

EFFECTS OF IRON DEFICIENCY ON FATIGUE LEVELS IN ADOLESCENT FEMALE BASKETBALL PLAYERS

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Abstract: Physical exercise is widely encouraged by physicians to prevent multiple diseases. However, intense physical activity can worsen hematological profile. Iron depletion has a negative effect on performance in athletes. In this study, higher fatigue levels in athletes, particularly adolescent female basketball players, were examined. These groups are more susceptible to iron deficiency due to age, gender and increased physical activity. Data for the study were collected from several scientific published literature. In the collected studies, blood samples were obtained to measure iron levels in different athletic groups. Some of the variables studied were age, gender, athletic engagement, and geo-economic factor. The data were analyzed to determine the significant difference between the groups using T Test and ANOVA statistics. The results of the study showed that one third of adolescents are iron deficient. Females are twice likely to have iron depletion than males, athletes are 1.5 times more likely to have iron depletion than their sedentary counterparts and as much as half of adolescent population in underdeveloped countries is considered anemic compared to only a quarter in developed countries. Endurance athletes such as female adolescent basketball players are at high risk of iron depletion. Proper nutrition and supplementation are vital to avoiding iron deficiency. Iron levels should be monitored at all times for better health and performance.

Key Words: adolescents, anemia, athletes, iron deficiency, iron depletion, nutrition, supplementation.

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