with clinically proven efficacy**. A dose and dose equivalents of 300-600 mg of formula per day were used in clinical trials. **This dose is contained in 25–50 ml DuoLife My Mind dietary supplement.**

1 dose (600 mg) of COGNIVIA™* found in 50 ml of DuoLife My Mind dietary supplement contains:

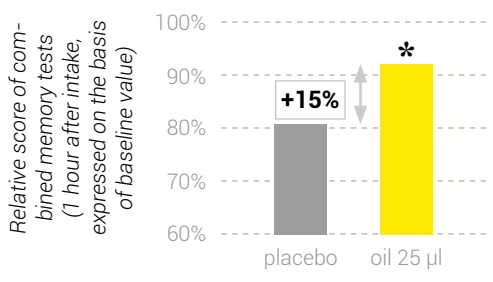
- ▶ **400 mg of garden sage (*Salvia officinalis*)** – leaf extract – the extract is a valuable source of health-promoting polyphenolic compounds such as rosmarinic acid, apigenin, quercetin and luteolin³;
- ▶ 200 mg of microencapsulated formula based on organic acacia fiber: the microcapsules contain **50 µl of lavender sage (*Salvia lavandulifolia*) essential oil**. Sage essential oil contains health-promoting terpenoids, mainly eucalyptol, camphor, as well as alpha- and beta-pinene⁴. **Microcapsules protect active compounds found in the oil against adverse effects of oxidation. They also allow for combining the oil with the extract in one powdered formula.**

Sage has been used for ages due to a multitude of its health-promoting properties. Particularly worth attention here is the influence of the plant on memory and cognitive functions³. Antioxidative properties of the representatives of the *Salvia* genus were widely documented scientifically and clinically, thus supporting the functioning of brain and the whole nervous system, as well as fostering memory, attention and learning (nootropic effect). Moreover, it's been proven that numerous *Salvia* genuses, including garden sage and lavender sage, may support memory functions in people with dementia – or even those battling Alzheimer's disease.

There were as many **as 7! clinical trials** completed, all showing the influence of the formula on cognitive and memory functions in humans^{5–10a}, involving both short- and long-term memory. Results of these trials were **published in esteemed international medical journals with over 1000 citations**, which proves the immense importance of the presented reports. The trials were conducted according to the gold standard of randomised, double-blind, placebo-controlled trials.

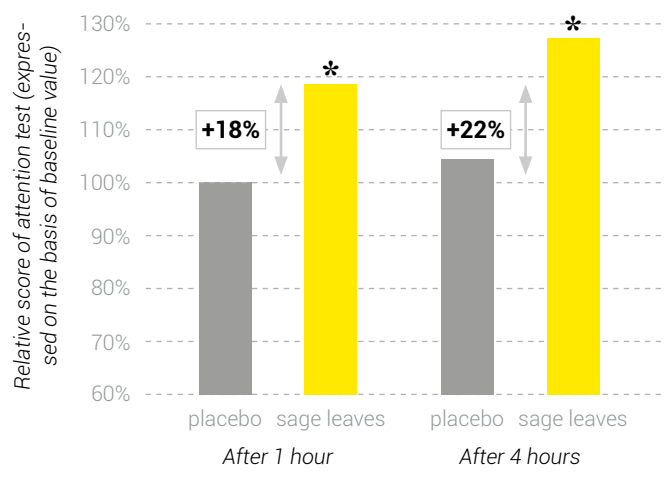
The trials proved that lavender sage essential oil boosts mood, as well as quality and speed of memory – especially the long-term one – while garden sage extract contributes to improved concentration and attention. **It was proven that the formula/formula equivalents work after just one use (after 1-6 hours after intake), with the effect strengthening with every day of use! The trials were conducted in both young and older participants!** (Fig. 1–3)

Clinical trial: the influence of lavender sage essential oil on long-term memory (25 µl of oil)



25 µl of oil is included in 25 ml of DuoLife My Mind

Clinical trial: influence of garden sage on cognitive functions (600 mg of dried leaves)



600 mg of leaves equals 180 mg of sage extract found in ca. 25 ml dose of DuoLife My Mind

Figure 1: Clinical trial results showing the influence of lavender sage essential oil⁵ and dried leaves of garden sage⁶ on long-term memory and concentration after just 1-4 hours after taking a dose. *p<0.05

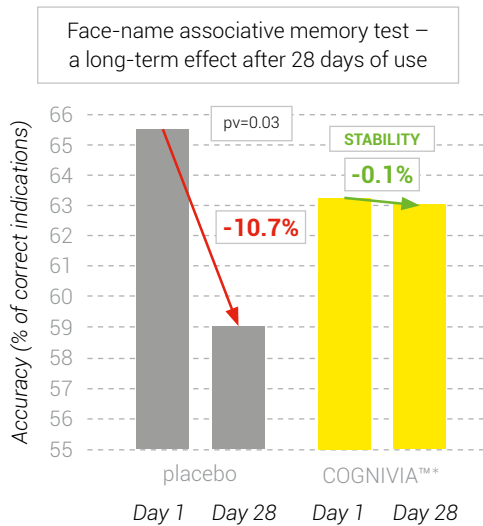
Using the COMPASS test battery, working memory was assessed. Working memory is a combination of short-term memory, attention and data analysis ability^{5-10a}.

Test type	Immediate effect		Long-term effect
	Day 1	Day 28	
Corsi block-tapping test	🧠	🧠	🧠
Numeric working memory	NS	🧠	🧠
Face-name associative memory test.	NS	NS	🧠

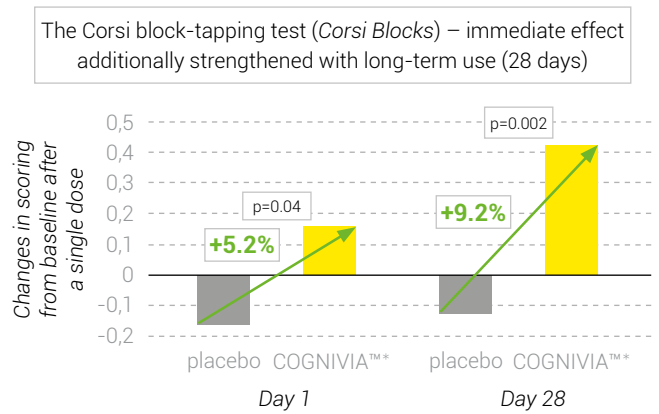
🧠 – summary of all statistically significant memory effects (p<0.05)

Figure 2: Study on working memory – effects following intake of single dose on the first day of the study and after long-term use (at least 28 days). Used cognitive tests belong to the known COMPASS test battery and include: the Corsi block-tapping test (Corsi Blocks), numerical operational memory test and the face-name associative memory test. Based on ^{5-10a}. NS = results not significant

Most recent reports were published in 2021¹⁰, presenting the synergistic influence of the whole formula on cognitive processes in both young people and the elderly who took the formula incidentally and subsequently for 28 days.



In the placebo group, a decline in good results was observed after 28 days of testing, opposite to **the stable, long-lasting effect of COGNIVIA™***.



In the test, improvement of memory functions in the study group **increases successively and is almost twice as high after 28 days of use** compared to first day. Test results, both on first and 28th day of using the COGNIVIA™* formula is **significantly better than in the placebo group**.

Figure 3: 2021 reports show the influence of the COGNIVIA™* formula on working memory after one use on the first day of study, successively strengthened with application time extended up to 28 days. Based on ¹⁰.

Moreover, *in vivo* studies showed **beneficial synergistic effect of both components of the COGNIVIA™* formula**. Study results prove that combining two sage types has **significantly better influence on memory processes than every of the types used individually**. The effect is noticeable from the first use (1-6 hours after the first intake on the first day of the study) and strengthened with each subsequent day of use¹¹ (Fig. 4).

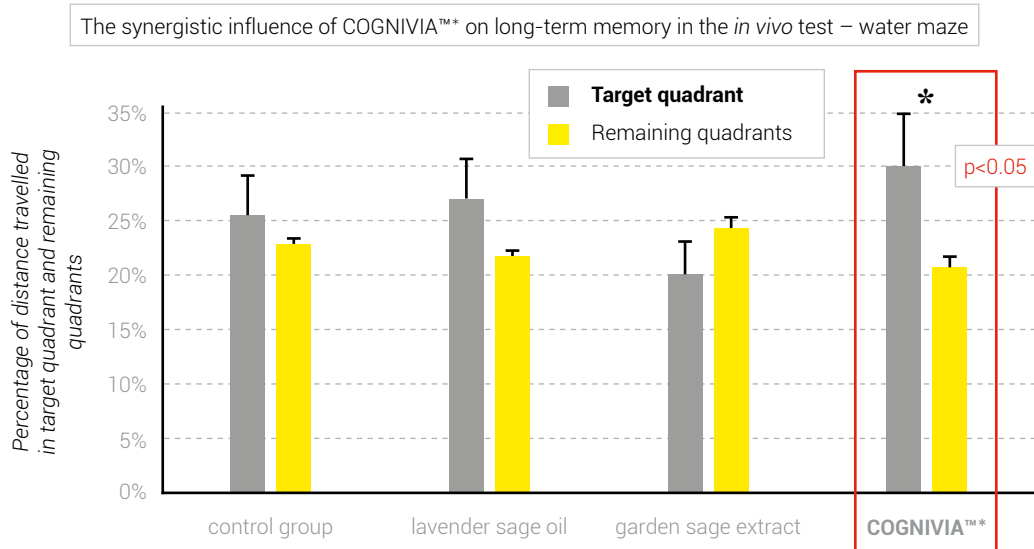


Figure 4: The synergistic effect of the COGNIVIA™* – formula – the formula presents significantly better influence on long-term memory in the *in vivo* tests than all of the components tested separately. Based on ¹¹.



i Note: you can test the effect of the COGNIVIA™* formula found in DuoLife My Mind yourself by participating in memory tasks IDENTICAL to those employed in clinical trials! All it takes is downloading the „CogniviaApp“ (available for iOS) on your phone and start taking daily, short memory tests using the app. Thanks to it, the participant can objectively observe on their own how the formula supports their cognitive functions and how, with each day of using, it contributes more and more to their improvement.

According to the fundamental rules of synergism, rosemary extract supports the properties of the COGNIVIA™* formula

Rosemary (*Rosmarinus officinalis*) demonstrates properties supporting the functioning of the nervous system, fosters optimal memory functioning and concentration, boosts cognitive functions. Moreover, due to antioxidative properties, it contributes to protecting neurons against oxidative stress. Health-oriented effect of the raw ingredient was backed by clinical trials¹².

Active compounds of rosemary include, among others, **terpenoids** – these compounds show **synergistic effect with terpenoids found in lavender sage essential oil** found in **COGNIVIA™***.

As many as 3 botanical extracts with adaptogenic properties were used in DuoLife My Mind! What are adaptogens and what is their function?

The term **adaptogen** refers to a substance allowing the body to react to physical, chemical and biological stress agents, by increasing a non-specific body response to a given stressor. An adaptogen increases the body's ability to adapt to changing conditions in its environment¹³.

In case of DuoLife My Mind, the adaptogenic effect refers to rose root, Chinese magnolia-vine and bacopa monnieri/Brahmi extracts.

Rose root (*Rhodiola rosea*) contributes to the improvement of memory, reflex and concentration. It also reduces fatigue. As an adaptogen it fosters the improvement of non-specific body resistance to stress, contributing to the protection of the nervous system and circulatory system (the heart) against damage¹³.

Chinese magnolia-vine fruits (*Schisandra chinensis*) contain schisandrin - a substance with adaptogenic and antioxidative properties^{14, 15}. Chinese magnolia-vine contributes to maintaining the proper level of neurotransmitters in the central nervous system, which indirectly contributes to the improvement of learning and memorising abilities. It also increases alertness, improves concentration and mental performance without nervousness and irritability¹⁴.

Brahmi (bacopa monnieri) also shows **adaptogenic properties**¹⁶, contributing to the maintenance of optimal functioning of the nervous system. Moreover, it has antioxidative and detoxifying properties, fostering the removal of harmful metabolic waste products and heavy metals from body¹⁷. The influence of Brahmi on **memory and cognitive processes is widely documented in scientific reports and proven by clinical trials**¹⁸⁻²¹.

Why are vitamin B12 and inositol important for optimal functioning of the nervous system?

Vitamin B12 plays a key role in attention and learning processes²². Vitamin B12 deficiency is observed in people with dementia and cognitive disorders. Its supplementation may significantly support memory processes in these people^{23, 24}. Humans cannot synthesize vitamin B12 on their own. Physiologically, the production of this vitamin is aided by intestinal bacteria.

Vitamin B12 in the form of methylcobalamin found in the proprietary, active MECOBALACTIVE^{®**} formula was used in DuoLife My Mind dietary supplement. It is produced in a safe, controlled process based on the idea of the so-called "**green chemistry**" from the base compound – cyanocobalamin – which, in turn, is obtained in the process of fermentation (being thus an ingredient of natural origin).

Moreover, **inositol** demonstrates antioxidative properties, contributing to the protection of neurons and supporting body's energy metabolism²⁵. Helps improve wellness, mood, minimise anxiety and regulate the circadian rhythm. Inositol is a natural ingredient sourced in hydrolysis of phytic acid isolated from corn.

ARONVIT[®] and ginkgo biloba extract contribute to optimal functioning of brain vessels and to the minimalisation of oxidative stress.

ARONVIT[®] is a proprietary formula based on chokeberry fruit extract with high, standardised content of anthocyanins - active compounds that contribute to the reduction of harmful influence of free oxygen radicals on the functioning of the nerve cells. Moreover, it was demonstrated that used systematically, chokeberry extract significantly influences memory functions^{26, 27}.

Ginkgo biloba is valued for its properties that protect nervous cells. What's particularly important, it shows antioxidative properties and fosters correct condition of brain vessels, contributing to the improvement of blood circulation in brain, thus improving memorisation, attention, and learning processes²⁸. **Health-promoting properties of ginkgo were proved by hundreds of clinical trials**^{29, 30}.

Ginkgo biloba extract contains over 60 bioactive ingredients. However, two main groups – flavonoids and terpenoids – are essential. The extract found in DuoLife My Mind is **standardised to high content of both flavonoid glycosides (24%) and terpene lactones (6%)**. This guarantees health-promoting effect of the raw material.

What makes DuoLife My Mind stand out?

- ▶ **100% natural plant extracts** with additional ingredients of natural origin (inositol and vitamin B12) **that support memory, cognitive processes and concentration and boost energy and vitality;**
- ▶ **Composition based on branded ingredients, including proprietary formulas with clinically proven health-oriented effect;**
- ▶ **Immediate and long-lasting effect:** immediate **memory and concentration support from the very first use, strengthened with every following day thanks to features of the proprietary COGNIVIA^{™**}** formula found in the product, and also with the help of other ingredients of the supplement;
- ▶ **The product is dedicated to both young people (pupils, students), adults, and the elderly –** health-oriented effect of the ingredients has been proven in a wide age group;
- ▶ The **"the CogniviaApp" application** available for download to a mobile phone (with iOS), enables self-control of the influence of the COGNIVIA^{™**} formula found in the preparation on memory processes – the tests in the app are IDENTICAL to those conducted during clinical trials;
- ▶ As many as **7 clinical trials for ingredients of the COGNIVIA^{™**}** formula that were published in esteemed international medical journals – in total, the reports were cited over 1000 times;
- ▶ **Synergic action** of all ingredients;
- ▶ **Active form of vitamin B12 – methylcobalamin;**
- ▶ **Convenient form of use** – liquid ready for immediate consumption;

- ▶ The product **CONTAINS NO** artificial **fillers and is GMO free;**
- ▶ The preparation **contains no artificial flavourings and aromas;**
- ▶ **The product is GLUTEN-FREE** – can be used by people with gluten intolerance;
- ▶ The product is **suitable for vegans and vegetarians;**
- ▶ 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;
- ▶ Special **bottle from pharmaceutical-grade glass** – dark glass protects against light and temperature fluctuations, and is resistant to release to the formulation of mineral substances from its inner surface of the bottle.

i *The references for DuoLife Liquid Form My Mind can be found on a separate binder sheet.*