



A well-planned vegetarian diet can provide active athletes the nutrients they need to meet their performance goals. But there are some key things to look out for. We recommend meeting with a registered dietitian to ensure you are meeting all of your nutrition needs.

Energy availability

Everyone has individual energy needs based on a variety of factors, including the type and amount of their training. However, athletes who follow a vegetarian diet need to take extra care to refuel between workouts. If you are experiencing low energy or having trouble maintaining or gaining weight, it could be that you need more calories.

Protein

Protein is important for any athlete for proper muscle performance and recovery. It is especially important for vegetarian athletes who need to pay extra attention to eating enough protein. We recommend including a variety of vegetarian protein sources with each meal. This increases your body's ability to use them.

Vegetarian protein sources include:

Legumes (lentils & beans)

7 to 9 grams of protein per ½ cup serving

Whole grains 6 to 8 grams of protein per ½ cup serving

Seeds (chia, flax, pumpkin, sunflower)

6 to 9 grams of protein per 1 ounce serving

Nuts and nut butters

4 to 9 grams of protein per 1 ounce serving or 2 tablespoon serving

Eggs 7 grams of protein per whole egg

Milk or soy milk 8 grams of protein per 8-ounce glass

Tofu 10 grams of protein per ½ cup serving

Cheese 6 to 8 grams of protein per 1 ounce serving

Yogurt

6 to 20 grams of protein per 6-ounce cup (Greek or Icelandic varieties tend to have more protein than regular yogurt)

Iron

Athletes, especially female and vegetarian athletes, are at risk for iron depletion or deficiency. Iron is responsible for transporting oxygen around the body, red blood cell production, enzyme function and immune system support. Not getting enough iron can have a big impact on athletic performance as well as your overall energy level.

Iron in our diets comes in two forms, heme (found only in animal foods) and non-heme (found in plant foods). Heme iron is better absorbed in the body. For obvious reasons, vegetarian athletes do not consume as much of this type of iron in their diet.

Iron-containing, non-meat foods include:

- legumes (lentils, beans, soy products, hummus)
- dark, leafy greens (spinach, kale, collard)
- nuts and seeds (almonds, cashews, pine nuts, macadamia nuts)
- grains (whole and enriched)
- dark chocolate

Many foods are also fortified with iron, such as cereals and enriched grain products.

To eat enough iron, it's important to choose a wide variety of foods every day. Pairing iron-containing foods with food rich in vitamin C can also increase absorption. You can achieve this by having a smoothie that incorporates iron-containing nuts and vegetables with oranges, melon or other fruit high in vitamin C. Or you can include a glass of orange juice or lemon water in your meals.



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This piece is part of an informational series on sports injury prevention produced by the Orthopedics and Sports Medicine Center at Boston Children's. For materials on preventing injuries in other sports, call **617-355-3501** or visit bostonchildrens.org/sportsmed.

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