

Vegetarian for Life



Nutrition for Older Vegetarians and Vegans

Getting the balance right

Over recent years, research has shown that vegetarians and vegans tend to be very healthy – perhaps more so than their meat-eating peers. Vegetarians typically have a more nutrient-dense diet than meat eaters. That is, they get more nutrients per portion¹. And a well-planned veggie diet can help a range of diseases, such as heart disease, high blood pressure, diabetes and cancer^{2,3,4}. This guide will help you get the balance right – whether you are an older vegetarian or vegan yourself, or simply cater for one.

Meeting nutritional needs

Generally speaking, basic dietary guidelines don't change as people get older. Whatever the age, whether meat-eater or vegetarian, we need about the same amount of fat, fibre and carbohydrate as younger adults⁵.

One of the most important things to check is that enough food is eaten to meet energy (calorie) requirements. You can gauge this by checking that you're not losing weight.



Some older adults have to adapt their diets to help control illnesses such as diabetes and heart disease. But if they are in good health, they can follow the same general dietary guidelines set for the population⁶ as a whole.

The Vegetarian Eatwell Plate is a good way to check you're getting the balance right. The plate shows each food group – protein, carbohydrates, fat, and fruit and vegetables – as a proportion of a balanced diet.

The Plate of Good Health
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Vitamins and minerals

There aren't specific vitamin and mineral recommendations for older adults. But the ability to digest, absorb, and use them does decrease with age.

Boosting your defences



Not getting enough nutrients increases the risk of getting an infection. This is because the body's immune system becomes less effective when it lacks certain vitamins and minerals.

The good news is that these effects on the immune system tend to be reversed when people receive the nutrients they are lacking. Excellent results were seen when older adults received supplements of all known vitamins, minerals and trace elements at levels of up to three times the recommended allowances⁷.

Multivitamin and mineral supplements do seem to have a place in helping to improve nutritional status and immune function in older adults. But as some vitamins and minerals can be toxic in high doses, do consult your GP or State Registered Dietitian before taking supplements or otherwise making changes to your diet.

Zinc, vitamin B6 and vitamin E are especially important for the immune system.

Table 1 lists good sources.







Table 1: Infection-fighting foods for older adults

Zinc	Pulses (peas, beans and lentils), green vegetables, sesame and pumpkin seeds and sourdough bread.
Vitamin B6	Wholegrains, soya beans, peanuts, walnuts, hazelnuts, raisins, bananas and yeast extract. The safe upper limit for supplementation is 10mg per day (unless directed by your GP).
Vitamin E	Plant oils such as soya, corn and olive oil, nuts and seeds, and wheatgerm (found in cereals and cereal products).

Older adults living in care homes or hospitals

A national survey⁸ found that older people living in institutions often lack certain vitamins and minerals. These deficiencies are detailed in **Table 2** below.

Table 2: Common vitamin and mineral deficiencies in institutionalised older adults

Nutrient deficiency	% of older people in institutions affected	
Vitamin C deficiency	41%	
Iron deficiency	40%	
Vitamin D deficiency	37%	
Vitamin B1 deficiency	14%	
Folate deficiency	10%	
Vitamin B12 deficiency	9%	

Around four in ten older adults living in care homes may benefit from more vitamins C and D and iron in particular. **Table 3** explains where these nutrients are found.

Table 3: Nutrients to take special care over in care homes and hospitals

Vitamin or mineral	Good sources	Notes
Vitamin C	<ul style="list-style-type: none">• Citrus fruits• Green vegetables• Peppers• Tomatoes	<i>The most common vitamin deficiency seen in institutionalised adults, affecting 41% of residents. It is also an important vitamin as it helps the body absorb iron. Fresh fruit juice or a starter containing citrus fruits is a good way to ensure iron from foods is absorbed well.</i>

Vitamin or mineral	Good sources	Notes
Vitamin D	<ul style="list-style-type: none"> • Milk, free-range eggs (<i>not for vegans</i>) • Fortified cereals, dairy-free milks and margarines (<i>note that a form of vitamin D called D3 is not suitable for vegans</i>) 	<p><i>Important for good bone health. We get most of our vitamin D from summer sunlight on our skin which is converted into vitamin D. But, as we get older, this process becomes less efficient. People aged 65 years and over (vegetarian and non-vegetarian) are at risk of vitamin D deficiency if they rarely venture outside.</i></p> <p><i>If a person is not having regular exposure to sunlight, a daily supplement of 10mcg vitamin D is recommended⁹.</i></p>
Iron	<ul style="list-style-type: none"> • Fortified breakfast cereals, especially bran flakes • Grains, such as wholemeal bread and spaghetti • Pulses (<i>peas, all types of beans, including tofu, and lentils</i>) • Figs • Eggs (<i>not for vegans</i>) • Green vegetables, especially curly kale 	<p><i>Fortified bran flakes are a particularly rich source of iron, and contain three times more iron than anything else on this list.</i></p> <p><i>Just 3 dried figs supply 29% of daily iron.</i></p>
Vitamin B1 (thiamin)	<ul style="list-style-type: none"> • Wholegrain cereals • Nuts and seeds • Pulses (<i>peas, all types of beans, including tofu, and lentils</i>) 	<p><i>B vitamins are water soluble which means they are not stored for long in the body. So try to include some of these foods every day.</i></p>
Folate	<ul style="list-style-type: none"> • Green vegetables, especially broccoli • Oranges • Nuts • Wholegrain cereals 	<p><i>B vitamins are water soluble which means they are not stored for long in the body. So try to include some of these foods every day.</i></p>
Vitamin B12	<ul style="list-style-type: none"> • Free-range eggs and dairy (<i>not for vegans</i>) • B12-fortified foods, such as breakfast cereals, margarines, yeast extract (e.g. <i>Marmite</i>) and fortified non-dairy milks 	<p><i>Vitamin B12 is needed every day. B12 from fortified foods is better absorbed than B12 from meat, poultry and fish.</i></p> <p><i>Adults aged over 50 are advised to obtain B12 from vitamin supplements or fortified foods – impaired absorption of B12 from animal foods is common in this age group¹⁰.</i></p> <p><i>The Vegan Society recommends a daily intake of 3mcg from food or a supplement of 10mcg once a day or 2000 mcg once a week.</i></p>

Frequently asked questions

Q. Have you any tips to help stimulate the appetite of an older adult who has lost enthusiasm for eating?

A. There is some scientific research to prove that certain ingredients enhance the flavour and enjoyment of food. You can also use a number of techniques to arouse hunger. These findings are summarised below.

Interestingly, one study of institutionalised older adults found that they preferred vegetables, fruits, and beans to red meat, milk and dairy products¹¹. This suggests that a plant-based diet could be more appealing to many, not just to vegetarian residents.

Try extracts to amplify flavour

- **Maple extract** enhances glazed vegetable dishes, and **almond or vanilla extracts** can be used in fruit salads, sauces, puddings and baked items. Start with ½ to 1 teaspoon of extract per recipe.
- Older adults on **liquid diets** may benefit from adding **fruit flavours** to juices and liquids made into **ice-lollies**. Maple, fruit, chocolate or vanilla flavours can be added to nutritional supplements or milkshakes (using soya, rice or oat milks, if not dairy). **Pureed apricot, peach or pineapple** has been teamed with protein foods for patients on chemotherapy, with good results¹².
- Flavour enhancers such as **monosodium glutamate** (MSG) can reduce the perceived bitterness or acidity of food, and they don't depend on a person's sense of smell. When used in combination with a small amount of table salt, MSG is an effective way of reducing the total amount of salt in the diet. Do check with the individual, though, because many people are said to be allergic to MSG.



Try using strongly flavoured foods and ingredients

- **Garlic, onions, olives, sun-dried tomatoes, flavoured vinegars, citrus fruits or ripe berries** give a lot of flavour. Use your judgement, though, as they may not be tolerated by sluggish or sensitive digestive tracts.
- Added **herbs and spices** may be helpful for people with disorders affecting taste and smell.



- **Dry rubs** are herb and spice combinations that may be added directly to tofu (soya beancurd) or hydrated TVP (texturised vegetable protein). They perform much the same functions as marinades, but without added liquid or oil.

The use of sugar and fat

- **Adding sugar to vegetables** may encourage increased consumption.
- Older adults often prefer **high-fat foods** because they provide a pleasant creamy texture.
- Sharp-tasting greens and vegetables, such as broccoli, Brussels sprouts, and cauliflower, may be **enhanced by a little fat**, such as a creamy dressing, cheese sauce, cream, sweet butter or flavoured oils (and vegan versions of these products).

Techniques that enhance flavour and sensory enjoyment

- Choose foods that are **fresh, brightly coloured, full-flavoured and seasonal** and arrange them attractively. Foods that appeal to the eye produce more salivary and gastric (stomach) secretions. **Familiarity** is also appealing and pleasing.
- Experiment with **different shapes, colours, sizes and textures** to add interest throughout a meal. For example, start with a hot, chunky soup; switch to a creamy pasta with tender mushrooms and crunchy steamed asparagus; and then finish with irregular berries. Switching foods may also reduce sensory fatigue, for example eating one bite of vegetables, followed by one of starchy foods, and then nuts and so on.

Arouse hunger

- To stimulate hunger, lift the lid from a food tray to **release the aromas just before setting it in front of a diner**. This can be achieved at home by eating in the kitchen to savour the cooking smells, or by taking a deep sniff before eating.



Tips adapted from *Nutrition for the Older Adult* by Bernstein and Schmidt Luggen¹³.

Q. Can you suggest ways of boosting nutrient intake, particularly 'finger foods' that are rich in nutrients?

A. Try the following tips, depending on personal tastes.

- Ground nuts, silken tofu, avocado, bananas, berries and other fruits can be added to smoothies. For example, blended peanut butter, cocoa powder, ripe

banana and your dairy/non-dairy milk of choice makes a lovely chocolatey smoothie. Spinach, banana and orange makes a sweet-tasting smoothie with a wonderful green colour.

- For older adults with a preference for sweet foods, sandwiches containing nut butters with jam and/or bananas, or bananas and tahini make a nutritious snack, especially if made with a grainy or wholemeal bread. Avocado and smoked tofu also makes a nutritious sandwich.



- Fruit salads can be popular, especially if they consist of a variety of warmed dried fruits, which are softer and easier to eat. They can be topped with a cream of preference – nut, soya or dairy – and sprinkled with ground nuts.

Q. What are good sources of protein for vegetarians or vegans on a soft or puréed food diet?

A. The main sources of protein for vegetarians and vegans are:

- pulses (peas, all types of beans, tofu and lentils)
- nuts and seeds, and their butters
- eggs and dairy products (for vegetarians)



Mock-meats and grains (if eaten) provide useful amounts of protein, too.

These foods can be ground, puréed, mashed or grated and used to bulk up other foods. For example, pulses can be added to soups, stews and curries, and then blended. Silken tofu, ground nuts or nut butter can be added to soups and smoothies. Peanut butter works particularly well in chilli, and of course in satay sauce. Smoothies can be frozen into ice lollies to help add interest to the diet.

Q. How can I get enough protein on a nut- and gluten-free diet?

A. The majority of people need 8% of their calories from protein at most, according to leading health bodies such as the World Health Organization (WHO). The good news is that most foods can provide us with this 8%.



The foods that are exceptions to this include fruits (which contain about 5% of their energy from protein) and many sweets and junk

foods. The WHO's value includes a large safety margin, so most people's real needs are even lower.

In practice, if you eat a variety of pulses, any grains and grain-products that can be tolerated, and eggs and dairy products (for vegetarians) – and you are neither gaining nor losing weight – then protein needn't be a particular concern. Aim to eat two or three servings of these foods each day. A serving is around half a cup of cooked pulses.

References

A list of the references cited in this leaflet can be found on our website, www.vegetarianforlife.org.uk

Vegetarian for Life is an advocacy charity aiming to improve the quality of life of the UK's older vegetarians and vegans. Our services include:

- **a UK-List of veg-friendly care homes**
- **catering and healthy-living guides**
- **nutritional advice**
- **charitable grants to aid independent living and respite care**
- **subsidised caterer training for UK-List members.**

Please visit our website or contact us for further details, or for any queries not addressed in this leaflet.



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