

The effect of phosphatidylserine administration on memory and symptoms of attention-deficit hyperactivity disorder: a randomised, double-blind, placebo-controlled clinical trial.

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Source

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Abstract

BACKGROUND:

Attention-deficit hyperactivity disorder (ADHD) is the most commonly diagnosed behavioural disorder of childhood, affecting 3-5% of school-age children. The present study investigated whether the supplementation of soy-derived phosphatidylserine (PS), a naturally occurring phospholipid, improves ADHD symptoms in children.

METHODS:

Thirty six children, aged 4-14 years, who had not previously received any drug treatment related to ADHD, received placebo ($n = 17$) or 200 mg day⁻¹ PS ($n = 19$) for 2 months in a randomised, double-blind manner. Main outcome measures included: (i) ADHD symptoms based on DSM-IV-TR; (ii) short-term auditory memory and working memory using the Digit Span Test of the Wechsler Intelligence Scale for Children; and (iii) mental performance to visual stimuli (GO/NO GO task).

RESULTS:

PS supplementation resulted in significant improvements in: (i) ADHD ($P < 0.01$), AD ($P < 0.01$) and HD ($P < 0.01$); (ii) short-term auditory memory ($P < 0.05$); and (iii) inattention (differentiation and reverse differentiation, $P < 0.05$) and inattention and impulsivity ($P < 0.05$). No significant differences were observed in other measurements and in the placebo group. PS was well-tolerated and showed no adverse effects.

CONCLUSIONS:

PS significantly improved ADHD symptoms and short-term auditory memory in children. PS supplementation might be a safe and natural nutritional strategy for improving mental performance in young children suffering from ADHD.

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