

FAQ: Vegan diets – strengths and challenges

For anybody interested in vegan diets and nutrition, BNF answers some of the most common questions.

What is a vegan diet?

A vegan diet is one where all animal-derived substances are excluded from the diet, and so a vegan avoids meat, poultry, fish, seafood, dairy products, eggs and honey. A vegan diet also excludes certain additives like cochineal, a colouring derived from insects, and vitamin D3, typically extracted from sheep's wool (lanolin).



Are vegan diets the healthiest type of diet?

There is some evidence that dietary patterns that include plenty of plant foods have health benefits. A more plant-based diet is typically higher in fruit and vegetables, wholegrains and dietary fibre while being lower in saturated fat and added sugars. In addition, overconsumption of red and processed meat is associated with colorectal cancer. The evidence specifically for vegan diets and health is limited, although some evidence suggests a reduced risk of some diseases, such as cancer. However, we also know that people who follow plant-based diets are often more health conscious overall and also adopt other healthier lifestyle factors. For instance, they are more likely to be physically active, have healthier weights, consume less alcohol, are less likely to smoke, as well as being more likely to have a higher income. This may explain some of the observed health benefits.



Can a vegan diet be unhealthy?

Not all plant-based diets are equal! Well-planned vegetarian and vegan diets can be nutritious and healthy, but it is also possible to follow a vegan diet badly. Foods that are suitable for vegans can also be high in saturated fat, salt and sugars, such as deep-fried foods, biscuits, crisps and confectionery.

How can vegans get omega-3 fats if they don't eat fish?

Vegans have a lower intake of long-chain omega-3 fats (associated with good heart health) compared to those that eat fish, but there is no strong evidence that vegans have poorer health as a result. Supplements containing long-chain omega-3 fats from microalgae are available as a vegan alternative. Short-chain omega-3 fats can be found in some nuts, seeds and their oils, but it has been shown that only a small proportion of these fats can be converted into long-chain omega-3s.

Do vegans struggle to get enough protein in their diet?

There is a common misconception that vegans (and vegetarians) don't eat enough protein. A varied vegan diet that provides a range of plant protein sources should provide enough of all the essential amino acids required for good health. These include pulses (e.g. chickpeas, kidney beans and lentils), tofu or bean curd, mycoprotein, nuts and nut butters and soy dairy alternatives.

Are there some vitamins and minerals that vegans don't get enough of?

UK dietary surveys indicate that animal-derived foods are typically important contributors of certain nutrients in our diet. So, if they are avoided it's important to ensure that these nutrients are provided by other dietary sources such as those in the table below:

Nutrient	Vegan food source
Vitamin B12	Typically, vitamin B12 is only found naturally in foods from animal sources, so reliable vegan sources are mostly fortified foods (like yeast extract, breakfast cereals, or dairy-free alternatives (e.g., soya, oat or almond drinks), as well as supplements.
Calcium	Dairy foods contribute around a third of calcium in the diets of UK adolescents and adults. Non-dairy vegan sources include bread [wheat flour (not wholegrain) is fortified with calcium by law]; kale, okra, rocket and watercress; fortified breakfast cereals; fortified dairy alternatives; calcium-set tofu; and almonds.
Iron	Good sources of iron for vegans include pulses, green leafy veg, wholemeal/seeded/brown bread, some fortified breakfast cereals, dried fruits (such as apricots and figs), nuts and seeds. Vitamin C-rich foods and drinks will increase iron absorption from plant foods (as this is less readily absorbed in the body than iron from animal products). Iron absorption could be increased by for example a small glass of orange juice at breakfast or plenty of vitamin C-containing veg in a bean stew.
Iodine	The main sources of iodine in the UK diet are fish and dairy foods. Seaweed is a vegan source of iodine, but as some varieties can provide excessive amounts (e.g. brown seaweed like kelp) it should not be eaten more than once a week, and is not recommended during pregnancy, breastfeeding or for children. Supplements can also be used to provide iodine in a vegan diet.
Selenium	Eggs, meat and fish are good sources of selenium. Suitable sources for vegans include Brazil nuts, cashew nuts and sunflower seeds.

What concerns may there be with young children on vegan diets?

The more restrictive a vegan diet, the greater the risk for nutrient deficiencies. As childhood is a time of rapid growth and development, ensuring a varied and balanced vegan diet is key to ensure nutrient requirements are met. For example, clinical symptoms from vitamin B12 deficiency because of poor dietary intake are rare; however, cases have been reported in restricted vegan diets, particularly in young children. A vegan diet can also be high in dietary fibre; young children may get full up before they've eaten enough calories and nutrients, so more energy and nutrient dense foods like houmous, bananas, smooth nut and seed butters can be useful inclusions in the diet.

Is eating a vegan diet expensive?

If you plan and shop carefully, it is possible to eat a healthy, vegan diet on a budget. For example, fruit and vegetables don't just have to be fresh – dried, canned and frozen varieties, which tend to be cheaper or more value for money, all count towards your minimum 5 A DAY and often have a longer shelf life and can be stored more easily.

There is not a 'one size fits all' healthy diet, but certain characteristics of dietary patterns are linked with better health. Such dietary patterns include higher consumption of fruit and vegetables, wholegrains, pulses, nuts and seeds as well as lower intakes of fatty/processed meat, refined grains, sugars-sweetened foods and beverages, salt and saturated fat. These can be achieved in diets that are vegan, vegetarian, pescatarian, flexitarian and/or those indicated by the UK *Eatwell Guide*.

Last reviewed May 2018. Review date May 2021.

For sources used in the article, please contact postbox@nutrition.org.uk