

Heart Matters

Spring 2026

Loving life thanks to research

Being born with a heart condition has not stopped Sara

Chair exercises to boost mobility

Expert-led movements you can do sitting down

Are vegan foods healthier?

Why some plant-based foods are bad for you



British Heart Foundation

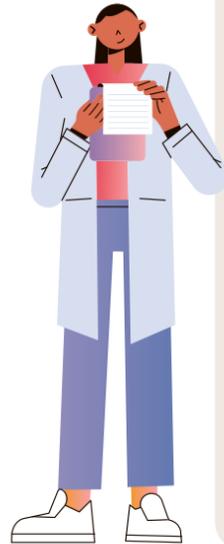
Welcome

Get information, inspiration and support

A magazine you can trust

We put together each issue of Heart Matters with the help of people with heart conditions and healthcare professionals including doctors, nurses and allied health specialists. Every article is triple-checked by our cardiac nurses and dietitians, as well as our research and statistics teams.

We also take pride in being editorially independent, meaning our information will never be influenced by British Heart Foundation (BHF)'s partners, or any other third parties. So you can feel confident that what you're reading is medically accurate, unbiased and up to date.



Got a question or concern?

Contact our cardiac nurses for free on the BHF Heart Helpline:

- ▶ Call **0808 802 1234** weekdays 9am to 5pm (apart from bank holidays).
- ▶ Email **hearthelpline@bhf.org.uk**
- ▶ Live chat on our website: **bhf.org.uk/helpline**

Connect with other people affected by heart conditions and circulatory diseases on our online community:

- ▶ HealthUnlocked: **bhf.org.uk/healthunlocked**



Editor's letter...

Welcome to Heart Matters' spring edition, packed with stories showing how science helps people live longer, healthier lives.

Our cover star, Sara Kirby, and her mum Ann, share their story on **page 30**. Born with Down's syndrome and a complex heart condition, she showed great strength through surgeries and setbacks. Thanks to BHF-funded research, Sara's future, and others' like her, continues to improve.

We also tackle a big question: can heart attacks be prevented? Find out how science is shaping future care and hear how Ben Aitken from County Durham lowered his heart attack risk (**page 9**).

Plus, we've included easy chair-based exercises (**page 38**), swaps for a better vegan diet (**page 25**), and tips to help loved ones be healthy (**page 33**).

Wishing you a happy and vibrant spring!

Joanna Hartley, Acting Editor



Support us

Your generosity funds BHF's lifesaving research and helps us create this magazine.

- ▶ To donate, visit **bhf.org.uk/HMdonate** or send a cheque payable to British Heart Foundation to **BHF, 2300 The Crescent, Birmingham, B37 7YE**.

Discover more heart health resources

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

Our heart health and lifestyle information is available in other formats too. Listen on the go, read our Braille or easy read booklets, and find health information in your language. Search **bhf.org.uk/infoforall** to find out more.



Meet our experts

We hear from some of this issue's trusted contributors

Professor Bryan Williams, BHF Chief Scientific and Medical Officer

"The vast majority of heart attacks are preventable," says Professor Williams. On **page 9**, he says advances will help doctors spot people at risk, offer new treatments and create personalised heart-attack prevention plans.



Professor Catherine Shanahan, researcher

On **page 18**, Professor Shanahan of King's College London demystifies coronary artery calcification. She explains how doctors test for this condition and how they treat it. She says: "Calcium deposits in your arteries are not related to your diet. They can be a sign of heart disease, or that you are getting older."



Dr Mark Griffiths (DClinPsy), psychologist

"Untreated depression could make heart problems worse over time," says Dr Griffiths, who's the lead consultant clinical psychologist at Liverpool Heart and Chest NHS Foundation Trust. On **page 34**, he discusses what depression symptoms you should look out for and shares tips for easing them.



Heart Matters is published by the British Heart Foundation, Greater London House, 180 Hampstead Road, London NW1 7AW. ISSN17459753 The British Heart Foundation is a registered charity in England and Wales (225971) and in Scotland (SC039426). Views expressed in this magazine are not necessarily those of the British Heart Foundation. The BHF does not endorse third-party products and services featured in Heart Matters. Information is correct at time of going to press. © BHF 2026. G204/0326

In this issue



23



40



34

Community

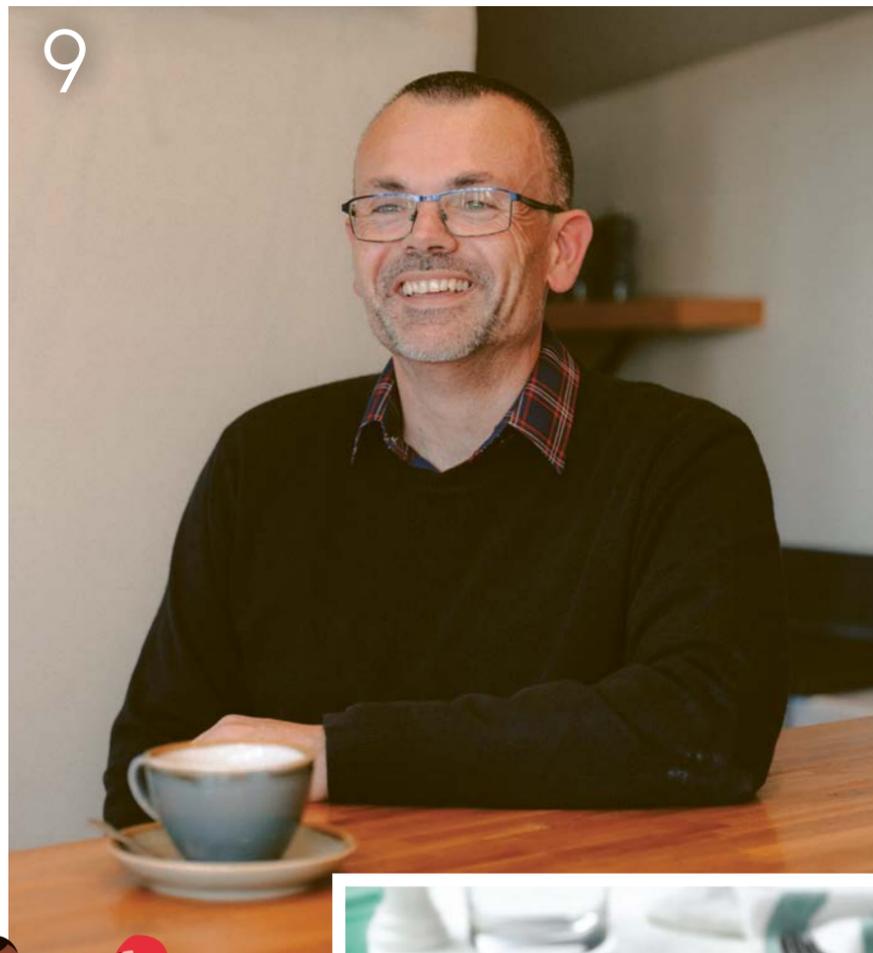
- 6 Your say**
Your letters and tips for living well with a heart condition
- 8 Get involved**
Here's how you can help us fund research that saves lives

Understand health

- 9 Preventing heart attacks**
How people can protect their hearts with lifestyle changes, medicines, and new science and technology
- 14 Feeling breathless?**
Why heart conditions can leave you short of breath and how to manage symptoms
- 16 Ask our nurses**
Are swollen ankles a sign of heart failure? Should you worry about painful legs when walking? What is clopidogrel?
- 18 Why calcification matters**
How a calcium score test is used to assess the health of your coronary arteries

Eat well

- 22 Recipes: pull out and keep**
Everything you need for a heart-healthy weekend, from an easy, tasty traybake to a healthy weekend brunch and chocolate banana cake



9



29

- 25 Worst vegan foods**
Plant-based meals and snacks to avoid, plus healthy swaps to have instead
- 28 Ask our dietitians**
Are decaf coffee and tea bad for you? Is baked beans on toast healthy? And can you have too much fibre?

Real life

- 30 Born with heart issues**
A mother shares her daughter's journey through lifesaving surgeries

Live well

- 33 How to help loved ones**
Top tips for motivating friends and family to get healthy
- 34 Dealing with depression**
Are heart problems affecting your mental wellbeing? Get helpful suggestions from a psychologist

Get active

- 38 Seated exercises to stay mobile**
Try these expert-led movements to keep you moving freely

Science

- 40 Stroke under the spotlight**
A top researcher reveals how scientific advances could help prevent strokes
- 42 Fact or fiction?**
We examine claims that health benefits are lost when you stop weight-loss injections, and that heartburn increases heart attack risk
- 43 Science we're supporting**
BHF-funded research on missed angina diagnoses, a 15-minute heart attack test and a neck scan to detect heart failure risk



33

What we've learned this issue

- 1** Most of us need to eat more **fibre** but having too much may reduce the amount of iron and calcium you absorb. See **page 29**.
- 2** Processed **vegan meat alternatives** can be as unhealthy as some animal-based options. See **page 25**.
- 3** Intermittent claudication is the medical term for **pain in the legs when walking** and can be a sign of peripheral arterial disease. See **page 17**.





Your say

We love to read your emails, letters and tips, so please write to us



Is salt the same as sodium?

Confusingly, the terms salt and sodium seem to be used interchangeably on some food labels. Please could you clarify the difference between the two.

Brian Hudson, Norwich

Dell Stanford, BHF Senior Dietitian, says:

The chemical name for salt is sodium chloride, and it's the sodium that can raise blood pressure. In the UK, front of pack labelling and the back of pack nutrition table will always list salt, but some products may also list sodium in the nutrition table. If you see sodium instead of salt, you can do this conversion: 1g of sodium equals about 2.5g of salt. Adults should have no more than 6g of salt a day. That's roughly 2.3g of sodium or about one teaspoon.

Sofa workout for strong legs

Thanks for the article 'Simple exercises to improve your balance' (Summer 2025, page 34; [bhf.org.uk/balance](https://www.bhf.org.uk/balance)). Strong legs are so important. I've a simple exercise anyone can do lying on the sofa or bed. Raise one leg six inches and hold it for 10 seconds. Do three sets of 10 and then repeat with the other leg. It helped me strengthen my legs and I now regularly cycle 10 miles.

Mark Nolan, Stockport



Pup power

I have a tip to add to '10 tips for staying motivated in winter' (Winter 2025, page 34; [bhf.org.uk/stay-motivated](https://www.bhf.org.uk/stay-motivated)).

In April 2024, aged 64, I was fitted with a stent in my right coronary artery. Since then, I have been on medication, undergone coronary rehab and yearly testing. One thing which helped enormously to keep my motivation high through two dark, cold winters was having a dog. Two or three daily walks, even on the wettest days, are not a chore.

David Hanlon, West Yorkshire

Try family games for vascular dementia

I enjoyed the article in your spring issue on how to support people with vascular dementia (Spring 2025,



page 30; [bhf.org.uk/vascular-dementia](https://www.bhf.org.uk/vascular-dementia)).

I've done two things my husband, who has the condition, seems to enjoy: I had pictures of family and favourite things made into simple jigsaw puzzles with 16 or 30 large pieces. And he enjoys a card game called 'Spot it' that my granddaughter enjoyed when she was young. We're able to play as a family together. He never liked playing games before his dementia, but now he enjoys joining in. It's worth trying.

Susie Artes

Whizzing up a warming soup

I made your curried lentil soup in my soup maker for my husband (Winter 2025, page 22; [bhf.org.uk/curried-lentil-soup](https://www.bhf.org.uk/curried-lentil-soup)). I used the chop and sauté feature for the onions, carrot, celery and garlic then added spices, the stock and lentils with a handful of fresh coriander. I make a lot of soups so am always on the lookout for new, tasty recipes since he had treatment for a blocked artery over 10 years ago. This

Have an opinion?

We want to improve your experience of Heart Matters. Take our short survey to tell us what you think about this issue, and what you'd like to read. Go to [bhf.org.uk/heartsurvey](https://www.bhf.org.uk/heartsurvey) to take the survey. It will take about 5 minutes and we'll use your answers to shape future articles in the magazine.

Have your say by 1 June 2026.

one was delicious, warming and easy to adapt.
Carol and Mike Fitzmaurice, Gwent

Going heavy on the veg

I tried the tomato, cabbage and bean soup recipe (Winter 2025, page 24;

[bhf.org.uk/bean-soup](https://www.bhf.org.uk/bean-soup)). I used a can of butter beans instead of cannelloni beans and a sweetheart cabbage and some spinach from the garden. It was delicious and filling.
Robert Bloomfield, Hampshire

Healthy cooking tip: get a non-stick pan

My casseroles became so much healthier once I'd bought a good quality non-stick pan. A tiny amount of oil is enough. Dry-fried eggs are great too.

Janet Harvey, London



Tell us what you think

If you have tried a recipe, benefited from a tip, or learnt something that supports your health and wellbeing, please let us know.

- ▶ Email: hmeditor@bhf.org.uk
- ▶ Write: **Heart Matters, British Heart Foundation, 180 Hampstead Road, London NW1 7AW.**

Get involved

Discover how BHF saves and improves lives, and help support our work through fundraising, campaigning, volunteering and fun events



Fundraising heroes go the extra mile

Three friends who raised more than £150,000 by cycling from Manchester to Italy have been awarded the 2025 Fundraising Hero Award by British Heart Foundation (BHF).

Tim Knight, Tim Fairley and David Kennedy (pictured above) completed the 1,600km journey over 10 days to raise money for BHF and their local hospice.

They made the journey in memory of their friend Simon 'Teddy' Taylor, who died suddenly in 2023 aged 56 after having a heart attack.

The three cycled more than 100 miles a day, starting from Hollingworth Lake in Greater Manchester before crossing the Alps to reach Lake Garda in Italy.

Next time, they plan to go even further and cycle to the Arctic.

Their achievement was celebrated at BHF's eighth annual Heart Hero Awards on 25 November 2025.

Want to be a heart hero and raise funds for BHF's lifesaving research? Get plenty of fundraising inspiration at [bhf.org.uk/ideas](https://www.bhf.org.uk/ideas)

Want to learn how to lower cholesterol?

In May we're hosting a live online question and answer session on high cholesterol, a key risk factor for coronary heart disease and heart attack.

This Heart Matters Live event will be fronted by a BHF health professional with expert knowledge of cholesterol, and a BHF-funded researcher who's investigating the condition. You'll also hear from someone who has successfully lowered their cholesterol levels.

Tune in for free from 1 to 2pm on Tuesday 5 May 2026 to learn how a healthy diet, exercise and medicine can help you reach healthy cholesterol levels. Sign up at: [bhf.org.uk/HML](https://www.bhf.org.uk/HML)



Can heart attacks be stopped?

Every five minutes in the UK someone is admitted to hospital with a heart attack. But with a healthy lifestyle, medicines and the help of new science, it's hoped fewer people will face this life-threatening event in the future



Ben Aitken was shocked he was at risk of a heart attack aged 42

When Ben Aitken went to his GP surgery for an NHS Health Check aged 42, he did not expect anything more than routine results.

So, he was shocked when he was told his chance of having a heart attack in the next 10 years was more than 18 per cent. "I went to my car, and I burst into tears," he remembers.

Ben, now 46, from Consett, County Durham, says his greatest

fear was dying. "I thought about my husband, David, who's deaf and relies on me for telephone calls, doctors' appointments and hospital checks. How would he manage if I was ill or died?"

This fear spurred Ben, who was already taking medication for high blood pressure (hypertension), to make immediate lifestyle changes. This included stopping smoking, starting on statins to lower his

cholesterol and losing six stone in weight. His efforts paid off. Ten months later his GP checked his heart attack risk again. It was down to almost four per cent.

Many heart attacks do not have to happen

By taking action in his 40s, Ben has lowered his chances of being one of the UK's shocking heart attack statistics – which sees 100,000

hospital admissions for heart attack each year. That's about 270 a day, or one every five minutes.

Yet, many could be prevented with early health checks, improvements to diet and exercise, and medicines to lower risk factors such as high blood pressure, high cholesterol and high blood sugar.

“For the vast majority of people, heart attack is completely preventable,” says Professor Bryan Williams, Chief Scientific and Medical Officer at British Heart Foundation (BHF).

Heart attacks cause at least 24,000 deaths in the UK each year. Many are in younger people, with over a third of these deaths in the under 75s, says Professor Williams, who also works as an NHS

“For the vast majority of people, heart attack is completely preventable”

consultant. “It’s very frustrating for me as a doctor to see middle-aged people have heart attacks. For most of them, it did not have to happen.”

Why do heart attacks happen?

The reason we have heart attacks is because, over time, the blood vessels that supply our heart with oxygen-rich blood, called coronary arteries, can get a buildup of a fatty material called plaque, causing

them to narrow – a condition called coronary heart disease.

A heart attack happens when the blood vessel becomes blocked, usually when a plaque breaks open and a blood clot forms around a piece of the fatty material inside. This reduces blood flow to the heart, which in turn causes damage and chest pain (angina) because not enough oxygen-rich blood is getting to the heart muscle.

It’s a medical emergency and without treatment it can cause death or heart failure (where the heart cannot pump blood as well as it should) and other heart complications.

People with risk factors have an increased chance of having a heart attack because they make it more likely that fatty material will build up in the coronary arteries.

Risk factors include high blood pressure, high cholesterol, excess weight, high blood sugar levels from uncontrolled diabetes, and smoking. And the key to preventing a heart attack is lowering these risk factors with a healthy diet, regular physical activity, stopping smoking and taking medicines to lower blood pressure, cholesterol and blood sugar when needed.

“Anyone who wants to try to prevent a heart attack should try to adopt a healthy lifestyle,” explains BHF-funded researcher Dr Michael McDermott. “We all know that eating fruits and vegetables, pulses and grains is much healthier than a diet heavy in salt and unhealthy, saturated fats that can raise blood pressure and cholesterol levels.

“And we know that being just a

little bit more active per day reduces your risk too,” says Dr McDermott from the University of Edinburgh.

Calculating heart attack risk

Because these risk factors are so important, doctors measure them to work out an individual’s risk of heart attack. They do this by taking blood pressure, cholesterol and blood sugar levels, working out your body-mass index (BMI) to identify if you are overweight or obese, and asking about your lifestyle.

“All these risk factors are important, but working together they are more dangerous,” warns Professor Williams. “Even a modest increase in blood pressure and cholesterol together is more dangerous than a high level of one or the other alone.”

To work out your risk of heart attack in the next 10 years, doctors put the measurements, plus other factors such as age, sex, medical conditions and family history, into an online calculator called QRISK that gives a score.

This is the score Ben received saying his risk of a heart attack was 18 per cent, putting him at moderate risk (a score of 20 per cent and over is classed as high risk and under 10 per cent is low risk). However, like Ben, most people

“Doctors, can't do anything unless you get your heart attack risk measured”



Ben was worried about his husband David if he fell ill

with risk factors do not have any symptoms, so they do not know they’re heading for a heart attack, says Professor Williams.

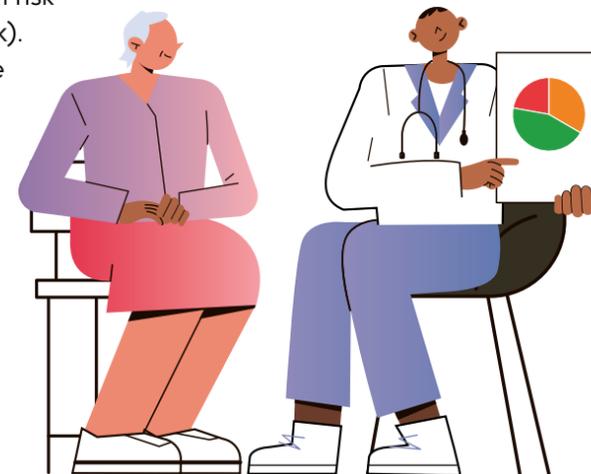
“We, as doctors, can’t do anything unless you get your heart attack risk measured. The sooner you get it checked, the sooner we can get you on a treatment plan to reduce your risk of ever having a heart attack,” he says.

Tech set to transform heart care

In the future, new technology will help doctors spot people at risk of heart attack earlier than they can now, Professor Williams adds.

He points to BHF-funded research led by Professor Charalambos Antoniades at the University of Oxford that is using artificial intelligence (AI) to analyse the CT scans of people with chest pain, which is a sign of coronary heart disease.

These CT coronary angiogram scans are used to check for narrowing or blocked areas within the coronary arteries. However, in some people who go on to have a heart attack, this narrowing or blockages are not visible. To pick up these people, Professor Antoniades’ AI tool looks for inflammation in the fat around the coronary arteries, which he



Professor Bryan Williams wants more people to check their heart attack risk



PHOTOGRAPHY: JOE HALL

previously discovered was a key warning sign of future heart attacks. Together with an individual's other risk factors, the AI tool can help better detect who with chest pain will go on to have a heart attack in the next 10 years. Several NHS hospitals are already using the tool, and it's hoped it will be rolled out more widely in the next few years.

"This kind of process is going to transform heart healthcare. When they're routinely available, everyone will get the same high standard of care," says Professor Williams. "We're on the cusp of a revolution in science and technology, and we must embrace it."

AI powered personal plans

Another big gamechanger will be technology that allows doctors to create personal heart-attack prevention plans based on the latest medical research.

BHF is developing an AI tool to make this a reality. "We know it can be a challenge for non-specialist doctors to take in all the new research information and make sure each person gets the best treatment," says Professor Williams.

"At BHF we want to change that. We want to use AI to integrate all that information as it emerges from studies and then use it with an individual's health data to generate an up-to-date personalised heart attack prevention treatment plan.

More medicines to lower risk

Alongside technology, new medicines will also be key to lowering risk factors and preventing heart attacks in the future, says

Professor Williams. "As doctors, we already have a lot of medicines we can use to reduce someone's lifetime risk of heart attack to almost zero, and with advances in science we're getting an even broader set of medicines to do that."

For example, statins are very effective at reducing cholesterol. But Professor Williams is now also prescribing a revolutionary cholesterol-lowering treatment called inclisiran, a type of therapy called RNA interference therapy.

It works by telling your liver to stop making the protein that blocks the clean-up of cholesterol, so your body can clear bad cholesterol more effectively.

"It is a twice-yearly injection and for the whole six months it's knocking down your cholesterol to normal levels," explains Professor Williams.

"We're on the cusp of a revolution in science and technology and we must embrace it"



"In a year or two we'll get the data to see if it works as well as statins. But I would be very surprised if it wasn't very effective."

A gene therapy is also being developed for high blood pressure, reveals Professor Williams. "It's still being tested but it's expected to be a six-monthly injection. It's an exciting development."

Finding motivators for change

However, at the core of heart attack prevention lies personal motivation to make hard lifestyle changes, take medicines, and attend appointments for health checks, tests, treatments and procedures.

For Ben, discovering his high QRISK score was the motivator he needed to take action to become heart-healthy. Looking back, he says, he should not have been surprised he was at such high risk of a heart attack.

He was overweight at 18.5 stone, had smoked since his early 20s, and was already taking medicines for high blood pressure.

"I had a lot to tackle all at once to bring down my risk of a heart attack. But that reality check of hearing my heart attack risk motivated me to do it," Ben says.

But, not everyone's motivated by their risk score. That's why Dr McDermott, led by Professor David Newby and his research team, investigated other motivation methods in the SCOT HEART 2 IMPACT trial. Their research looked to see if having a CT coronary angiogram motivated people to change their behaviour and take preventative medicines more than



Ben quit smoking, lost weight and took medicines to lower his risk

"The reality check of hearing my heart attack risk motivated me"

a heart attack risk score did. They found six months after having a CT, participants had healthier diets, greater weight loss, and were more likely not to smoke and to take preventative medicines than those who had a heart attack risk score.

"It showed us that heart scans helped people understand their future risk better than a score, and this resulted in healthier lifestyle behaviours and improved uptake of preventative medicines," says Dr McDermott. "The next stage is for us to test to see if these changes will prevent more people from having heart attacks."

Using motivational tools to encourage people to make behavioural changes is already part of NHS care. Take Ben and his 20-a-day cigarette habit. Ben knew he had to quit so he downloaded the NHS Stop Smoking app, which encouraged him with regular motivational messages.

This meant, even before he attended a stop smoking clinic, he had cut down to just a few cigarettes a day with the help of nicotine patches and a vape.

"The app's messages about how my health was improving the longer I went without cigarettes gave me the motivation I needed to continue," he says.

In the future, smartphones and watches will likely play an even bigger role in monitoring and motivating people to have better heart health, says Professor

Williams. "Wearable technology will be able to track your risk factors, feed the data back to your doctor, and nudge you to exercise or eat more healthily."

For Ben, it was a mix of personal motivation, technology, medicines, the support of family, friends, and health professionals, that helped him lower his heart attack risk.

"My husband David kept me going, friends at work, family, and Hazel the nurse at my GP surgery. But in the back of my mind, it was the fear of dying—I knew I had to do it," Ben says.

"Less than a year after I started making changes, I'd quit smoking and my blood pressure, weight and cholesterol had all come down.

"When I went back to the doctor to have my risk score done again and it had dropped to almost four per cent, I was just beaming." ●

PHOTOGRAPHY: JOE HALL



Ruth Goss
Senior Cardiac
Nurse, British
Heart Foundation



Shortness of breath

the common symptom explained

Learn why some heart conditions make you feel breathless, how anxiety can make it worse and ways to ease symptoms

Feeling short of breath can be worrying. It can feel like not enough air is getting into your lungs or that you're struggling to catch your breath.

Many heart conditions lead to breathlessness, which you may hear your doctor or nurse describe as 'dyspnoea'. These include heart failure, chest pain (angina), heart attack and some abnormal heart rhythm disorders (arrhythmias) like atrial fibrillation (AF). All these conditions stop the heart working

properly, resulting in a shortage of oxygen-rich blood getting to the rest of your body.

This triggers you to breathe faster to get more oxygen into your body. It can also cause fluid to build-up in your lungs, making it more difficult to breathe – especially if you have heart failure.

Lung conditions, including asthma, chronic obstructive pulmonary disease (COPD) and chest infections, also make people feel short of breath, as can anxiety.

“Many heart conditions, such as heart failure, lead to breathlessness”

Every day or sudden onset?

There are two main types of breathlessness:

- ▶ **Chronic:** Where you feel breathless every day, which is the type of breathlessness experienced with heart failure.
- ▶ **Acute:** Breathlessness that comes on quickly, which can happen during a heart attack and with heart conditions like arrhythmias.

Physical exertion, like climbing stairs, can lead to breathlessness with some heart conditions too.

If you notice you're becoming more breathless when you move over time, and you do not already have a diagnosed condition that causes breathlessness, see your doctor to have this investigated.

How anxiety can make it worse

Being short of breath can cause anxiety because it feels like you cannot breathe. This may make you panic, which in turn causes more rapid breathing.

This could lead to a panic attack, which is when a range of physical symptoms, such as struggling to breathe, a pounding heartbeat and feeling light-headed, build up quickly.

To help you through a panic attack, the charity Mind suggests:

- ▶ focusing on breathing slowly in and out while counting to five
- ▶ stamping on the spot, as some people find this helps to control their breathing
- ▶ focusing on your senses by tasting a mint-flavoured sweet or cuddling something soft.

When to get medical support

If you have shortness of breath, your doctor will work with you to treat the underlying cause.

If it's a chronic symptom, your doctor can tell you what new or changing symptoms to look out for that need urgent medical attention. If you're not sure when to get help, you can ask yourself: Are my symptoms new or worse than usual? How long have they been going on for or changing?

Even with treatment, shortness of breath can make daily life difficult, so it's important to get emotional support from family and friends too.

If you're having severe difficulty breathing, are gasping or choking, or have other symptoms like chest pain, call 999 or get someone to take you to A&E. ●

5 tips to manage breathlessness

- 1 Find a comfortable position to help ease your shortness of breath, such as sitting in a chair or propping yourself up in bed when resting or sleeping.
- 2 Use breathing techniques, such as taking slow, relaxed breaths.
- 3 Plan your daily activities to allow for breaks to rest and recover.
- 4 Stay as active as possible. Even just moving around the house more during the day helps.
- 5 Open a window, or use a fan, to help get air circulating in the room.

Get more info and support

- ▶ Find more on breathlessness from the NHS: [nhs.uk/symptoms/shortness-of-breath](https://www.nhs.uk/symptoms/shortness-of-breath)
- ▶ For more on panic attacks, go to Mind at [mind.org.uk/panic-attacks](https://www.mind.org.uk/panic-attacks)

Ask our nurses

Cardiac care specialists answer your questions on living with a heart condition or a risk factor



Regina Giblin
Senior Cardiac Nurse, British Heart Foundation

Q: Can swollen ankles and feet be a sign of heart failure?

A: Swollen ankles and feet can be one of the first signs of heart failure and an ongoing symptom of the condition. Healthcare professionals may refer to it as 'peripheral oedema', 'fluid retention' or 'water retention'.

When your heart is not working properly because of heart failure, blood backs up in the veins of your legs and feet. This increases pressure in the blood vessels, which forces fluid into the surrounding tissues and leads to swelling. In response, the body holds salt and water in the blood to try to increase the

blood's volume. But instead of helping, this leads to more fluid moving into the tissues.

Your doctor may ask you to monitor the swelling in your ankles and feet as an indicator of how well your heart is pumping, or how well any medicines you've been prescribed are working.

Eating a high-salt diet and being inactive when you have heart failure can make ankle and feet swelling worse, so it's important to have a healthy diet and be as active as possible. If you have heart failure and notice new or worsening swelling in your legs, ankles or feet, speak to your medical team, as your treatment plan may need adjusting.

Q: Should I worry about having painful legs when walking?

A: If you start experiencing pain in your legs when walking that goes away with rest, you could have intermittent claudication. This is the medical term used to describe this type of pain, which is the main symptom of peripheral arterial disease (PAD).

Intermittent claudication is usually felt as a cramp or pain in the leg muscles when walking. It ranges from mild to severe and is relieved by rest within 10 minutes. The pain most commonly affects the calves, rather than the thighs, buttocks or hips. It may be in both legs at the same time, or worse in one leg.

If you have PAD, the arteries in your legs are narrowed due to a build-up of fatty material (plaque). This means not enough oxygen-rich blood can get to your muscles, causing the cramp.

Research suggests that having PAD increases your risk of dying from cardiovascular disease by up to six times, compared to those who do not have it. So, if you think you have intermittent claudication, see your GP who will measure the blood pressure in your arms and ankles. If there's a difference, you may have PAD. Some GP surgeries also use a Doppler scan to check how well blood is flowing in your legs. They should assess your risk of cardiovascular disease too.



Get your questions answered

- ▶ To find more answers from our experts go to bhf.org.uk/ask-expert including: **Should I worry about cold hands and feet? Are beta-blocker side effects a trick of the mind?**
- ▶ Send your questions to hmeditor@bhf.org.uk
- ▶ Go to **page 7** for more ways to contact us.

Q: What is clopidogrel?

A: Clopidogrel is an antiplatelet medicine that's often prescribed to people who've had a heart attack and have coronary heart disease.

The word 'platelets' refers to a special type of blood cell that helps your blood clot, which stops bleeding after an injury. Platelets do not cause issues for most people, but after a heart attack they can become overactive and cause abnormal clotting.

If you have coronary heart disease, a heart attack can happen when fatty material (plaque) in the coronary arteries hardens then ruptures or bursts.

In response, the body forms a blood clot to repair this by activating platelets. But the clot can block the coronary artery, stopping oxygen-rich blood from getting to the heart muscle. Without enough oxygen the heart muscle starts to die, leading to long-term damage.

Clopidogrel helps prevent blood clots forming by making platelets less sticky, so they cannot clump together into a clot. This reduces the risk of having another heart attack. If you have concerns about clopidogrel, speak to your GP or pharmacist. ●



Ruth Goss
Senior Cardiac Nurse, British Heart Foundation



Coronary artery calcification



Professor Catherine Shanahan
Professor of Cellular Signalling, King's College London

Calcium deposits in the coronary arteries put you at high risk of a heart attack. An expert explains why it happens and how a calcium score test can assess it

Coronary artery calcification is when calcium builds up in your heart's main arteries. It's a sign that fatty material (plaque) has built up in the blood vessels, a process called atherosclerosis that's commonly present in coronary heart disease and raises the risk of a heart attack.



What causes calcification?

Calcium deposits in your coronary arteries are not caused by the calcium you eat in food. It happens when the cells in these arteries are not working as they should, which can be a sign of heart disease, or that you're simply getting older.

Healthy muscle cells allow the coronary arteries to contract and expand. But studies show that when these muscle cells become diseased or old they start to change into bonelike cells. These bonelike cells are hard-wired to deposit calcium, which can lead to calcium in the fatty plaques of your arteries. You may hear the condition referred to as 'hardening of the arteries'. This is because it makes your arteries stiff and less flexible, which forces your heart to work harder, increasing the risk of heart issues.

How is it diagnosed?

A CT scan is used to see how much calcium there is in fatty plaques in your coronary arteries, which indicates how much atherosclerosis you have. If the CT scan finds calcified plaques, it means you likely have

“Lifestyle changes and treatments can slow its progression and reduce your risk of a heart attack”

coronary heart disease and are at risk of a heart attack.

However, not all fatty plaques contain calcium, which is why doctors also do other tests to work out your risk of having coronary heart disease and a heart attack.

Guidance from the National Institute for Health and Care Excellence (NICE) says you should be offered a CT scan to find out if you have calcified plaques if you have chest pain (angina), which is a key symptom of coronary heart disease, and if your doctor has assessed your likelihood of coronary heart disease to be between 10 and 29 per cent.

What does your calcium score mean?

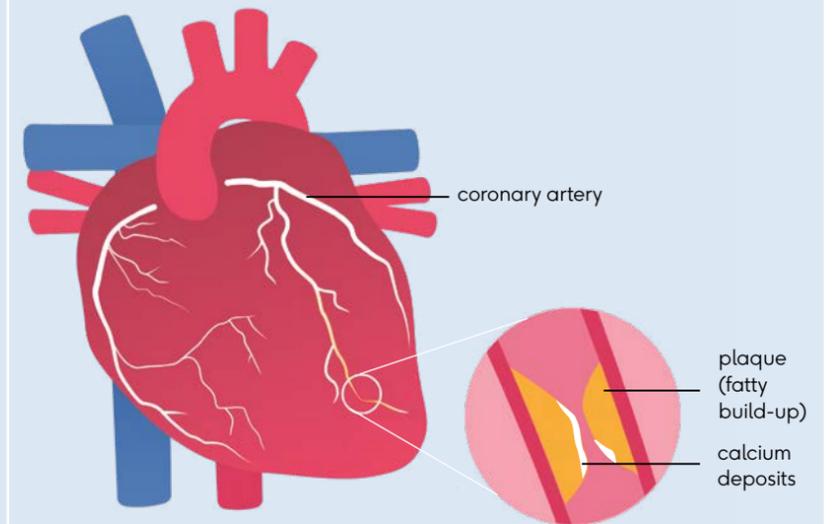
If your scan shows you have calcium plaques, you may be given a calcium score. This ranges from zero to 1,000. It's important because the higher your score, the higher your risk of having a heart attack in the next five years:

- ▶ **Zero** means you have a very low risk of a heart attack.
- ▶ **1 to 99** means you have a low risk of a heart attack.
- ▶ **100 to 299** means you have moderate risk of a heart attack.
- ▶ **Above 300** means you have a high risk of a heart attack.

Research shows that even if you do not have any other symptoms of coronary heart disease, having a calcium score over 300 means you are seven times more likely to have a heart attack or die from coronary heart disease than someone with no coronary artery calcification.

According to NICE guidance, if your calcium score is between 1 and 400 you will be offered a CT coronary angiogram to investigate the extent of your coronary heart disease. And if it's over 400, you may be offered an invasive coronary angiogram.

Coronary artery calcification happens when calcium deposits form on fatty plaques inside the arteries of the heart



How is it treated?

There is no treatment to reverse coronary artery calcification.

However, there are lifestyle changes and treatments that can slow its progression and help reduce your risk of a heart attack.

If you have no other symptoms or risk factors for coronary heart disease, like chest pain, then your medical team will advise you to have a healthy lifestyle.

This involves regular physical exercise, a healthy diet low in saturated fats, sugar and salt, quitting smoking and limiting the amount of alcohol you drink.

These simple lifestyle changes can go a long way to slowing down your risk of having a heart attack.

If you have other risk factors for a heart attack – such as high blood pressure, high levels of bad cholesterol, obesity or diabetes – then your doctor can also prescribe medicines that can help to lower these risk factors. ●

London to Brighton Bike Ride

Sunday 21st June 2026

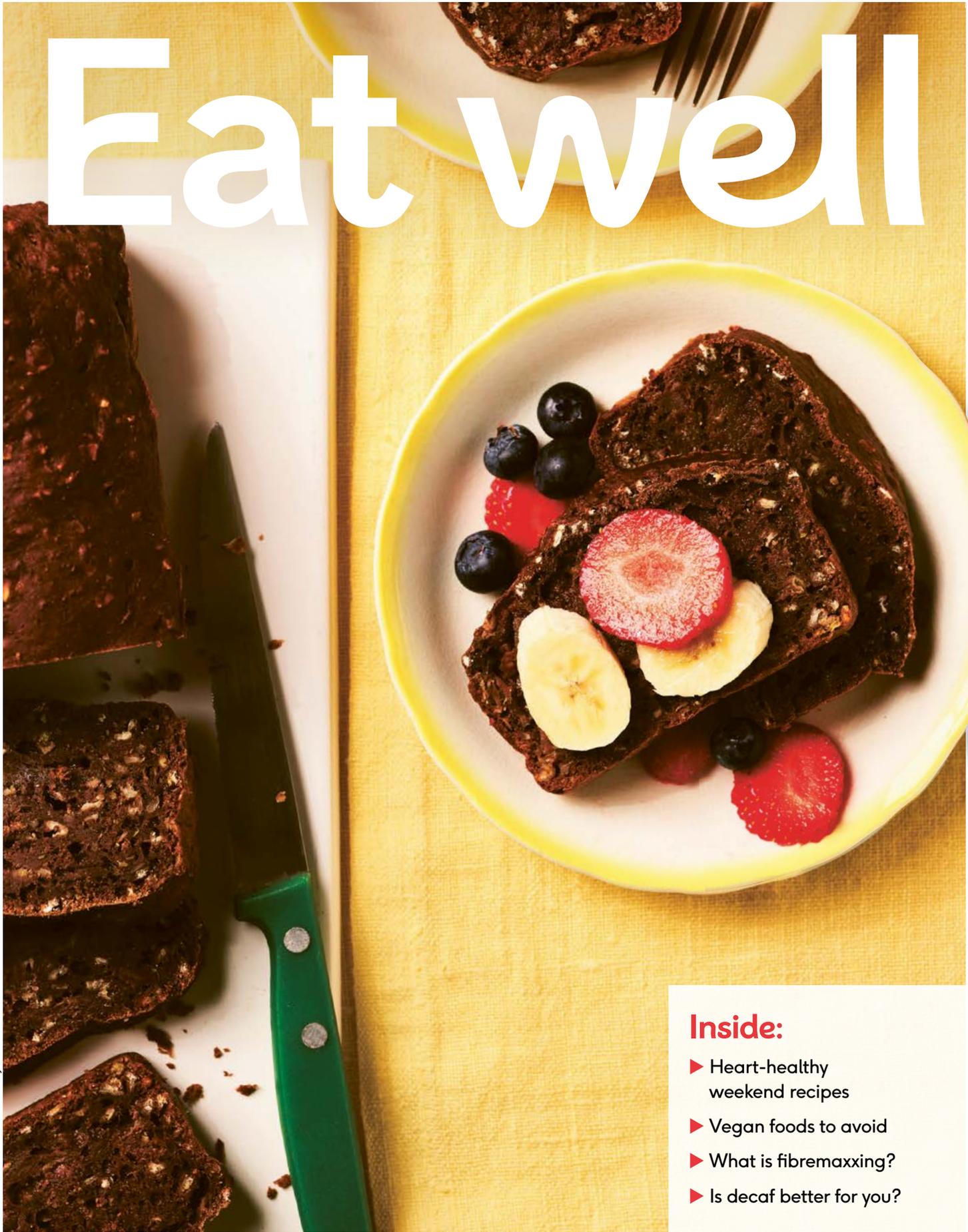
From rusty chains to fancy frames, whether you're a new rider or a seasoned pro. This ride is for everyone.

New to cycling or not ready for 54 miles? Try our shorter 20.5 mile ride this summer.

Book your place today
bhf.org.uk/l2b



Eat well



PHOTOGRAPHY: STEVEN JOYCE

Inside:

- ▶ Heart-healthy weekend recipes
- ▶ Vegan foods to avoid
- ▶ What is fibremaxxing?
- ▶ Is decaf better for you?

Energy KJ: 2670 Kcal: 636	32%
Carbs 38.8g	
Fibre 13.5g	45%
Fat 29.7g	42% Med
Saturates 5.1g	26% Low
Sugar 14.3g	16% Low
Salt 0.29g	5% Low

Indian-spiced salmon and chickpea traybake

This deliciously spiced curried supper is simple to make as well as heart-healthy.

Preparation time: 20 minutes
Cooking time: 20 minutes
Serves 2 | Not suitable for freezing

Ingredients

¼ tsp ground ginger
¼ tsp ground cumin
¼ tsp ground coriander
¼ tsp ground turmeric
¼ tsp ground cayenne pepper
400g (14oz) can chickpeas, drained
2 tsp sunflower oil
2 x 150g (5½ oz) salmon fillets
200g (7oz) frozen peas
100g (3½ oz) cherry tomatoes

How to read the nutrition labels

- ▶ **g** = the grams of each nutrient in one portion
- ▶ **%** = proportion of an adult's recommended daily intake per portion
- ▶ **traffic light colours:** show if a food is low (green), medium (amber) or high (red) in fat, saturated fat, sugars or salt in 100g of the recipe.

How we made it healthier

A delicious mix of seasoning gives plenty of flavour, without the need to add salt.

For the raita:

8-10 mint leaves
100g (3½ oz) 0% fat natural yogurt or 0% fat Greek yogurt
1 clove garlic, crushed

For the relish:

100g (3½ oz) cherry tomatoes or 2 large tomatoes, finely chopped
¼ small red onion, finely chopped
1 tbsp lime juice
1 tbsp chopped coriander

- 1 Preheat the oven to 180°C/160°C fan or gas mark 4. Mix all the spices together and set aside half to use later.
- 2 Place the chickpeas in a shallow roasting tin, sprinkle with half the remaining spice mixture and drizzle with the 2 tsp of oil. Place in the oven and roast for 5 minutes.
- 3 Sprinkle the salmon fillets with a little more of the spice mixture and nestle them among the chickpeas. Add the peas and cherry tomatoes and return to the oven for 12-15 minutes until the fish is just cooked through and will flake easily.
- 4 Meanwhile, mix mint, yogurt and garlic together. In another bowl, mix the finely chopped tomatoes, red onion, lime juice and coriander.
- 5 When the fish is cooked, serve with a scattering of chopped coriander, the raita and the tomato relish.

Cook's tip

Add extra vegetables like spinach or broccoli for a nutrient boost.

Chocolate banana cake

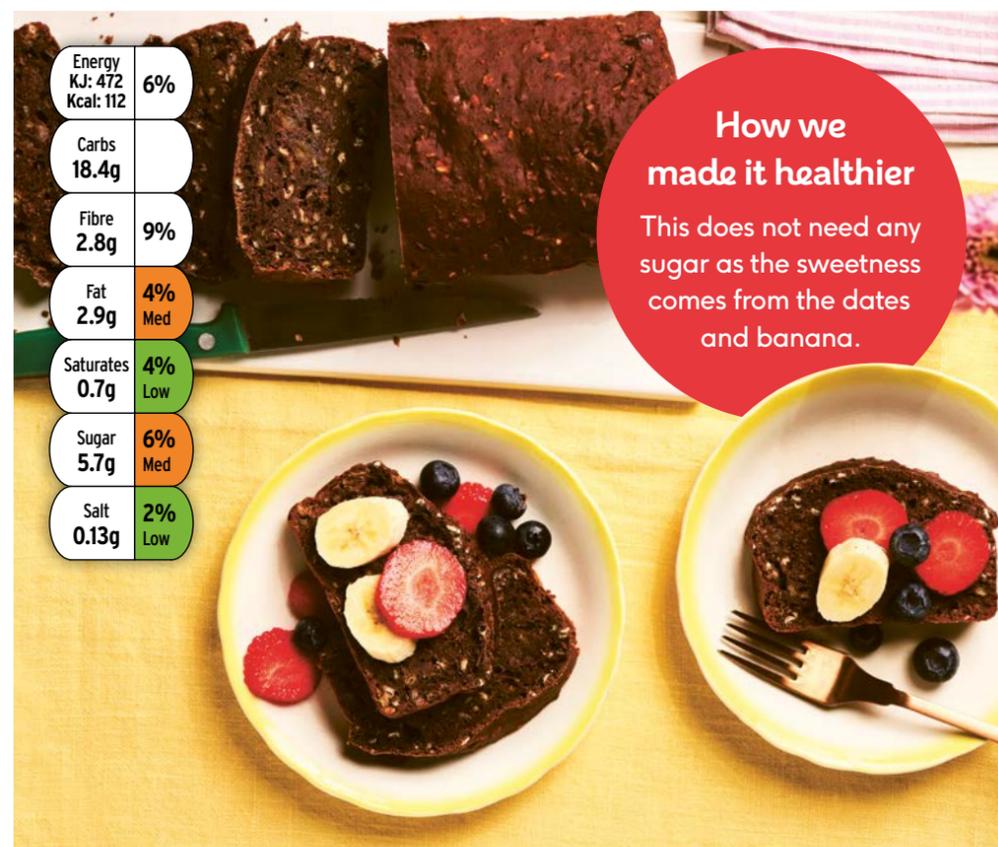
Preparation time: 15 minutes
Cooking time: 1 hour
Serves 12 | Suitable for freezing

Ingredients

50g (2oz) medjool dates, stoned (about 6 dates)
130g (4½ oz) peeled ripe banana (1 medium banana)
50g (2oz) milled flax seeds
200ml (7fl oz) skimmed milk
150g (5½ oz) self-raising flour
25g (1oz) cocoa powder
40g (1½ oz) porridge oats

- 1 Line a 900g (2lb; approximately 22x12cm) loaf tin with baking paper. Set oven to 180°C/160°C fan or gas mark 4.

- 2 Chop the dates as finely as possible, then mash them with the banana until it is almost pureed.
- 3 Stir the flax seeds into the milk and leave for 10 minutes to allow the seeds to soak.
- 4 Mix the flour, cocoa and oats together in a medium bowl then stir in the banana and flax mixtures. Stir together, then spoon into the loaf tin and spread the top smooth with the back of a spoon.
- 5 Bake for 1 hour or until a knife inserted in the centre comes out cleanly. Allow to cool completely then turn out of the tin and serve thinly sliced. ▶



Energy KJ: 472 Kcal: 112	6%
Carbs 18.4g	
Fibre 2.8g	9%
Fat 2.9g	4% Med
Saturates 0.7g	4% Low
Sugar 5.7g	6% Med
Salt 0.13g	2% Low

How we made it healthier

This does not need any sugar as the sweetness comes from the dates and banana.

Garlicky mushrooms with healthy baked beans

Serve this with wholegrain toast and eggs for a healthy but hearty weekend brunch.

Preparation time: 5 minutes

Cooking time: 15 minutes

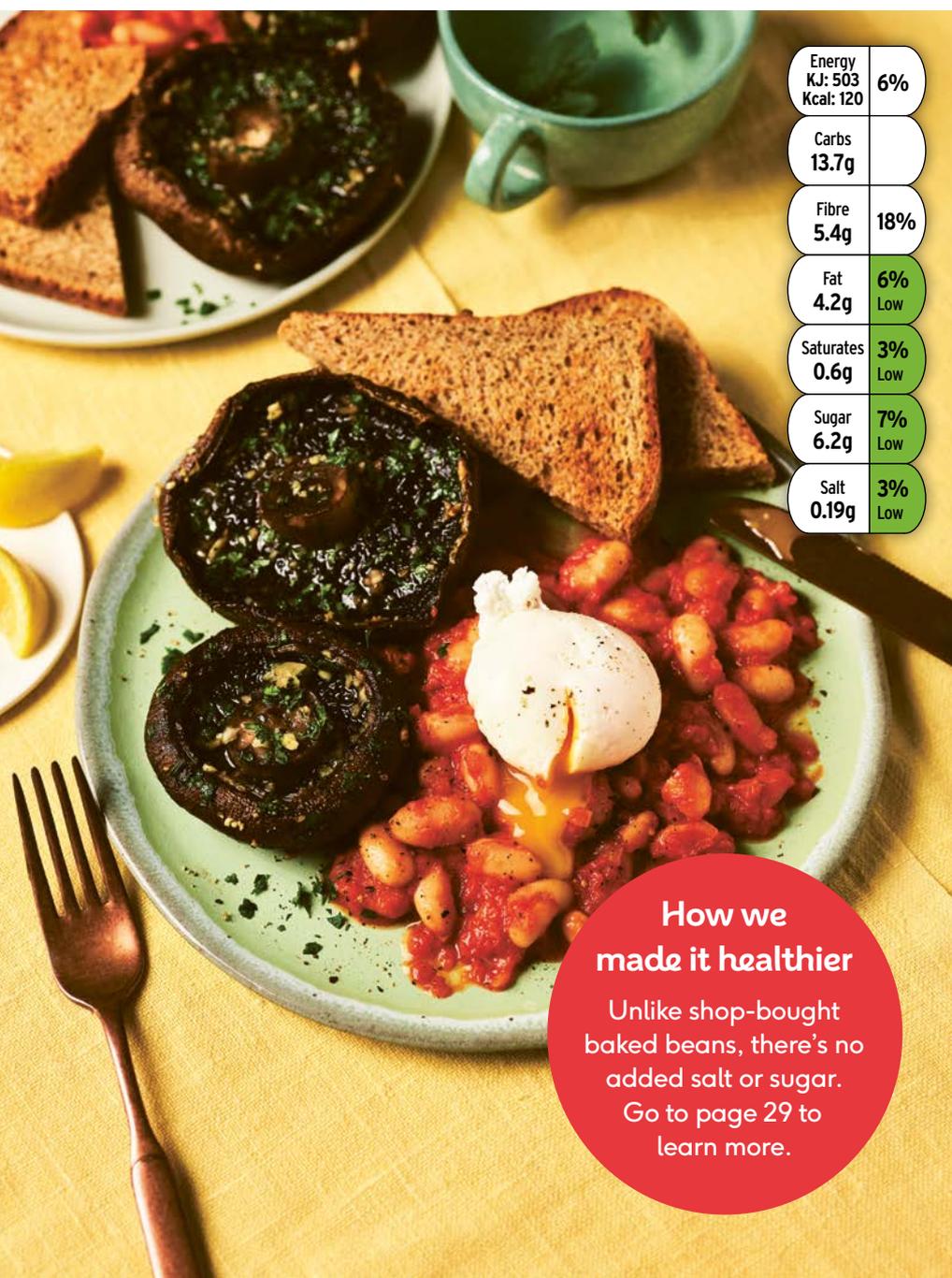
Serves 4 | Mushrooms not suitable for freezing; beans suitable

Ingredients

2 cloves garlic, crushed
1 tbsp olive oil
4 large Portobello mushrooms
3 tbsp chopped parsley
1 tsp dried mixed herbs
2 tbsp lemon juice

For the baked beans:

1 tsp vegetable oil
½ onion, peeled and diced
1 tsp Dijon mustard
1 tbsp apple cider vinegar
400g (14oz) can chopped tomatoes
400g (14oz) can cannellini beans, drained



Energy KJ: 503 Kcal: 120	6%
Carbs 13.7g	
Fibre 5.4g	18%
Fat 4.2g	6% Low
Saturates 0.6g	3% Low
Sugar 6.2g	7% Low
Salt 0.19g	3% Low

How we made it healthier

Unlike shop-bought baked beans, there's no added salt or sugar. Go to page 29 to learn more.

- 1 Heat the oven to 180°C/160°C fan or gas mark 4.
- 2 Mix the garlic with the olive oil, then brush all over the mushrooms and place on a baking tray. Sprinkle with chopped parsley and mixed herbs.
- 3 Bake for 10-12 minutes or until tender. Drizzle with the lemon juice just before serving.
- 4 While the mushrooms are baking, heat the vegetable oil in a small saucepan and fry the onion gently for 5 minutes or until transparent and tender.
- 5 Add the remaining baked beans ingredients and bring to the boil, then simmer for 10 minutes and serve on toast with an egg, if liked. ●

Tell us what you think

We'd love to hear your thoughts on our recipes, and any tweaks you made to them.

- ▶ Email us with photos of your dishes to hmeditor@bhf.org.uk
- ▶ Go to **page 7** for more ways to contact us.

Worst vegan foods

Our dietitian uncovers which plant-based meals and snacks you should cut back on



Tracy Parker
Senior Dietitian,
British Heart
Foundation

There's good evidence that including more plant-based foods in your diet – like wholegrains, beans, lentils, nuts, fruits and vegetables – can lower your risk of heart disease. But plant-based is not automatically better.

Vegan labels can appear on foods that are loaded with salt, sugar and additives, making them just as unhealthy as their animal-based counterparts.

Here are some of the unhealthiest vegan foods to cut back on:

Meat alternatives

These faux meats are made to look, taste and feel like real meat – think vegan burgers, bacon or nuggets.

They often use proteins like soy, peas, lentils, tofu and mushrooms, which are lower in saturated fat than meat.

However, many are high in added fat, including saturated fats, from ingredients like coconut oil, as well as added salt, sugar and artificial ingredients.

Better choices are whole, plant-based proteins like lentils, chickpeas, tofu, plain tempeh (made from fermented soybeans) or homemade bean or mushroom burgers. ▶



Faux fish and seafood

From fish-free cod and salmon to vegan crab sticks, faux fish products are readily found on supermarket shelves.

To mimic the taste of fish, they are usually coated in batter or breadcrumbs with added fat, salt and additives. They also tend to be lower in protein and, unless fortified, lack healthy omega-3 fats naturally found in oily fish.

Look for products with fewer additives that are lower in salt and saturated fat, and fortified with omega-3s, often from algae oil.

Or try replacements like artichoke hearts, giant oyster mushrooms, cauliflower, jackfruit or firm tofu.

Vegan eggs

Vegan eggs are available as powders, liquids or pastes. They are lower in saturated fat than regular eggs, contain no dietary cholesterol and come with extra fibre from ingredients like pea, chickpeas or mung beans.

But they often have less protein and more salt and additives.

Choose products with wholefood ingredients and minimal additives. For baking, try homemade alternatives like apple sauce, silken tofu, flax or chia seeds.



Plant-based dairy

Vegan cheese, butter and fat spreads often swap dairy for coconut or palm oil, making them high in saturated fat. And they sometimes come with added salt.

Vegan cheese also tends to be lower in protein and calcium – two key nutrients found in traditional dairy.

Plant-based milk and yogurt alternatives are generally lower in saturated fat, but not all are nutritionally equal. Almond, coconut and oat options often lack protein – sometimes they have less than 1g per 200ml serving. And they can include added sugars such as agave, date syrup or fruit juice concentrates.

Not all dairy substitutes have added calcium, vitamin D or B12 – key nutrients that people who are avoiding dairy need to replace in their diets. Look for options with these added nutrients, minimal added sugars and lower levels of salt and saturated fat.

For savoury flavours try spreads made from wholefoods: hummus, avocado or tofu with added nutritional yeast.

You can also add nutritional yeast for a cheesy flavour – it’s low in salt and comes with added vitamin B12, a valuable addition to a plant-based diet.

Vegan snacks

Many vegan crisps, crackers, meat-free jerky and snack bars are high in salt, saturated fat and artificial flavourings, while they are low in fibre.

Instead, try whole foods like a handful of unsalted nuts or homemade roasted chickpeas, edamame, kale crisps or popcorn.

Vegan biscuits, cakes, muffins and fruit bars may include healthy ingredients like nut flours, seeds and fruits, but often come with added sugars, saturated fats and additives.

Switch to naturally sweet fruit like bananas and dates, or unsweetened dairy alternative yogurts with fruit. ●

“Vegan foods can be as unhealthy as their animal-based counterparts”



Simple swaps for healthier vegan eating

Replace plant-based foods that are high in saturated fat, salt and sugar with whole food alternatives

Instead of... Plant-based burgers and bacon

Try... Tempeh strips or giant mushrooms

Instead of... Vegan faux fish

Try... Firm tofu and seaweed

Instead of... Vegan butter

Try... Mashed avocado or 100% nut butter

Instead of... Vegan muffin

Try... Wholegrain toast with mashed banana



Ask our dietitians

Our experts answer your questions on eating and drinking for a healthy heart



Tracy Parker
Senior Dietitian,
British Heart
Foundation

Q: Are decaffeinated coffee and tea good or bad for you?

A: When caffeine is removed from tea and coffee, the main change is the removal of the caffeine itself. Decaf tea and coffee retain their antioxidants, the plant chemicals that have been linked with better gut and heart health.

Some people worry about caffeine's links to heart health due to its stimulating effects. But research shows having moderate amounts of caffeine (about 400mg of caffeine a day, which is about four cups of regular coffee or eight cups of regular tea) should not harm your heart, cholesterol or heart rhythm.

However, some people are more sensitive to caffeine, which can lead to anxiety, jitteriness or heart palpitations. If this sounds like you, it might be wise to limit how much caffeine you're having and choose decaf coffee or tea.

Caffeine can interfere with sleep, which can cause insomnia or restless nights. Reducing how much caffeine you have, or switching to decaf coffee or tea after midday, may help you get a better night's rest.

Remember herbal teas such as peppermint and ginger are usually caffeine free, but green tea contains around 30mg a cup. And if you're switching to herbal teas, watch out for liquorice tea – regularly drinking more than one cup a day is not advised, especially if you have high blood pressure.

Q: Can you eat too much fibre?

A: You might have heard of the trend 'fibremaxxing', where people eat lots of high-fibre foods such as wholegrains, pulses, fruit and veg, seeds and nuts.

To 'max out' meals even further, some people add supplements and powders made from concentrated fibre sources like bran, chia, flaxseeds and psyllium husk.

Having higher amounts of fibre in your diet is linked with a lower risk of heart and circulatory disease, type 2 diabetes and some cancers.

In the UK, adults are recommended to eat 30g of fibre a day, but most fall short, averaging just 17g a day. That means many of us could benefit from eating more.

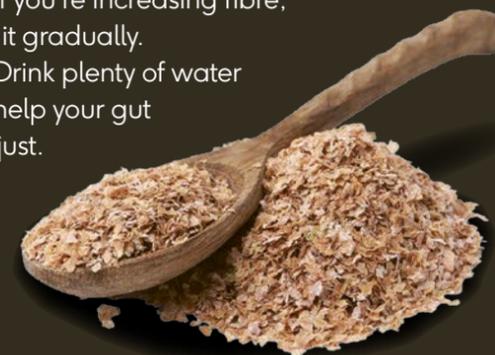
But fibremaxxing can be problematic if taken to extremes. Going overboard – especially adding fibre too quickly or with supplements – can lead to symptoms including:

- ▶ bloating
- ▶ discomfort
- ▶ problems with absorbing nutrients like iron and calcium.

It's also not for everyone. People with Irritable Bowel Syndrome (IBS), Crohn's or other gut conditions may need individual fibre advice.

Balance is key:

- ▶ Aim for variety over quantity.
- ▶ Focus on whole foods, not fortified products or supplements.
- ▶ If you're increasing fibre, do it gradually.
- ▶ Drink plenty of water to help your gut adjust.



Q: Is baked beans on toast healthy?

A: A portion of baked beans (around 3 heaped tbsp) can count as one of your 5-a-day – just once though, no matter how much you eat.

The beans are packed with nutrients such as iron, zinc and B vitamins. And the tomato sauce is rich in lycopene, an antioxidant linked with a reduced risk of heart and circulatory diseases.

Baked beans are low in fat and high in fibre and plant proteins. Eating them with wholemeal bread adds extra fibre. Plus, the combination provides all nine essential amino acids (protein building blocks) you need from your diet.

However, look out for their salt and sugar content. A typical half can portion (207g) contains about 1.3g salt and 9g sugar. That's 21 per cent of the maximum recommended amount of salt and 10 per cent of the maximum recommended amount of sugar you should have a day.

Choose no-added sugar or reduced sugar and salt options. Be aware that curry-flavoured varieties, or those with cheese and sausages, can have more salt and fat. ●



Dell Stanford
Senior Dietitian,
British Heart
Foundation

Get your questions answered

- ▶ Find more answers online at [bhf.org.uk/ask-dietitian](https://www.bhf.org.uk/ask-dietitian) including: **Do carbs make you gain weight? Do I need supplements for better heart health?**
- ▶ Send your questions to hmeditor@bhf.org.uk
- ▶ Go to **page 2** for more ways to contact us.

“Sara has never let her heart condition define her”

Sara Kirby's extraordinary journey has filled her mum Ann's life with hope, love and gratitude. They are 34 and 62, and live in Carmarthenshire, Wales

“When you give birth, you expect to hold your baby in your arms. But when my third child, Sara, was delivered by caesarean section in January 1991, she was tiny and blue. I only glimpsed her briefly before she was whisked away to intensive care, leaving me with empty arms and my heart in my mouth. What was wrong with my little girl? I was absolutely terrified.

When I finally held her and fed her the next day, I was relieved – but noticed something different about her face. Two days later, her doctors suggested she might have Down's syndrome, which was soon confirmed with genetic tests.

What I felt in that moment was fear of the unknown, but also fierce love for my tiny girl. Little did I know what was to come.

Worrying signs Sara was unwell

At home, I noticed concerning signs. Sometimes, Sara seemed to pass out for a second or two, her colour changing, her body limp.

After I raised it at her six-week check, Sara was sent for a scan. We learned she had Tetralogy of Fallot, a congenital heart disease with four structural problems, including a hole between her

heart's lower chambers. She would need open heart surgery at two or three years old.

The idea of someone opening my tiny, precious baby's chest and performing surgery felt inconceivable. Until that time, we had to watch her closely and wait.

Those years were anxious. I barely slept, always listening for her breathing. Yet the looming surgery forced me and my husband, Andy, to cherish every day.

In early November 1993, when Sara was nearly three, she had her heart operation in Bristol Royal Infirmary. Five hours. That's how long she was in theatre. When I saw her afterwards, hooked up to wires and machines, my heart broke.

Doctors said it had gone well, though there was a small leak in her heart's mitral valve that needed monitoring.

We brought her home after 10 days but she seemed sad, her spark gone. Just before Christmas, I noticed she looked yellow. The doctors said she had a problem with her liver and she was rushed to Birmingham Children's Hospital.

Fighting for her life

Sara became desperately ill. Her organs were shutting down. Her doctors warned that she might not survive. We moved from south-west Wales to nearby to stay close.

Christmas was spent at her bedside. She was swollen with fluid, covered in tubes. Her doctors even



Sara has always had a big smile, even in the face of her childhood surgeries



“Survival is possible, happiness is possible. There is a future beyond fear”

suggested we bring her siblings, Joanne and Chris, to say goodbye.

A scan revealed Sara's mitral valve was severely affected. She needed a replacement. We gave our blessing. After surgery, she was fragile and swollen, and on kidney dialysis. But slowly, she began to recover. Weeks later, I saw her being wheeled down the corridor, awake. Pure joy. She had lost all muscle strength, but then one day she gave me the biggest smile. The nurses called her 'a miracle'.

After months in hospital, she came home in April 1994. She later developed endocarditis, an infection of the heart lining, but she was alive. And that was everything.

Growing up with challenges

Sara's heart has been monitored ever since. In 2010, at 19, she had another surgery: a new mitral valve and pulmonary valve.

Later, when she developed heart block, she had a pacemaker inserted. There were many times ►



Sara today,
with her dad
Andy, mum
Ann and
sister Joanne

when we thought we'd lose her. Yet here she is, 34 years old, living life to the full. Sara loves swimming and bowling. She lives in shared assisted housing nearby and fills our days with hugs and laughter.

Through it all, Sara has never let her condition define her. She proves children born with congenital heart disease can grow up to have fulfilling lives.

Talking to other parents helped us cope. The doctors and nurses who cared for Sara were extraordinary. Their dedication saved her life. And research is vital. Without advances in surgery and treatment, Sara might not be here. That's why I support British Heart Foundation (BHF).

Celebrating Sara's life

Alongside Sara's journey, I found my own way of coping: running. In my 40s and 50s, I began taking it seriously. One day Chris said,

'Shall we run the Swansea half marathon?'. I did - and I haven't looked back. Last October, I ran the Cardiff half marathon in aid of BHF. It's the perfect way to honour Sara's journey and give back.

Being Sara's mum has taught me resilience, patience and gratitude. I treasure the small moments: her smile, her giggle, her hugs. Even in the darkest times, there can be light.

Sara is my miracle. Proof that hope can carry you through, that love can sustain you and that research changes lives.

I share Sara's story for every parent facing the terrifying reality of a child with a congenital heart disease. I want them to know survival and happiness are possible. There's a future beyond fear.

As I laced up my shoes for the race in Cardiff, I carried her story with me, step by step. Because this isn't just her journey, it's ours. And it's filled with hope and love." ●

How BHF-funded research helped

Every year, around 50,000 people in the UK are fitted with a pacemaker – a small device that helps to manage abnormal heart rates and abnormal heart rhythms.

But in the early 1960s, pacemakers were far from perfect. These early pacemakers were bulky, used a lot of power and had to be recharged in hospital.

With the help of one of BHF's earliest research grants, that changed, with advances in pacemaker technology paving the way for the sophisticated devices we have today.

Thanks to this progress thousands of people live longer, healthier lives with the people they love.

Find out more about how BHF funds groundbreaking research at [bhf.org.uk/thisisscience](https://www.bhf.org.uk/thisisscience)

Get more info and support

► If you want to learn more about congenital heart disease go to [bhf.org.uk/congenital](https://www.bhf.org.uk/congenital)

5 ways to help loved ones get healthy

Tips on supporting family and friends to live a healthier lifestyle, whether it's being more active, eating nutritious meals or giving up smoking



2 Avoid information overload

Sharing articles or TV programmes about healthy living can be useful, but too much advice can start to feel stressful. And bombarding someone with health messages may make them switch off. Instead, keep it simple and supportive.



1 Really listen

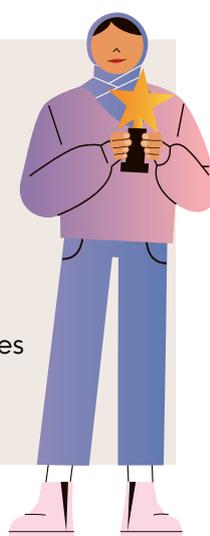
If you want someone to hear your advice, show that you're listening first. Ask how they're feeling and what's working for them. If they say exercise makes them feel better, but they do not have time for the gym, suggest something simple like walking instead of driving into town. The timing of advice matters just as much as the advice itself.

3 Focus on the here and now

Big health goals, like giving up smoking and doing more exercise, can feel overwhelming. To help, remind your loved one of the immediate benefits of being healthier. For example, if they've gone a month without cigarettes, talk about how much money they've saved and how they're less breathless.

4 Stay positive and celebrate progress

Supporting someone through lifestyle changes requires empathy, patience and positivity. If someone slips up, do not frame it as a failure. Encouragement is far more motivating than criticism. Remind them of what they've already achieved, whether it's losing weight, saving money or simply trying hard. Praise their efforts and successes both big and small. Listen to their needs and celebrate every step forward.



5 Remove temptations

If someone is trying to cut back on unhealthy foods, alcohol or smoking, do not tempt them by having those things around them. Eating, drinking and smoking are social behaviours, so reducing triggers makes it easier for them to stay on track.





Dr Mark Griffiths
(DClinPsy),
Consultant Clinical
Psychologist,
Liverpool Heart and
Chest NHS
Foundation Trust

How to deal with depression

Feeling down after heart problems?
A clinical psychologist explains how
to recognise depression and
shares tips to ease symptoms



It's normal to feel down sometimes, especially when you are coping with a health condition, recovering from surgery or experiencing other major difficulties.

But if the feelings do not pass and you feel persistently sad for weeks or months, you may have clinical depression (also called major depressive disorder). It's a medical condition that affects your mood, energy and motivation over a longer period.

If left untreated for a long time it can also impact your wider health.

Depression is a genuine health condition with real symptoms. It's nothing to do with willpower, and it does not mean you're weak. Like any illness, it deserves care and support—and with the right help, things can get better.

What causes depression?

Depression can happen for many reasons, but if you have a heart condition, you may be more vulnerable to it.

Heart disease can trigger hormonal and inflammatory changes in the body that can affect your mood.

Living with a heart condition can feel frightening and cause you to worry frequently, which in turn can lead to depression.

You may have to change or adapt your work, hobbies and exercises you enjoy. And you may need to start taking medicines or attending more doctor's appointments. This may feel like

losing part of your identity or that your identity has changed.

Not knowing when you might need surgery or face complications can create fear and hopelessness.

Experiences like having a heart attack, needing heart surgery or spending time in intensive care can leave a lasting emotional impact.

“Depression is a genuine health condition with real symptoms”

What are the symptoms?

How you might feel:

- ▶ down, sad or hopeless
- ▶ upset or tearful
- ▶ anxious or worried
- ▶ isolated and alone
- ▶ angry or frustrated
- ▶ feeling flat or numb
- ▶ losing motivation or interest in things you usually enjoy
- ▶ fatigue and lack of energy
- ▶ low self-worth or self-confidence
- ▶ aches and pains which do not have a clear cause
- ▶ thoughts of self-harm or suicide.

How you might act:

- ▶ avoiding meeting or speaking to friends or family
- ▶ having problems sleeping
- ▶ changes in appetite or weight
- ▶ difficulty remembering or concentrating

- ▶ difficulty making decisions
- ▶ moving or speaking more slowly than usual
- ▶ saying no to things you used to find enjoyable
- ▶ losing interest in sex
- ▶ finding it difficult to work or do everyday tasks.

How is depression treated?

Treatment for depression usually combines self-help strategies, talking therapies and sometimes medication.

You can access treatment through your GP or cardiology team. Or, in England, you can self-refer to talking therapies by searching online for “NHS talking therapies”.

Why it's important for you to get treatment

When you're living with a heart condition, untreated depression can make everyday tasks feel impossible. This can lead to missing medications, skipping doctor's appointments or letting healthy habits slide—all of which could make your heart condition worse over time or lead to more serious health problems.

Seeking support for depression can make a real difference and isn't just about feeling better emotionally. It can help you stay engaged in your care and reduce risks to your heart health. Getting treatment can improve your energy, motivation and sleep, making it easier to follow your treatment plan and find enjoyment in life again. ▶

10 tips to ease low mood

If you're feeling overwhelmed and looking for ways to ease your symptoms while waiting for treatment or alongside it, there are a few things you can try:

1 Stay connected by talking to others

Share how you feel with a friend or family member that you trust. Opening up can take you out of your own thoughts and help you to feel less alone.

2 Ground yourself in the present

Grounding practices, like the 5-4-3-2-1 technique, can help bring your attention back into the present by engaging your senses. To try this technique, begin by naming:

- ▶ 5 things you can see
- ▶ 4 things you can feel or touch
- ▶ 3 things you can hear
- ▶ 2 things you can smell
- ▶ 1 thing you can taste.

3 Boost your mood with movement

Getting physically active can help ease symptoms of depression as well as support your heart health. Start with what feels doable – a brisk 15-minute walk, a 10-minute home workout or even a bit of gardening.

Moving your body releases endorphins, helps to improve sleep and gives you a sense of accomplishment, which can all help lift your mood.



4 Practise mindfulness

Mindfulness techniques can help steer your mind away from distressing thoughts. One exercise you can try involves picturing in your mind a place that makes you feel calm, safe and comfortable. Perhaps it's a sandy beach, or a peaceful place in the countryside. Imagine yourself in this place and use your five senses to imagine what you might see, hear, smell, touch and taste there.

Listen to our three-minute guided mindfulness meditation at [bhf.org.uk/3-min-mindfulness](https://www.bhf.org.uk/3-min-mindfulness)

5 STOPP method

When you feel overwhelmed by strong emotions, try these steps to find a moment of pause and redirect your attention towards helpful action:

- ▶ **Stop:** Try to pause your thoughts for a moment. Picture a traffic light turning red.
- ▶ **Take a few breaths:** Focus on the sensation of breathing in and out slowly.
- ▶ **Observe:** With kindness and without judgement, notice what's going on in your mind and body. Picture the traffic light turning amber.



▶ **Pull back:** Try to reframe your perspective. Is there another way of looking at the situation? Will following these thoughts help or hinder you?

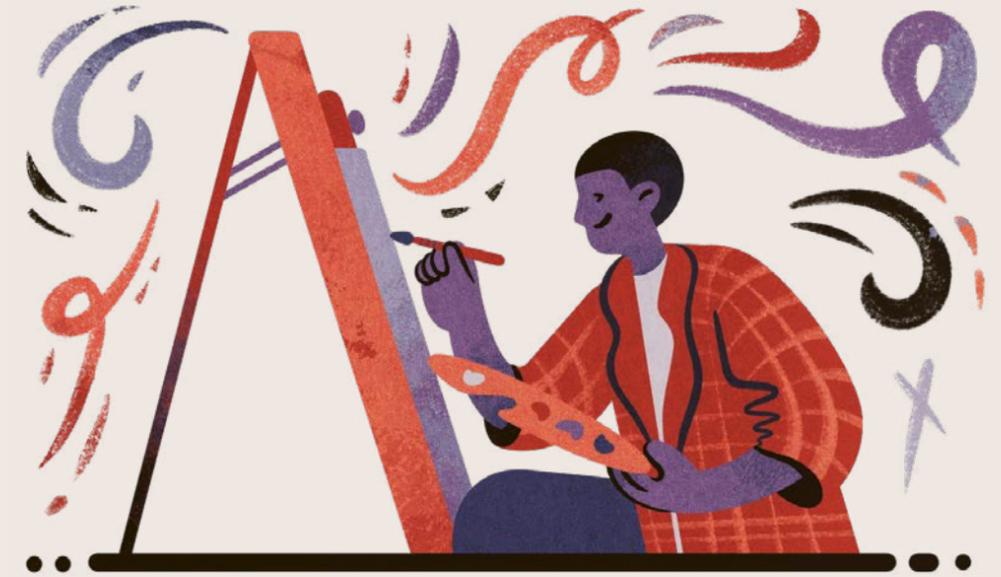
▶ **Proceed:** Think about what you could do next that might help you to get through this moment. It could be 'coaching' yourself through positive self-talk, going out for a short walk, calling in on a neighbour, or even having a shower. Choose an action, picture the traffic light turning green, and take that step.

6 Deep breathing

Slow, deep breaths can help calm the nervous system. To try diaphragmatic breathing, set a timer for 10 minutes and follow these simple steps:

- ▶ Imagine your stomach is a balloon inflating as you breathe in and deflating as you breathe out, while your chest stays relatively still.
- ▶ Place your hand on your belly, breathe in through your nose and feel your hand moving up as your belly rises.
- ▶ As you breathe out, notice your belly returning to a relaxed position and your hand moving with it.
- ▶ If you notice you've started thinking about something else, gently bring your attention back to your breathing and the rise and fall of your belly.

“Getting physically active can help ease symptoms of depression”



7 Distraction

With depression, it's normal to get stuck in your own head. Distraction can be a helpful way of steering your thoughts towards something else. You could:

- ▶ Listen to a podcast.
- ▶ Watch a favourite film.
- ▶ Call a friend.
- ▶ Go for a short walk.

8 Prioritise doing things you enjoy

Doing things you enjoy, even in small doses, can lift your mood over time. Make a short list of activities that usually bring you comfort or joy and plan to do one each day, even if it's just for a few minutes.

9 Keep to a routine

Sticking to a regular wake-up time and limiting long periods in bed can make a big difference. Try adding small, predictable activities – like a daily walk at the same time or another calming habit – to bring structure and control to your day.

10 Make small swaps

Eating well and staying active can feel hard when your energy is low.

Start with small, manageable food swaps – trade chips for a jacket potato or have plain popcorn instead of crisps.

Apply the same idea to moving: if a walk outside feels too much, try exercising at home or a few minutes of gentle stretching. A little movement is better than none and small changes add up over time. ●

Get more info and support

- ▶ Visit the mental health charity website [mind.org.uk](https://www.mind.org.uk) or call their helpline on **0300 102 1234** (9am to 6pm, Monday to Friday, except bank holidays) for support.
- ▶ Visit [samaritans.org](https://www.samaritans.org) or call their helpline on **116 123** (open 24 hours) for immediate support.
- ▶ Join our online community on [healthunlocked.com/bhf](https://www.healthunlocked.com/bhf) to talk to others with heart conditions.

Seated exercises

to help boost your mobility

Try these chair-based movements, designed to keep your muscles and joints moving freely

Good mobility can help you stay independent as you get older. It can reduce the risk of falls, age-related muscle stiffness and joint pain.

And there are plenty of ways to keep moving, even if you have trouble getting up and about.

These chair-based exercises can help to improve mobility by working the muscles and joints in different parts of your body. Try to perform each two to three times a week.

Start slowly and build things up gradually. As your body gets used to the exercises, keep progressing by doing more repetitions, increasing your range of movement or trying the suggested 'next step'.

Check with your doctor before you start if you have a heart or circulatory condition, or if you're concerned these exercises will make an existing medical issue or injury worse.



Hara Markos
Cardiac
Rehabilitation
Exercise
Practitioner, Royal
Free London NHS
Foundation Trust



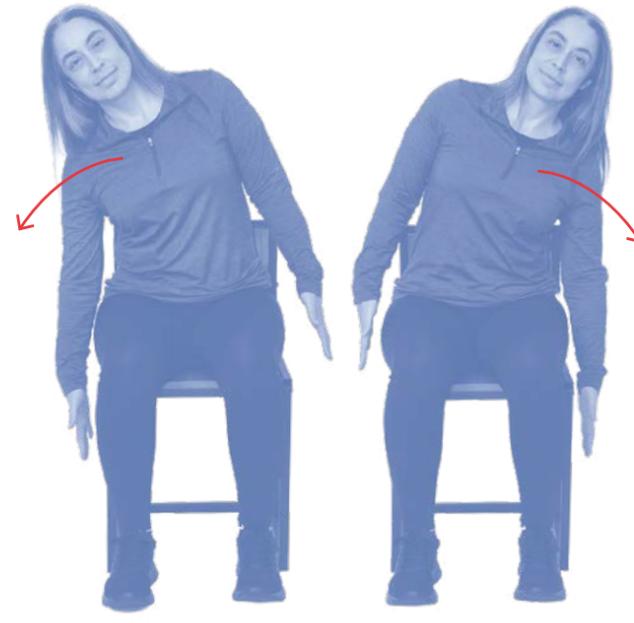
PHOTOGRAPHY: TIM BEKIR

Spine twist

- 1 Sit on a chair with your feet hip-width apart and your arms crossed over your chest.
- 2 Twist your upper body from the waist towards the side as far as feels comfortable, while keeping your hips facing forward.
- 3 Slowly twist back towards to the other side.
- 4 Repeat six to eight times in both directions.

Next step: Try the exercise with your hands straight out to the sides or put your fingertips on your temples with your palms facing forwards and elbows pointing out to the sides.

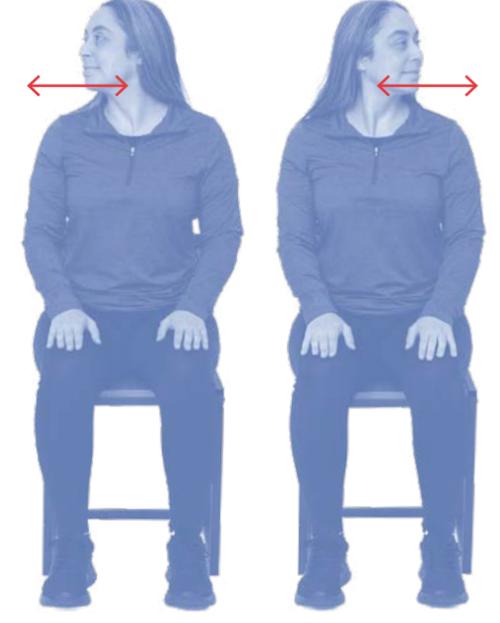
Tip: When exercising sitting down, choose a strong chair that's not too soft. Your feet should be on the ground with your thighs parallel to the floor when you're sat down.



Side bend

- 1 Sit on a chair with your feet hip-width apart and your hands by your side.
- 2 Slowly lean over to one side without moving your hips or leaning forwards or backwards.
- 3 Come back to the centre and then repeat on the other side.
- 4 Repeat six to eight times on each side.

Next step: As you lean over to the side, put your fingertips on your temples with your palms facing forward and elbows pointing out to the sides.



Head turn

- 1 Sit on a chair with your feet hip-width apart and your shoulders relaxed.
- 2 Move your head to look over one shoulder, then slowly come back to the centre.
- 3 Look over the other shoulder, then come back to the centre.
- 4 Repeat eight to 12 times in both directions.

Next step: Bring your ear down towards your shoulder, then rotate your head in a half circle by moving your chin down towards your chest and then bringing your other ear over to the other shoulder. ●



Try the full 15-minute workout

► For 7 more exercises and a follow-along video, scan the QR code on the left with your phone or visit bhf.org.uk/seatedexercises



Go to YouTube for videos

► Watch all our living room workout videos on YouTube. Scan the QR code or go to tinyurl.com/BHFworkouts

Q&A

What's next in ... stroke science

University of Edinburgh's **Professor Rustam Al-Shahi Salman** explains how research could help lead to better treatment and prevent strokes

Q: Why is research into stroke important?

A: There's so much more we need to do to reduce the burden of stroke.

Stroke is happening more often nowadays and worldwide, one in four people will have a stroke in their lifetime.

It's one of the UK's biggest killers and is the single biggest cause of severe disability. And beyond physical symptoms, survivors often

experience invisible effects such as fatigue and emotional distress.

Q: What causes stroke?

A: Most strokes are linked to:

- ▶ **atherosclerosis** (the build-up of fatty material in blood vessels)
- ▶ **small vessel disease** (where small blood vessels become damaged)
- ▶ or **atrial fibrillation** (a type of abnormal heart rhythm).

However, the cause is unclear

for a significant number. This is especially true for younger people, whose stroke rates are rising, and who often do not have the traditional risk factors. Research is increasingly focused on this, exploring possible links to diet, obesity and other aspects of modern living. For example, we're only starting to research the effects of vaping. It may prove to be a risk factor in the same way smoking is.

Q: Can new technology help?

A: New uses of imaging technology and biomarkers (indicators of biological processes happening in our bodies) are helping us identify underlying mechanisms that cause stroke, even when standard tests do not give clear results.

For example, some people may have a standard carotid Doppler ultrasound test and it does not show that an artery in their neck is significantly narrowed. But a PET scan – an imaging technique that labels specific molecules – might show that atherosclerosis in their neck could have caused the stroke and be suitable for treatment.

Q: How can strokes be prevented?

A: There are three main ways we can prevent strokes:

- ▶ **Lifestyle changes:** Research could identify effective approaches to reduce the rising numbers of people living with obesity, eating an unhealthy diet, and who are physically inactive – all factors that can increase stroke risk.
- ▶ **Screening:** Research can help us work out if screening tools like a heart tracing, blood test or smart watch can predict who is at risk so we can offer personalised prevention.

PHOTOGRAPHY: TIM BEKIR

Professor Salman, a consultant neurologist, uses imaging technology to scan arteries in the brain and neck

Worldwide
1 in 4
will have a stroke
in their lifetime

▶ **Medicine:** There's ongoing research into new medicines, or ways to combine existing medicines, to treat multiple stroke risk factors, such as high blood pressure and cholesterol. Trials can also help us to understand how to better use existing medicines. For example, I am leading the British Heart Foundation-funded trial called **ASPIRING** (aspiring.ed.ac.uk).

We're looking at whether antiplatelet medicines can prevent people who've had a haemorrhagic stroke (one that involves bleeding in the brain) from having another stroke or a heart attack.

Antiplatelet medicines are used to treat those who've had an ischaemic stroke (where a clot blocks a blood vessel). But currently

people who've had a haemorrhagic stroke are not given them.

Q: How might treatments evolve?

A: Ischaemic strokes are often treated with a thrombectomy, which gets rid of the blood clot. There's growing interest in this procedure being carried out with robots. This could mean more people are treated as there's currently a shortage of radiologists who can do it, especially in rural areas.

For haemorrhagic strokes, a minimally invasive procedure that removes blood in the brain has shown promising results in trials.

In rehabilitation, techniques like vagus nerve stimulation (delivering an electrical current to the nerve connecting your heart and brain) and digitally delivered therapy are being explored, but more evidence is needed to show how effective these are.

Regenerative medicine is looking at helping the brain repair itself. These therapies are still decades off being widely used but they offer hope for the future. ●

Fact or fiction?

We fact-check media reports on heart health so you have the full story

What happens when you stop taking Mounjaro?

Over the past few years, weight-loss injections like Mounjaro (tirzepatide) and Wegovy (semaglutide) have been shown to be effective for weight loss.

Excess weight increases the risk of cardiovascular disease, so taking these medicines to lose weight can reduce the risk of a heart attack or stroke. Research suggests weight-loss drugs can improve other cardiovascular risk factors too, including high blood pressure, high cholesterol, high blood sugar and a larger waist.

However, studies show many people regain a significant amount of weight when they stop taking these medicines. Now, research published in November 2025's JAMA Internal Medicine suggests other health gains are reversed too.

The study was an analysis of a previous trial called SURMOUNT-4, which included

670 people with obesity or excess weight who did not have diabetes.

The researchers analysed data from 308 participants who'd lost at least 10 per cent of their original body weight after weekly injections of Mounjaro for nine months. These people also experienced significant decreases in blood pressure, cholesterol, blood sugar and waist size.

They were then given a dummy injection with no medicine for a year. Afterwards, 82 per cent had regained at least one quarter of the weight they'd lost. And around 24 per cent had regained three quarters to all of it.

Importantly, those who put on the most weight lost the most health benefits. They had the greatest reversal in reductions of blood pressure, cholesterol, blood sugar levels and waist size.

There were no obvious reasons why some people regained

more weight than others, said the researchers. But on average, those who lost the least weight on Mounjaro gained more weight when they stopped. Many UK media outlets reported on the study. The Daily Mail's headline – "This is how much weight you'll gain back after quitting Mounjaro" – was misleading. The study did not find a clear way to predict how much weight people will regain when they stop the drug.

OUR VERDICT

This study supports NHS England's recommendations that people taking weight-loss injections should eat a balanced diet and regularly exercise to prevent weight gain when they stop. But more research is needed to find out how stopping these injections impacts the risk of cardiovascular disease.



“Those who put on the most weight lost the most health benefits”



Does severe heartburn increase the risk of having a heart attack?

Heartburn affects up to one in every four UK adults. But despite the name, it's not related to your heart – it's caused by acid in the stomach flowing up into the food pipe (acid reflux). However, new research shows people with severe acid reflux may be at a higher risk of heart disease.

The 2025 study in the Journal of Gastroenterology and Hepatology found that people with severe acid reflux were 27 per cent more likely to have a heart attack than those without it.

The researchers from the United States examined six studies covering around 1.3 million people. The studies were observational, so did not prove acid reflux caused the participants' heart attacks, just that the two conditions were linked. Lifestyle factors that increase the risk of acid reflux – such as too much alcohol, smoking and excess weight

– raise the risk of a heart attack too. The researchers said inflammation caused by severe acid reflux “may contribute” to heart attack risk, but evidence was limited. However, the Daily Mail's story said inflammation was “likely to be the cause”, overstating their carefully worded findings.

OUR VERDICT

There's not enough evidence to say that severe acid reflux directly increases your chances of having a heart attack. However, lifestyle changes, such as drinking less alcohol, stopping smoking, and losing excess weight will lower the risk of both. ●

Find more online

► Other fact-checks include: **Can antidepressants affect your heart health?** Go to bhf.org.uk/factcheck

Science news

Discover the lifesaving research BHF is funding

Half of angina cases missed

One in two people with chest pain (angina) from coronary heart disease may be missed because the standard angiogram test cannot always spot disease in tiny blood vessels, reveals University of Glasgow research using MRI scans that was funded by British Heart Foundation (BHF).

Heart attack test in 15 mins

Tests for troponin – a protein released when the heart is damaged – can tell doctors if someone has had a heart attack, but results can take two hours. Now a new 'on-the-spot' troponin test can pick up heart attacks in just 15 minutes, according to University of Edinburgh researchers.



Scan finds heart failure risk

A carotid ultrasound – a painless scan of the major neck arteries – could identify people at high risk of heart failure, say University College London researchers. They scanned 1,600 men and found those with the least flexible arteries were 2.5 times more likely to develop heart failure than those with the most flexible.



British Heart
Foundation

Save 10%
with code
FITNESS10

Discover fitness equipment designed for you

Take charge of your heart health with our range of exercise equipment.

- Ideal for beginners or those getting back into fitness.
- Dumbbells, resistance bands, yoga mats and more.
- Prices start from just £8. **Save 10% with code FITNESS10.**
- All profits help fund lifesaving research into cardiovascular disease.



Scan QR code to
discover our range

Explore the collection: bhf.org.uk/getfit

Excellent  4.8 out of 5 based on 7486 reviews  Trustpilot

T&C's: Offers and discounts are subject to availability and may vary across products and devices. Site-wide promotions are available for a limited time only and may change without notice. Please check individual product pages for current pricing and promotional details. British Heart Foundation is a registered charity in England and Wales (225971), Scotland (SC039426) and the Isle of Man (1295).

