

## SUMMARY

The thesis is focused on the problem of the childhood obesity and its therapy in spa facilities. The theoretical part consists of a brief explanation of the definition and classification of childhood obesity, its prevalence, etiopathogenesis of obesity, obesity-related health risks and possibilities of its prevention and treatment.

In the practical part, I have made an evaluation of the chosen features which emerged from the examination of the children who underwent a spa weight loss programme in doctor's Filip health resort in Poděbrady. The thesis consists of 6 goals arranged in alphabetical order.

At first I made an evaluation of some selected anthropometrical characteristics to find out, whether the weight loss reported during the spa therapy was effective and correct. In order to achieve this goal I divided the group of the obese girls in four smaller groups according to the categorization of obesity designed specifically for children (Bláha, 2001). An excessive loss of muscular mass was noted with the girls with high level of obesity, whereas the weight reduction process was found to be correct in the other categories and the loss of the fat tissue exceeded at least six times the loss of the muscular mass in every case (Bláha et al., 1994). In the following part I undertook an assessment of the biochemical features which were found out in the beginning and at the end of the weight reduction programme. I took into consideration the HDL levels, the total cholesterol and glucose level. A considerable decrease of the total cholesterol level has been noted, while the level of HDL has been reduced. In the course of the anthropometric examination the girls were asked about the time of their first menstrual period. The average age, as follows from the examination, is 12,01 years. Obese girls are thus one year ahead the non-obese population in this aspect. Furthermore, I made an inquiry of the energy expenditure of non-obese girls. I found out that the energy expenditure depends mostly on body weight, the correlation being more apparent in non-obese population. The obese children showed an increased energy expenditure during the same activity at the end of the programme. Another part of the thesis represents an evaluation of the questionnaires which were given to the parents of the obese children. The questionnaires were designed to find out the personal and family anamnesis of the obese children in order to detect obesity-related complications and predictors in children and their closest relatives. In the final part of the thesis I made an assessment of the data obtained from the archives of the health resorts who tackle childhood obesity.

This thesis contains 10 illustrations, 10 graphs, 148 tables and four supplements.