## Abstract

**Title:** Frequency of normal weight obese preschool children and its physical fitness - selected populations of children from 6 Prague kindergartens.

**Objectives:** The goal of this thesis is to find out the occurence and physical fitness of preschool age children with normal weight obese and compare it with physical fitness of normal weight non-obese preschool children and children with overweight and obese.

**Methods:** Observation is the main method used in this thesis (regarding to title). We analysed 289 preschool aged children and chose BMI index in the range of 25th to 80th percentil, according to Vignerova at al. (2006) along with values of each skinfold higher then 85th percentil according to Bláha et al. (1990), to identify normal weight obese children. Physical fitness was based on several tests: multistage 20 metre shuttle run, standing long jump, sit-ups, sit-and-reach, throw ball with alternative hands. To analyse all the facts and get results we used descriptive statistics, tests of normaltity and ANOVA.

**Results:** We identified n = 12 normal weight obese children (4,15 %) from all participating children. Results of research showed us that normal weight obese children were worse than normal weight non-obese children by 5,80 %, respectively by 4,76 %. Children that were overweight and obese had the worst physical fitness and were way behind normal weight non-obese children by 15,2 %, respectively by 13,98 %. Normal weight non-obese children had the best results. Differencies in physical fitness of preschool children were shown as insignificant Hays $\omega$ $\omega^2 = 0{,}036$ and $\omega^2 = 0{,}040$.



**Keywords:** preschool age, obesity, normal weight obesity, physical fitness