Iron supplementation for female athletes: effects on iron status and performance outcomes

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Erratum in


Abstract

Iron is an essential micronutrient involved in oxidative metabolism and critical to exercise performance. The prevalence of iron deficiency (ID) is much higher in active women for a variety of reasons, and poor iron status has been shown to be detrimental to overall health as well as physical performance. Iron status can be assessed using a number of indicators; however clinical cut-offs for active populations remain controversial. Randomized, placebo-controlled supplementation trials of iron-depleted female athletes have shown that oral iron supplementation in doses of 100-mg FeSO4·d (approximately 20 mg elemental iron) improves iron status and may improve measures of physical performance. It is recommended that female athletes most at risk of ID be screened at the beginning of and during the training season using hemoglobin and serum ferritin, and appropriate dietary and/or supplementation recommendations be made to those with compromised iron status.