

WISER PLANT-BASED SWAPS



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Henri Davy looks at how to nutritionally support children when animal products are off limits

When children don't eat meat or other animal products, the available array of readymade alternatives can be a gift. Yet when it comes to nutrition, these alternatives are not a direct swap. For better or worse, they are just different; some of the more processed varieties may also contain ingredients that we don't recognise or wouldn't include in our own cooking, raising concerns about how well children will grow and thrive on a vegetarian or vegan diet.

A well planned, vegetarian or vegan diet, however, can support health at every age and life stage. But research finds that it's the quality of food that's important. Just as it's possible to eat meat and have an unhealthy diet, it's also possible to have an unhealthy plant-based diet. One small study found health markers differed not with eating meat or plant-based food, but when participants were put on high or low quality versions of their respective diets.¹

Learning from tradition

If it seems impossible to feed your vegetarian or vegan child without relying on readymade sausages, burgers and pies, take comfort in the knowledge that some communities have followed vegetarian diets, at least for hundreds if

IN BRIEF

- Readymade vegetarian and vegan alternatives to western diet 'staples' are not like-for-like swaps.
- Historically, vegetarian diets relied on wholefood ingredients such as pulses, vegetables and starchy carbohydrates.
- Some nutrients are less available or absent from vegetarian or vegan diets, but planning and supplementation, where necessary, can support healthy nutrition.

not a thousand years. India is thought to have the lowest consumption of meat in the world, with millions of Indians following a vegetarian diet. This is because for many Indians, vegetarianism is deeply rooted in religion and culture.

Deepa Mer, a registered nutritional therapist and metabolic balance coach, explains that in present day India, the Hindu diet, for instance, varies depending on the region, community and religious caste to which people belong. Hindu texts forbid eating beef because the cow is considered sacred, but some Hindus will eat chicken, fish or goat. The most common diet, however, is ovo-lacto vegetarian, in which eggs and dairy "form a very important part

of the diet". Milk, yoghurt and paneer (cheese) are widely consumed, and children tend to have a diet rich in rice, wheat, vegetables, lentils, legumes and eggs, accompanied by the generous use of spices. "It's the norm for children to consume home cooked meals and carry home lunches," says Mer, adding that processed foods are more of an issue with adult populations.

Aim for diversity

Even if your child is not a fan of spicy food, pulses can help to support their nutrition. These include store cupboard staples such as kidney beans, butter beans, pinto beans and even the humble baked bean. Lentils of all colours make the cut, as do chickpeas, broad beans and runner beans. These are all good sources of vitamins, minerals, fibre, protein, and complex carbohydrate, helping to deliver slow and steady energy. Not forgetting the practicalities, they are also cheap and versatile, and the variety of textures is another bonus when catering for a younger audience.

However, whilst a wide selection of vegetables and fruit is something that will benefit everyone, registered nutritional therapist Karine Stephan urges parents to ensure their children are also getting enough energy.

"[Parents] can sometimes offer too many raw fruits and vegetables, which are low calorie density and too much

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roughage [fibre], especially for young children.” She recommends offering a diverse range of whole plant foods, including pulses, grains, nuts and seeds, in addition to fruit and vegetables.

Know your labels

With the best will in the world, however, it is not always possible to cook from scratch. Readymade products are convenient, often tasty, and may also be fortified with essential nutrients. Read the label and compare brands because some products will have fewer (or even no) unrecognisable ingredients. Try to avoid too many products that contain sunflower oil, thickeners, fillers, emulsifiers, stabilisers and sugar (such as fruit juices, words ending in -ose and maltodextrin).

With careful planning, parents can ensure there are no nutritional deficiencies when excluding animal products from their children's diets. Whilst a registered nutritional therapist will be able to advise on supplementing, simply shopping wisely and cooking whole foods can contribute to an exciting and nutritious plant-based menu.



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References:

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2. www.nhs.uk/conditions/vitamin-b12-or-folate-deficiency-anaemia/symptoms
3. www.nhs.uk/conditions/vitamins-and-minerals/vitamin-d

NUTRIENT CHECKLIST

Protein

Protein is essential for muscle growth and repair, including for internal organs. Vegetarians can get complete protein from eggs and dairy. Protein can also be obtained from pulses such as lentils and chickpeas and is present in smaller amounts in wholegrains. ‘Complete’ proteins (which contain all the essential amino acids) include chia seeds, quinoa, amaranth, tofu, tempeh and quorn.

Vitamin B12

Naturally present in animal sources, vitamin B12 is in its most concentrated form in animal liver and, to a lesser extent, fish, eggs and cheese. For vegans, it is present in nutritional yeast, which can be added to cooking. But supplementation is likely to be essential. B12 is important for growth and development, and has many physiological functions including red blood cell formation, nervous system function, and DNA synthesis. Signs of B12 deficiency can include mouth ulcers, pins and needles, irritability, depression, and a decline in mental abilities such as memory, understanding and judgement.²

Iodine

Found in seafood and dairy, iodine is another micronutrient that may need to be topped-up. However, registered nutritional therapist Karine Stephan says some plant-based milks are fortified with iodine, and it's also present in seaweed such as nori. Iodine is needed to support thyroid function, which have a major role in controlling growth, development and metabolism. A deficiency of this mineral can disrupt the production of thyroid hormones and impair development.

Iron

Iron is important particularly for menstruating girls; however extracting it from food is a challenge for the body — even more so from vegetarian sources that contain what is called non-haem iron. Iron absorption can be supported by pairing the iron-containing food with a source of vitamin C; e.g. a salad of peppers and tomatoes. In older children who may drink tea (including green tea), avoiding these around the time of eating will help to support iron absorption. Iron is needed to make haemoglobin, a component of red blood cells that carries oxygen from the lungs to the rest of the body. Signs of deficiency can include pale skin, tiredness, poor appetite, slow growth and development, and behavioural problems.

Fat

Healthy fats are essential for growth and development, and so parents may want to ensure their children eat enough through good quality sources.

“Children following a plant-based diet need to regularly consume plant sources of unsaturated fatty acids (found in foods such as avocado, nuts and seeds) and of essential omega-3 fatty acid alpha-linolenic acid (ALA), [found in foods] such as walnuts, chia seeds, linseeds or hemp seeds,” says Stephan. If your child objects to these foods, try blending them into smoothies, or soak chia overnight in coconut milk to make a nutritious pudding. Two other essential fatty acids are found in oily fish (eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA)). In the absence of these from the diet, the body can make them by converting ALA to EPA and EPA to DHA but the process is imperfect. Stephan therefore recommends an algae-based omega-3 EPA/DHA supplement.

These fats are vital to the development of a healthy brain and nervous system; they also provide fuel, contribute to hormone health, and help the body absorb fat soluble vitamins (vitamins A, D, E and K). Signs of deficiency can include dry skin and hair, raised bumps on the skin, and mood and behaviour issues.

Vitamin D

Regardless of what's on the dinner table, the NHS currently advises vitamin D supplementation from September to March,³ or all year round for those who have limited sun exposure or dark skin. Drops can be given to babies to fulfil their requirement of 8.5-10 mcg a day and anyone aged one and over should have 10 mcgs per day. Vitamin D is essential for healthy bones, regulating calcium, and immune health. A lack of vitamin D can lead to bone deformities such as rickets in children. Signs to look out for include bone pain, impaired growth and muscle cramps.

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