

## Abstract

The main aim of the study is to determine a body composition in participants of weight reduction program STOB, based on group cognitive behavioral therapy of obesity. The program lasted 12 weeks and participants underwent a cognitive behavioral therapy and followed a diet and physical activity plan. The body composition was measured by bioelectrical impedance InBody 230 at the initial and final lesson. We examined a participant's body weight, skeletal muscle, fat mass, abdominal fat mass and BMI. At the end of the weight reduction program participants lost 5% (-4,6kg) of their initial weight, achieved significant decrease in fat mass (average -4,3kg and -3%), lost 14,4cm<sup>2</sup> of abdominal fat mass and mean BMI value decreased by 1,7. A muscle component hasn't significantly changed within the weight reduction program. The effect of 12 week weight reduction program STOB resulted in significant changes in body composition, which are associated with reduced risk of cardiovascular and metabolic complications of obesity.

Using cognitive behavioral therapy as an obesity management strategy is positively evaluated especially for its effect on long term weight reduction and effective relapse prevention. Therefore a future study should be focused on a long term re-evaluation of changes in body composition in participants of this study.