

Study finds Magtein enhances memory, reaction time and heart health markers

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Magtein, a unique source of bioavailable magnesium, is associated with improvements in cognitive performance, memory, reaction time, brain cognitive age, and heart rate, a clinical trial has found.

Magtein, the patented proprietary form of magnesium L-threonate, is used in dietary supplements to support sleep, healthy brain ageing, and cognitive vitality. It has been shown to work by effectively crossing the blood-brain barrier.

In a new randomised, double-blind, placebo-controlled trial, 100 healthy adults (18–45 years) with self-reported dissatisfied sleep supplemented with 2g daily of Magtein or a placebo for six weeks.

Cognitive performance was measured by the NIH Cognitive Toolbox, while a wearable sleep-tracking device (Oura Ring) provided data on physiological stress markers including heart rate (HR) and heart rate variability (HRV). Sleep quality was also measured through self-report questionnaires such as PROMIS Sleep, while reaction times and hand-eye coordination were assessed by a digital aim trainer.

Participants in the Magtein group demonstrated:

Improved overall cognitive performance

Greater improvements in working and episodic memory

A 7.5-year reduction in estimated brain cognitive ageing

Faster reaction times

Reduced resting heart rate and increased heart rate variability

Improvement in PROMIS sleep-related impairment.

Magtein has been extensively studied for its ability to support brain magnesium levels and has demonstrated benefits for cognitive performance and sleep quality in human trials. The new research adds to this clinical foundation by further confirming these effects and expanding the understanding of its benefits.

Dr. Jennifer Gu, SVP of R&D at Magtein, said: “While earlier studies have demonstrated that Magtein supports cognitive performance in older populations, this latest research confirms those benefits also extend to younger adults. It also highlights additional positive outcomes related to cognitive function, sleep-related measures, and physiological markers of neurological and heart health, including improved heart rate variability, which is demonstrated for the first time. Together, these findings build on a growing body of research supporting Magtein and further strengthen the scientific foundation behind its broad cognitive and neurological benefits.”