

## Diet and high blood pressure

Blood pressure (BP) naturally rises and falls across the day and night. High BP (also called hypertension) means BP stays high all the time, putting the heart and blood vessels under greater strain. Untreated high BP increases your risk of heart attack, stroke and vascular dementia as well as kidney and eye damage. Eating well and being a healthy weight can help to lower high BP and reduce risk of developing high BP in the future.

**Healthy eating:** A nutritious, varied and balanced diet, e.g. as described in The Eatwell Guide, limits intake of salt, added sugars and fats and promotes intake of fibre and other essential nutrients, all of which can help to manage or lower BP and reduce overall risk of cardiovascular disease.



The Eatwell Guide shows the five recommended food groups and how much from each group we need to eat over a day or week for a healthy balanced diet

<https://www.nhs.uk/live-well/eat-well/food-guidelines-and-food-labels/the-eatwell-guide/>

Some information might not apply if you have been advised by a Healthcare Professional to follow a particular diet

## Nutrients that may help with blood pressure management

**Fibre:** Eating more fibre can lower risk of heart and circulatory diseases. Soluble fibre from oats (called beta-glucans) may help in lowering BP. Fibre helps us to feel full for longer so can also help weight loss goals. Fibre should be increased gradually to avoid unpleasant symptoms e.g. bloating or gas and to allow the gut to adapt.

**Potassium:** this essential nutrient helps to manage BP by assisting the removal of spare sodium from the body through urine and by easing tension on blood vessel walls (too much sodium can lead to high BP, see “Salt” on Page 3). **Potassium supplements are not recommended to manage high BP**, as too much potassium can affect heart rhythm. Some people with advanced kidney disease may be advised by a healthcare specialist to reduce intake of potassium from dietary sources.

**Magnesium:** this essential nutrient helps lower BP by relaxing blood vessels and, due to its anti-oxidant nature, by offsetting damage to blood vessels.

**Calcium:** It's good for teeth and bones, but calcium is also important for regulating BP by helping blood vessels to relax. Too much calcium can increase risk of high BP so it's best to get it from your diet and not rely on supplements (unless you cannot regularly eat enough calcium-containing foods).

**Vitamin D:** although it does not affect BP directly, Vitamin D does help your body to absorb calcium. Many people can get enough Vitamin D from sunlight on the skin between April - September (in the UK) but adults and children over 4 years should consider taking a daily supplement of 10 micrograms per day during autumn and winter and some people could benefit from taking Vitamin D supplements all year round.

## Food sources of nutrients helpful for blood pressure

Food group from The Eatwell Guide	Food source	Nutrients
<b>Fruits &amp; Vegetables</b> Aim for 5 x 80g portions daily	All fruits & vegetables	Fibre & potassium (in various amounts)
	Tomatoes, beetroot, orange juice	Potassium
	Bananas	Potassium, magnesium
	Avocados	Fibre, potassium, magnesium
	Some mushrooms (see label)	Vit D
	Orange, broccoli, kale	Fibre, calcium
<b>Starchy carbohydrates</b> Aim for some at every meal	All wholegrains e.g. brown rice, brown pasta, wholemeal bread	Fibre
	Potatoes	Fibre, potassium
	Oats, barley, wheat	Fibre, magnesium
	Calcium-fortified cereals / bread	Calcium
	Wholemeal bread	Fibre, calcium
<b>Higher protein foods</b> Aim for 2 – 3 portions daily	Nuts & seeds	Fibre, potassium, magnesium
	Beans, peas, lentils, chickpeas	Fibre, potassium, magnesium
	Cod, haddock, tuna	Potassium
	Salmon	Potassium, magnesium, Vit D
	Oily fish e.g. pilchards, sardines, mackerel	Vit D
	Eggs	Potassium, Vit D (yolk only)
	Red meat	Vit D
	Calcium-set tofu	Calcium
	Bones from tinned sardines, pilchards or salmon	Calcium
<b>Dairy or non-dairy alternatives</b> Aim for 3 portions daily  Some people may need more, see calcium leaflet below	Cheese, yoghurt, milk or calcium-fortified non-dairy alternatives e.g. soya / rice / oat milks	Calcium

## How to increase your intake of foods & nutrients helpful for blood pressure

- Fibre: <https://www.bda.uk.com/resource/fibre.html>
- Fruit & veg: <https://www.bda.uk.com/resource/fruit-and-vegetables-how-to-get-five-a-day.html>
- Calcium: <https://www.bda.uk.com/resource/calcium.html>
- Vitamin D: <https://www.bda.uk.com/resource/vitamin-d.html>

## Learn about other foods & nutrients that can be part of a healthy diet

- <https://www.bda.uk.com/food-health/food-facts.html>

## Foods and nutrients that may contribute to high blood pressure

**Salt:** Salt, or table salt, is the common name for sodium chloride. We need both sodium and chloride for many body functions, including BP management, but too much sodium can lead to high BP. The recommended safe limit for healthy adults is 6g salt per day. Most of the salt we eat (~75%) is already in our food when we buy it and many of us have more than the daily safe limit.

### Tips to reduce salt intake

Check food labels for lower salt / sodium options & avoid or limit high salt / sodium foods  
Use no, or very little, salt when cooking  
Add flavour with herbs / spices instead of salt  
Search for lower salt recipes e.g. BBC Food  
See <https://www.bda.uk.com/resource/salt.html>

Sodium contributes to high BP and is present in every type of salt e.g. sea salt, flakes, crystals, pink and flavoured salts

Low-sodium salt substitutes can be high in potassium so may not be suitable for people with kidney disease or diabetes

**Caffeine & Alcohol:** These are both stimulants, which affect BP differently from person-to-person. Caffeine is found in coffee and tea (inc. decaf), cocoa beans, chocolate and energy drinks. Caffeine should be limited to 400mg per day or 200mg per day during pregnancy or breastfeeding. Alcohol should be limited to no more than 14 units per week, with several alcohol-free days weekly.

240ml of filtered coffee = 100mg caffeine  
240ml decaf coffee = 1 – 50mg caffeine  
250ml energy drink = 80mg caffeine

25ml measure of spirits = 1 unit  
1 pint beer or 175ml glass wine = 2.2 units  
250ml glass wine = 3.1 units

## Lifestyle changes that can help reduce your risk of high blood pressure

Following safe alcohol recommendations, not smoking, doing some physical activity daily and, if you are overweight or obese, losing even just 5 – 10% weight, can reduce risk of high BP, cardiovascular disease, stroke and Type 2 diabetes.



For simple weight loss tips, see:  
[https://nwknowledgeon.nhs.uk/wp-content/uploads/2025/07/PIL\\_Lose\\_weight\\_healthy\\_way\\_Nutrition.pdf](https://nwknowledgeon.nhs.uk/wp-content/uploads/2025/07/PIL_Lose_weight_healthy_way_Nutrition.pdf)

For tips on making healthy lifestyle choices, including stopping smoking, being more active, losing weight and reducing alcohol intake, see  
<https://www.nhs.uk/better-health/>

For more information about blood pressure and diet, visit:  
<https://www.bloodpressureuk.org/>