

Abstract

The obesity is a main factor in expansions of cardiovascular diseases, diabetes type 2, musculoskeletal diseases and some of the tumour illnesses.

Study is dealing with the effect of movement activities during 3-months individual program on body mass reduction and changes of composition in human body.

The program was held in VSTJ Medicina Praha, z.s. from April 2018 to January 2019. Included the group of 37 participants. Only 19 of them completed the program. This group undertook the body analysis, using bioimpedant machine "Tantia MC-780 MA".

Components of evaluation were body mass, BMI and body fat in kg and %. In application "Time for Health" nutritional Intervention diet was monitored and evaluated during consultations. Physical activity using Pedometer "Garmin Vivofit" was recorded as a number of steps.

Aim of this study was to obtain a collection data of changes in the body mass and body composition of the participants, based on input and output analysis as well as other biological parameters.

Comparison of the compliance and program was based on recorded number of diet days. Statistically important differences between input and output data were compared and average decrease in body mass was 3.5 kg (SD \pm 3.22), body fat 2.3 kg (SD \pm 2.63) and BMI 1.17 kg (SD \pm 1.11). On average participants walk 8992 steps a day.

Effectiveness of influence in reduction program at changes of body composition and mass results especially in improvement of compliance in overweight and obesity treatment.

Key words: obesity, overweight, weight reduction, three-month program, body composition