

BONE MINERAL STATUS OF YOUNG MEN WITH DIFFERENT LEVELS OF PHYSICAL ACTIVITY

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Abstract

Introduction. The study sought to assess bone mineral content (BMC) and bone mineral density (BMD) in men with different levels of physical activity during the period of reaching peak bone mass. **Material and methods.** The research included wrestlers (n = 31) and students of the University of Physical Education (n = 88) aged 18-24. The state of the bone tissue was assessed with the use of the bone densitometry (DEXA) method (lumbar spine L₂-L₄). Data concerning the physical activity levels and nutritional behaviours of the study participants were gathered in a diagnostic survey carried out using a specially prepared questionnaire. **Results.** The analysis of the results revealed that as there were no statistically significant differences in nutritional behaviours between men from particular groups, physical activity proved to be the factor which significantly differentiated the groups under investigation in terms of their bone mass. The highest mean values of the bone parameters analysed were achieved by the wrestlers, who demonstrated a high level of physical activity.

Key words: physical activity, peak bone mass, osteoporosis, nutritional behaviours