

## **The comparison of food groups consumption between ADHD and normal children and its relationship with anthropometric characteristics of ADHD children**

### **Abstract**

**Back ground & objective:** Attention deficit hyperactivity disorder (ADHD) is one of the most commonly diagnosed childhood psychiatric disorders and it constitutes a group of developmental disorders, which are characterized by inadequate level of attention, excessive activity and impulsivity. Prevalence of ADHD in boys is 3 times more than girls. Some studies have shown differences in some anthropometric indices between ADHD children and normal children. This study aims to compare nutritional patterns and anthropometric indices between ADHD and normal children.

**Methods:** this study is a case-control one. 100 children with ADHD (Cases) and 100 normal children (Controls) with same age and gender were entered the study. Height, weight, abdominal circumference, upper mid-arm circumference and body mass index were the anthropometric indices which were gathered from each group. Nutritional habits were gathered by food frequency questionnaire and 24-hour food reminder questionnaire. Collected data were analyzed by SPSS software.

**Results:** Mean age of cases were  $8/33 \pm 2/1$  years and 72% of cases were male. No significant difference were found between two groups in these factors. Abdominal circumference and BMI in cases were significantly higher than controls. Also, cases were consuming more simple sugars and fast foods and less protein, vitamin B1, vitamin B2, vitamin C, zinc and calcium than the other group.

**Conclusion:** finally it seems ADHD is related with certain nutritional habits and some anthropometric disorders like overweight and obesity.

**Keywords:** Attention deficit hyperactivity disorder, Nutrition, Anthropometrics