Nutritional and environmental factors in attention-deficit hyperactivity disorder (ADHD): A cross-sectional study.


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Abstract

OBJECTIVES: Attention-deficit hyperactivity disorder (ADHD) has been related to nutrient deficiencies and 'unhealthy' diets, and to date, there is only one study that examined the relationship between the Mediterranean diet and ADHD. The aim was to determine the association between those environmental, nutritional, and body composition factors that may affect the pathogenesis and symptomatology of patients with ADHD in Spain.

METHODS: A total of 89 children and adolescents (41 with diagnosed ADHD and 48 controls) were studied in an observation case-control study. Anthropometry, nutritional status, adherence to a Mediterranean diet, sedentary behavior, and sleep were measured.

RESULTS: Lower adherence to a Mediterranean diet was associated with ADHD diagnosis. Individuals with ADHD more often missed having a second serving of vegetables daily and showed reduced intakes of fish, pulses, and pasta or rice almost every day when compared with controls. Statistically significant differences (P < 0.05) were found for fish, cereal, no breakfast, and commercially baked goods consumption. There were also statistically significant differences between ADHD individuals and controls when analyzing sedentary behaviors and BMI (P < 0.05).

CONCLUSION: Low adherence to a Mediterranean diet might play a role in ADHD development. Not only specific nutrients but also the whole diet should be considered in ADHD. No clear association was found for anthropometry and sedentary behaviors.