

Comparison of the Effect of Plyometric Training on Oxidative Stress and Biochemical Parameters among Tennis Players

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ABSTRACT The present research is aimed at examining the effect of 8-week plyometric trainings on oxidative stress and biochemical parameters among tennis players. In this study, 39 male certified male tennis players between the ages of 20-25 voluntarily participated. The participants in this research were divided into two groups randomly as control group (Age- 22.67 ± 1.61 , Height- 180.43 ± 6.85 , Weight- 77.43 ± 7.79 kg and BMI- 23.73 ± 1.23 kg/m²), and experimental group (Age- 22.76 ± 1.58 , Height- 176.40 ± 8.49 , Weight- 73.25 ± 10.04 and BMI- 23.45 ± 1.72). Experimental group were subjected to a program of 105-minutes; 35-minute plyometric training and 70-minute standard tennis training; while control group was engaged in 105-minute standard tennis training without any plyometric training for 8 weeks. Before and after 8-week training programs, blood samples were taken from the participants after 12-hour night fasting. Mann-Whitney U test was used for the analysis of pre-tests of groups; in-group pre-test and post-test differences were tested with Wilcoxon test. As a result, the findings showed that eight-week plyometric training increased MDA, GSH, and levels supports the assumption that regular physical activity has positive health effects.