

141

**THE EFFECT OF 1-MONTH THYME USING IN ELITE SPORTSMEN ON OXIDANT STRESS AND ANTI-OXIDANT CAPACITY**

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The object of the study is to determine the effect of thyme loading during exercise at elite wrestlers on oxidant stress and

anti-oxidant capacity. Totally 18 elite wrestlers were involved in the study. The wrestlers were randomly divided into two groups, experimental and placebo. The subjects were loaded 1 g dried thyme tea three times a day after meals during 35-day period. The blood samples were taken before and after loading thyme, and total antioxidant capacity (TAC), malondialdehyde (MDA) and total sulphydryl group (RSH) were analysed. To evaluate the data, Wilcoxon signed rank test was used for in-group evaluation and Mann–Whitney U test was used for inter group evaluation and significance level  $\alpha$  was set at 0.05. While there were no differences between groups before loading thyme, TAC values were found meaningfully increased after loading in experimental group ( $p < 0.05$ ). However, the decrease in MDA values of the experimental group after loading thyme was statistically significant ( $p < 0.01$ ). The decreases in RSH values of the experimental group were insignificant ( $p > 0.05$ ). In the other hand experimental group decreasing of the MDA values and increasing of the TAC values were found statically significant compared with placebo groups ( $p < 0.05$ ). But compared with two groups RSH values were statically insignificant. It was concluded that thyme loading increases enzymatic antioxidant capacity but does not have any effects on non-enzymatic antioxidant structures during exercise. However, thyme loading reduced oxidant stress in elite sportsmen.