

Summary

On a selected group of obese children who participated in a 5 week weight reduction program at Dr. Filip medical institute, I evaluated the energy output of their motoric activity with a "Kenz Calorie Counter" device. I also evaluated their energy income according to food pyramid norms and with the computer program "Nutridan". Other characteristics such as biochemical indicators of lipid and glycid metabolism and personal anamnesis of obese children and their relatives were also analyzed. Restrict diet served during the weight reduction program correspond to the dietary requirements of higher motoric activity. It reflects necessity of higher protein demands because of protection of muscle mass during weight reduction therapy. Significant reduction of fat mass was detected, reduction of muscle mass was also detected, but the fat mass reduction was several times higher. The correctness of this weight reduction therapy was confirmed. Biochemical indicators showed significant changes of glycid and lipid metabolism. The therapy had positive effect on the levels of biochemical parameters. Analysis of personal anamnesis showed higher occurrence of environmental diseases related to obesity at 1., 2. and 3. level relatives.