Magtein®

BRAIN HEALTH

6 Functional Categories

Mood
Calm
Sleep
Memory
Focus
Brain Energy

In the United States, nearly one out of every four adults over the age of 70 has cognitive impairment and over one out of ten of those individuals progress to dementia every year. Nearly 47 million Americans have preclinical Alzheimer's disease with over 6 million Americans diagnosed with Alzheimer's disease. This is projected to increase to 15 million by 2060.

A primary cause of cognitive decline is synapse loss, or the connections between the neurons in the brain. Synapses help to code our memory and allow neurons to communicate with each other. The loss in synapses leads to memory loss and cognitive impairment. A reduction in magnesium levels in the brain may play a leading role in this loss of synapses. In fact, patients with Alzheimer's disease have been found to have low levels of magnesium in the brain.

A unique magnesium supplement called Magtein® (magnesium L-threonate) has been shown to increase brain levels of magnesium and functional neuronal terminals compared to other magnesium supplements including magnesium citrate, gluconate, malate and glycinate in animal studies. Furthermore, Magtein® also has been shown to prevent synaptic loss and reverse cognitive deficits in Alzheimer's disease animal models. In patients with cognitive impairment, Magtein® was shown to significantly improve overall cognitive ability and reverse the equivalent of 9 years of brain aging. Magtein® has also been shown to improve the MMSE score in patients with mild to moderate probable Alzheimer's disease.

Thus, Magtein® is a unique "brain boosting" magnesium supplement that has been shown to improve memory and cognition in those with cognitive impairment.

formula

Magtein® MEMORY

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Magtein® is a unique "brain boosting" magnesium supplement that has been shown to improve memory and cognition in those with cognitive impairment.

Ashwagandha reduces oxidative stress in the brain.

Alpha-GPC Increases neuronal membrane fluidity.

formulas at a glance

Target population: Older adults with memory impairment.

Magtein®
Think clearly

Dose:
1-2 grams

Mechanism of Action:
Increases brain magnesium, synapses, synaptic function and synaptic plasticity.

Ashwagandha

Dose:
300 mg twice daily

Mechanism of Action:
Supports GABA and lowers cortisol. Supports the brain against oxidative stress.

Why it Works:
Increases brain magnesium levels. Supports GABA and lowers cortisol. Supports the brain against oxidative stress.

Alpha-GPC

Dose:
400 mg three times daily or
800 mg morning 400 mg evening

Mechanism of Action:
Increases the synthesis and release of acetylcholine in the brain. Increases neuronal membrane fluidity.

Why it Works:
Increases the synthesis and release of acetylcholine in the brain. Increases neuronal membrane fluidity.

Memory Formula 1 Magtein®+Ashwagandha

Description

- Magtein® is a brain bioavailable magnesium.
- Ashwagandha is known as withania somnifera. It is an Ayurvedic adaptogenic herb that has been used in India for centuries

Mechanism of Action

Magtein® Magtein increases brain magnesium levels, which increases neuronal synaptic density, function and plasticity. Magtein® has been shown to improve memory and cognition in those with mild cognitive impairment.[20]

Ashwagandha Neuroprotective, neuroregenerator and may regenerate neurites.[21]

Dose:
Magtein 1-2 grams.
Ashwagandha 300 mg twice daily

Safety:
Good safety profile.[12]

Benefit:
Increases brain magnesium levels. Supports GABA and lowers cortisol. Supports the brain against oxidative stress.

Claims:
Supports a healthy brain.
Supports memory.
Supports sleep.
Relaxes the mind.

Clinicals

1. A systematic review of randomized, double-blind, placebo-controlled trials found that ashwagandha improved performance on cognitive tasks, executive function, attention, and reaction time. It also appears to be well tolerated, with good adherence and minimal side effects.[22]
2. Randomized double-blind placebo-controlled study in 50 adults testing ashwagandha 300 mg twice daily or placebo in those with mild cognitive impairment.[23]
   a. After eight weeks of study, the ashwagandha treatment group demonstrated significant improvements compared with the placebo group in both immediate and general memory, verbal paired associates, faces, family pictures, logical memory.
   b. The treatment group also demonstrated significantly reater improvement in executive function, sustained attention, and information-processing speed
   c. Conclusions: Ashwagandha may be effective in enhancing both immediate and general memory in people with mild cognitive impairment as well as improving executive function, attention, and information processing speed.

Memory Formula 2 Magtein®+Alpha-GPC

Description

- Magtein® is a brain bioavailable magnesium called magnesium L-threonate.
- Alpha-GPC or alpha-glycerophosphocholine, used to be known as **choline alfoscerate**, is a choline containing supplement.

Mechanism of Action

Magtein® Magtein increases brain magnesium levels, which increases neuronal synaptic density, function and plasticity. Magtein® has been shown to improve memory and cognition in those with mild cognitive impairment.[20]

Alpha-GPC Increases the synthesis and release of the neurotransmitter acetylcholine in the brain (hippocampus, frontal cortex and striatum) which helps with memory.

An older name for alpha-GPC was choline alfoscerate.

Increases neuronal membrane fluidity.

Alpha-GPC was compared with CDP-choline in 2 multicenter, randomized, controlled studies among patients with multi-infarct dementia. Both investigations showed significant improvements in most neuropsychological and behavioral instruments in the alpha-GPC recipients compared with CDP-choline recipients; both drugs were well tolerated.[24]

Dose:
Magtein 1-2 grams.
Alpha-GPC 1,200 mg/day.

Safety:
No safety concerns.

Benefit:
Increases the synthesis and release of acetylcholine in the brain. Increases neuronal membrane fluidity.

Claims:
Supports memory.
Supports learning.
Supports healthy neuron.

Clinicals

1. Alpha GPC (choline alfoscerate) at 400 mg three times daily
   a. Supplementation of Alpha-GPC at 400mg three times daily (1,200mg daily) for 180 days in persons with mild to moderate Alzheimer's disease was able to improve symptoms as assessed by a multitude of rating scales including ADAS, MMSE, CDI, and GDS.[25]
2. Alpha-GPC 800 mg in morning and 400 mg at 4PM in probable Alzheimer's disease with clinical onset after 65 years of age (senile dementia of Alzheimer's type).
   a. Significantly improved MMSE scores, verbal memory (as assessed by Rey's 15-word test), immediate and delayed recall scores, intellectual and emotional impairments, 'affective disorders', 'apathy', 'somatic functioning', as well as the item 'overall impression'.[24]