

## **Abstract**

### **Title:**

Comparison of endurance abilities cyclists and tennis players

### **Objectives:**

The main objective of this thesis is comparison results functional load diagnostics at the tennis players and cyclists. At the same time the objective is find out difference in endurance between tennis players and cyclists.

### **Methods:**

In this thesis was used load tests up to vita maxima. Tennis players perform it on the treadmill and cyclists on the bicycle ergometer. The data are transform into the tables and statistically evaluate. For statistical process was used arithmetical average, standard deviation and calculate difference in percents.

### **Results:**

The results of the functional load diagnostics tests was different between tennis players and cyclists on bicycle ergometer. Cyclists achieve highest score at the all measured parameters. The maximum oxygen intake differed by 29.4%, the heart rate limit aerobic threshold difference was 7.4%, the heart rate at the anaerobic threshold, the difference of 5.4% for vital capacity was difference 14.8% and minute ventilation differed by 8.9%. Differences in values showed better endurance abilities.

### **Keywords:**

Tennis, cycling, test up to a vita maxima, endurance abilities