

The Effects of Intensive Training on Selected Sex Hormones in Young Wrestlers

**Faruk Yamaner¹, Yetkin Utku Kamuk¹, Taner Bayraktaroglu², Kursat Karacabey³,
Mustafa Gumus⁴ and Tevfik Cem Akalin⁴**

¹Hitit University, Department of Physical Education and Sports, Corum, Turkey

²Bulent Ecevit University, Faculty of Medicine, Zonguldak, Turkey

³Duzce University, Department of Physical Education and Sports, Duzce, Turkey

⁴Bulent Ecevit University, Department of Physical Education and Sports, Zonguldak, Turkey

KEYWORDS Anabolic. Catabolic. Testosterone. Adolescent. Exercise. Athlete

ABSTRACT Adolescence is a crucial period for growth and sports training during this period, besides its positive effects, may have negative effects on growth. The aim of the present study was to evaluate the effect of an 8-month intensive training on selected hormones in young male wrestlers. Forty-five subjects (13.94 ± 0.57) volunteered as the training group (TG) and a control group (CG) of 35 non-athlete subjects (13.93 ± 0.51) was assigned. TG attended to an 8-month wrestling training program for 5 days a week 90 minutes per day. CG did not receive any exercise sessions. Homogeneity of data was tested by using Kolmogorov-Smirnov test ($p > .05$) and independent samples t-test was used to analyse the significance of the differences between pre and post-tests. Change in luteinising hormone levels was significant ($p < .01$) but no significant difference was observed in the other hormone levels ($p > .05$) or BMI ($p > .05$). In conclusion, long-term intensive training caused alterations in LH hormone responses in young wrestlers.