

## Abstract

---

Attention deficit hyperactivity disorder (ADHD) is one of the most commonly diagnosed childhood psychiatric disorders, with prevalence 5 – 10 % in general population. This developmental disorder is manifested in every part of children's behavior and it is characterized by inadequate level of attention, excessive activity and impulsivity. ADHD is a complex disorder influenced by genetic and environmental factors, characterized by various symptomatology, etiology and heterogeneous development. It is a model disorder for combination of interaction of genetic, neurobiological and environmental factors.

The aim of the presented study was to describe the variability of somatic development of ADHD children. The main aim was to analyze the growth of medicated and non-medicated ADHD children compared with population norms. Partial question is to identify factors which may be connected with these changes, e. g. specific life style of this group. In order to answer these question two independent studies were provided- the first focused on anthropometric examination, the second focused on eating habits and lifestyle in ADHD children.

According to the results of the first study there are differences in anthropometric parameters between the group of ADHD children compared to control children and also between the group of children with medicated and non-medicated ADHD children. ADHD children have lower average body height than the control children, medicated children have an average body height lower than children medicated. Significant differences were found mainly in indicators of nutrition. There is statistically significant difference between groups in body weight and body fat - non-medicated ADHD children have the highest values, medicated children the lowest.

The second part of the research pointed on significant information about physical activity and eating habits of ADHD children compared to control children lower regular physical activity of ADHD children and specific differences in dietary habits. ADHD children have probably a lower rate of regularity in diet, increased intake of sweetened beverages and less frequent intake of fruits and vegetables compared to the control group. These findings support the hypothesis of a possible specific style of eating in ADHD children which may be related to differences in the physical parameters.

The study has brought new knowledge about the variability of somatic development in ADHD children, which can be, among other factors, partly associated specific dietary habits and lifestyle.

## Key words

---

ADHD, attention deficit hyperactivity disorder, growth, somatic development