

# Vegan Alternatives



## Calcium



Calcium is required for healthy bones, nerve and muscle function and also blood clotting. We tend to think of milk and dairy products as being our main sources of calcium. However, there are numerous sources of calcium that are suitable for vegan diets.

**Fruit and vegetables:** kale, watercress, greens, parsley, lambs lettuce, spinach, bok choy, Brussels sprouts, butternut squash, celery, broccoli, French beans, oranges, grapefruit, blackberries, blackcurrants, pomegranate, dates and figs.

**Nuts and seeds:** almonds, Brazil nuts, pistachios, sesame seeds.

**Other:** edamame, navy beans, oats, blackstrap molasses, tofu, drinking hard water, fortified foods (for example rice and oat milks are often fortified with calcium).

**The recommended intake of calcium for adult men and women is 700mg a day.** Teenage boys require 1000mg a day, and teenage girls 800mg a day. Here are some examples of the calcium content of foods, so that you can check if you are getting enough:

**1 serving/80g kale-100mg**

**1 serving/140g butternut squash-70mg**

**1 medium orange-50mg**

**5 pitted dates-80mg**

**1 serving/100g broccoli-40mg**

**1 small serving/80g calcium set tofu-560mg**

**5 dried figs-70mg**

**10 almonds-35mg**

## Iron

Iron is essential for energy production, thyroid function and ensuring our immune system remains healthy. Iron from plant sources is less bio-available than animal sources; however, if you are eating vegetables in high quantities they are a very useful source for vegans. With a little effort it's possible to get enough iron in a vegan diet, particularly if you are having enough vitamin C rich foods, as vitamin C helps the body absorb iron. So including a fresh salad, fresh orange juice or some cauliflower with your meal will help you maintain optimum iron levels. The following foods are good sources of iron:

**Vegetables:** kelp, greens, spinach, peas, artichoke, broccoli and asparagus.

**Fruit:** dried apricots, dates, prunes, cherries, strawberries, blackberries, apples and avocados.

**Nuts and Seeds:** pumpkin, sunflower and sesame seeds, pistachios, almonds, cashews and Brazils. Soaking overnight and adding to foods such as porridge will increase the iron absorption.

**Grains:** millet, brown rice, wholemeal bread and quinoa. Soak grains in hot water overnight with a dash of lemon juice before cooking. This increases the bio-availability of the iron.

**Pulses:** lentils, chickpeas and kidney beans. Again, soak overnight in hot water with lemon juice. Even better are sprouted pulses and seeds – alfalfa, broccoli and mung beans are particularly good and can be found in health food shops.

**Other sources:** tofu, tempeh, natto, tahini, blackstrap molasses.

**The recommended amount of iron differs from person to person** and even within a single person's lifetime. However, in general an adult male should aim for 9mg a day, and an adult woman 15mg.

**2 tbsp tahini-3.7mg**

**1 serving/100g broccoli-0.8mg**

**1 serving/100g frozen spinach- 1.6mg**

**1 serving tempeh/100g-4.5mg**

**50g bag dried apricots- 1.7mg**

**15g pumpkin seeds & almonds-2.5mg**

## Vitamin B12

B12 is needed for the formation of red blood cells and a healthy nervous system. Lack of this vitamin can cause anaemia and damage to nerves. Bio-available B12 is only found in animal produce, so it's essential for vegans to take a supplement.

## Protein

The human body contains 10s of 1000s of different proteins, each with a specific function. Proteins are made from amino acids. There are 20 amino acids that the body needs to make the 1000s of proteins it requires. Some amino acids can be made within the body, but nine of them are "essential", i.e. they cannot be made in the body and need to be obtained from our diet. Meat and animal sources of protein are known as "complete" proteins, as they contain all the essential amino acids. However, it is possible to get all essential amino acids from a healthy vegan diet. The following foods are good sources of protein, but it is important to realise that no one food contains all of the essential amino acids (other than quinoa), therefore a varied diet is required from a variety of different foods.

**Vegetables:** spinach, kale, French beans, peas.

**Nuts and seeds, nut butters**

**Grains/cereals:** oats, wheat, buckwheat, millet, rye and quinoa (a pseudo-cereal).

**Milks:** almond and quinoa.

**Legumes:** lentils, soy, butter, black-eyed, pinto, adzuki, cannelloni.

**Soy products and protein powders:** tofu, tempeh, miso, natto, pea protein, hemp protein.

## Healthy Fats

**Polyunsaturated Fatty Acids** - The most common being the essential fatty acids, omega 3 and 6, which are needed for a healthy cardiovascular and nervous system. Unlike other fats, our body cannot synthesize them; therefore we need them to come from our diet. The average diet tends to contain more than enough omega 6, so it is better to focus on increasing omega 3 intakes.



**Omega 3** - flax and chia seeds (best sources), hemp seeds, pumpkin seeds and walnuts.

**Omega 6** - vegetable and plant oils, seeds and seed oils, many nuts, soy beans, evening primrose oil and borage oil.

**Monounsaturated Fatty Acids** - the most common being omega 9, or oleic acid. The best sources are olive oil, avocados, nuts and seeds and most vegetable oils.

Sources and Resources: Green for Life by Victoria Boutenko (2005), [www.vegansociety.com](http://www.vegansociety.com)