

Guidance to Support a Healthy Plant-Based Way of Eating

Evidence-based Advice from the Lifestyle Medicine Team

Vegan Diet

Plant-based eating is becoming increasingly popular. We're keen to support you to meet all of your nutritional needs while enjoying a vegan or plant-based lifestyle. As with any way of eating, we recommend that you aim to eat a diverse range of foods to ensure that you are eating a variety of phytonutrients.

To help you to meet your nutritional needs, we've created some information on some of the key nutritional aspects to be aware of when following a vegan diet. Research has shown that there are several dietary components that are naturally lower in a vegan diet (1). We've written the following to help you avoid missing out on these essential nutrients.

Vitamins and Minerals

If you're following a vegan diet and are eating a broad range of foods, you should easily be getting many of the vitamins and minerals you need. However, it's known that plant based diets can also have lower than optimal amounts of some important nutrients(2). Read on to find out a little more about which these are and how to support your intake of these and your long term health.

Vitamin B12

Vitamin B12 comes from animal based foods so anyone following a Vegan diet will find it harder to consume the required amount of dietary vitamin B12 (3). Symptoms of B12 deficiency include loss of sensation or tingling in fingers and toes. Nutritional yeast, Spirulina, Marmite, Brewers yeast and Chlorella can be used as vegan sources of vitamin B12 - other foods such as plant-based milks may also be fortified with vitamin B12.

Vitamin D

Vitamin D is a fat soluble vitamin found in some animal foods. Other food sources are regularly fortified with vitamin D, such as soy, almond, oat milks and cereals. Vitamin D can also be produced from sunlight exposure on the skin(4). Vitamin D helps to maintain your bone health by promoting the absorption of calcium from the gut and by maintaining adequate levels of calcium and phosphate in your blood. Vitamin D also plays an important role in bone remodelling. Mushrooms are a potential source of vitamin D with some mushrooms having been exposed to UV light to increase Vitamin D levels(5).

Iodine

Iodine is most abundant in seaweed and seafood and sea vegetables(6). Soil also contains iodine in varying amounts. Plant foods and water sources will have varying amounts of iodine in them. Iodine deficiency can result in goitre or thyroid swelling, and can also lead to impaired mental function in adults, low metabolism, low blood pressure, and weight gain. Some foods such as cabbage and broccoli are rich in compounds known as "goitrogens" which can interfere with the hormones produced by the thyroid. These can block the uptake of iodine from your diet. Soaking, washing and cooking goitrogenic foods well can help to overcome this issue(7).

Selenium

Selenium is an important antioxidant which is often found to be low in those following a vegan diet. Selenium content of the soil where plants are grown will affect selenium levels in the food. The UK is generally recognised as having low levels of selenium in the soil so the level of selenium in plants will also be low. Selenium is used in many enzyme functions in the body and in the complex process of production of DNA(8).

One key role of selenium is to help thyroid hormones convert from an inactive to an active form. Selenium has also been found to help prevent a condition that affects the heart called cardiomyopathy(9). Selenium can be obtained from eating brazil nuts, green and brown lentils, brown rice, beans and bananas.

Calcium

Calcium is an important micronutrient recognised for its importance in bone health, but is also important for many other functions in your body including blood clotting and health of your muscles. Calcium levels are often naturally lower in a plant based diet(10). When following a vegan diet, aim to eat soy products that are rich in calcium, as well as tofu, fortified milks such as soy and almond and hemp. Other sources include tahini, kale and beans, peas and lentils.

Fats

When following a Vegan diet, Omega 3 fats can be found in the following sources: avocado, chia and flax seeds, walnuts, seaweed and algae. Aim to add a small portion of these to every meal(11).

Protein

It's recommended that adults aim to eat a minimum of 0.8g of protein per kilogram of body weight(12). To put this into context if you weigh 80Kg you would need to eat at least 64g of protein a day; or if you weigh 100 Kg then you would need to eat 80g of protein a day.

To calculate your protein needs, simply take your weight (Kg) and multiply this by 0.8 to obtain the amount of protein in grams that you need to consume that is recommended to meet your health needs.

Vegan Protein Sources (13)

Flours

Protein content per 100g

Brown Wheat Flour	12.6
Brown Chapati Flour	11.5g
Soya flour (full fat)	36.8g
Soya flour (low fat)	45.3g
Teff	12g

White bread making flour	11.5
White Chapati Flour	9.8g

Grains and Legumes

Protein content per 100g

Aduki Beans (soaked)	9g
Baked beans in tomato sauce	5.2g
Black Eyed beans (soaked)	8.8g
Butter Beans (soaked)	5.9g
ChickPeas (soaked)	8.4g
Hummus	7.6g
Lentils, Green, Brown, Red (split), dried	24g
Lentils, Green and Brown in water	8.8g
Lentils, red split, in water	7.6g
Mung Beans, dried	24g
Mung Beans (soaked)	7.6g
Red Kidney Beans (soaked)	22g
Red Kidney Beans (soaked)	8.4g

Nuts and Seeds per 100g

Almonds	21g
Brazils	14g
Cashews	20g
Chia seeds	17g

Coconut - creamed block	6g
Hazelnuts	14g
Macadamia	8g
Mixed Nuts	23g
Peanuts	26g
Pecans	9g
Pine nuts	14g
Pumpkin seeds	24g
Sesame Seeds	18g
Sunflower Seeds	20g
Tahini	18.5
Trail Mix	9g
Walnuts	15g

Soya Products per 100g

Tofu -steamed	8g
Soy bean, dried	36g
Soy bean - reconstituted	18g
Edamame	9g

Alternative products *

Quorn, pieces (manufactured from myco-protein)	14g per 100g
Pea Protein	As packet label

Hemp Protein	As packet label
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*Other protein options include protein powders made with pea/ rice/ hemp or soy protein and can offer an option to boost your protein intake.

Plant based milk and yoghurt

Protein per 100mls

Almond Milk	0.4g
Almond Yoghurt - 150g	7.5 g
Coconut Yoghurt 100g	10g
Hemp Milk	0.1g
Oat Milk	1g
Rice Milk	0.3g
Soya Milk	2.4g

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