

THE RELATIONSHIP BETWEEN SERUM IRON, TOTAL IRON BINDING CAPACITY AND CARDIOVASCULAR FITNESS IN CHILDREN

***Movaseghi Farzaneh and **Kazemi Nasibe**

1. Professor, Department of Physical Education, Sepidan Branch, Islamic Azad University, Fars, **IRAN**.
2. Professor, Department of Physical Education, Science and Research Branch, Islamic Azad University, Fars, **IRAN**.

Email: fmtaraneh61@yahoo.com

(Received March 28, 2011, accepted June 03, 2011)

ABSTRACT

The purpose of this study was to examine the relationship between serum iron, total iron binding capacity (TIBC) and cardiovascular fitness in 8 to 12 years old children (11girls and 19 boys). Thirty central elementary school children from Noorabad selected randomly, their age 9.73 ± 1.38 (mean \pm SD) years, standing height 134.5 ± 11.77 cm, body weight 32.04 ± 8.65 and body mass index 17.46 ± 2.58 took part in the study. Before entering the study, informed consent for all measurement was taken by each child and parents. All of the children's health status was checked, than serum iron and TIBC were obtained by blood samples. Cardiovascular fitness (vo_{2max}) was measured by Bruce treadmill test. Pearson Bivariate correlation analysis was used to find out the results and the level of significance was set at $p \leq 0.05$. Results revels that no statistically significant relationship was observed between cardiovascular fitness and serum iron or TIBC, in summary these data suggest that serum iron and TIBC was not a predictor of vo_{2max} in children.