

Nootropics definition

Nootropic is a substance that enhances cognition and memory and facilitates learning. Nootropics work in many ways to produce a range of benefits across memory, focus, attention, motivation, relaxation, mood, alertness, stress resistance.

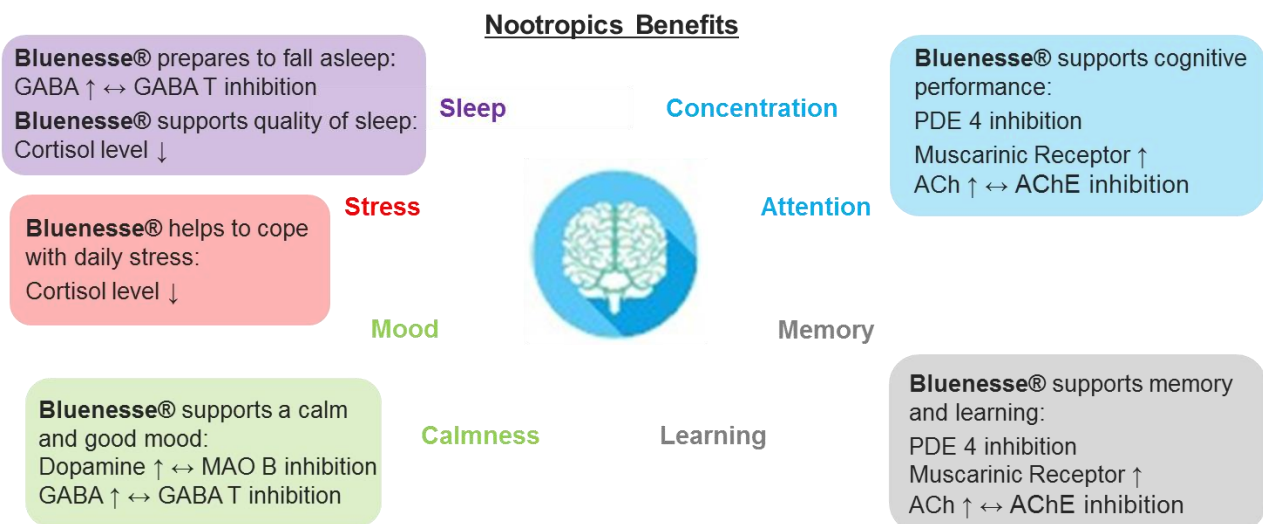
Bluenesse®

Bluenesse® – an innovative, exclusive lemon balm extract, *Melissa officinalis* (L.) – supports your mental health. It has an immediate effect on focus, concentration, and memory. Furthermore, it supports a calm and good mood and helps to balance the stress hormone cortisol.



Bluenesse® - Nootropics concepts

Nootropic benefits of Bluenesse® and the underlying mode of action:



Bluenesse® - Nootropics concepts – detailed information:

Several, double blind, randomized, placebo-controlled, crossover human study results have shown that Bluenesse® supports nootropic effects on demand. Below, the investigated parameter and mode of action is explained per each nootropic application.

Cognitive performance support and enhancing learning & memory:

Bluenesse® significantly improves cognitive performance, particularly alertness, working memory and mathematic processing by improving the efficiency of neuronal communication.

- It activates Muscarinic receptors, which are responsible for the efficient flow of information between neurological cells, so-called “oscillation”, leading to a better cognitive performance
- It inhibits PDE4, which degrades cAMP, which is a second messenger of the cAMP/PKA/CREB pathway. cAMP has been shown to be necessary to build up “long-term potentiation” (LTP) signal transmission (Ca²⁺ ions) between neurons, critically involved in learning and memory
- It inhibits acetylcholine-esterase, an enzyme which degrades acetylcholine, which is important for communication between the brain and the muscles

Good mood support and to be calm & relaxed and prepare to fall asleep:

Bluenesse® significantly reduces anxiety by controlling neuronal communication and avoiding information overflow.

- It inhibits MAO B, an enzyme which degrades Dopamine. Dopamine is a neurotransmitter response for communication between nerve cells, which are especially responsible to trigger motivation and good mood
- It inhibits GABA Transaminase, which degrades GABA; a neurotransmitter responsible to reduce neuronal communication, and to ensure that we are not overloaded by information

Cortisol control to cope with stress and enable regeneration during sleep

Bluenesse® significantly reduces stress-induced cortisol levels measured in saliva

- The body’s negative responses to mental or physical stress are high cortisol levels, leading to high blood pressure, anxiety, and a metabolism in favor for quick energy related to glucose
- When cortisol levels remain high during night your body can not relax and sleep well. Low cortisol levels are necessary to enable the release of the human growth hormone (GH) which is essential for physical body repair. In addition, sleep is the longest fat-burning phase of the day, allowing the body to lower blood sugar and to refuel the brain and muscle with sugar, energy. Sleep with high cortisol levels, is no quality sleep, even after enough hours of sleep, one might weak up being tired
- Bluenesse® supports quality of sleep by controlling cortisol levels