

Abstract:

The goal of this diploma thesis is to evaluate changes in the body structure, selected laboratory values and blood pressure for patients with prediabetes or diabetes mellitus of 2nd type who attended nutritional therapy in diabetic ambulance. The patients were divided in 2 groups based on their preferences. The first monitored group monitored energy intakes and expenditures on web page www.kaloricketabulky.cz. The first group had also an opportunity to be supervised or to communicate with its nutritional therapist on web page www.casprozdravi.cz. The second monitored group monitored energy intakes and expenditures manually in the diabetic notebook.

The body changes were monitored by bioelectric impedance scale Tanita BC-545 N during each consultation. Laboratory values were taken on consultation 1 and 5. The blood pressure was measured on consultation 1 and 5.

Rated values – overall body weight, waistline, percentage of body fat, glycemia, HbA1c, overall cholesterol, HDL cholesterol, LDL cholesterol, triglycerides and blood pressure.

The results of this research were weight reduction in both groups by an average of 3.2 %, waistline by 4.5 %, body fat by 1.7 %, glycemia by 16 %, HbA1C by 28.6 %, overall cholesterol by 15.1 %, HDL cholesterol by 6.5 %, LDL cholesterol by 23.6 %, triglycerides by 19.3 % and diastolic blood pressure by 5.3 % and increase in systolic blood pressure by 3.5 %.

For the group 1 we can prove the significant success in glycemia and HDL cholesterol. In other measurements weren't recorded statistical differences.

The Importance of nutritional therapy in diabetics lies in long-term weight reduction and subsequent weigh maintenance. It will be advisable to check weight progress in monitored groups in next months.