

Understanding high blood pressure



There are many ways to lower your blood pressure. Remember that small changes can build up to make a big difference.

In this booklet you'll find lots of tips and easy swaps, like:

As you make changes to lower your blood pressure you may want to keep track of your progress. There's space on page 62 to record your blood pressure readings.

Swap salt for herbs and spices Add a side salad or more vegetables to your plate

Choose smaller alcohol measures, like a half pint or a small glass of wine

Swap some meals with meat for fish, beans, lentils or tofu

Walk short journeys instead of driving If you smoke, pick a quit date and get friends and family to help you stick to it

hand to
measure your
food portion
sizes

About this booklet

If you or a loved one have been diagnosed with high blood pressure, it can be a worrying time.

This booklet is a starting point. It can help you find out:

- what it means to have high blood pressure
- how to lower your blood pressure
- where to go for extra support.

There's lots you can do to lower your blood pressure. Even taking a few tips from this booklet can help you make a positive change.



Call 0808 802 1234 (freephone) to speak to a nurse.
Our helpline is open weekdays 9am to 5pm (excluding bank holidays).

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What is blood pressure?

Your heart pumps blood around your body to deliver oxygen and nutrients to your organs. Blood travels around your body through your arteries.

Your blood pressure (or BP) is the amount of pressure inside your arteries. This pressure helps your heart to pump blood.

You need some pressure to keep your blood moving. It's normal for it to go up or down throughout the day and to go up while you're moving about.

What's high blood pressure?

High blood pressure is when your blood pressure is higher than it should be, even when resting. It causes your heart to work harder to pump blood around your body.

The medical name for high blood pressure is hypertension.

When your blood pressure is always high, you need to do something about it.

You can find out more about high blood pressure on our website: **bhf.org.uk/bloodpressure**

Why is high blood pressure bad for your health?

Your arteries are stretchy to cope with your blood pressure going up and down.

If you have high blood pressure, your arteries lose their stretchiness and become stiff or narrow. This makes it easier for fatty material to block them up.

If the arteries that carry blood to your heart get damaged and blocked, it can lead to a heart attack. If this happens in the arteries that carry

blood to your brain it can lead to a stroke.

High blood pressure can also lead to other conditions, like:

- problems with your kidneys
- heart failure
- problems with your eyesight
- vascular dementia.

High blood pressure is a very common, but serious condition. This is why it's important to take care of your heart.

There are lots of things you can do to lower your blood pressure and protect your heart.

Stroke: blocked artery in the brain

I Plaque (fatty build-up)

Heart attack: blocked artery in the heart

How do I know if I have high blood pressure?

Most people with high blood pressure have no symptoms.

It's a hidden risk factor, meaning you can have it without knowing, which can increase your risk of a heart attack or stroke. That is why it's important to get your blood pressure checked regularly (see page 12).

In rare cases you may have symptoms, such as:

- blurred vision
- chest pain
- feeling dizzy
- headaches
- nosebleeds
- feeling like you cannot breathe (shortness of breath).

Contact your GP if you have any of these symptoms. You can also call **NHS 111**.

Call 999 for an ambulance if you have chest pain that does not go away after a few minutes rest.

However, most people find out after having their blood pressure checked at an appointment or health check.

In the UK, it's estimated that 6 to 8 million people are living with undiagnosed or uncontrolled high blood pressure.

If you're over 40 you can try this tool to find out your heart age. It will give you an idea of what your heart age might be and how to improve it.

Find out your heart age at **bhf.org.uk/heartage**

Where can I get my blood pressure checked?

You can get your blood pressure checked at:

- your GP practice
- some pharmacies
- some workplaces
- some gyms.

Adults in England should be offered a free NHS health check when they turn 40. The rest of the UK also have similar schemes. Ask your GP or pharmacist for more information.

You can buy a blood pressure machine to check your own blood pressure. If you're not sure which BP machine to buy, speak to a pharmacist.

Buy one online from BHF at **bhf.org.uk/buy-bp-monitor**

How do I check my blood pressure?

You can find a step-by-step guide to taking your blood pressure at home on our website: **bhf.org.uk/bloodpressureathome**

These tips can help you to take an accurate blood pressure reading:

- check it in a quiet, calm place
- sit down with your back supported and feet on the ground
- ✓ have the cuff on your upper arm, level with your heart
- make sure the cuff stays in place but it's not too tight.

You should avoid:

- 💢 eating for 30 minutes before checking it
- drinks with caffeine in for 30 minutes before checking it
- walking or strenuous exercise for 30 minutes before checking it
- 💢 talking while taking your blood pressure.

If you're blind or have a visual impairment, you can get a talking blood pressure monitor to help you measure your blood pressure at home. Buy one from the Royal National Institute of Blind People (RNIB) at shop.rnib.org.uk

You can also speak to your local pharmacist for help taking a blood pressure reading.

How is blood pressure measured?

You can measure your blood pressure by using a blood pressure (BP) machine. The machine measures the force that's put on your artery walls.

A cuff (a velcro band) is put around your upper arm. The cuff should fit comfortably around your upper arm when it's fastened. If it's too tight or too loose it can give you a blood pressure reading that's not accurate.

Air is inflated into the cuff until it feels tight. This can feel uncomfortable, but it only lasts a few seconds.

It's important to relax and not talk during the reading because this is when your blood pressure is measured. When you have your blood pressure measured, your reading is written as two numbers.

140 / 90

Systolic Diastolic pressure Diastolic pressure pressure of mercury

- **Systolic pressure** is when the pressure is at its highest, when your heart pushes blood out
- Diastolic pressure is when the pressure is at its lowest, when your heart rests between beats.

You'll usually hear people say '140 over 90'. mmHg is the unit for measuring blood pressure.

Watch our blood pressure video at: **bhf.org.uk/bloodpressure**

What should my blood pressure be?

If you're under 80 years old, your blood pressure should usually be:

- below 140/90 mmHg when checked by a healthcare professional
- below 135/85 mmHg when checked at home.

If you're over 80 years old, your blood pressure should usually be:

- below 150/90 mmHg when checked by a healthcare professional
- below 145/85 mmHg when checked at home.

Our blood pressure chart on page 18 gives you more information on what your reading means.

Ask your GP if you're not sure what your blood pressure should be.

Blood pressure chart

	Systolic	Diastolic
Healthy	Under 129	Under 84
Slightly raised	130 to 139	85 to 89
High (Stage 1)	140 to 159	90 to 99
High (Stage 2)	160 to 180	100 to 120
High (Stage 3)	Over 180	Over 120

One high reading does not necessarily mean you have high blood pressure. To get an accurate blood pressure reading, you need to have it measured several times.

There are different stages of high blood pressure depending on how high it is.

Your GP can give you more information about your individual blood pressure measure.

It's ok to ask the professional taking your blood pressure what the reading is. You may want to write it down so you can keep track of it. There's space to write down your blood pressure on page 62.

What's low blood pressure?

Low blood pressure (also called hypotension) is when your blood pressure measurement is under 90/60 mmHg. It can cause symptoms like dizziness and fainting.

Common causes of low blood pressure:

- dehydration
- infection
- other health conditions, like an abnormal heart rhythm (an arrhythmia)
- fitness, for example athletes usually have lower blood pressure.

Read more on low blood pressure at **bhf.org.uk/lowbloodpressure**

If you're worried about low blood pressure speak to your GP.

How often should I check my blood pressure?

If you're a healthy adult over 40, it's recommended that you get it checked at least once every five years.

You may need to have it checked more often or at a younger age if you have:

- an increased risk of high blood pressure
- a heart condition
- a close family member with high blood pressure, like one of your parents
- Black African, African Caribbean or South Asian heritage.

Speak to your GP if you're not sure when or how often to check your blood pressure.

Can you check your blood pressure too much?

It can become a habit to check it more regularly, especially if you have a BP machine at home. Checking it too much can cause you stress, and this will increase your blood pressure.

If you're unsure how often to check your blood pressure, ask your GP.

If you're worried about your blood pressure and need someone to talk to, you can call our Heart Helpline.



Call 0808 802 1234 (freephone) to speak to a nurse.
Our helpline is open weekdays 9am to 5pm (excluding bank holidays).

What happens if my blood pressure reading is high?

If you have a high blood pressure reading, make an appointment to see your GP.

They will check your blood pressure and, depending on the reading, they may recommend you have further tests.

This could include:

- A 24-hour blood pressure monitor looks at your blood pressure over a day or more to see if it's always high, even when resting.
- A home blood pressure monitor, you'll be asked to take your own blood pressure over a few days, and sometimes more than once a day. This helps your doctor work out your average blood pressure.

If your blood pressure is 180/110 mmHg your GP may recommend you go to hospital for urgent treatment.

Your GP will usually give you a BP machine. Sometimes you may need to buy one yourself. You can buy one online from BHF at bhf.org.uk/buy-bp-monitor

What's white coat syndrome?

White coat syndrome is when your blood pressure is higher when it's measured by a healthcare professional than it would be at home. It's usually caused by stress or tension from being in a medical setting.

If this happens, your GP may recommend using a blood pressure monitor at home.

What happens if I'm diagnosed with high blood pressure?

If your blood pressure is always high, even when resting, you'll be diagnosed with high blood pressure.

Your GP will work out a treatment plan with you. Including lifestyle information, such as diet and exercise (see page 37). You may also be offered medicine to help lower your blood pressure (see page 33).

You will also have tests to check your general health, including:

- electrocardiogram (ECG)
- echocardiogram (echo)
- tests on your pee (urinalysis)
- tests on your eyes
- blood tests
- QRISK (a tool that looks at your risk of a heart attack or stroke in the next 10 years).

You should be given regular appointments to see your GP, usually every two weeks at first. Your blood pressure will be checked and you may have a blood test.

If you've been given medicine to lower your blood pressure, they'll check if the medicine is working. Talk to them if you're having any side effects from the medicine or have any questions.

Once your blood pressure is under control, you should be invited for a check-up once a year.

If you have questions before your next appointment, speak to a pharmacist or call our Heart Helpline (see page 27). Contact your GP if you're not sure when your next appointment is.

If you're under 40 years old, you may need more appointments or tests to find out what's causing your high blood pressure.

What if there are delays seeing my doctor?

You might find there are delays getting an appointment to see your GP. Waiting for an appointment can be a worrying time, but there are places you can go.

You can speak to a pharmacist or call **NHS 111** if you have questions about your condition or any concerns.

You can also call our Heart Helpline to talk to our cardiac nurses.



Call 0808 802 1234 (freephone) to speak to a nurse.
Our helpline is open weekdays 9am to 5pm (excluding bank holidays).

You're not alone

Find support from other people with high blood pressure in our online community, Health Unlocked.

Find out more at **bhf.org.uk/ouronlinecommunity**

You can also find inspiring stories and helpful information on lowering your blood pressure at **bhf.org.uk/heartmattersmag**

What causes high blood pressure?

Anyone can get high blood pressure and it can be caused by many different things. Some things we can control like lifestyle habits, others we cannot.

If you take care of the things you can control, you'll help lower your risk of heart and circulatory diseases.

Things you can control:



your diet, including eating too much salt



drinking too much alcohol



smoking



not being active enough



having excess weight, especially around your middle

Things you cannot control:



getting older



family history



having Black African, African Caribbean or South Asian heritage

In rare cases, high blood pressure can be caused by another medical condition. If you're under 40 years old and diagnosed with high blood pressure, your doctor may recommend some tests.

You can find more information on the causes of high blood pressure at **bhf.org.uk/bloodpressure**

Transgender people

Research shows transgender (trans) people may be more likely to have high blood pressure, but the reason is not clear.

Checking your blood pressure regularly can help make sure it's at a healthy level.

Find out more about your risk at **bhf.org.uk/transheartrisk**

How is high blood pressure treated?

High blood pressure can be treated with:

- healthy lifestyle changes (see page 37)
- medicine.

Your doctor may recommend you make lifestyle changes first to see if this helps.

Even small changes can make a difference in just a few weeks, and you may not need to take medicine.

Medicine

Medicine can:

- ✓ reduce your blood pressure
- reduce your risk of a heart attack or stroke.

Common medicines for high blood pressure include:

- ACF inhibitors
- angiotensin receptor blockers (ARBs)
- calcium-channel blockers
- diuretics
- alpha-blockers (doxazocin)
- beta-blockers.

Sometimes you may need to try different medicines to find the one that works best for you.

Find out more about medicines for high blood pressure at **bloodpressureuk.org**

It can be hard to take medicine when you feel healthy. But medicines for high blood pressure are preventative, meaning they help protect your health in the future.

The thought of taking medicine every day can be difficult. But there are simple steps to make it easier:







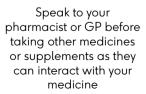


Get into a routine

Give your body time to get used to medicine

Be mindful of your mental wellbeing







Plan your medicine if you go away

What can I do about side effects?

Most people do not experience any side effects. However, for some people side effects can have a big impact on their daily life.

Side effects can be caused by your medicine but could also be caused by other things, such as your condition, stress, tiredness, or a change in your lifestyle.

It's worth bearing in mind that symptoms with any medicine may improve over time or even disappear.

It's important to keep taking your medicine. Speak to your doctor before you stop taking any prescribed medicine. Speak to your GP or a pharmacist. They can:

- find out if your medicine is causing the side effects
- help you manage side effects
- change the dose of your medicine if appropriate
- prescribe a different type of medicine
- recommend an alternative treatment.

You can also call our Heart Helpline to talk to our cardiac nurses.



Call 0808 802 1234 (freephone) to speak to a nurse.
Our helpline is open weekdays 9am to 5pm (excluding bank holidays).

Lifestyle

There are lots of small changes you can start making today to lower your blood pressure.

You could pick one swap from each of the following sections or commit to making one swap a week. Remember that small changes build up to make a big difference.

Give yourself time. By making lots of smaller changes you're more likely to stick to them.



Healthier swaps

Eating more fruit and vegetables and cutting back on food and drink that's high in saturated fat, sugar and salt can help lower your blood pressure.

Try these simple food swaps:

- swap butter for spreads made from olive, rapeseed or sunflower oils
- eat wholemeal instead of white bread
- try sugar-free drinks instead of full-sugar versions
- make sauces from scratch rather than buying ready-made
- eat more fish and less red meat.

rgood starting point for eating healthier is to look at how you cook your food. Try grilling, boiling or baking your food instead of frying it, to use less oil.



Want more healthy swaps?

We have lots of food swaps, including healthier takeaway orders, in our **Eat better** booklet. Order or read it online at **bhf.org.uk/eatbetter-booklet**

Have less salt

Cutting down on the amount of salt you eat is an important change you can make to lower your blood pressure.

Adults should eat less than 6 grams of salt each day. That's about one level teaspoon.



Watch our short video to find out why too much salt is bad for you. Search **bhf.org.uk/salt-animation**

There are lots of ways to cut down on the amount of salt you have.

- Remove salt from your table and taste your food before adding salt.
- Add less salt to food. There's usually already salt in the food you buy.
- ✓ Look for low-salt, reduced-salt or low-sodium options in your food shop.
- Ditch ready-made rubs and sauces and make them yourself with less salt.
- Use herbs and spices for flavour, instead of adding extra salt.
- Swap salty snacks, like salted peanuts and crisps, for less salty alternatives.

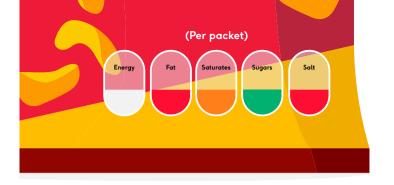
Foods high in salt:

- soy, hoisin and fish sauce
- miso
- ready-made sauces
- processed meat, like bacon and sausages
- some cheeses, like halloumi and feta
- salted nuts and crisps.

Need inspiration?

You can find free, tasty, low-salt recipes on our website:

bhf.org.uk/lowsalt-recipes



Look at food labels

It can also help to look at the labels on the food you buy. If you have high blood pressure, it's especially important to check the label for salt

Most packets of food have colour coded labels. A good rule is to try to eat foods with mostly green and amber labels.



Potassium

You might hear about potassium when you're diagnosed with high blood pressure. It's a mineral found in some foods that can help lower your blood pressure.

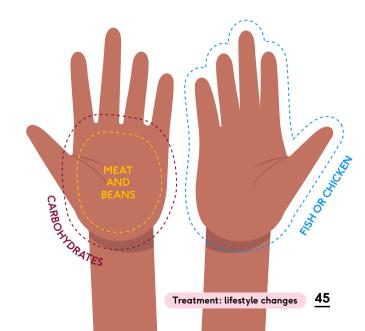
Healthy diets like the DASH (Dietary Approaches to Stop Hypertension) or Mediterranean diet can help lower your blood pressure. This is because they include lots of fruit, vegetables, wholegrains, low-fat dairy foods and fish which are good sources of potassium.

It's important to check with your doctor before you increase your potassium. Some people on heart medicines, or with kidney problems, should be careful not to have too much potassium.

Look at your portion sizes

A healthy diet is not just about what you eat, it's also about how much you eat. Getting portion sizes right is an important part of eating well and keeping to a healthy weight.

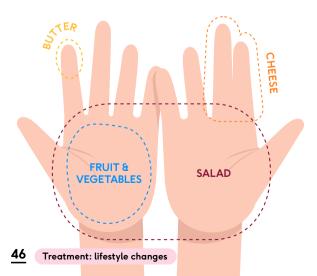
A quick and easy way to measure portions is to use your hand.



Some tips to help manage portion sizes:

- Put leftovers in a food container straight away to eat another day. This helps to avoid going back for a second helping.
- Use a smaller plate to stop yourself from overloading your plate.
- Wait 20 minutes before eating more as it can take a little while to feel full.

Find more tips to help you manage your portion sizes at **bhf.org.uk/portionsize**



Move more

Lots of activities can get you moving, like walking, playing with kids or grandkids, gardening, or housework.

To look after your heart, you should aim to be active every day. Adults should try to do 150 minutes a week (around 20 to 30 minutes of exercise a day).

There are lots of ways to a build exercise into your day:

- Get off the bus one stop early and walk the rest of the way.
- ✓ Walk to and from the station or school run instead of driving.





- Do some squats or lunges while you're waiting for the kettle to boil.
- Get into a routine of walking each day, like at lunchtime.
- Try a new hobby or class,

like g park

- ✓ Make go w
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Many people find that eva a great way to catch up with it to themselves. I break from your

Exercise can also

- maintain a hea
- ✓ give you more e
- ✓ reduce anxiety
- ✓ improve your slee

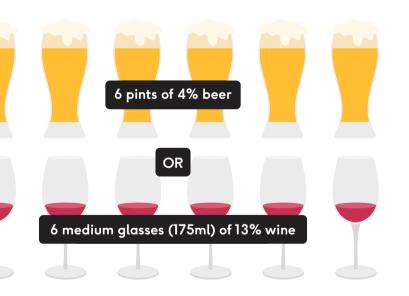
The NHS has exercises search nhs.uk/live-wel

You'll also find lots of tips and tricks for getting active at **bhf.org.uk/activity**

Drink less alcohol

Cutting down on the alcohol you drink can lower your blood pressure, help maintain a healthy weight and help protect your heart.

Adults should aim to have no more than 14 units a week. That's about:



Drinking can be a big part of socialising, or your weekly routine. But there are ways to make easy, manageable swaps to cut down.

Try having:

- a half pint instead of a pint
- a small glass of wine instead of a large glass
- a small wine spritzer (with soda water) instead of a large glass of wine
- a single measure of spirits with diet mixer instead of a double
- alcohol-free and low-alcohol beers, wine or spirits.

For more tips on healthier drinking choices, order or read our **Eat better** booklet at **bhf.org.uk/eatbetter-booklet**

Stop smoking

It's never too late to quit. There are lots of benefits to not smoking, like:



having more energy



breathing easier



improved fitness



better sense of smell and taste



reduced risk of a heart attack or stroke

After one year of quitting smoking, your risk of having a heart attack is half that of a smoker.

You can find lots of support and information to help you quit online. You may find these tips helpful.

- Set a quit date and tell your friends and family to help you stick to it.
- Have healthy snacks and drinks to help with unhealthy cravings.
- Use the money you save by not buying cigarettes to get yourself a reward at milestones.

Do not be afraid to ask for help. Speak to your GP or local pharmacy for help to stop smoking.

The NHS has a free stop smoking service to help you boost your chances of quitting. Search 'NHS stop smoking'.

Find ways to help with stress

It might feel more difficult to manage stress. But there are lots of ways to reduce stress and feel more relaxed. You could:



try relaxing exercises, like yoga or meditation



download an app to help manage stress or listen to music and podcasts



spend time with family, friends or pets



practice breathing exercises, find out more at bhf.org.uk/ breathing-exercises

I need more support

If you feel anxious and sad a lot of the time, and it's affecting your daily life, talk to your GP. Do not be afraid to ask for help. Sometimes you need to put yourself first.

You can also refer yourself to the NHS for talking therapies, like cognitive behavioural therapy (CBT) or counselling. Search 'NHS talking therapies' for more information.

You can also get in touch with Mind, a charity offering support to anyone affected by their mental health. Visit mind.org.uk

Maintain a healthy weight

We know how hard it can be to lose weight and stick to new lifestyle changes. Many of the tips in this booklet will help to manage your weight and look after your heart.

Being a healthy weight is about watching your portion sizes, swapping some less healthy foods or snacks for healthier ones, avoiding packaged foods labelled in red, and being physically active.

Whatever your reasons are for wanting to lose weight, now is a great time to start. We're here to help and support you every step of the way. Visit **bhf.org.uk/myweight**

What should I do if my blood pressure is still high?

Your GP should give you information about follow-up appointments and when to get your blood pressure checked.

If you've been making healthier swaps and your blood pressure is still high, your doctor may recommend you try medicine as well. For people already taking medicine, your doctor may change the type of medicine or dose. They may also recommend you take more than one medicine.

You should see your GP regularly until your blood pressure is at a healthy or controlled level. Talk to them if you've been diagnosed with high blood pressure and do not have a follow-up appointment.

If you need support, speak to one of our cardiac nurses (see page 58).

Support

It can feel overwhelming to be told you have high blood pressure. In some communities it can also be more difficult to talk about.

You may not know where to start, but small changes can make a big difference. In time you'll feel more confident in managing your health.

It's important to get help when you need it.

Call the Heart Helpline

If you're not sure where to go next, our cardiac nurses can help you with your questions or concerns.



Call 0808 802 1234 (freephone) or email hearthelpline@bhf.org.uk
Our helpline is open weekdays,
9am to 5pm (excluding bank holidays).

Join Heart Matters

Discover the benefits of Heart Matters, your free heart-health membership.

Join to receive our free magazine or email newsletter, featuring expert tips, hearthealthy recipes, inspiring stories, and the latest updates backed by BHF funded science.

Guided by our team of experts, Heart Matters helps you to make small changes for a healthier heart.

bhf.org.uk/heartmatters

Read our trusted information

We have lots of information about looking after your heart. You can read and order our booklets for free at **bhf.org.uk/publications**

If you've been diagnosed with high blood pressure you may also have been diagnosed with high cholesterol.



Read or order our
Understanding
high cholesterol booklet
or visit bhf.org.uk/
cholesterol



We also have information on high blood pressure and high cholesterol in audio format and other languages.

Read or listen to our information online **bhf.org.uk/infoforall**

Date	Blood pressure reading

Track your blood pressure using our free blood pressure chart and diary. Get it online at **bhf.org.uk/bpdiary**

For more information from BHF on high blood pressure, scan here or visit bhf.org.uk/bloodpressure



We are British Heart Foundation



Through research, information and support we're here for everyone affected by heart and circulatory conditions.

Get help

Speak to one of our experienced cardiac nurses for more information and support. They can help answer your questions, big or small.

You can call **0808 802 1234** (freephone). Our helpline is open weekdays, 9am to 5pm (excluding bank holidays).

Support our work

If you've found this information helpful and would like to support our work, please scan the QR code or visit bhf.org.uk/support-us



Scan here with the camera on your phone

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