

# **Effect of an Intensive Anaerobic Training Session on Lactate Levels, Anaerobic Power and Fatigue Index among Teen Boy Soccer Player at the Start and End of Puberty**

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The aim of this study was to investigate and compare the effects of an intensive anaerobic Training session on lactate levels, anaerobic power and fatigue index among Teen boy soccer player at the early and the late stages of puberty. The population consisted of 30 teen boy soccer player of Malavan club who were ed through convenience sampling and then divided into two groups. The first group in the early stages of puberty were determined by Tanner stage 2 and 3 (n = 15, mean age: 14.00 ± 0.00 years, body mass index: 19.20 ± 1.44 kg / m<sup>2</sup>, body fat: 19.30 ± 5.43%), and the second group of teens in the late stages of puberty by Tanner stage 5 (n = 15, mean age: 17.00 ± 1.05 years, body mass index 21.31 ± 1.18 kg / m<sup>2</sup>, body fat 13.78 ± 4.97%). After a orientation session with parents and players, the consent form was filled. Then the subjects' height and weight were measured. In order to measure the percentage of body fat was used the caliper and also anaerobic power and fatigue index were determined using RAST test. The health status was evaluated and the stage of puberty was determined by the Malavan's team physician via the Tanner Scale. Blood lactate measurement was performed in 4 stages of rest, immediately after the RAST test, 5 and 15 minutes after after the RAST test. The results showed that the anaerobic peak power, anaerobic mean power, relative anaerobic power and fatigue index were higher in the subjects in the late stages of puberty than in the early stages of puberty (p

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