

## **Abstract**

### **Lifestyle diabetic 2nd type**

**Aims:** The aim of this thesis is to outline alternatives how to improve medical condition of patients who suffer from diabetes mellitus 2nd type by non-pharmacological treatment. Another target is to create and application an intervention exercise program. It is also necessary to evaluate measured physical parameters plus to compare results before the beginning and after the termination of the intervention. Last but not least is important suggestion of recommendations for the future therapy of patients with NIDDM.

**Methods:** In this work, there are stated contemporary information of relationship between physical activity and diabetes of the second type of a patient. Literature research was used to get this knowledge. Based on these facts and available options, the experiment related to training program was designed. This observation takes 20 weeks.

**Results:** The controlled diabetic patient underwent the intervention program without significant complications and in full extent. Non-pharmacological treatment focused primarily on increasing physical activity performed by walking and practicing on a exercise bike, on the contrary, dietary regimen was not changed or a adjusted. The results after intervention showed improvements in physical state of a patient such as reduction in weight (-5 kilograms), body fat (reduction of -4,2 kilograms) or a parameter of a waist. This outcome was reached due to the patient almost daily physical activities (-5 centimeter).

**Keywords:** diabetes mellitus, lifestyle, walking, obesity, physical activity