

PLANT-BASED NUTRITION FAQ

CAN WE REALLY GET ALL THE NUTRIENTS WE NEED WITHOUT EATING ANIMAL PRODUCTS?

Yes! Humans have no need to eat any animal products at any stage of life. Not sure? Here is what the largest and most respected body of nutrition professionals says about plant-based diets:

*"It is the position of the Academy of Nutrition and Dietetics that **appropriately planned** vegetarian, including vegan, diets are **healthful, nutritionally adequate and may provide health benefits** for the prevention and treatment of certain diseases. These diets are **appropriate for all stages of the life cycle**, including pregnancy, lactation, infancy, childhood, adolescence, older adulthood, and for athletes. Plant-based diets are more environmentally sustainable than diets rich in animal products because they use fewer natural resources and are associated with much less environmental damage. Vegetarians and vegans are at **reduced risk of certain health conditions**, including ischemic heart disease, type 2 diabetes, hypertension, certain types of cancer, and obesity..."*

- J Acad Nutr Diet. 2016 Dec;116(12):1970-1980. doi: 10.1016/j.jand.2016.09.025.

As with any eating pattern, a little bit of planning and know-how is important to help us make good food choices, and as required, supplement appropriately for optimum health. Here are some nutrition basics on nutrients you might want (or need) to know more about.

WHERE CAN WE GET PROTEIN FROM ON A PLANT-BASED DIET?

Protein is an important nutrient for growth and has many functions throughout the body, including being a major component of muscles. Protein is composed of substances called amino acids. There are 20 different amino acids we require for protein synthesis but only 9 of these are considered essential as our bodies cannot make these and so these need to be provided in our diet. Many people associate protein with animal products and worry they won't get enough on a plant-based diet. However, nearly all foods contain protein and people on a plant-based diet can get plenty of protein by basing their daily diet on plant foods such as lentils, beans, chickpeas, tofu, tempeh, grains, nuts, seeds, and vegetables.



Patrik Baboumian, vegan strongman

Limiting your intake of "empty calorie" foods like soft drinks, oils, margarine and other high fat/ high sugar processed foods and eating more whole plant foods will increase the protein density of your daily diet. People who are doing strength training to increase their muscle mass often use protein powders to boost their protein intake in a convenient way. Plant-based protein powders (e.g. based on soy, rice, peas or other plant foods) are readily available.

WHAT ABOUT VITAMINS?

Vitamins are essential nutrients that humans need to obtain in order to be healthy. The only vitamins that are not readily obtainable from unprocessed plant foods are Vitamin B12 and Vitamin D. All the other essential vitamins are readily obtainable from eating a range of plant foods, including vegetables, fruit, legumes, nuts, seeds and whole grains. It is important for anyone eating a plant-based diet to know about vitamin B12 and vitamin D and where to get them - so read on!

Vitamin B12 is produced by bacteria and is found in soil but is scarce in plant foods. (Eating soil or unwashed vegetables is unsafe so not recommended!) People on plant-based diets can obtain vitamin B12 by eating fortified foods (i.e. foods that have had vitamin B12 added, such as some soymilks, marmite and some meat alternatives – check the label. However, as at least three serves of vitamin B12-fortified foods are required to meet the minimum recommended intake. Therefore, the safest, easiest and cheapest way to ensure that you get adequate vitamin B12 is to take a vitamin B12 supplement. This can be either in the form of a daily vitamin B12 tablet, lozenge or liquid containing at least 50-100 mcg of vitamin B12, or a twice-weekly dose of 1000-2000 mcg of vitamin B12. It is especially important that women of reproductive age, infants and children obtain enough vitamin B12 each day as it is essential for brain development and growth. (It's recommended that babies born to women on a vegan diet are supplemented from 6 months of age, if breastfed, or from birth if their mother did not supplement with B12 during her pregnancy.) As we age, we don't absorb vitamin B12 as well, so higher intakes are recommended for people over 50.

Vitamin D can actually be obtained from the sun! Ten to thirty minutes of daily mild sun exposure, without sunscreen, is recommended. During winter or for those living in less sunny areas or not much getting exposure to sun, Vitamin D supplements may be required. Getting enough vitamin D is crucial for infants and growing children as it is needed to enable calcium to be taken up into bones and a deficiency can result in weak bones and rickets. It is now recommended that vegan infants be supplemented from birth with 400 IU of vitamin D.

WHAT ABOUT MINERALS?

There are several minerals that are essential for humans to obtain in order to be healthy. Minerals are chemical elements and cannot be synthesized by plants or animals. All minerals are ultimately obtained from the earth, and the content of minerals in plants varies dependent on the soil they are grown in. Iron, zinc and calcium are important minerals that humans need to ensure they obtain in adequate amounts.

Iron is important for our red blood cells and good sources include legumes (such as chickpeas, lentils, navy beans, pinto beans, kidney beans, soybeans), tofu, tempeh, whole grains, fortified vegan meat analogues (with added iron), breakfast cereals, pepitas and green vegetables. *NOTE:* Vitamin-C rich foods (like orange juice, tomatoes, capsicum and raw green vegetables) help to increase the amount of iron we absorb, so try eating these foods in the same meal. Tea and coffee can interfere with iron absorption, so it is best to have these between meals rather than with them.

Calcium is stored in our bones and is important for bone strength. The best plant sources include kale, leafy Asian vegetables (like bok choy), rocket, calcium-set tofu and fortified plant milks. (Check the label and look for plant milks that have at least 120 mg calcium per 100 ml.) Other plant foods that contain moderate amounts of absorbable calcium are white beans, almonds, figs, and oranges.

Zinc has many functions throughout the body and sources include soy products, legumes, nut, seeds, whole-grains, pepitas and green vegetables.

TRACE ELEMENTS

Trace elements are mineral elements that are needed in small amounts in human nutrition. They are derived from soil and the amount of a particular trace element in a food will depend on the soil the food was grown in. Unfortunately, modern farming methods tend to deplete the soil of trace elements, resulting in low amounts in the foods grown in those soils. In Australia, iodine and selenium levels in soil tend to be low.

Iodine is important for thyroid function in adults and for brain development in infants and children. Seaweed contains iodine but the amounts are very variable. Kelp (kombu) is rich in iodine but not recommended because it can provide **way too much** iodine, which could result in damaging the thyroid gland. Using iodised salt is a more reliable way of boosting iodine

intake, although people with high blood pressure or on sodium-restricted diets need to limit their salt intake. Another alternative is supplementation: multivitamin tablets containing about 100-150 micrograms of iodine (for adults) will help ensure an adequate iodine intake. Iodine is important for brain development and so it is very important that pregnant and lactating women supplement with iodine (e.g. in a prenatal supplement) to ensure an adequate intake.

Selenium is also important for thyroid health and has other functions in the body, such as a role in cardiovascular health. Brazil nuts are a rich source of selenium and just one or two brazil nuts a day will meet requirements. (Avoid having more than this as too much selenium can be harmful.) Alternatively, most multivitamin supplements contain selenium.

CAN WE GET ESSENTIAL FATTY ACIDS WITHOUT EATING FISH?

Yes. Essential fatty acids are components of fats that humans need to have in their diets. The two types of essential fatty acids that are required are called omega-6 fatty acids and omega-3 fatty acids.

Omega-6 (linoleic acid) is widely available from a range of foods including nuts, seeds, avocado, grains and vegetable oils. We do not require much omega-6 so even most low-fat diets can provide adequate amounts of linoleic acid. A high intake of omega 6 fatty acids can suppress the conversion of the omega-3 ALA to its active forms DHA/ EPA, so people on diets high in omega-6 may require a higher intake of ALA or supplemental DHA.

Omega-3 fatty acids include ALA, DHA and EPA. Foods rich in alpha linolenic acid (ALA) include flaxseeds (also known as linseeds), chia seeds and walnuts. Flaxseeds are best consumed freshly ground, as they are not easily digested in whole form. Having about a tablespoon of flax or chia seeds or 10 walnut per day will boost ALA intake significantly. Our bodies need to convert the omega 3 ALA (from flaxseeds etc) to DHA and EPA and we do this with variable efficiency. Another option to ensure we get enough of these omega-3s is to supplement with algal-derived DHA/EPA. (Algal is the original source of omega-3s for fish.) This is recommended for all pregnant and lactating women, children and young children.

Want more info on planning a plant-based diet and getting all the nutrients you need to be healthy? Check out our eBook "Easy Peasy Plant-Based Eating - with Vegan Nutrition Guide". It has loads of useful info on putting together plant-based meals, plus a sample meal plan with recipes. Alternatively, consider our eBook '28-day Plant-based Meal Plan with Recipes', which has breakfast, lunch, dinner and snack recipes for 28 days of plant-based eating. Both are available on our [website](#).

NOTE:

The information on this page is of a general nature only and is not intended to replace individualised advice from an appropriately qualified health professional. It is recommended that you have a nutrition consultation when you adopt a plant-based eating pattern, to help ensure that you are on track to get all your essential nutrients and get the maximum benefit from your plant-based diet. This is **especially** important if you are planning a pregnancy, are pregnant, breastfeeding or have children. See [bookings](#) for information on how to organise a consultation. For additional general information on plant-based eating and nutrition, have a look at our [Free Downloads](#).

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