

## **Abstract**

- Title:** The comparison of heart rate and energy expenditure during 5 km run and 5 km speeded-up transfer with load of 10 kg
- Objectives:** The aim of the work was to compare the results of heart rate and energy expenditure during 5 km run and 5 km speeded up transfer with load of 10 kg. The energy expenditure was found by spirometric test while running on a treadmill.
- Methods:** The method applied in this research was the quantitative research based on intra-individual comparative analysis.
- Results:** Based on the measured data of the average energy expenditure per minute of subjects during the run and the speeded-up transfer with load at 11 km.h<sup>-1</sup> there was some difference found. The energy expenditure spanned from 14.19 kJ to 41.94 kJ with the average value of 23.87 kJ.
- Keywords:** Speeded up transfer, energy expenditure, heart rate.