



**ELITE**  
Personal Training and Fitness Solutions

# HEALTH TIP OF THE WEEK

## 2/14: Vegan

### 8 Common Nutrient Deficiencies in Vegan Diets

It is common knowledge that fruit, vegetables, and other plant-based foods are good for us. Omnivores (people who eat meat and plants) are often told to include more of these plant-based foods in their diet for good health. On the other end of the spectrum are vegans who not only go meatless but exclude foods of animal origin completely. While there are some health benefits to being more plant-based, there are some nutrients that are abundant in foods of animal origin that vegans may be lacking.

It is possible to avoid nutrient deficiencies while enjoying the benefits that plant-based diets offer us, but just like other diets that restrict certain foods or exclude food groups entirely, it takes some planning to make sure you are meeting your needs and avoiding common nutritional deficiencies. Vegan and vegetarian diets can lead to at least eight identifiable important nutrient deficits.



Elite Personal Training and Fitness Solutions does not provide medical treatment or intervention. We acknowledge scientific evidence that appropriately intensive exercise and sustainable nutritional intervention can have significant impact on chronic health disorders and obesity, dramatically improving symptoms when recommendations are followed. Please visit us at [Eliteptf.com](http://Eliteptf.com) for more information and to schedule your evaluation.

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## Protein and Amino Acids

Those beans and tofu just might not cut it to fulfill all your protein needs. That's because when it comes to protein, it's not just about quantity it's also about quality. Protein is made of amino acids. Some amino acids are considered essential or non-essential. The essential amino acids cannot be made by the body, so we need to get these from food. If a protein-containing food does not contain all of the essential amino acids, it's not considered to be a "complete" protein source. Vegan diet amino acid deficiencies are actually relatively common. Leucine, lysine, and sulfur-containing amino acids are the ones that vegans may be lacking.

Consider a [plant-based protein powder](#) made from peas and brown rice to help you meet your protein & amino acid requirements.



## Vitamin B12

Vitamin B12, which is important for the nervous system and more, is found in a variety of foods of animal origin—but only trace amounts are found in plant foods. Some foods, such as cereal and nutritional yeast, are fortified with vitamin B12.

However, eating these fortified foods alone is not enough to meet our B12 needs. Therefore, [supplementation of this B vitamin is necessary](#) if following a vegan diet.

## Calcium

Although we often think of dairy products when we think of calcium, vegetables and legumes are also sources of this important mineral. Make sure to include broccoli, soybeans, spinach, and other leafy greens into your repertoire.

## Vitamin D

Although our skin can produce vitamin D from sunlight, regardless of your dietary choices, there are some limitations to this such as one's age, skin color, geographic location, and lifestyle habits (indoors, much?).

It can be difficult for vegans and non-vegans alike to obtain vitamin D from food alone. Supplementation is often necessary to support optimal levels for bone health and immune function. Most vitamin D3 supplements are derived from lanolin (sheep's wool), but if you are looking for a vegan option, [algae-derived vitamin D3](#) supplements are available.



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## Iron

Iron is important for red blood cell function since iron is incorporated into heme, found in hemoglobin, which allows red blood cells to carry oxygen throughout the body. Plant foods provide nonheme iron, whereas meat provides heme iron, and heme iron is more bioavailable than nonheme iron. Because of this, the RDA of iron for vegetarians is 1.8 times higher than for people who eat meat. The good news is that eating vitamin C-rich foods along with iron-containing plant foods can help you absorb more nonheme iron.

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## Zinc

[Zinc is important for immune system function](#), protein synthesis, and more. Although a variety of grains and plant foods contain zinc, the bioavailability from these sources is lower than zinc coming from animal sources like beef and seafood. This is because phytates—which are present in whole-grain bread, cereals, legumes, and other foods—bind zinc and inhibit its absorption.

According to the NIH, people who are on plant-based diets sometimes require as much as [50% more of the RDA for zinc](#) than non-plant based. Soaking beans and choosing leavened grains (bread versus crackers) can help inhibit phytates and increase zinc absorption.

## Omega-3: DHA

DHA (docosahexaenoic acid) is an omega-3 fatty acid that is important for brain and heart health. It is largely obtained from fatty fish like salmon and sardines. It can be difficult for vegans and non-vegans alike to get enough DHA.

If you are vegan, consider supplementing with [algae-derived DHA](#) instead of fish oil as your omega-3 supplement to make sure you are getting enough.



## Iodine

When it comes to this thyroid supporting mineral, the partially good news for vegans is that sea vegetables like [seaweed](#) are among the best [sources of iodine](#). The not-so-good news is that seaweed is one of the only food options that both serves as a good source and is suitable for vegan diets.

Some plant foods such as beans and potatoes contain iodine but are not reliable sources since the amount will vary based on regional growing practices. Using iodized salt is also an option for vegans to get more iodine. Because plant-based options are lacking, vegans are at risk of deficiency and should consider [iodine supplementation](#), especially if pregnant or breastfeeding.

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