

## **Abstract**

**Title:** Influence of dynamic stretching on the resulting dynamics of lower extremities in volleyball

**Objectives:** The aim of this work was to find out if there is a correlation between long term dynamic stretching and muscle dynamics of lower limbs of volleyball players.

**Methods:** Theoretical part is based on foreign literature and researches. To gain the necessary data, experimental study was created. It contained 10 male probands in the age of 16-19. In the beginning of the experiment, all the participants attended the Bosco test at the biomedical lab at UK FTVS. The main parameter was the total flight time of the entire 60 seconds. After that participants attended 8 weeks of 2 times a week of dynamic stretching before the training instead of their usual stretching stereotype. Immediately after those 8 weeks, second Bosco testing took place and the comparison of the data of the whole group and individuals was made from the view of their volleyball posts.

**Results:** There was a slight improvement in all the data at the whole group and significant improvement in anaerobic endurance. After comparing of the results of all the probands no significant differences between the probands from the perspective of player's volleyball posts.

**Keywords:** volleyball, stretching, static stretching, dynamic stretching, PNF stretching, warm-up, prevention of injuries, increasing the range of motion, enhancing the endurance