Conference Abstract

Anemia and its relationship with socio-demographic data and dietary habits in young Emirati athletes

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Abstract

Introduction: An appropriate diet is crucial for performance development and recovery in athletes. An insufficient nutrient intake diet can lead to health disorders like anemia. Anemia, which is defined as a low level of Hemoglobin in the blood and low volume of red blood cells, Anemia is common in athletes, especially in those performing endurance exercise, and can lead to severe consequences, especially in young individuals and it is associated with decreased athletic performance as well as limited concentration. So far, there is no data in young Emirati athletes on anemia, its prevalence and related factors. Aim: To determine the prevalence of anemia in young Emirati athletes and to identify related factors. Methodology: A cross-sectional study was conducted. 59 male soccer players aged from 13 to 18 years were recruited from Al Jazira Academic sports clubs in the United Arab Emirates. Blood tests results were obtained from the medical file of each participant, which include a complete blood count (CBC) among which the level of Hemoglobin (HgB), Hematocrit (HcT), and Mean Corpuscular Volume (MCV). Socio-demographic data were collected by using a questionnaire. Dietary habits were assessed with a food frequency questionnaire. Both questionnaires were administered in groups under the supervision of a trained interviewer. The software SPSS version 23 was used to conduct data analysis. Data are described as mean ± s.d. or percentage (%) as appropriate. Results: 33.33% of the sample has low HgB. In those athletes, both HcT and MCV are at the inferior limit of the normal range. Also, there is a significant relationship between athlete’s mother education level and Meat group (P-value<0.01) where when the mother's educations level increase the meat and meat consumption for the athlete’s increase. A significant relation between cereal Group and HgB (P-value=0.01) was found. There was no significant relationship between neither HgB, HcT nor MCV with meat consumption in the whole sample and in below HgB athletes. Conclusion: The implication of this finding is that some athletes are considered to have anemia, low blood results then it is desirable for soccer players, this may be related to a poor dietary iron intake.