

## **Abstract**

### **Title:**

Winter preparation of an amateur road cyclist

### **Objectives:**

The main aim of the bachelor thesis is to establish a three-month training plan for an amateur road cyclist during the winter preparation period in local conditions.

### **Methods:**

The bachelor thesis uses experimental and comparative methods. The experiment took the form of a three-month training plan, from December to February, in which we included exercises ranging from general to specific. The comparative part of the bachelor thesis consists of the comparison of input and output of the measured values (body composition, performance test on a running machine and spirometry), analysing whether any progress was made as a result of the training plan, and which skills were particularly affected by it.

### **Results:**

We can only objectively evaluate the changes in the body composition of the studied subject, as he injured himself towards the end of experiment and we were therefore unable to conduct the performance test on a running machine and spirometry. The Bio-electrical Impedance Analysis (BIA) enabled us to notice a decrease in the fat mass from 8.4% to 7% and an increase in the muscle mass in the area of the upper body from 34.5 kg to 35 kg. Because of the complexity of the workout, the muscle mass in the lower body was reduced in order to level off the inequalities of the overall body mass. However, an imbalance of the arm muscles mass can be observed: the left arm had 0.2 kg less muscle mass than the right arm. Subjectively speaking, the studied subject felt an overall physical improvement.

### **Keywords:**

Cycling, Sports training, Preparation period, Diagnostics