

# Diet and blood pressure

## What is High Blood Pressure or Hypertension?

Blood pressure is a measure of the force that your heart uses to push blood around your body. It is recorded as two numbers: the systolic records the pressure when the heart beats and the diastolic when the heart is at rest between beats. Both numbers are important.

Blood pressure is extremely variable and may easily be elevated by stress, emotional state, physical activity and even "a visit to the doctors".

## What is normal blood pressure?

Normal blood pressure is considered to be a systolic between 110 and 130 and a diastolic between 85 and 60. Blood pressure is measured in millimetres of mercury, which is written down as: mmHg. High blood pressure, or hypertension, is diagnosed when several readings show your systolic pressure is 140 or above, or your diastolic is 90 or above, or both.

## Why is high blood pressure (hypertension) dangerous?

Poorly controlled hypertension increases the risk of heart attacks and stroke as well as kidney and eye damage.

If your blood pressure is too high your GP will prescribe medication and review this regularly. However simple changes to your diet and lifestyle can also be a very effective part of treatment.

## What can I do to help?

Making small changes to your diet and lifestyle can, overtime, help to reduce your blood pressure and keep it low, you may need to take medication too if your doctor advises you to.

Try the eating plan opposite. It is based on research findings which show that a diet low in saturated fat and salt and high in fruit and vegetables, wholegrain foods, and low fat dairy foods can significantly lower blood pressure within two weeks. It is rich in nutrients such as potassium, calcium, magnesium and fibre.

The most important changes you can make to your diet are:

### Aim for 4-5 portions of vegetables daily

- 1 portion = 3 heaped tablespoons of vegetables or beans
- 1 small bowl of salad
- 150ml vegetable juice

(if using canned vegetables, look out for lower salt varieties)

### Aim for 4-5 portions of fruits daily

- 1 portion = 1 medium fruit (bananas, apples, oranges)
- 2 small fruits (plums, satsumas, kiwi fruit)
- 1 handful very small fruit (grapes, strawberries, cherries)
- 1 slice of a large fruit (melon, pineapple)
- or ½ grapefruit
- 1 tablespoon dried fruit
- 3 heaped tablespoons stewed or canned fruit
- 150 ml fruit juice or fruit smoothie

### Aim for 2-3 portions of low fat dairy foods daily

- 1 portion = 1 glass skimmed/semi skimmed milk
- 1 small carton low fat yoghurt
- 1½ ozs reduced fat cheese

### Reduce your intake of salt to less than 6g per day

Three quarters of the salt we eat is hidden in manufactured foods, ready meals and takeaways, so it will help if you eat less of these (see our factsheet on salt). As a guideline, less than 0.3g salt (0.1g sodium) per 100g of food is "a little" and over 1.5g salt (0.6g sodium) per 100g is "a lot"

### Increase fibre intake

Include a wide variety of high fibre foods e.g. beans, pulses/dahls, nuts, whole grains including whole grain breakfast cereals, wholemeal pasta, wholemeal or medium brown chapatti flour and all types of wholemeal breads. Aim for 3 servings each day.

### Oily fish

Include at least 1-2 portions per week. Examples include salmon, pilchards, sardines, mackerel, herring and trout. Fresh, frozen or canned are all good, but avoid fish canned in brine.

### Alcohol in moderation

- Limit alcohol to no more than 1-2 drinks (2-3 units) for men and 1 drink (1-2 units) for women each day
- A unit is half a pint of normal strength beer or a pub measure of spirits (25ml)
- A typical 175 ml glass of wine is around 2 units. A 330 ml bottle of lager or alcopop is around 1.7 units
- Make sure you have at least 2 alcohol free days a week

The most important changes you can make to your lifestyle are:

- Keeping your weight down. If you are overweight losing just 5-10% of your starting weight will help
- Be more physically active. Aim for at least 150 minutes of moderate activity per week in bouts of at least 10 minutes.
- If you drink alcohol, only drink in moderation (see overleaf)
- Being under stress can raise blood pressure. Use relaxation techniques such as yoga or mediation to help relieve stress and improve your readings

**Other things to consider:**

- If you drink a lot of coffee, tea or cola drinks you should try cutting down. Caffeine can raise blood pressure.
- Taking dietary supplements such as calcium, magnesium and potassium is not recommended as a way of reducing blood pressure. If you follow our suggested meal plan you should get enough of these nutrients without having to take a supplement. However if you eat a very restricted diet a dietary supplement may be beneficial.
- If you take medication to control high blood pressure, continue to take it as prescribed by your doctor.