



# The Vegetarian Athlete

Any athlete, regardless of sport, intensity of training, gender, or age can successfully choose a vegetarian diet without risking nutrient shortages or deficiencies. However, such a lifestyle choice will require careful planning to maintain adequate energy for training and to reduce the risk of associated vitamin and mineral deficiencies.

*\*\*\*The key to a successful vegetarian diet is understanding which plant foods contain similar nutrients as the foods you are no longer consuming; and which nutrients may be at risk.*

## Nutrients at risk for the vegetarian athlete:

Iron  
Zinc  
Vitamin B-12  
Calcium  
Omega 3s  
Protein

## Nutrient Information and Sources:

*If you do have a known deficiency, it is important to consult your physician to determine appropriate dietary supplements regimen.*

**Zinc** - Necessary for protein synthesis, and supporting immune function, this mineral can be found in whole grains, fortified foods as well as nuts and seeds

**Vitamin B-12** - B-12 is necessary for protein synthesis and aids in energy metabolism but it is only found in animal products, so vegan athletes should look for foods fortified with B-12 or consume a multi-vitamin that contains B-12.



## FORMS OF VEGETARIANISM

### Vegan -

consisting of only plant-based foods

### Lacto-ovo -

includes milk, milk-based foods, and eggs;

### Pesca Vegetarian -

add fish, eat dairy products and eggs

*This material was developed by professional sports nutritionists at the United States Olympic Committee. For more information and additional sport performance resources, visit:*

[www.teamusa.org/resources/usoc-sport-performance](http://www.teamusa.org/resources/usoc-sport-performance)

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**Iron** – The most bio-available form (heme) is found in meat, but vegetables contain a form of iron (non-heme) that can promote optimal iron stores if consumed regularly.

**Calcium** - Recommended Adequate Intake (AI) for athletes between ages of 19 and 50 years is 1000 - 1500mg. Athletes not eating dairy can find calcium in fortified foods, soy as well as some veggies and legumes.

**Omega 3s** – This essential fatty acid which promotes good heart health and inflammation can be found in high concentrations in nuts/seeds like almonds, walnuts, flax and sunflower seeds.

**Protein** – Depending upon the individuality of the sport, phase of training etc, most athletes will need 1-2g protein/kg body weight

### Common Sources of Iron

Food	Serving Size	Iron (mg)
Beef, round tip (cooked)	3 oz	2.5 H
Chicken, breast (roasted)	3 oz	0.9 H
Shrimp (cooked moist heat)	3 oz	2.6 H
Kidney beans, canned	½ cup	2.6 NH
Tofu, reg	3 oz	6.4 NH

### Common Sources of Calcium

Food	Serving size	Calcium (mg)
Skim milk	1 cup	306
Low-fat yogurt	1 cup	372
Cottage cheese	2 cup	304
Soy Milk	1 cup	333
Broccoli (raw)	1 cup	60
Kale (cooked)	1 cup	180
Cheerios	1 cup	122

### Common Sources of Protein

Food	serving size	Protein (g)
Peanut butter	2 tbsp	7
Almonds	¼ cup	8
Sunflower Seeds	¼ cup	6
Tofu	½ cup	20
Soy milk	1 cup	6-10
Beans (black, kidney etc)	½ cup	7-10
Edamame	½ cup	10
Quinoa, cooked	1 cup	9