

ABSTRACT

Introduction: The main topic of this diploma thesis was the nutrition of athletes compared to people with a sedentary lifestyle. **Aim:** The main goal of the thesis was the nutrition of athletes compared to people with a sedentary lifestyle using analyzing dietary regimen. **Material and methods:** We evaluated the dietary regimen of 40 women at the age of 20-30 years old. Women were divided into the groups of non-athletes („sedentary people“) and women who exercise fitness sports („fitness people“). Their average age was in the range of 25,3-26 years. Respondents filled out the form with their dietary regimen for three days using a 24-hod recall. Records were evaluated with using an extensive food database which was created at the Institute of Physical Education, First of Medicine, Charles University. Student's two-tailed unpaired mean t-test was used to compare the groups. We used the F-test to analysing a equation scattering before using t-test. **Results:** Group of fitness athletes consumed average 335 kcal less total energy ($p = 0.008$), 15.17 g more plant-based proteins ($p = 0.031$), 15.24 g less fats ($p = 0.025$) and 13.23 g less animal fat ($p = 0.044$). The results for other nutrients weren't statistically significant, but from a nutritional point of view they provided an interesting overview of eating regimen among the compared groups. **Conclusion:** Group of fitness people in some aspects ate healthier. They ate more plant-based proteins and less total fats, especially animal fats with an overall lower energy intake.

keywords: sport nutrition, nutrition, sedentary people, protein intake, carbs intake, fats intake, minerals, vitamins, low fat, low carb