

Plant-based food fortification

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Do you have a small appetite?

Your appetite can change for a variety of reasons including medications, illness and age. However, it is still important to get all the nutrients from your diet to maintain health.

If you are eating less or smaller portions, it is important that your diet is as nourishing as possible to help you stay healthy.

Handy hints

Try to follow the steps below every day to help maintain a good nutritional intake:

- Eat three small meals plus 2-3 snacks or nourishing drinks per day.
- Use at least one pint (600ml) of calcium enriched plant based milk daily.
- Have at least 6-8 cups (1.5 to 2 litres) of fluids per day. Drinks can include: tea, coffee, fruit juice, squash, soups, smoothies, plant-based milk alternatives and water.
- Avoid drinking before meals to ensure you don't feel full up at mealtimes.
- Have a source of protein with every meal such as soya protein, beans, nuts, lentils, mycoprotein (Quorn®) or tofu.
- Base your meals around starchy carbohydrates such as bread, potatoes, rice, pasta or cereals. Choose whole-meal options where possible.
- Include fruit and vegetables daily. Fresh, frozen, canned or dried are all good options.
- If you struggle to eat fruits and vegetables, try drinking a glass of fruit juice or squash with added vitamin C.
- Keep snacks with you to have throughout the day.
- Prepare large batches of meals and freeze the leftovers so you can enjoy a quick and easy meal at a later date.

Nourishing alternative milks

Choose **fortified versions** of plant-based milk alternatives which contain a similar amount of calcium to regular milk. Approximately 600ml of alternative milk will provide 700mg of calcium, which is the recommended daily amount for adults.

Opt for sweetened versions as they usually contain more calories.

The table below shows a comparison of different types of milk alternatives that have been fortified with calcium:

Plant based milk	Energy per 100ml (kcal)	Protein per 100ml (g)	Calcium per 100ml (mg)
Sweetened Soya	43	3.1	130
Oat	43	0.3	120
Coconut	19	<0.5	122
Sweetened almond	29	0.8	121

Aim to include 1-2 milk alternative drinks into your diet each day.

You can use plant based milk to make up:

- **Hot drinks:** coffee, dairy free hot chocolate, chai latte, 'milky' tea. ('Barista style' plant milks tend to be best for making hot drinks to help prevent curdling/splitting)
- **Cold drinks:** milkshakes made with syrups or fruit squash. You could try adding a scoop of vegan ice-cream or yoghurt to add even more nourishment.

Nourishing drinks recipe ideas

Chocolate milkshake 350kcal and 18.5g protein

Ingredients:

150ml fortified soya milk
1 tablespoon vegan protein powder e.g. pea protein
1 tablespoon cocoa powder
2 scoops of vegan vanilla ice-cream

Preparation:

Whisk the protein powder, cocoa and soya milk together, blend with the ice-cream until smooth. This recipe makes one serving.

Fruit smoothie 430kcal and 18.5g protein

Ingredients:

150ml fortified soya milk
1 ripe banana or handful of fresh strawberries
1 tablespoon of vegan protein powder e.g. pea protein
2 scoops of vegan vanilla ice-cream

Preparation:

Mash the banana or the strawberries until smooth. Whisk the protein powder and soya milk together. Then blend all the ingredients together until smooth. This recipe makes one serving.

**Coconut cream shot
(makes 3 x 50ml shots)
127kcal and 0.5g protein per
50ml shot**

Ingredients:

2 teaspoons of jam or syrup
110ml coconut cream
20ml fortified soya milk

Preparation:

Mix the ingredients together in a dish. Drink over the course of one day in 3 x 50ml shots.

**Lemon and Lime drink
(makes 2 x 150ml servings)**

225kcal and 0.5g protein

Ingredients:

100ml full sugar lemonade
100ml lime cordial
2.5 tablespoons of lemon syrup
1 tablespoons of golden syrup
2.5 tablespoon of icing sugar

Preparation:

Whisk all the ingredients together and pour through a strainer to remove any lumps.

High-energy foods to include in your diet:

- Avocado
- Nuts and seeds (chia, linseeds, sunflower, walnuts, peanuts etc)
- Oils such as olive, rapeseed, peanut, coconut, walnut or avocado
- Nut butters such as peanut or almond
- Plant-based yoghurts such as soya or coconut
- Plant-based ice-creams and creams
- Dried fruits
- Dips such as hummus or tahini
- Fruit juice and smoothies

High protein foods to include in your diet:

- Legumes such as lentils and chickpeas
- Beans
- Quinoa
- Nuts
- Nut butters
- Meat alternatives e.g. tofu, soya, mycoprotein (Quorn®), tempeh
- Soya milk
- Soya yoghurt

Nourishing snack Ideas	Tips	Energy (kcal)	Protein (g)
Soya yoghurt (100g)	Enjoy with fruit or add to sauces and cereals	72	3
Malt loaf (2 slices)	Add plant based spread for extra calories	151	4

Nourishing snack Ideas	Tips	Energy (kcal)	Protein (g)
Soy broad bean snack (20g handful)	Enjoy as a convenient snack between meals	88	4
Dried fruit and nuts (25g handful)	Enjoy as a convenient snack between meals or add to yoghurt and cereals	131	3.3
Houmous (75g or ¼ pot)	Use as a dip for vegetable sticks or bread	230	5.1
Nut butter e.g. peanut, almond, cashew (1 tablespoon or 15g)	Spread on crackers, toast, crumpets or add to milkshakes and cakes	90	3.5
Vegan cheese (30g)	Add to crackers, bread, potatoes and soups	86	0

High energy and protein meal ideas:

Breakfast Ideas:	Tips to add extra nourishment:
Cereals or porridge	<ul style="list-style-type: none"> • Add nut butter, fruit, honey/maple syrup, nuts and seeds • Add dried or fresh fruit to cereals • Add coconut oil to porridge • Add a dollop of jam or marmalade to porridge • Add extra soy or coconut yoghurt to cereals • Add desiccated coconut or creamed coconut
Toast toppers	<ul style="list-style-type: none"> • Add liberal amounts of plant based butter/spread • Add a thick spread of nut butter (2 tablespoons) • Add ½ or a whole avocado and drizzle with olive oil and seeds • Add a thick spread of jam or marmalade to seeded/whole meal toast • Add beans and plant based cheese • Add hummus and drizzle with olive oil

Fresh fruit and yoghurt	<ul style="list-style-type: none"> • Add a couple of teaspoons of maple syrup or honey • Add a tablespoon of nut butter • Add a handful of nuts or seeds • Add a handful of granola • Add ground almonds or hazelnuts
Lunch Ideas:	Tips to add extra nourishment:
Sandwiches/wraps/baguettes	<ul style="list-style-type: none"> • Choose high calorie fillings such as houmous, avocado, vegan cheese, nut butter with jam and add condiments such as vegan mayonnaise • Add extra plant based butter/spread
Salads	<ul style="list-style-type: none"> • Include a source of protein such as grilled tofu, vegan cheese, nuts and seeds or legumes • Add a couple of tablespoons of oil or a creamy salad dressing • Include a source of starchy carbohydrate such as rice, new potatoes, couscous or pearl barley
Soup	<ul style="list-style-type: none"> • Add croutons or serve with buttered or oiled bread/toast • Include a source of protein such as lentils, chickpeas, beans, blended tofu or quinoa • Add chopped avocado into the soup or serve on the side • Add full fat canned coconut milk or creamed coconut • Drizzle with oil or add extra plant based butter/spread
Dinner ideas:	Tips to add extra nourishment:
Pasta/lasagne	<ul style="list-style-type: none"> • Use beans or legumes e.g. lentils for spaghetti bolognese • Use coconut cream for creamier pastas • Add vegan cheese • Sprinkle with nutritional yeast • Drizzle with olive oil • Toss with plant based butter/spread before adding a sauce
Pizza	<ul style="list-style-type: none"> • Add a source of protein such as grilled tofu or meat alternatives • Top with vegan cheese • Add starchy carbohydrates and vegetables such as sliced potato or sweet potato or diced pumpkin/squash • Add olives in oil • Drizzle with olive oil/chilli oil

Potatoes	<ul style="list-style-type: none"> • Roast in plenty of oil • Add vegan cheese, plant based milk/cream/ oil/plant based spread into mashed potato • Add plant based spread or olive oil to new potatoes
Stir fry	<ul style="list-style-type: none"> • Add nut butter such as peanut butter to make a satay stir fry • Add coconut milk (canned) or coconut cream • Add nuts and/or seeds such as peanuts, cashews or sesame • Use tofu, beans or legumes • Add ground almonds or hazelnuts
Casseroles/ stews/curries	<ul style="list-style-type: none"> • Serve with potatoes, naan, rice or bread • Drizzle naan or bread with olive oil or add plant based spread • Add canned coconut milk or coconut cream • Add a tablespoon of blackstrap molasses to savoury dishes and sauces

Vitamins and minerals

If you are following a plant-based or vegan diet, there are certain vitamins and minerals that can be harder to achieve from dietary intake alone which you need to be aware of:

Calcium

Some vegan foods are great sources of calcium such as fortified plant based milk, soya yoghurts and calcium-set tofu. Other plant-based sources include green leafy vegetables, dried figs, chia seeds and almonds.

Vitamin D

Vitamin D is needed for our body to absorb dietary calcium. Everyone living in the UK should consider supplementation of 10mcg/400 IU during the winter months. Vitamin D3 from lichen and vitamin D2 are vegan friendly.

Iodine and selenium

The amount of iodine and selenium in plant foods varies according to where the food is grown and can sometimes be low. If you are following a vegan diet, reliable sources of these minerals is needed and supplementation can provide this reliable source. Dietary sources of iodine include some fortified plant based milks, cereals and grains. Brazil nuts are a particularly good source of selenium.

Vitamin B₁₂

This nutrient is not produced by plants so you need to ensure you are getting enough by using fortified foods or supplements. Dietary sources include some fortified plant milk, soya yoghurt, vegan spreads, fortified breakfast cereals and nutritional yeast flakes.

The Vegan Society has a great information sheet, 'Plant-based nutrition' regarding vitamins and minerals in more detail:

<https://www.vegansociety.com/resources/publications-and-video/leaflets>

Further information

If you have any queries about your diet, please do not hesitate to contact the dietetic team.

Dietetic Department
North Devon District Hospital
Barnstaple

Telephone: 01271 322306 (Monday- Friday)

Useful websites

The British Dietetic Association Food Fact Sheet on Plant based diets

<https://www.bda.uk.com/resource/plant-based-diet.html>

The British Dietetic Association Food Fact Sheet on Malnutrition

<https://www.bda.uk.com/resource/malnutrition.html>

The Vegan Society

<https://www.vegansociety.com/>

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PALS

The Patient Advice and Liaison Service (PALS) ensures that the NHS listens to patients, relatives, carers and friends, answers questions and resolves concerns as quickly as possible. If you have a query or concern, call 01271 314090 or email ndht.pals@nhs.net. You can also visit the PALS and Information Centre in person at North Devon District Hospital, Barnstaple.

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'Care Opinion' comments forms are on all wards or online at www.careopinion.org.uk.

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