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Sports, Cardiovascular, and Wellness Nutrition
a dietetic practice group of the
eat right. American Dietetic Association

Reversing Iron Depletion

Athlete Scenario

I'm a collegiate runner whose times have been slow to improve following increased training. Recent tests revealed normal values for complete blood count but low serum ferritin, indicating depleted iron stores. What foods might help? Should I take an iron supplement?

Goals for Iron Repletion

- Replenish iron stores to normal levels. Iron is an integral component of proteins (hemoglobin, myoglobin) that supply oxygen to muscle cells. Iron depletion can progress to iron deficiency and anemia, conditions that impair athletic performance.
- Boost iron stores with foods containing iron. Iron exists as heme iron (animal sources: red meat, dark poultry, fish) and nonheme iron (plant sources: whole grains, egg yolks, lentils, dried beans and peas, leafy greens, nuts, seeds).
- Enhance iron absorption by consuming nonheme iron sources with a source of vitamin C (citrus fruits and juices). Consume heme iron with nonheme iron to enhance nonheme iron absorption.
- Iron supplementation may be needed but supplement only when prescribed and monitored by a physician or other qualified health care professional.

Strategies to Boost Iron Stores

- Red meat, dark poultry, or fish several times a week
- Iron-fortified cereal and citrus fruit or juice
- Stir-fry veggies (peppers, tomatoes, broccoli, cabbage), protein source (beef, poultry, fish, tofu), and iron-enriched grains
- Enriched pasta with veggie sauce and a protein source (chicken, beef, lentils)
- Sandwich (roast beef, ham, turkey) on iron-enriched bread plus fruit salad (oranges, strawberries, kiwi)
- Cast-iron pots for cooking

Tips to Take With You

1. You are at increased risk for depleted iron stores if you are young, female, vegetarian, and/or competing in endurance (running, cycling), aesthetic (gymnastics, figure skating), winter (speed skating, cross-country skiing) or intense ball sports (basketball, tennis).
2. Consume iron-containing foods regularly.
3. Monitor iron status (complete blood count and serum ferritin) for health and athletic performance.

Contact SCAN

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Written by SCAN registered dietitians (RDs). The key to optimal meal planning for athletes is individualization. For personalized nutrition plans contact a SCAN sports dietitian or Board Certified Specialist in Sports Dietetics (CSSD) by accessing "Find a SCAN Dietitian" at **www.scandpg.org** | **800.249.2875**.

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