

# INTRODUCING HIGH BLOOD PRESSURE



**Blood Pressure UK**

Helping you to lower your  
blood pressure

# About this booklet

This is one of a series of booklets produced by Blood Pressure UK, to help people with high blood pressure take practical steps to manage their condition. The booklets in the series are:

- 1 **Introducing high blood pressure**
- 2 **Healthy eating and blood pressure**
- 3 **Healthy lifestyle and blood pressure**
- 4 **Getting the most from blood pressure medicines**
- 5 **Measuring your blood pressure at home**

Blood Pressure UK is a registered charity and we rely on donations to help us carry out our work. We would be grateful for any donation that you can make towards the cost of producing this booklet.

Contact us by email at [help@bloodpressureuk.org](mailto:help@bloodpressureuk.org) or visit our website at [www.bloodpressureuk.org](http://www.bloodpressureuk.org)

High blood pressure is the **biggest** known cause of disability and premature death in the UK through stroke, heart attack and heart disease. **One in three adults** in the UK **has high blood pressure** and every day 350 people have a preventable stroke or heart attack caused by the condition.

# What is blood pressure?



Every time the heart beats it contracts, pumping blood in to the arteries, which is carried through to every part of your body to give it the energy and oxygen it needs. As the blood moves along the artery, it pushes against the sides of the blood vessels. The force of this pushing is your blood pressure.

The pressure is at it's highest when the heart beats. This is called the systolic pressure (top number), and should be around 120 or less.

The pressure is at it's lowest when the heart relaxes (rests) in between beats. This is called the diastolic pressure (bottom number), and should be around 80 or less.

Blood pressure is therefore expressed as two numbers, systolic and diastolic. Blood pressure is measured in 'millimetres of mercury' (mmHg).

When your blood pressure is measured it will be written as two numbers. For example, if your reading is 120/80mmHg, your blood pressure is '120 over 80'.

Blood pressure is not usually something that you feel or notice. The table below shows what different readings can mean:

| BP reading   | What this means   | What you need to do  |
|--|---|--|
| <b>Less than 120 over 80</b>                           | Your blood pressure is normal and healthy   | Re-check in 5 years. Follow a healthy lifestyle to keep your blood pressure at this level      |
| <b>Between 121 over 81 and 139 over 89</b>             | Your blood pressure is a little higher than it should be. You maybe at risk of developing high blood pressure in later life, and you should try to lower it | Re-check in a year. Make healthy changes to your lifestyle                                     |
| <b>140 over 90, or higher (over a number of weeks)</b> | You have high blood pressure  | Change your lifestyle - see your GP or practice nurse and take any medicines they may give you |

## What is high blood pressure?

If either or both your readings are consistently 140 over 90, or higher, over a number of weeks you probably have high blood pressure.

High blood pressure usually has no signs or symptoms, so the only way to know if you have high blood pressure is to have yours measured. However, a single high reading does not necessarily mean you have high blood pressure. Many things can affect your blood pressure through the day, so you will need to see that it stays high over time.

Diagnosis will be made by your GP.

### Why is high blood pressure important?

If your blood pressure is too high, it puts extra strain on your heart and blood vessels. Over time if left untreated or undiagnosed, this extra strain can possibly damage your body's organs, which puts you at risk of health problems.

If you have high blood pressure and do not control it, this raises your risk of a heart attack or stroke. High blood pressure can damage your arteries, cause heart disease, kidney disease and eye problems, and is a risk factor for some forms of vascular dementia.



### What causes high blood pressure?

For most people, there may be no single cause for their high blood pressure. We do not know exactly what causes high blood pressure. We do know that your lifestyle can affect your risk of developing it.

You are at a higher risk if:

- ♥ you eat too much salt;
- ♥ you don't eat enough fruit and vegetables;
- ♥ you are not active enough;
- ♥ you are overweight;
- ♥ you drink too much alcohol.



A small proportion of people may have high blood pressure that is linked to another medical condition, such as kidney problems and diabetes. For these people, treating the medical problem can lower their blood pressure back to normal.

Some other things that can affect your blood pressure, which you cannot control. These include:

- ♥ **Age:** as you get older, the effects of an unhealthy lifestyle can build up and your blood pressure can increase.
- ♥ **Ethnic origin:** people from African-Caribbean and South Asian communities are at greater risk than other people of high blood pressure.
- ♥ **Family history:** you are at greater risk if other members of your family have, or have had, high blood pressure.

# Healthy eating and blood pressure

If your blood pressure is too high, you can make healthy changes to your lifestyle to help bring it down. The following changes to your diet and activity can have a real effect on your blood pressure.

## ♥ Eat less salt

Too much salt raises your blood pressure, so it is important to eat as little as possible. Most of the salt you eat is not what you add to your food, but is in prepared foods like bread, breakfast cereals and ready meals. Don't add salt to food when cooking or at the table. When shopping for food, check the labels and choose low-salt options when you can.

## ♥ Eat more fruit and vegetables

Eating more fruit and vegetables helps to lower your blood pressure. Adults should eat at least five portions of fruit and vegetables every day. A portion is 80 grams, or roughly the size of your fist.

Try to eat a range of different fruits and vegetables. Dried, frozen and tinned are fine, but watch out for added salt, sugar or fats. Fruit juice and smoothies should be limited to a small glass a day.

Potatoes, yams, cassava and plantains are all vegetables but they do not count towards your five a day as they are heavier in starch. However, you should still include them as part of a healthy diet.



Please see our other booklets:

[Healthy eating and blood pressure](#)

[Healthy lifestyle and blood pressure](#)

## ♥ Drink less alcohol

If you drink too much alcohol, this will raise your blood pressure over time. The current guidelines recommend no more than 14 units a week for BOTH men and women. 14 units is roughly 6 pints of 4% beer, 6 175ml glasses of 13% wine and 14 25ml glasses of 14% spirits.

## ♥ Keep to a healthy weight

Losing weight, if you need to, will help lower your blood pressure and reduce your risk of health problems. The best way to lose weight is to reduce your calorie intake and increase physical activity. Reduce your calorie intake by avoiding foods that contain a lot of added sugar and/or saturated fat, such as sugar-sweetened drinks, confectionery, cakes and biscuits.

If overweight, losing just 5 to 10% of your weight will result in significant health benefits, including reducing your risk of heart attacks or stroke.

Set yourself realistic goals. Make small changes in your diet and activity levels that you can keep to for life.

## ♥ Get more active

30 minutes of moderate exercise five times a week can keep your heart healthy, and can lower your blood pressure. If you can't find 30 minutes in your day, increasing your activity by even a small amount can help.

Think about how you can be more active in your daily life. Any activity that leaves you feeling warm and slightly out of breath is ideal.





# Medicines for high blood pressure

Changing your diet and being more active can really help you control your blood pressure, but they may not lower it enough on their own. You may need to take medicines to lower it further.

There is a wide range of medicines available for high blood pressure.

Most of these are grouped under four main types of medicine:

- ♥ **Angiotensin Converting Enzyme inhibitors (or ACE)**
- ♥ **Angiotensin receptor blockers (or ARBs)**
- ♥ **Calcium channel blockers (or CCB)**
- ♥ **Thiazide diuretics**

There are other types of medicines available, but these four types are most commonly used today.

## ♥ Finding the right medicines for you

Every person is different, and some types of medicine work better in different types of people. What works well for a friend or relative may not work so well for you.

Many people find that one medicine alone will not lower their blood pressure enough. Each type of medicine works in different ways in your body, so taking more than one should have more of an effect on your blood pressure.

**Doctors have guidelines to help them decide what to use, but it can take time to find the right medicines for you.**

**Please see our booklet: [Getting the most from blood pressure medicines](#)**



## ♥ Getting the most from your medicines

High blood pressure cannot be cured, and if you need to take medicines, you will probably need to keep taking them for life. If you stop, your blood pressure will rise back up again.

It is very important to keep taking your medicines, even if you don't feel unwell.

By keeping your blood pressure low you are protecting your heart and blood vessels from damage and disease.

## ♥ Working with your doctor or nurse

Your doctor or nurse will want to see you again relatively soon after you start a new medicine. This will be to make sure that it is working well for you, and that you are not feeling any side effects.

If you begin to feel different after you start a new medicine, you can check the list of side effects on the leaflet that comes with it. But it may be more useful to speak to your doctor or nurse, or your pharmacist. They are experts in medicines and can advise you.

If you are having side effects from a medicine, your doctor or nurse can change your dose, or try a different medicine which may work better for you.

**Build your medicines into your daily routine – take them at the same time every day, and get into the habit of taking them. This will help you get the most benefit from them.**



## Measuring your blood pressure at home

As measuring blood pressure in a surgery/clinic may make you feel anxious (also known as white coat effect), which can affect the results, you might find it helpful to measure your own blood pressure at home between appointments with your doctor or nurse. This can be really useful in allowing you to monitor what your blood pressure is like in daily life, especially if you suffer from white coat effect.

Speak to your doctor or nurse about measuring your blood pressure at home. They may be interested to see what your blood pressure is like when you are away from the clinic. Many doctors are now using home readings in addition to clinical readings as a measure of management.

### Blood pressure monitors

If you are thinking of measuring your blood pressure at home, it is important to choose the right monitor. Monitors that measure at your upper arm are usually more accurate and consistent.

Whatever monitor you choose, make sure that it has been 'clinically validated'. This means that it has been tested and it gives results that you can trust.

### When and how to measure your blood pressure

Ask your doctor or nurse for advice about how often to check your blood pressure. It can be a good idea to check regularly at first, but then less often as you go on.

Try to measure your blood pressure at the same time of day, when your body is relaxed. Try to make sure that you compare 'like with like'.

Measuring at home is not for everyone. If you find that it is making you more anxious about your blood pressure, speak to your doctor or nurse.



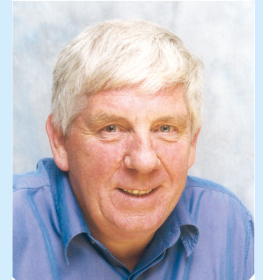
## Tom's story 'I had no idea'

**It should have been a routine blood pressure check. We were about to run a blood pressure awareness event and I'd been asked to have mine checked first.**

'When I had my blood pressure checked, the health advisor looked up at me with a look filled with shock and concern. 'I think you need to see your GP – right now,' she said.

Up until that moment I hadn't a clue that anything was wrong. I was 62 years old, I felt fine and I tried to do the things I did when I was 30 years younger. Alright, I was carrying a bit more weight than I should but then who doesn't?

'But I don't feel anything,' I said. 'Yes,' she explained, 'that's why it's called a silent killer.'



This booklet has been written to help you make the most of your blood pressure medicines. Most people with high blood pressure will need to take medicines to lower it, but this can sometimes be difficult to accept.

This booklet aims to answer the most common questions people have about their blood pressure medicines. It gives you information on:

- ♥ **What high blood pressure actually means**
- ♥ **Who gets high blood pressure and why**
- ♥ **Lifestyle changes to lower blood pressure**
- ♥ **Medicines for high blood pressure**

The booklet has been written with help from people who have high blood pressure, and from professionals who are experts in the field. It has been designed to give you the information you need to make the right choices for you.

For more information, go to **[www.bloodpressureuk.org](http://www.bloodpressureuk.org)**.

## About Blood Pressure UK

We are the UK's leading blood pressure charity - lowering the nation's blood pressure to prevent stroke, heart attack and heart disease. High blood pressure can be successfully treated and prevented. We are here to help.

For more information, please contact:

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**[www.bloodpressureuk.org](http://www.bloodpressureuk.org)**

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