7 ESSENTIAL FOODS NOT FOUND IN A PLANT BASED DIET

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Nutrients in Animal Protein

7 Essential Nutrients Not Found In A Plant-Based Diet

1. Vitamin B12

Vitamin B12 is an essential nutrient that's almost exclusively found in animal-sourced foods, such as fish, meat, dairy products, and eggs.

Also known as ***cobalamin***, it's a water-soluble nutrient involved in developing red blood cells and maintaining nerves and normal brain function.

Studies have shown that without supplements or enriched foods, **vegetarians are at a high risk of vitamin B12 deficiency**. Lacto-ovo-vegetarians can get adequate amounts of this nutrient from dairy products and eggs, but this is much more challenging for vegans.

Vegans who don't take supplements are at a higher risk of vitamin B12 deficiency than vegetarians.

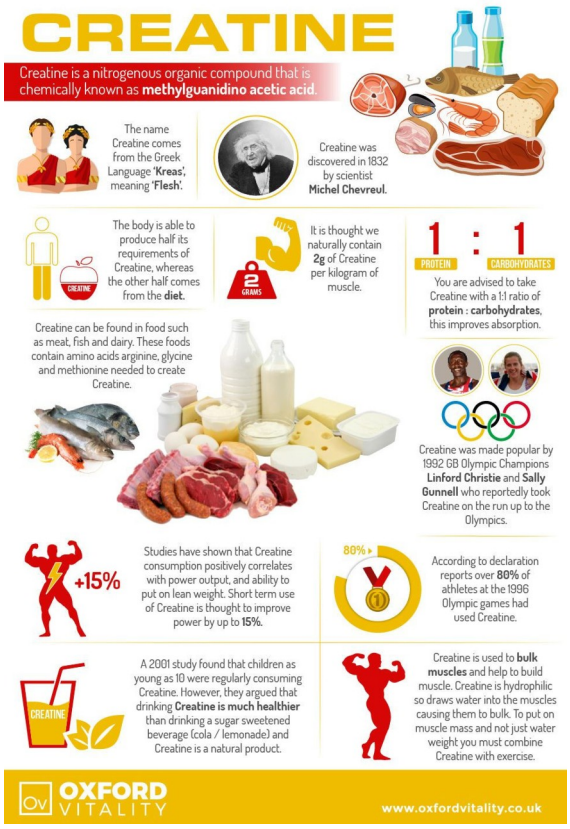
The symptoms and risks associated with vitamin B12 deficiency include:

- Weakness, fatigue
- Impaired brain function
- Neurological disorders
- Psychiatric disorders
- Neurological disorders in babies of breastfeeding mothers
- Megaloblastic anemia
- Possible links to alzheimer's disease

- Possible links to heart disease

2. Creatine

Creatine is a molecule found in animal foods. Most of it is stored in your muscles but significant amounts are also concentrated in your brain.



It functions as an easily accessible energy reserve for muscle cells, giving them greater strength and endurance. For this reason, it's one of the world's most popular supplements for muscle building. Studies show that creatine supplements can increase both muscle mass and strength.

Creatine is not essential in your diet, since it can be produced by your liver. However, studies have shown that vegetarians tend to have lower amounts of creatine in their muscles.

One study placed people on a lacto-ovo-vegetarian diet for 26 days and found that doing so caused a significant decrease in their muscle creatine levels.

Because creatine is naturally found in animal tissue, vegetarians and vegans can get it only from supplements --- which are manufactured from animal sources.

Creatine is a bioactive compound that's lacking in plant-based diets. It plays an important role in brain and muscle function.

3. Carnosine

Carnosine is an antioxidant that's concentrated in the muscles and brain of humans and animals. It's very important for muscle function, and high levels of carnosine in muscles are linked to reduced muscle fatigue and improved performance. Carnosine is only found in animal-based foods. However, it's considered nonessential, since your body can form it from the amino acids histidine and beta-alanine.

Dietary sources of beta-alanine may contribute significantly to muscle levels of carnosine, but the main dietary sources meat, poultry, and fish — are non-vegetarian. Studies have shown that vegetarians have less carnosine in their muscles than meat eaters.

Carnosine is a nutrient found only in animal-derived foods. It's important for muscle function. Beta-alanine supplements increase the levels of carnosine in muscles.

4. Vitamin D3 (cholecalciferol)

Vitamin D is an essential nutrient with many important functions. Also called the sunshine vitamin, it doesn't have to come from your diet.

Your skin can produce vitamin D when it's exposed to sunlight. However, if your sunlight exposure is limited or you live far from the equator, you must get it from food or supplements.

There are two types of dietary vitamin D:

- Ergocalciferol (D2), found in plants
- Cholecalciferol (D3), found in animal-based foods

Of these types, cholecalciferol (D3) increases blood levels of absorbable vitamin D much more efficiently than ergocalciferol (D2)

The best sources of vitamin D3 are fatty fish and egg yolks. Other sources include supplements, cod liver oil, or enriched foods like milk or cereals.

Since the main dietary sources of vitamin D3 are not plant-based, vegetarians and vegans may be at a higher risk of deficiency, especially during the winter in countries north or south of the equator.

Deficiency in vitamin D is linked to an increased risk of various adverse conditions, including:

- Osteoporosis, with an increased risk of fractures in older adults
- Cancer
- Heart disease
- Multiple sclerosis
- Depression
- Impaired brain function
- Muscle wasting and reduced strength, especially in older adults
- Cholecalciferol (D3) is a type of vitamin D found in animal-sourced foods, especially fatty fish, and it's more effective at raising blood levels of vitamin D than the plant form of vitamin D (D2).

5. Docosahexaenoic acid (DHA)

DHA is an essential omega-3 fatty acid that's important for normal brain development and function. Deficiency in DHA can have adverse effects on mental health and brain function, especially in children. In addition, inadequate DHA intake in pregnant women may adversely affect fetal brain developmen. It's mainly found in fatty fish, fish oil, and certain types of microalgae.

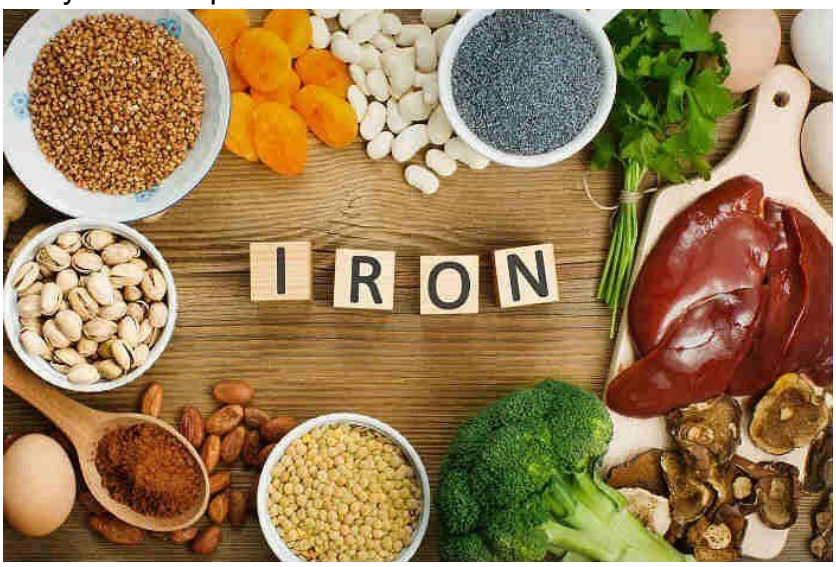
In your body, DHA can also be made from the omega-3 fatty acid ALA, which is found in high amounts in flax seeds, chia seeds, and walnuts.

However, the conversion of ALA to DHA is very inefficient and may not increase blood levels of DHA sufficiently. For this reason, vegetarians and vegans often have lower levels of DHA than meat eaters. Docosahexaenoic acid (DHA) is an essential omega-3 fatty acid found in fatty fish and fish oil.

6. Heme Iron

Heme Iron is a type of iron found only in meat, especially red meat. It's much better absorbed than non-heme iron, which is commonly found in plant foods

Heme iron also improves your absorption of non-heme iron from plant foods. This phenomenon is not entirely understood but is called the meat factor.



Non-heme iron is poorly absorbed. Its absorption can be limited further by anti-nutrients also present in plant foods, such as PHYTIC ACID.

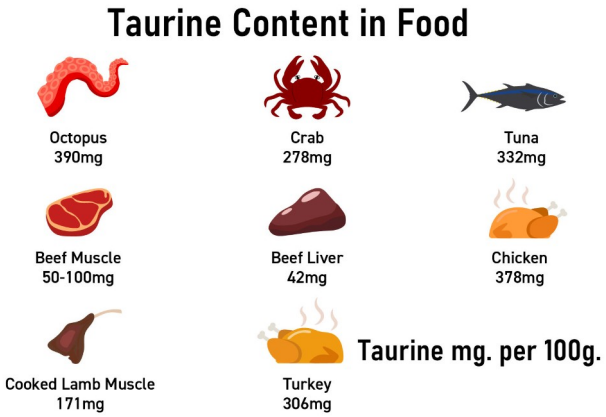
Unlike non-heme iron, the absorption of heme iron is not affected by the presence of anti-nutrients.

For this reason, vegetarians and vegans — especially females and people on raw food diets — are more prone to anemia than meat eaters).

Meat, especially red meat, contains a type of iron called heme iron, which is much better absorbed than non-heme iron from plant foods.

7. Taurine

Taurine is a sulphur compound found in various body tissues, including your brain, heart, and kidneys.



While its bodily function is not entirely clear, it appears to play a role in muscle function, bile salt formation, and antioxidant defenses. Taurine is found only in animal-sourced foods, such as fish, seafood, meat, poultry, and dairy products.

Subsequently, studies have shown that vegans have lower levels of taurine than meat eaters. Taurine isn't considered essential in the diet, since your body produces small amounts. Still, dietary taurine may play a role in maintaining your body's taurine levels.

Taurine is a sulphur compound that has several functions in your body. It's found naturally in only animal-based foods.

The bottom line

Well-planned vegetarian and vegan diets are very healthy. Unfortunately, a few nutrients are impossible or difficult to get from commonly consumed plant foods.

If you plan to eliminate animal-sourced foods from your diet, make sure to keep those nutrients in mind, and take dietary supplements to make sure that you're getting everything your body needs.

NOTE: Should be noted that these supplements are created from animal sources OR are artificial --- rendering them useless as the body has a very difficult time recognizing "artificial" substances.

Briefly: The 7 Essential Nutrients NOT Found in a Plant-Based Diet Are:

1. Vitamin B12
2. Creatine
3. Carnosine
4. Vitamin D3 (cholecalciferol)
5. Docosahexaenoic acid (DHA)
6. Heme iron
7. Taurine

ReLive Greens are available from The Root Brands Website

Most Americans do not eat enough vegetables.

According to the Center for Disease Control and Prevention ***(CDC)***, 22 percent of American adults eat vegetables less than once a day, and the average person only eats vegetables 1.6 times a day.

The U.S. Department of Agriculture ***(USDA)*** dietary guidelines for 2015 recommend that the average adult should eat between two and three cups of vegetables daily. Many Americans eat far less than one cup of vegetables daily.