

Abstract

Title: Optimization of warm-up before speed-strenght loading

Objectives: The aim of this work is to compare three variants of warming up and to determine the most appropriate one before speed-strenght loading.

Methods: The test group consisted of 15 male students of the Faculty of Physical Education and Sport at The Charles University at the age of 22 -26 years. The tested subjects underwent 4 tests within 4 weeks. The first test was used to determine the 1 RM bench press and leg-press, the results of which we needed for the proper determination of the weights for the following protocols. The other three measurement protocols include three warm-up (base, a speed-strenght and toning), followed by a test of explosive strength in arms and legs. Countermovement vertical jump height with arm swing was used for legs testing and medicine ball shoot-up in supine position was used for arms testing.

Results: This research shows that best results in the countermovement vertical jump height with arm swing were achieved after the speed-power warm-up. The best results in medicine ball shoot-up in supine position were achieved after the basic warm up, but results are not statistically significant for these testing.

Keywords: Warm-up, dynamic stretching, speed-force loading, toning, explosive force, testing