

## **ABSTRACT**

Obesity and the number overweight of children are currently major global issues. According to the Regional Office for Europe (2006) obesity has risen three times over the last two decades worldwide. The attention is currently focused on health promotion and disease prevention among the population through comprehensive health education starting in the early age of individuals, aimed to slow down the increasing incidence of obesity and related health issues. This thesis discusses the pedagogical aspects of health, specifically the options on how to shape nutritional habits of elementary and middle school students and how to systematically deepen the required knowledge about healthy nutrition by implementation of nutrition education programs. The purpose of this study was to determine the relationships between dietary habits and healthy nutrition knowledge of grade nine students in elementary schools from the South Bohemian region in Czech Republic.

A validated *Nutritional survey* and *Nutritional knowledge quiz* were designed to determine the relationship between knowledge and behavior of grade nine students from South Bohemia elementary schools. The validity of the Nutritional survey and the Nutritional knowledge quiz were tested using analytical analysis of all survey and test items and examining internal consistency in both. The analysis among nine graders from randomly chosen elementary schools in South Bohemia was organized during the 2014/2015 and 2015/2016 school years, using the validated research methods. The majority of the assumptions were confirmed, within the hypotheses verification. Relationship between knowledge and behavior was assessed using Pearson Correlation Coefficients. Pearson's correlation coefficient between nutrition related knowledge and nutritional habits of examined respondents (0.327 at the reached level of significance of the  $p$  test was less than 0.001) confirmed the relatively high association of variables (the null hypothesis was also rejected at 0.01% significance level). The assumption that students with the highest level of knowledge of healthy nutrition have a higher relationship between eating habits and knowledge of healthy nutrition than those with the lowest level of healthy nutrition was also confirmed. On the other hands the assumption that girls will have better eating habits than boys from the same schools has not been confirmed. Differences in declared eating habits

among boys and girls did not appear to be statistically significant (the  $p$  value was higher than the chosen level of significance of the test 0.05), even if the average values of the index were higher for girls than for the boys. The hypothesis assuming a higher average score in the dietary habits questionnaire of students participating in the survey who consume vegetables every day, compared to students who do not consume vegetables daily, and was confirmed at a level of significance of 0.1. The assumption was verified by a two-sample t-test in the index of nutritional habits, when the results of the students eating habits were compared according to their answers to the question whether they consume vegetables every day or not. The final assumption predicting the relationship between the level of education obtained by parents of students in the survey and the students' level of nutritional knowledge was confirmed. Null hypotheses about the disconnect of eating habits and the highest attainment education of mother and father were rejected in both cases at 0.1% level of materiality. The Nutrition Education Program was designed based on the research findings and hand in hand with experiences of uses of the Nutrition education program designed by the University of Nebraska – Lincoln in practice. The implementation of the designed program took a place in the second half of the school year 2017/2018 at selected elementary schools in the South Bohemian region. The Nutrition Education Program have been found to be an effective instrument of acquiring the required nutritional knowledge and enhancing desirable attitudes towards health nutrition among school aged children.

Research provides a pedagogical intervention tool aimed to actively support the health of Czech children. Study results determined the positive relationship between health nutrition and nutritional habits of elementary school students, and presents an educational program supporting health nutrition in the context of enhancing the educational impact on health. The program seems to be an suitable instrument for proper nutrition education and a teacher's well accepted tool for the organization of nutrition education.