## **ABSTRACT**

**Title:** The use of walk to reduce overweight and obesity in middle-aged women

**Aims:** The aim is to assess the exercise regimen and assess the impact of changes in body composition by using the walk on for middle-aged women with overweight and obesity

**Methods:** File under consideration formed 16 women aged 30 to 60 years of age, have passed the basic course on reducing the weight of STOB and at the same time engage in the study of MUDr. Marie Skalská, where specifically increase their physical activity by walking.

In the framework of this thesis I investigated the influence of these interventions to change their body composition and daily routine.

The measurement of body composition by bioelectrical impedance after the physical intervention on the duration of 20 weeks. Daily exercise regimen was measured by pedometers in the course of the intervention with a length of 20 weeks. The effect of the intervention was evaluated using the survey of physical activity, which was submitted before and after the intervention.

**Results:** Physical intervention based on the walking has affected body composition middle-aged women with overweight and obesity. An average weight reduction of 3.2 kg. BMI decreased by 1,1 kg•m<sup>-2</sup>. The circumference of the waist has shrunk by 3.5 cm and the percentage of fat in the body is decreased by 2.2%. Conversely, not to cut the weight of non-fat mass, which remained constant. ECM/BCM ratio decreased by 0.02.

Physical intervention based on walking should result in an increase of the average daily number of steps about 30%. The average daily number of steps increased from  $8\,038 \pm 2108$  steps to  $10\,469 \pm 1216$  steps.

After completing the course on reducing overweight has increased the volume of realized physical activities, but not to the inclusion of new physical activities. Thanks to the inclusion of research about the impact of walking, significantly increased this physical activity.

**Keywords:** overweight and obesity, physical activity, lifestyle, body composition, walk