# Vitamin levels in adults with ADHD

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Abstract

Background
Micronutrients containing vitamins are reported to reduce symptom levels in persons with attention-deficit hyperactivity disorder (ADHD), but data on vitamin levels in ADHD are sparse.

Aims
To examine the relationship between vitamin concentrations, ADHD diagnosis and psychiatric symptoms in young adult ADHD patients and controls.

Method
Eight vitamins and the nicotine metabolite cotinine were analysed in serum samples from 133 ADHD patients and 131 controls aged between 18 and 40, who also reported ADHD symptoms and comorbid conditions.

Results
Lower concentrations of vitamins B2, B6 and B9 were associated with the ADHD diagnosis, and B2 and B6 also with symptom severity. Smokers had lower levels of vitamins B2 and B9.

Conclusions
ADHD patients were overrepresented in the group with low levels of some vitamins, possibly indicative of inadequate dietary intake of these micronutrients in a subgroup of patients. It is important to identify these patients in dietary intervention trials of ADHD.