

## **Abstract**

### **Title:**

The effect of functional training on parameters of body composition

### **Objective:**

The main objective of the study was to analyze changes in selected parameters of body composition, which occurred due to a four-month exercise program.

### **Method:**

The work has the character of an empirical research, where the main method is observation. The observed group were consisted of women ( $n = 15$ ), who were attending to fitness center Partyfit in Prague. We were measured the basic anthropometric parameters (body height, body weight, BMI). To obtain the input and output data to evaluation the parameters of body composition was used bioelectrical impedance BIA (Bodystat Quadscan 4000). For determination of input and output parameters was used paired t-test (statistical significance  $p < 0.05$ ). To assess the substantive significance we applied (Cohen -  $d$ ).

### **Results:**

The results of our study show that during the specific four-month exercise program occurred changes in all parameters of body composition. The most significant differences were detected in the parameter total body water 2.2%, resp. (0.9 l), total body fat 2.2%, resp. (1.3 kg) and fat free mass to 2.2%, resp. (1 kg). For other parameters the differences were slightly less significant.

### **Key words:**

Active lifestyle, anthropometry, bioelectrical impedance, functional training