## **Abstract**

This bachelor thesis deals with diabetes mellitus, obesity and the importance of a diabetic diet, comparing food intake of obese and non-obese diabetics.

Aim: To evaluate the influence of nutritional intervention on glycemic control and body weight change.

Methods: The practical part focuses on examining the descriptively association relationships between eating habits and weight of diabetics observed at clinic of diabetology. We addressed a total of 24 people, of whom monitoring was completed at 19. Those were patients with diabetes mellitus type 2, whose pharmacotherapy was not changed during monitoring. First, probands diets' were analyzed and dietary changes were recommended. To evaluate the effect of interventions following methods were used for data collection: monitoring changes in eating habits, measurements of body weight, waist circumference and blood pressure and biochemical parameters of glycemic control (blood glucose levels, glycated hemoglobin).

Results: Evaluation of results before and after the intervention shows that non-obese patients had lower energy intake and better diets than obese. The effect of nutritional intervention and compliance of framework diet was apparent as 11 respondents showed decreased body weight and waist circumference. Weight loss was on average 1,29 kg and waist smaller by 2,72 cm. Furthermore, at most respondents level of glycated hemoglobin has improved on average by 2,51 mmol/mol.

**Key words:** Type 2 diabetes mellitus, diabetes compensation, obesity, dietary prevention