



VEGAN nutrition SOS

Eva Killeen shares the 9 essential nutritional needs to consider when going vegan

Plant-based eating is on the rise, and for good reason. Following a plant-based diet can offer significant benefits to your health and the health of the planet.

If not considered properly however, a plant-based diet could lack some important nutrients, so in order to make sure that we are brimming with health and energy we need to be aware of what they are, and find out how to maximise nutrient-intake as we reduce animal products from our diet.

Iron – *Say no to tea and coffee*

Iron plays an important role in our bodies through its role in making haemoglobin, which carries oxygen in the blood. Iron is abundant and absorbable in meat, but as a vegan you will need to source other options, of which there are plenty.

Some plant based sources include dried fruit, beans, seeds, vegetables and whole grains. However, tea and coffee inhibit the absorption of plant iron. The recommended iron intake for vegans is about twice that of non-vegans. Consuming iron-rich foods with a source of vitamin C (like peppers or citrus) will enhance iron absorption.

Plants can fulfil your calcium needs

There are many plant based sources of calcium. Obtaining enough calcium in a vegan diet can be achieved by eating a balanced diet full of nutrient dense foods and also by incorporating calcium fortified foods into your diet.

Plant sources of calcium include bok choy, figs, kale, mustard greens, turnip, watercress,

broccoli, chickpeas, sesame seeds and fortified plant milks.

Iodine – *Get wrapping*

Iodine is vital for healthy thyroid function and is needed for metabolizing food into energy.

A low iodine intake can lead to hypothyroidism, often resulting in low energy levels, dry skin, forgetfulness, depression and weight gain.

Vegans need to make a conscious effort to consume enough. Kelp (Kombu) »



is very rich in iodine, but should only be consumed on occasion. Nori (sushi wraps) have more moderate levels (three sheets per day contains almost all your recommended intake) and can be eaten regularly. Iodised salt also boosts levels.

Essential Fats (Omega 3 and 6) – *Nothing fishy*

Ideally we should have a balance of omega-6 to omega-3 of a close to 1:1 ratio. However, the average Western diet has a ratio of anywhere from 15:1 to 50:1!! A high omega-6 to omega-3 ratio is linked with many inflammatory diseases such as arthritis, diabetes, depression, heart disease and cancer.

For a vegan to achieve the ideal ratio, the solution is to first cut back omega-6 food sources by reducing the intake of processed foods and vegetable oils. Boost your intake of omega-3 rich plant based sources such as flaxseeds, chia seeds and walnuts. You can also supplement with algae oil if needed.

If you eat a whole food plant-based diet and avoid processed food, then your levels of these two fatty acids should be happily balanced at healthy levels.

Vitamin D – *The Sunshine Vitamin*

More and more scientific research is being done on the importance of vitamin D for our health. Amongst other things, vitamin D helps enhance the absorption of calcium by the body and influences many other bodily processes, such as immune function, mood, memory and muscle recovery.

The reference nutrient intake (RNI) for vitamin D for children and adults is 15mcg per day. However, daily requirements are believed to be a lot higher than the current recommendations suggest.

Unfortunately, there are not many foods containing vitamin D and foods fortified with it are often unable to meet the daily requirements. This could partly explain the worldwide reports of vitamin D deficiency among vegans and omnivores alike.

Besides the small amount you get from your diet, vitamin D can be made from sun exposure, but because of the climate in the UK,

it is not advised to rely on sun exposure alone to boost vitamin D levels.

It is a good idea to have your blood levels tested. Those unable to get enough from fortified foods and sunshine should take a daily vegan vitamin D supplement.

Vitamin D3 seems more effective at raising blood levels of vitamin D, so a vegan vitamin D3 option would be best.

Zinc

It is important to have small amounts of zinc on a daily basis in order to maintain health and perform important functions each day. Zinc offers many benefits: it helps with hormone production, growth and repair, improves immunity, supports digestion, and has the ability to act as an anti-inflammatory agent. Zinc may therefore have significant therapeutic benefits for several common, chronic diseases like helping to fight cancer or to reverse heart disease.

An insufficient intake of zinc can lead to developmental problems, infertility, loss of hair, diarrhoea, hormonal problems and poor wound healing.

The RNI for zinc is 7-9mg per day for adults.

Few plant foods actually contain zinc and absorption of the zinc from those that do is limited due to their

phytate content. Based on this, vegans are recommended to aim for 1.5 times the RNI.

To maximize your intake, eat an abundance of zinc-rich foods, including whole grains, wheat germ, organic tofu, legumes, nuts and seeds. Make sure to choose organic ingredients whenever possible, as any pesticide residues on non-organic produce can have a negative effect on your health.

Soaking nuts and seeds overnight before eating them, ensuring adequate protein intake and eating fermented foods such as tempeh, also appears to boost zinc absorption.

Vitamin A – *It's all about conversion*

Vitamin A is also only available from animal sources. However, our bodies convert beta carotene (a red-orange pigment found in many fresh fruits and vegetables) into vitamin A. To

Sunshine exposure supplies you with vitamin D, but it needs supplementing in the UK's climate



Successfully transitioning into a healthy vegan takes consideration, planning and time



Spirulina – contains 4 grams of protein per tablespoon.

Kidney beans – 13 grams per cup.

Chickpeas – 14.6 grams per cup and also high in fibre.

Sunflower seed kernels – 7.3 grams per quarter cup.

Vegetables don't tend to have as much protein as legumes and seeds, but some do contain significant amounts – along with lots of antioxidants and heart-healthy fibre. If someone is eating a lot of vegetables it will add up to a good amount of amino acids. For example, two cups of raw spinach contains 2.1 grams of protein.

It is important to remember to choose whole food sources of protein and not to get swayed by the ever booming protein-bar market. While protein bars can offer a substantial amount of protein, they often contain chemical nasties and can cause sugar crashes, stomach problems, and even lead to weight gain.

maximise this conversion it is important to eat beta carotene-rich foods such as carrots and sweet potatoes, with a little healthy fat.

B12 – you will need support

Along with including B12-fortified foods in your diet, supplementation is advised. B12 keeps the body's nerve and blood cells healthy and helps make DNA. A lack of B12 can result in low energy, feeling weak, constipation, appetite loss, weight loss and depression, so make sure you get yours.

As if we could forget – Protein

We all know how it goes – you mention you're vegan and the first question is "but where do you get your protein?"! As tedious as these questions can be, the importance of adequate protein cannot be ignored.

Protein is found throughout the body in muscle, bone, skin, hair, etc. It makes up the enzymes that power many of the body's chemical reactions, as well as the haemoglobin that carries oxygen in your blood.

There are 20 building blocks called amino acids, which provide the raw material for all human proteins. Similar to the 26 letters of the alphabet forming millions of different words,

these 20 amino acids serve to form different proteins; at least 10,000 different proteins make you what you are and keep you that way.

Half of these 20 amino acids cannot be manufactured by the human body. These are known as the essential amino acids and can easily be provided by a balanced diet, but because the body doesn't store amino acids, it needs a daily supply.

As babies, our mother's milk provides the protein we need to grow healthy and strong. Once we start eating solid foods, approximately 10-12% of our total calories need be in the form of protein.

The Reference Nutrient Intake (RNI) is set at 0.75g of protein per kilogram bodyweight per day in adults.

Vegetable sources of protein, such as beans, seeds, and whole grains, are excellent choices as they offer healthy fibre, vitamins and minerals.

Here are some examples of plant based proteins to get you started:

Quinoa – contains 8 grams of protein per cup and full of fibre, iron, magnesium and manganese.

Remember you don't have to change everything at once

Successfully transitioning into a healthy vegan takes consideration, planning and time. If you are just starting out, begin by including more plant-based foods in your diet, while simultaneously cutting back on animal products, especially those that are processed and refined. Make gradual changes and assess how you are feeling along the way.

If you would like personalised guidance, enlist the support of a naturopath or nutritional therapist who can help you achieve your personal health goals for now and the longer term. Plus learn how and what to cook to produce delicious and healthy vegan meals, which will help you to ensure that you are receiving the maximum nutrient content for the food you make. ♥



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