

Vegetarian Athletes: What to Eat

It is a proven fact that diet can definitely impact athletic performance, and a vegetarian diet can certainly provide all of the energy and nutrients that individuals need to power themselves through their next workout or competition. Most vegetarian diets can meet the nutritional needs of athletes, if they include a wide variety of foods. The following tips can help ensure that you perform at your optimal ability.

Protein

- Protein requirement for endurance athletes:
 - 0.8 – 1.2 grams (g)/kilogram (kg)/day
- Protein in some plants is not completely digested:
 - Vegetarians and vegans may need to eat more to ensure that they are getting enough protein.
- Even though most vegetarians easily meet the requirement for protein, vegans, strength-trained athletes, or athletes with very intense training regimens or low-food intake may want to:
 - Use nutritional shakes and protein supplements to meet their needs, or
 - Focus on improving their protein intake through careful dietary planning

Carbohydrate

- Carbohydrate requirements:
 - 5-7 g of carbohydrate/kg/day for general training
- Most athletes should aim to have 60%-65% of their total caloric intake from carbohydrate, although the total amount can vary depending on body weight
- Most of the calories that athletes consume should come from complex carbohydrates, such as whole wheat breads/pastas/cereals, oatmeal, brown rice, fruits, and vegetables.

Fat

- A diet with too much emphasis on carbohydrates can crowd out necessary fat consumption
- Good sources of fat include: nuts, seeds, nut butters, avocados, and olive oil.

Vitamins and minerals

- Deficiencies: Vegetarian athletes are most likely to become deficient in the following vitamins and minerals (more common in females): Vitamin D, Riboflavin, Calcium, Vitamin B₁₂, Iron, and Zinc
- Nonheme iron: Most plant foods contain nonheme iron, which is not as well absorbed as heme iron:
 - Iron and vitamin C: Pair iron-rich foods with foods containing vitamin C, such as citrus
 - Iron and calcium: Do not pair foods containing iron with calcium; calcium interferes with iron absorption
- Phytic acids: The absorption of zinc from plant foods is hindered by the presence of phytic acids, making the zinc less absorbable than the zinc found in animal-based foods
- B₁₂: This vitamin is found only in animal foods, making fortified foods necessary for vegetarians and vegans
- Vitamin D: This vitamin exists naturally in animal products and is synthesized from exposure to sunlight
- Spinach: Although high in calcium, spinach is not a good source of calcium because of the presence of oxalates, which makes for poor absorption of calcium



Nutrient	Vegetarian/Vegan Food Sources	Nutrient	Vegetarian/Vegan Food Sources
Calcium	<ul style="list-style-type: none"> • Milk and milk-based foods (if lacto-vegetarian) • Kale • Collard greens • Mustard greens • Broccoli • Bok choy • Legumes • Figs • Currants • Almonds • Chickpeas • Oranges • Tofu • Fortified soymilk • Texturized vegetable protein • Tahini • Calcium-fortified orange juice • Flour • Bread 	Iron	<ul style="list-style-type: none"> • Pistachios • Cashews • Chickpeas • Dried apricots • Sesame seeds • Tahini • Black molasses • Spinach • Wholemeal bread
Riboflavin	<ul style="list-style-type: none"> • Enriched whole-grain cereals • Enriched breads • Dark-green leafy vegetables • Broccoli • Avocados • Nuts • Sea vegetables 	Zinc	<ul style="list-style-type: none"> • Legumes • Hard cheese (if lacto-vegetarian) • Whole-grain products • Wheat germ • Fortified cereals • Nuts • Tofu • Miso

