

KeenMind®



Supports memory, concentration and learning function

The KeenMind® difference

- Uses a clinically trialled specific extract of *Bacopa monnieri* – CDRI 08.
- The KeenMind® CDRI 08 extract has been researched in more than six high quality clinical trials and numerous preclinical studies.
- KeenMind® is the results of more than 50 years of research and development started by the Central Drug Research Institute (CSIR-CDRI).
- Commitment to rigorous harvesting and manufacturing processes results in a consistent, complete and unique *Bacopa monnieri* extract.
- Standardised from the whole plant to contain not less than 55% bacosides.
- Well established tolerability through clinical research, with no known reported drug interactions.

KeenMind® contains the scientifically researched extract of *Bacopa monnieri* CDRI 08

KeenMind® therapeutic indications

- Supports mental concentration, focus and clarity.
- Enhances mental endurance and alertness.
- Helps increase attention span and reduces cognitive fatigue.
- Supports learning and information processing.
- Promotes learning ability and enhances cognitive performance.
- Increases memory and supports mental recall.
- Improves short term memory.
- Helps promote healthy neurotransmission.
- Supports brain function and health.
- Traditionally used in Ayurvedic medicine:
 - as an adaptogen to help with stress adaptation
 - to support learning and information processing
 - to promote learning ability
 - as a nerve tonic.
- Relieves irritability and decreases nervous tension.
- Reduces symptoms of stress and mild anxiety.
- As an antioxidant: Helps reduce free radical formation and damage to body cells.

CDRI 08- the *bacopa* extract with a complex constituent profile, clinically proven for memory, concentration and learning function



Multiple clinical trials and history of use show efficacy and tolerability



KeenMind® has a long history of use and good levels of tolerability:

- With over 50 years of research and development started by the Central Drug Research Institute (CSIR-CDRI).
- Numerous randomised, double-blind clinical trials show efficacy and good tolerability (including studies conducted by the Swinburne University of Technology in Melbourne). Research is ongoing.
- Bacopa has shown good tolerability in children, adolescents and adults.

KeenMind® research summary

KeenMind® and the specialised extract, CDRI 08, have been researched for efficacy in hundreds of subjects. This research shows a clinically proven use of KeenMind® for memory, concentration and learning function.

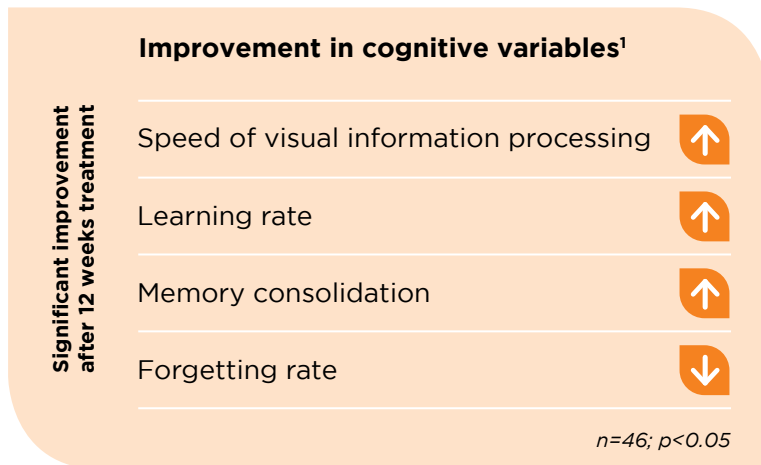
Lead Author/Year	Study Design	Participants/Dose	Outcome Summary
Stough et al. 2001 ¹ .	Randomised, double-blind, placebo-controlled, independent group study.	46 healthy adults (18-60 years). Two KeenMind® capsules or placebo daily for 12 weeks (3 months).	Chronic cognitive function efficacy study KeenMind® was given chronically for 3 months, with neuropsychological testing completed at 5 and 12 weeks. KeenMind® significantly improved early information processing, verbal learning, memory consolidation. It also produced a significant decrease in state anxiety, compared to placebo.
Stough et al. 2008 ² .	Randomised, double-blind, placebo-controlled, independent group study.	107 healthy adults (18-60 years). Two KeenMind® capsules or placebo daily for 90 days (3 months).	Chronic cognitive function efficacy study KeenMind® was given chronically for 90 days, with significantly improved spatial working memory accuracy and rapid visual information processing, compared to placebo. There was a trend toward improved cognitive functioning in areas of attention, working memory and psychomotor tasks. KeenMind® was well tolerated.
Downey et al. 2013 ³ .	Randomised, double-blind, placebo-controlled, crossover design study.	24 healthy adults (18-56 years). KeenMind® capsules at the CDRI 08 dose of 320mg or 640mg, or placebo, were given on each testing day (3) and separated by 7 day washout period.	Acute cognitive function efficacy study KeenMind® 320mg acutely enhanced cognitive functioning, particularly aspects of reasoning and cognitive speed. The effect did not appear to be dose related. KeenMind® was well tolerated.
Benson et al. 2014 ⁴ .	Randomised, double-blind, placebo-controlled, crossover design study.	17 healthy adults (18-44 years). KeenMind® capsules at the CDRI 08 dose of 320mg or 640mg, or placebo, were given on each testing day (3) and separated by 7 day washout period.	Acute cognitive function efficacy study KeenMind® 320mg produced acute improvement in aspects of reasoning and cognitive speed, indicating positive nootropic effects starting at 1 hour post intervention, compared to placebo. There were also reductions in cortisol levels, signifying a possible adaptogenic effect. KeenMind® was well tolerated.

Research shows that bacopa may improve cognition acutely and chronically, particularly when subjects are engaged in cognitively challenging or stressful situations.^{1,4}

Improvement in cognitive functions with KeenMind®

In this randomised, double-blind, placebo-controlled study, two KeenMind® capsules per day improved many higher order cognitive variables related to learning and memory. This suggests it helps process and organise information acquired from the environment.¹

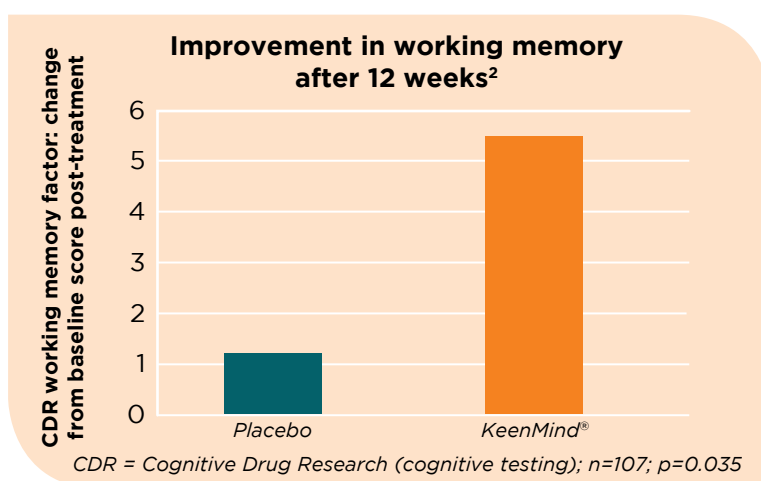
Stough C, et al. The chronic effects of an extract of *Bacopa monnieri* (Brahmi) on cognitive function in healthy human subjects. *Psychopharmacology*. 2001;156(4):481-484.



Working memory improvement with KeenMind®

In this randomised, double-blind, placebo-controlled study, working memory significantly improved in the healthy adults.² Working memory processes, stores and recalls information, and plays a key role in learning.

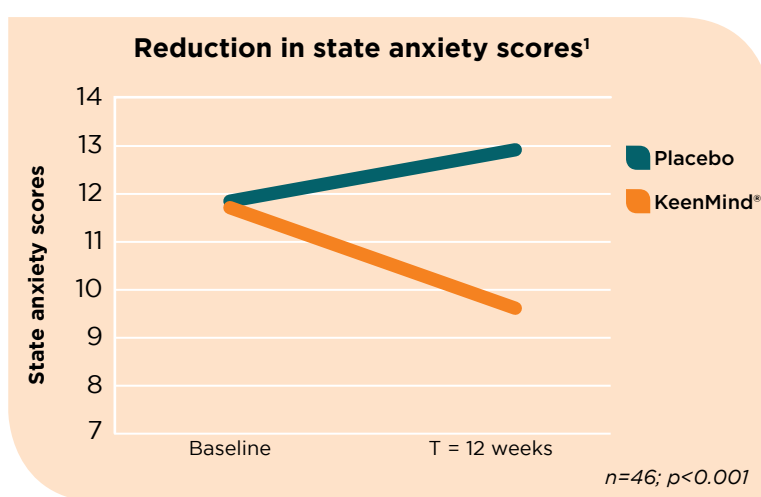
Stough C, et al. Examining the nootropic effects of a special extract of *Bacopa monnieri* on human cognitive functioning: 90 day double-blind placebo-controlled randomized trial. *Phytother Res*. 2008;22 (12):1629-1634.



KeenMind® may be beneficial in mild anxiety

State anxiety is a transitory emotional state with feelings of apprehension, tension, nervousness and worry.⁵ In this study, KeenMind® produced a significant reduction in state anxiety, compared to placebo, during cognitive testing. This suggests it may be helpful at times of stress or when calm focus is required.¹

Stough C, et al. The chronic effects of an extract of *Bacopa monnieri* (Brahmi) on cognitive function in healthy human subjects. *Psychopharmacology*. 2001;156(4):481-484.



KeenMind® potential modes of action

The exact mode of action of *Bacopa monniera* has not yet been fully determined.² However, the specialised extract CDRI 08 has been the subject of numerous experimental studies and it is suggested that it works in supporting brain and cognitive health through many complex mechanisms, including:

- Antioxidant effect, including Nrf2 expression.⁸
- Anti-inflammatory effect.⁹
- Neurotransmitter and neuromodulation, including 5-HT.^{8,10-12}
- Reducing cortisol levels.⁴
- Increase in brain derived neurotrophic factor (BDNF).¹²
- Regulation of N-methyl-D-aspartate receptors (NMDAR) and post synaptic density (PSD-95) composition.¹⁰

Traditionally, bacopa was used in Ayurvedic medicine to help the body adapt to stress. This may be explained by research showing it attenuates the systemic HPA axis.¹³ All of these processes can contribute to learning, memory, attention, and brain health and function.

Active ingredients

Each KeenMind® hard capsule contains:

Bacopa monnieri (Bacopa) extract dry conc. (CDRI 08*) 160mg, equivalent to whole plant dried 2.16g.

*CDRI 08 is a scientifically researched extract of *Bacopa monnieri*. Commitment to rigorous processes from the harvesting the plant by hand, through to analysis and then manufacture of the final product, results in a consistent form of *Bacopa monnieri* extract, meaning that each final product will contain the same high quality extract. The extract in its entirety is believed to be responsible for the efficacy and tolerability that has been demonstrated in clinical trials. CDRI 08 is standardised from the dried whole plant to contain not less than 55% bacosides (based on UV spectrophotometry).⁶

Dosage and administration

Adults: take 2 capsules daily with breakfast, with water or as advised by your health professional.

Effects may be noticeable within hours of starting KeenMind®; however, to achieve an optimal treatment effect it is recommended to take KeenMind® for a minimum of three months.¹⁻⁴

Presentation

60 cylindrical hard veggie capsules (size 1) containing a fine beige powder.

Storage conditions

Store below 30°C in a dry place.

Contraindications and precautions

Do not recommend if there is a history of hypersensitivity to *Bacopa monnieri*.

There are no known reported drug interactions; however, due to bacopa having a potential inhibitory effect on acetylcholinesterase and possibly increasing acetylcholine levels, care may be warranted with the concomitant use of acetylcholinesterase (AChE) inhibitors and anticholinergic or cholinergic drugs.¹⁴

Pregnancy and lactation: There are no published studies to establish safety or rationale for the use of the KeenMind® during pregnancy, or while breastfeeding, so use is not recommended.

FAQ

Does KeenMind® cause dependence or the efficacy diminish after prolonged use?

KeenMind® is not a narcotic or a drug that can cause dependence. There are no reports of dependence or withdrawal symptoms. Decreases in efficacy have not been reported during clinical trials performed with KeenMind® after prolonged use.



Vegetarian and vegan friendly formula. No added:

- Gluten
- Wheat
- Dairy
- Corn
- Egg
- Soy
- Yeast
- Sesame
- Peanuts or tree nuts
- Genetically modified ingredients
- Artificial or nature identical flavours, colours or sweeteners

References

1. **Stough C**, et al. The chronic effects of an extract of *Bacopa monnieri* (Brahmi) on cognitive function in healthy human subjects. *Psychopharmacology*. 2001;156(4):481-484.
2. **Stough C**, et al. Examining the nootropic effects of a special extract of *Bacopa monnieri* on human cognitive functioning: 90 day double-blind placebo-controlled randomized trial. *Phytother Res*. 2008;22 (12):1629-1634.
3. **Downey L**, et al. An acute, double-blind, placebo-controlled crossover study of 320 mg and 640 mg doses of a special extract of *Bacopa monnieri* (CDRI 08) on sustained cognitive performance. *Phytother Res*. 2013;27(9):1407-13.
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11. **Rai R**, et al. A special extract of *Bacopa monnieri* (CDRI-08) restores learning and memory by upregulating expression of the NMDA receptor subunit GluN2B in the brain of scopolamine-induced amnesic mice. *Evid Based Complement Alternat Med*. 2015. DOI:10.1155/2015/254303.
12. **Preethi J**, et al. Possible involvement of standardized *Bacopa monnieri* extract (CDRI-08) in epigenetic regulation of reelin and brain-derived neurotrophic factor to enhance memory. *Front Pharmacol*. 2016;7:166.
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14. **Natural Medicines Database**. *Bacopa monnieri* monograph. 2019. Available from: <https://naturalmedicines.therapeuticresearch.com/>



Sustainability. Conservation. Restoration. Respect.