

## QRISK score explained

How doctors estimate your risk of cardiovascular disease

## Mood-boosting foods

What to eat to feel your best and where to cut back



## 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...

ur Autumn issue sees us chatting to Olympian Roger Black about his open heart surgery to replace a faulty valve, which he'd lived with all his life (page 10). Like anyone facing a major operation, Roger was scared, but now, looking back, he shares his tips for a good recovery. We also visit Bernadette Williams in Wales, who talks about the terrible impact high cholesterol has had on her family (page 30), and how she was treated for familial hypercholesterolaemia.

We've also got a useful article on QRISK, the tool used by doctors to estimate your risk of cardiovascular disease (page 18). One way to reduce your risk is to be physically active. Turn to page 33 for ways to keep moving inside in cold weather and page 34 for easy aerobic exercises to try at home.

## 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.

## Meet our experts

We hear from some of this issue's trusted contributors

## Dell Stanford, dietitian

Registered dietitian Dell Stanford joined BHF after 15 years as an NHS dietitian, working with people in cardiac rehab. On **page 25**,

she tackles myths about mood-boosting foods. She says: "Nourishing your body with a healthy, balanced diet can also help your mental wellbeing."

## Dr Rikesh Rajani (PhD), researcher

"Despite how common it is, vascular dementia research has been understudied and underfunded," according

to Dr Rajani. As a group leader of the recently founded BHF-UK DRI Centre for Vascular Dementia Research, he hopes to change this. Find out about the exciting new science happening in this area on **page 40**.

## Dr Katie Murray, psychologist (DClinPsy)

On page 36, Dr Murray gives tips to deal with anxiety if you have a heart condition, something she does as part of her role as a clinical psychologist at Imperial College Healthcare NHS Trust. She says: "If worries about your heart are interfering with your normal life, it's important to seek help."

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 2025. G204/0925

## In this issue



## 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

## Real life

## 10 Roger Black shares his story

The Olympic silver medallist describes his open heart surgery

### 30 Familial hypercholesterolaemia

How Bernadette was treated for inherited high cholesterol that was linked to a family history of heart attacks

## Understand health

## 14 Heart failure stages

How doctors use your symptoms to categorise your condition

### 16 Ask our nurses

What are the different types of heart attack? Plus, how to work out your ideal heart rate when exercising

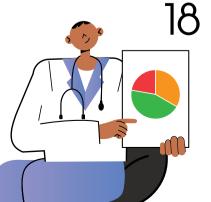
## 17 Ask our quest expert

How are LVADs used to treat heart failure?

## 18 QRISK explained

A guide to how doctors can estimate your risk of heart and circulatory disease









## Eat well

## 22 Recipes: pull out and keep

Take a world tour with Indian spiced scrambled eggs, Caribbean fish curry, and black bean sweet potato burritos

## 25 Mood-boosting foods

Our dietitian shares tips on how to eat to feel your best

### 28 Ask our dietitians

Is honey good for you? How much protein do I need? And what are triglycerides?

## Get active

### 33 Work out at home

Discover five easy ways to keep active indoors

### 34 Aerobic exercise

An expert shows you how to do simple cardio exercises

## Live well

## 36 Heart health anxiety

Having difficulty coping emotionally? Get helpful tips from a psychologist

## Science

## 40 Vascular dementia

A leading scientist answers questions on how research may improve treatment

### 42 Fact or fiction?

We delve into media claims about weight-loss injections and whether statins can lower the risk of dementia

## 43 Science we're supporting

BHF-funded projects are looking at how hope affects the heart, a link between the body clock and a heart rhythm, and how to reduce inequalities in heart health 28



## What we've learned this issue

While sugar highs from cakes or sweets give you a temporary boost, eating a healthy, balanced diet is the only way to feel good in the long term. See page 25.

Your age, sex, ethnic background, where you live and family history can all affect your risk of developing heart and circulatory diseases.

See page 18.

Cholesterol is not the only fat in your blood that you should keep an eye on – for heart health your triglyceride levels matter too. See page 29.

## Your say

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



I've spent some time recently reading through personal medical records from the past 10 years. Looking through this material has given me a couple of 'light bulb' moments about my health. Doing this, along with reading articles in Heart Matters, is a good combination to keep on getting more light bulb moments!

Mark Wilkinson, Leicestershire

## Joanna Hartley, Heart Matters Editor, says:

That's a brilliant approach.
Reviewing your own medical records alongside trusted resources like Heart Matters can really empower you. It's a great way to understand your heart health journey and spot patterns or questions to ask your doctor.

## Walking's many wonders

Walking has helped me in many ways (bhf.org.uk/walking). I wake up at 5am each day and walk 40 minutes to the beach to watch the sunrise. I average about 15,000 steps a day. This has improved my mood, sleep and weight, and has helped me make new friends and enjoy life.

Theresa Wadalla, Sydney, Australia

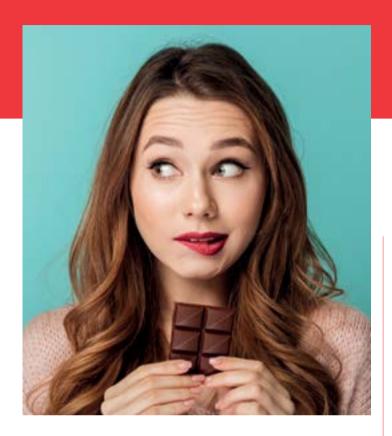
## Weight loss solved my sleep apnoea

Just over a year ago I was on oxygen 16 hours a day and used a sleep apnoea machine during the night, and was more, or less, confined to the house. Then I read an article in Heart Matters and started a weightloss programme through my GP. I have since lost over four stone. I'm no longer on the sleep apnoea machine, and I have been taken off the oxygen, too.

Robert Fleming, Angus

## Ruth Goss, BHF Senior Cardiac Nurse, says:

Robert, we're so pleased our article helped you take steps to manage your weight and that it's helping your health. Taking care of your weight can also improve your heart health. We hope you keep achieving your goals.



## Can chocolate raise cholesterol?

I have just been diagnosed with a high level of cholesterol. which has come as a surprise. I am 66, fit and healthy, and a lifelong vegetarian. I also have coeliac disease, so my normal diet is rather bland. As the cholesterol blood test was conducted over Easter I was wondering could all the extra chocolate I ate during the holiday have caused this? How long should I wait to get another test?

Bernadette Warren, Cambridgeshire

## Tracy Parker, BHF Senior Dietitian, BHF says:

It's understandable you were surprised by your high cholesterol, especially given your healthy lifestyle. But, genetics, age, and other factors can play a role in cholesterol levels, not just diet. Easter treats may have had a small effect. but likely not the main cause. Check your levels in six weeks after returning to your usual diet. Eating gluten-free fibre like oats, beans and veg

## 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** to take the survey. It will take about 10 minutes and we'll use your answers to shape future articles in the magazine.

Have your say by 30 December 2025.

can also help to lower your cholesterol.
Go to bhf.org.uk/reducecholesterol for more information.

## Perfect exercises if you're in pain

I'm recovering from spinal fractures and have done hardly any exercise for eight weeks due to pain. But today, I tried your balance exercises (Summer 2025, **bhf.org.uk/** balance). I avoided ones that moved my leg backwards and kept the Zimmer frame nearby just in case, but otherwise I found them very gentle and helpful. Judith Harper, Essex

## **Guilt-free flapjacks**

I made your healthier flapjacks recipes (Spring 2025, bhf.org.uk/healthy-flapjacks). I sprinkled them with pumpkin, sunflower and sesame seeds for extra crunch and goodness. Delicious and guilt-free! Susanne McKenzie, Warwickshire



## 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



with heart failure

Join us for our next online Q&A called 'Heart failure: how do I live well with this condition?' The free session, which is part of our Heart Matters Live series, is at 7pm on 4 November 2025.

During the live event, you'll get the chance to put your own questions to:

- Someone with experience of living well with heart failure.
- British Heart Foundation (BHF) Senior Cardiac Nurse, June Davison.
- A leading BHF-funded scientist who researches heart failure.

"Heart failure is when your heart can't pump blood around your body as well as it should, and it can be a challenging condition to live with," June Davison says.

"Join us at Heart Matters Live to get tips on how to live as well as you can. You will also hear from one of our leading researchers and you can put your questions to any of us on the panel."

Sign up at **bhf.org.uk/** heartmatterslive. You can watch previous episodes too, such as how to reduce your risk of a heart attack.

## Jump to it!

Have you ever tried skipping for fun or fitness? Well, we're asking you to take up your skipping rope again for our new Virtual Skipping Challenge.

This November we are calling on people to do 100 skips a day for the whole month. As it's a virtual challenge you can complete it in a place and at a time that suits you.

To take part, you can either ask friends, family or colleagues to sponsor you or make a one-off donation to BHF. You'll be helping to fund vital lifesaving research. Find out more at

bhf.org.uk/ skippingchallenge



## Become a CPR hero like Ellie

Ellie Harries wants to encourage everyone to learn CPR (cardiopulmonary resuscitation) since she used her own training to help save the life of her beloved 90-year-old grandmother, Ann.

In March 2024, Ellie, a social media manager from Salisbury, Wiltshire, used BHF's free digital CPR-training course, RevivR. Two weeks later, the 31-year-old found Ann unresponsive in the bathroom.

"All the colour had drained from her and I couldn't find a pulse," Ellie recalls. "I pulled her on to the floor and started chest compressions. I called 999 and the call handler was brilliant. He encouraged me to continue CPR, and after a time she opened her eyes."

Ann's doing well and has only just retired as a volunteer at Salisbury Cathedral. "She's a walking miracle. I want to encourage everyone to learn CPR."

Visit **bhf.org.uk/revivr** to learn CPR in 15 minutes.

## Help at your local BHF shop

Volunteering at a BHF shop is a great way to meet new people and share your skills. We've got lots of different roles, from department coordinators, who sort and display donations, to digital assistants, who keep online listings of what's in each store up to date.

We also need drivers to collect stock, as well as people to recruit volunteers. You can work behind the scenes or have a customer-facing role. To find out more, including how to apply, visit **bhf.org.uk/volunteer** 

## Take part in an event

## All year round

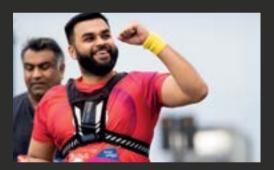
## **Ultra Challenge Series**

Join the UK's biggest trek series. Walk, jog, or run along stunning coasts or beautiful trails in the British countryside. **bhf.org.uk/hmultrachallenge** 

Sept 2025 - May 2026

## AJ Bell Great Run Series

From thrilling 5ks to the iconic Great North Run, these events bring together communities in different cities. They are for new and experienced runners. bhf.org.uk/hmgreatrunseries



21 June 2026

## London to Brighton Bike Ride

Take in the sights on a mostly traffic-free route from city to coast on our iconic 54-mile bike ride. **bhf.org.uk/l2b** 

27 June 2026

## **Bournemouth Pier to Pier Swim**

Take on the epic open water swim from Boscombe Pier to Bournemouth Pier.
Sign up at **bhf.org.uk/hmpiertopier** 

## Find out more

► Call **0300 222 5721** (weekdays 9am to 5pm) for event information.



When you think of Olympic athletes, you picture strength, resilience, and peak physical health. But heart disease does not discriminate, even against those who've stood on the podium.

Roger Black, who won the Olympic 400m silver medal in Atlanta in 1996, recently underwent open heart surgery after a routine check-up for his lifelong heart condition. It's a reminder that heart surgery can be daunting no matter who you are.

## A kid who loved sport

Roger's heart disease journey began at 11 years old. "I was just a kid who loved sport," he recalls. "I was the fastest in school, playing football and rugby. I felt absolutely fine." But during a routine school health check, a nurse heard something unusual in his heartbeat. That led to a referral to Southampton General Hospital, where he was diagnosed with a bicuspid aortic valve.

This is a congenital heart condition, which is a heart problem that you are born with. Congenital heart disease affects one to two per cent of people in the UK.

MAIN PHOTOGRAPHS: TIM BEKIR, ROGER IN THE 1996 OLYMPICS: MARK SHEARMAN

Roger won silver in the 400m at the 1996 Atlanta Olympics

A bicuspid aortic valve is a heart valve with only two leaflets (or cusps) instead of the usual three. This can lead to the valve becoming narrowed or leaky over time, and often requires ongoing monitoring or treatment.

Roger remembers being told he had to stop doing any competitive sport for the foreseeable future. But his doctors eventually cleared him to return to playing sport as long as he had regular check-ups. For the next 47 years, Roger attended the hospital once a year.

## Olympic highs to heart lows

Despite his diagnosis, Roger's athletic career flourished. He became a European champion and won a silver medal at the 1996 Atlanta Olympics for the 400m. But all the while, his heart was being monitored by specialists.

In September 2024, during what was supposed to be a routine check-up, Roger's world shifted.

"They did the echocardiogram, and it took longer than usual. Then two doctors sat me down and said: 'Things have changed'.

"The next day, my consultant called and said, 'the day has come, we need to get you into surgery'. Even though my underlying heart problem was ever-present, this was a complete shock," Roger recalls.

His aortic valve had deteriorated significantly. More urgently, his aorta, which is the main blood vessel carrying blood from the



"I had thought this day would come in my 70s. It came when I was 58"

heart to the body, had become dangerously enlarged.

This condition, known as an aortic aneurysm, can be life-threatening if the blood vessel bursts. "It was a ticking time bomb," Roger says. "I had thought this day would come in my 70s. It came when I was 58."

"This can't be happening to me. I've always been the strong one, the fit one"





## No training for heart surgery

Despite his athletic background, Roger was not immune to fear. "I was scared," he admits. "It's hard to know how to plan for it physically—it's not like preparing for a race that you know how far it will be and how fast you need to run. It's about surrendering control and that's hard."

He describes the days leading up to the surgery as surreal. "I kept thinking, 'This can't be happening to me.' I've always been the strong one, the fit one. But suddenly, I felt vulnerable."

Open heart surgery is exactly what it sounds like: the chest is opened, and the heart is operated on directly. In Roger's case, surgeons replaced his failing valve and repaired the aorta.

"I handed myself over to my surgeon and focused on what I could control, my recovery," he says. "I had to trust the team."

## Hard days in hospital

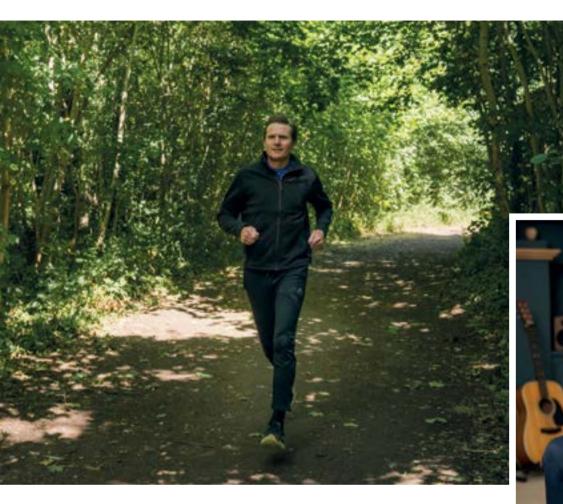
People undergoing heart valve replacement surgery often face a choice. You can choose a tissue (biological) valve, which may need replacing after 10 to 20 years, but does not usually require long-term medication. Or you can have a mechanical valve, which lasts longer, but requires lifelong blood thinning medicine. Roger chose a tissue valve.

His surgery went well, although he experienced some complications, including atrial fibrillation (AF), an irregular heartbeat which is common after heart surgery. He later underwent a procedure called a cardioversion that uses electric shocks to restore the heart to a normal rhythm.

"The hospital stay was tough," he says. "You can't move. You've got tubes everywhere. But every day, there's a little win. The doctors and nurses were absolutely fantastic."

## Home and in control again

"For anyone going through this, the best moment is getting home,"



Four months after surgery, Roger is back to jogging in his local woods

## "It's part of me now. It doesn't define me. But it's changed me. And I'm grateful"

Roger says. "Suddenly, you're in control again. You can lie in your own bed, eat your own food.

you start walking just a bit fur each day." He credits his record at home to the support of his Jules and son George. "I'm us the one looking after everyor else. But you have to let go." own bed, eat your own food. And you start walking just a bit further each day." He credits his recovery at home to the support of his wife Jules and son George. "I'm usually the one looking after everyone

He also harnessed the power of movement and mindfulness. "Walking is the best medicine. And I did a lot of visualisation, imagining the blood flowing through my new valve. It helped me connect with my body." Now, four months after the procedure, Roger's able to go jogging again.

## Surgery's lasting impact

One of the most worrying aspects of heart valve disease is how subtle the symptoms can be. Fatigue, breathlessness or feeling 'a bit off' can be dismissed as signs of ageing or stress, rather than signs the valve is not working properly.

Roger's wife, Jules, had noticed he was more tired and breathless, but he brushed it off. "I thought I was just getting older," he says.

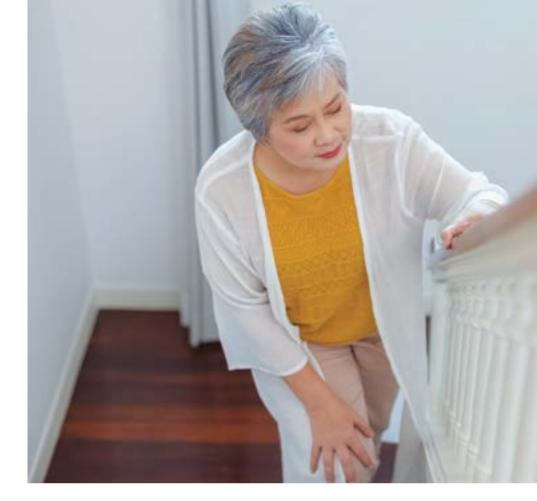
But having once shied away from talking about his heart condition, Roger now often speaks about the surgery he's had to fix it. "It's part of me now. It doesn't define me. But it's changed me. And I'm grateful."

## Get more info and support

Learn about heart valve disease:

bhf.org.uk/heartvalvedisease

For more on valve repair surgery: bhf.org.uk/valverepair





Ruth Goss Senior Cardiac Nurse, British Heart Foundation

## Heart failure stages explained

How do doctors classify your condition based on your symptoms? Find out from our cardiac nurse Being told you have heart failure can be a lot to take in, and understanding your condition can help you to feel more in control.

Heart failure means your heart is not pumping blood around your body as effectively as it should. It can be caused by a heart attack, high blood pressure, or another heart condition.

You may hear your doctor or nurse talk about 'stages' or 'classes' of heart failure. This refers to a classification system that describes the impact your symptoms are having on your daily life. It can help your healthcare team plan the best treatment and support for you.

The most commonly used system is based on the New York Heart Association (NYHA) classification. This divides heart failure into four classes (see opposite page).

But it's worth remembering that everyone experiences heart failure differently. And you might find you



## "You might find you move between classes of heart failure day by day"

move between the four classes. For example, your symptoms might improve when you receive treatment. Your class may even change day by day.

There are lots of different treatments for heart failure which can help to manage your symptoms. If you're worried about your symptoms changing, or what your classification means for you, speak to your doctor or nurse for more support.

## What are the four classes of heart failure?

## Class 1: No limitation of physical activity

This means that you do not experience any noticeable symptoms while you're doing your normal daily activities.

You can still do these activities without feeling abnormally breathless, tired or lightheaded.

## Class 2: Slight limitation of physical activity

This means you might notice some symptoms when you're doing your normal activities.

You feel comfortable at rest, but everyday activities like climbing stairs, brisk walking, or carrying shopping might leave you feeling breathless, tired or faint. You may also experience less common symptoms, such as a fast heart rate or palpitations.

This may be a sign that your heart is working harder to keep up with the demands of your body. Talk to your doctor if you notice any of these changes to see if you need any adjustments to your treatment.

## Class 3: Significant symptoms

This means your symptoms are getting in the way of daily life.

Everyday tasks, such as walking to the kitchen, may feel more difficult. You may need to take breaks when you're getting dressed or stop while climbing stairs.

## Class 4: Symptoms at rest

This means you're unable to carry out any physical activity without discomfort and experience symptoms when you're resting. You might feel breathless, exhausted, and uncomfortable, even when you're sitting or lying down.

## End-stage heart failure

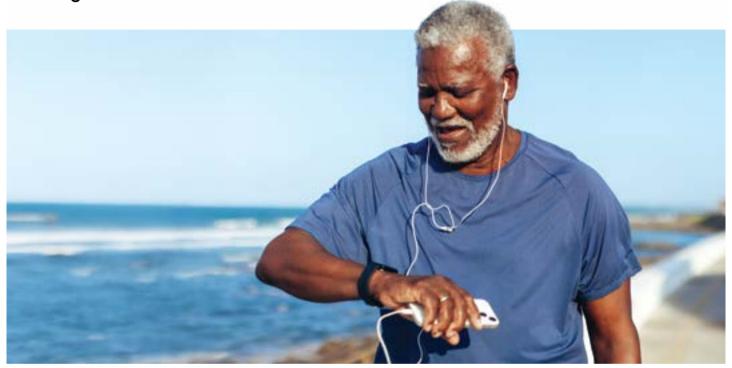
Doctors sometimes use the term 'end-stage heart failure'. There's no exact definition for it, but someone with end-stage heart failure may be in NYHA class 4 and treatments are not helping them, or they may need to go into hospital a lot. Being in class 4 does not automatically mean you're in end-stage heart failure. If your medical team thinks you're in end-stage heart failure, they'll discuss this with you and what your options are.

## Get more info and support

▶ Read more on heart failure at bhf.org.uk/heart-failure or speak to a cardiac nurse for free by calling 0808 802 1234 weekdays 9am to 5pm, excluding bank holidays, or emailing hearthelpline@bhf.org.uk

## 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: What should my heart rate be when I exercise?

A: Exercise raises your heart rate because your muscles need more oxygen and your heart pumps harder to deliver it. Exercising regularly helps your heart work efficiently. But it's important to know what your heart rate – the number of beats per minute (bpm) – should be when exercising.

This is called your 'target heart rate' and is around 50 to 70 per cent of your maximum heart rate. To work it out, subtract your age from the number 220 and calculate 50 to 70 per cent. For example, if you're 60, your maximum heart rate is 160 bpm (220–60), and your target range is 80 to 112 bpm.

You can also use the 'talk test' to see if you're exersing to the right intensity. This means if you feel warmer and breathe a little harder but can still talk while you're exercising, you're exercising at your target heart rate.

To check your heart rate, also known as your pulse, hold two fingers on the inside of your wrist and count the beats for a minute. Fitness trackers can monitor heart rate too, but they're not always accurate. If you feel unwell or your device shows worrying changes, check your pulse manually, or speak to your doctor.

If you're new to exercising after a heart or circulatory condition diagnosis, or returning to exercise, check with your doctor first.

► Go to BHF's target heart rate calculator tinyurl.com/target-heart-rate-calculator

## Q: What are the different types of heart attacks?

A: A heart attack (or myocardial infarction) is a medical emergency caused by a sudden loss of blood flow to the heart, leading to potential damage.



Ruth Goss Senior Cardiac Nurse, British

There are two main

types: STEMI, where the
coronary artery is completely blocked,
and NSTEMI, where it's only partially
blocked. Both are diagnosed using an
ECG (to detect heart signal changes)
and a blood test for troponin, a protein
that rises when the heart is injured.

A STEMI shows specific changes on an ECG, while an NSTEMI does not. But both require urgent treatment. An untreated NSTEMI heart attack can progress into a full STEMI, increasing the risk of serious harm to the heart.

Symptoms of both include chest pain (often heavy, tight or crushing), nausea or indigestion-like discomfort, and sudden anxiety. Symptoms can vary from person to person, so it's always best to call 999 immediately if you think you, or someone else, might be having a heart attack. The faster you seek help, the better.

If you've experienced a heart attack and you're not sure which type it was, ask your doctor or nurse to clarify.

# Allery proprogrammer of the second se

## Askour guest expert

Q: What is an LVAD and why would someone be offered one?

A: A long-term implantable LVAD, or left ventricular assist device, is a mechanical device that's used to pump blood around the body when the heart is too weak to pump blood on its own.

An LVAD does not replace your heart and is not an artificial heart. It's used to treat people with advanced heart failure who are waiting for a heart transplant. It is implanted in the left ventricle—the main pumping chamber of the heart—to help it to pump blood around the body. This involves major surgery under general anaesthetic.

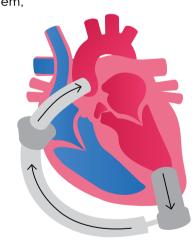
Fewer than 100 people each year in the UK are fitted with an LVAD. For them, it can be life-changing. People who are very limited in what they can do find they can return to a more active life. There are still challenges, like having a power cable that comes out through the skin of your abdomen and is at risk of infection. Some people live with an LVAD for several years, or even longer.

Read more about LVADs at bhf.org.uk/lvads



Dr Stephen Pettit Consultant Cardiologist at Royal Papworth Hospital NHS Foundation Trust

LVAD location It is implanted in the heart's main pumping chamber



## Get your questions answered

- ► Find more answers from our experts online at bhf.org.uk/ ask-expert including: Aortic stenosis: when do you need treatment? How often should I see my cardiologist?
- Send your questions to hmeditor@bhf.org.uk
- Go to **page 2** for more ways to contact us.

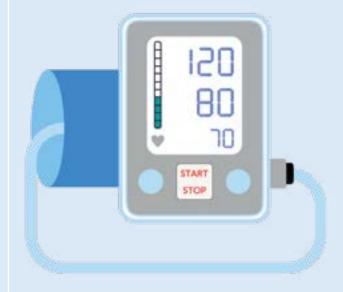
# Your guide to QRISK

The QRISK score is a valuable tool to understand your risk of heart disease. We answer your questions on how it works and what it means for your health

QRISK is an online calculator your doctor can use to estimate your risk of developing heart and circulatory diseases over the next 10 years. It looks at cardiovascular disease, which includes heart attack, stroke, angina and peripheral arterial disease.

Your score cannot definitively say if you will develop cardiovascular disease or not, but knowing your risk allows you and your doctor to take steps to reduce it, if needed.





### How does the QRISK calculator work?

The calculator uses a complex algorithm (a set of calculations based on research into large numbers of people) to generate your QRISK score.

It considers factors that influence your chance of developing cardiovascular disease. These include your age, sex, ethnic background, lifestyle, where you live, family history, certain existing medical conditions and if you have high blood pressure.

## When is QRISK used?

It's most often used in NHS England's Health Check, which is for people aged 40 to 74 who have not already been diagnosed with certain conditions that raise the risk of cardiovascular disease, like type 2 diabetes. Or your GP may use it if you've raised concerns about your heart health or your family's medical history.

It's not designed for people who already have cardiovascular disease, or take statins for high cholesterol, as they're already known to be at high risk.

## What does my QRISK score mean?

- Less than 10 per cent: This suggests you have a relatively low chance, less than 10 in 100, of developing cardiovascular disease in the next 10 years. It's still important to maintain a healthy lifestyle, especially as your lifetime risk is likely to be higher.
- ▶ 10 to 20 per cent: This means you're at moderate risk and have at least a 10 in 100 chance, and up to a 20 in 100 chance, of developing cardiovascular disease within 10 years. Your doctor will discuss lifestyle changes with you and may recommend taking a medicine, like a statin, that can help to lower your risk.
- ▶ 20 per cent or higher: This means you're at high risk, with a 20 in 100 chance or more, of developing cardiovascular disease within 10 years. Your doctor will recommend medicines to lower your risk, as well as lifestyle changes. They also may consider further tests or a referral to a specialist.

"Whatever your score, you can take steps to reduce your risk"

### Does QRISK have limitations?

QRISK mainly assesses your 10-year risk of cardiovascular disease, but there is another version that focuses on lifetime risk. You may be told that you have a low 10-year risk, but a high lifetime risk, especially if you're younger and have risk factors. This can be helpful in motivating you to make changes that could help you to stay healthy later in life.

However, the current version of the tool—called QRISK 3—does not fully consider some conditions now thought to increase your risk.

These include autoimmune diseases, learning disabilities, COPD (chronic obstructive pulmonary disease), certain cancers, severe mental illness, postnatal depression in women and pre-eclampsia. Talk to your doctor about how your individual circumstances could affect your risk of cardiovascular disease.

## I've got my QRISK score. What do I do now?

Whatever your score, you can take steps to reduce your risk. These include taking any medicines you're prescribed for high blood pressure or high cholesterol, eating a healthy diet, keeping to a healthy weight, being active, and quitting smoking.



## How AI will improve heart disease risk calculation

Artificial intelligence (AI) looks to improve tools like QRISK. This is because AI is good at analysing huge sets of data and spotting patterns.

It can look to see how genes, lifestyle factors and environmental influences interact to discover new risk factors for cardiovascular disease and to better understand existing ones. British Heart Foundation is funding researchers to develop new Al tools. At the University of Oxford, Professor Charalambos Antoniades and his team have developed an Al tool trained on CT scans to better identify which people with chest pain are at risk of having a heart attack.





"I thought I was just dealing with a pulled muscle. But after feeling intense pain, I realised something was seriously wrong. I found out later I was having a heart attack. Now, I'm committed to raising awareness about heart health. Donating to BHF is vital."

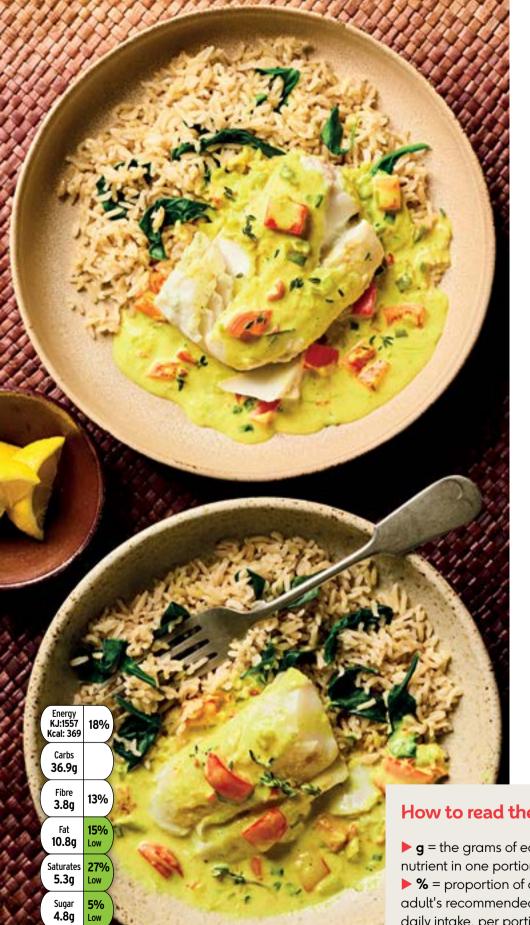
Over 50% of BHF-funded research comes from Gifts in Wills.

Search 'BHF Wills' or scan the QR code to get your free Will guide and learn how to leave a gift that saves lives.









0.42g

## Caribbean fish curry

Traditionally featuring snapper or bream, this Caribbean fish curry has bold flavours without added salt.

**Preparation time:** 10 minutes Cooking time: 15 minutes

Serves 2 | Not suitable for freezing

## Ingredients

2 snapper, bream or cod loins, approximately 125g each

1 tsp korma curry powder or Caribbean curry powder (choose one that does not contain salt)

1 tbsp lemon juice

2 tsp vegetable oil

2 spring onions, finely chopped

1 clove garlic, crushed

½ tsp fresh ginger, grated

¼ red chilli or scotch bonnet, deseeded

and chopped

Pinch of ground turmeric

1 red pepper, diced

3-4 stems of fresh thyme

175ml (6fl oz) light coconut milk

1 tsp cornflour

## To serve

100g (3.5oz) brown rice Juice of ½ lemon Handful of young spinach leaves

## How to read the nutrition labels

- $\triangleright$  **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

- 1 Sprinkle the fish with a pinch of the curry powder and squeeze over 1 tbsp lemon juice. Set aside while you cook the rice and make the sauce.
- 2 Place the rice in a pan with double the volume of cold water. Bring to the boil, cover with a lid and turn the heat down to the lowest setting. Cook for 11 minutes or until the grains are tender. Squeeze over the juice of ½ lemon and stir the spinach through the cooked rice.
- 3 To make the curry, heat the oil in a medium pan over a medium heat and add the spring onions, garlic, ginger, chilli, turmeric, the remaining curry powder, the red pepper and thyme leaves. Stir fry for 3-4 minutes, then add the coconut milk and simmer for 5 minutes until the pepper is tender.
- 4 Add the fish to the pan and cook for 4-5 minutes or until it just begins to fall into flakes. Mix the cornflour with 2 tsp cold water, stir into the pan and cook for 1 minute until the sauce thickens. Serve with the rice and topped with a few more thyme leaves.

## Cook's tip

Add scotch bonnets or a pinch of pimento for traditional Caribbean flavours, but you can opt for milder chillies if scotch bonnets are too hot for your taste.

## Indian-spiced scrambled eggs

Warm, aromatic flavours from your spice cupboard give this easy, familiar meal added oomph.

Preparation time: 5 minutes

Cooking time: 10 minutes

Serves 2 | Not suitable for freezing

## Ingredients

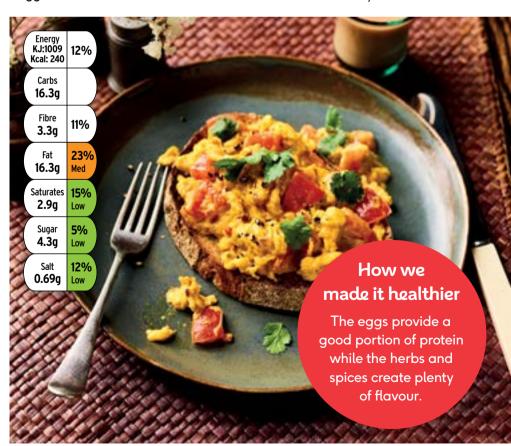
2 tsp vegetable oil
½ small red onion, finely diced
¼ red or green chilli, deseeded and finely chopped
Pinch of ground cumin
Pinch of ground coriander
Pinch of ground turmeric
2 medium tomatoes, chopped
4 eggs, beaten

A few coriander leaves, chopped 2 slices wholemeal toast or flatbreads

- 1 Heat the oil in a non-stick frying pan and fry the onions on a medium heat for 5 minutes until browned. Add the chilli, spices and tomatoes, fry for 2-3 minutes.
- 2 Add the beaten eggs. Stir over the heat for 2-3 minutes until just scrambled, then add coriander and serve on wholemeal toast or flatbreads (chapatis).

## Cook's tip

Add the chilli sparingly—you can always add more, but you cannot take it away.



## Black bean and sweet potato burritos

Black beans provide protein and fibre in this tasty lunch.

Preparation time: 10 minutes

Cooking time: 10 minutes

Serves 2 | Net suitable for free

Serves 2 | Not suitable for freezing

## Ingredients

1 tsp vegetable oil
1 onion, chopped
250g (9oz) sweet potato, peeled and coarsely grated
1 clove garlic, crushed
½ tsp ground cumin
½ tsp sweet smoked paprika
2 medium tomatoes, chopped
½ a 400g can black beans, drained
1 avocado, sliced
Pinch of chilli flakes

Juice of 1 lime

2 wholemeal tortillas

2 tbsp low-fat crème fraiche or low-fat Greek yogurt

A few baby spinach leaves

- 1 Heat the oil in a medium frying pan and fry the onion for 5 minutes until transparent. Add the sweet potato, garlic, cumin, paprika and tomatoes and cook for 5-6 minutes until the tomatoes have softened, then stir in the black beans and heat through.
- 2 Toss the avocado slices with the chilli flakes and lime juice and a little ground black pepper.
- 3 Spread the tortillas with the crème fraiche, spoon over the

sweet potato mixture and then top with the avocado. Add a few spinach leaves, then roll up tightly, folding in the ends.

## Cook's tip

For a lower-carb substitute, swap sweet potato for butternut squash.



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 2** for more ways to contact us.



## Mood-boosting





Dell Stanford
Senior Dietitian,
British Heart
Foundation

Different foods and drinks, the hormones your body releases after eating, and your gut health can all impact your mood for better or worse. Let's explore how.

## Food's feel-good factor

Ever wondered why sugary foods, like chocolate and sweets, make you feel good in the moment? It's because sugar triggers a boost of the mood-lifting brain chemical serotonin. But serotonin's effects are short-lived, and regularly eating too much sugar can harm your mood, health and wellbeing.

The release of another chemical called dopamine triggers the feeling of satisfaction you feel after eating. Dopamine activates the brain's 'feel-good' centres, but it can also lead some people to comfort eat or overeat, resulting in weight gain.

## Choose carbohydrates carefully

Your brain controls your mood, and it needs glucose from carbohydrates to function.

However, not all carbohydrates break down to glucose in the same way. Simple carbohydrates in sugary foods and drinks break down quickly to glucose, causing sharp spikes in blood glucose and energy levels. Your body responds by releasing insulin, which lowers your blood sugar. This may lead to low energy levels, feelings of hunger, mood swings and anxiety.

In contrast, eating wholegrain carbohydrates that are high in fibre like veg,





fruit, pulses, nuts and seeds, helps glucose enter the bloodstream slowly. This keeps glucose levels stable, helping you feel fuller for longer, while steadying your mood and energy levels. To prevent energy dips and mood swings, try not to skip meals.

## Fuel up on healthy fats

Eating healthy unsaturated fats in moderation, like olive and rapeseed oils, nuts, seeds and avocados, helps support brain function.

Omega-3 fats, found in oily fish like salmon, mackerel, sardines and pilchards, are also important for a healthy brain and circulatory system. However, although research has linked anxiety and depression to low omega-3 intake, there is no

strong proof that omega-3
supplements help either
condition. Instead, the
NHS recommends eating

## "To prevent energy dips and mood swings, try not to skip meals"

oily fish as part of a healthy diet. Try to have two portions a week, including one of oily fish.

### Be wise about water

Being dehydrated can make you feel low in energy and mood. To stay hydrated the NHS recommends drinking six to eight glasses of fluids (1.5 litres to 2 litres) a day. Stick to water, low-fat milk or water-based drinks low in sugar like tea, coffee and sugar-free squash.

## Go easy on alcohol

Alcohol releases serotonin and dopamine – the so-called 'happy hormones' mentioned earlier. But too much alcohol affects the brain.



It can worsen mood and anxiety, up the risk of depression, and harm your overall health.

Alcohol can also interfere with the gut's ability to absorb essential vitamins and minerals from other foods. The NHS recommends sticking to a maximum of 14 units per week, with at least two alcohol-free days. One unit is around half a pint of beer, a single shot of spirits or half a small glass of wine.

### Be cautious with caffeine

Caffeine, found in coffee, tea, energy drinks and cola, boosts your alertness in the short term. But it can cause anxiety, agitation and sleep problems if consumed in excess—this is over 400mg a day, which is equivalent to about four to five cups of coffee.

### Know the value of vitamins

Low levels of B vitamins (such as thiamine, niacin, vitamin B12 and folate), vitamin D, selenium and iron can affect how you feel. While food is the best source of vitamins and minerals, some people may benefit from supplements. For example, vegans need B12 and people with anaemia may need iron. Vitamin D is recommended for everyone in the UK during the winter months.

## How mood can affect food too

Studies suggest that being in a good mood is linked to healthy food choices, while unhealthy food choices are linked to low mood.

What we eat can also depend on who we're with, where we are, and the emotional connections we have with foods, such as memories from childhood.

Try to be mindful and intuitive about what you eat, as this can help you untangle the relationship between food and mood. This will help you to reconnect with your body's natural signals of hunger and fullness.

## 10 tips to boost your mood with food

- Eat a Mediterranean-style diet.
- 2 Do not skip meals.
- 3 Drink six to eight glasses of water or sugar-free drinks per day.
- 4 Cut back or stop drinking alcohol.
- 5 Limit caffeinated drinks like coffee, tea and sugar-free cola to no more than four to five cups a day.
- 6 Have fewer sugary foods and drinks. No more than 30g of added sugars a day.
- 7 Eat high-fibre foods such as wholewheat bread, pasta and wholegrain rice, cereals, pulses and nuts. Aim for 30g of fibre a day.
- 8 Eat at least five portions of fruit and vegetables per day.
- Aim for at least two portions of fish per week, including one portion of oily fish. Fresh, frozen or canned (not in brine) all count.
- 10 Try to be mindful about what you're eating.



## Ask our dietitians

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



Tracy Parker
Senior Dietitian,
British Heart
Foundation



## Q: How much protein do I need?

A: For the average adult with a healthy weight, the recommended daily amount of protein is 0.75g per kilogram of body weight. That's about 45g a day for a 60kg woman and 55g a day for a 75kg man. But your protein needs also depend on your age and how physically active you are.

To prevent age-related muscle loss, people over 65 are advised to eat about 1 to 1.2g of protein per kg of body weight per day. For example, if you weigh 75kg, you'd need around 75 to 90g.

If you're below 65 and you're more active – perhaps you regularly run five to 10km, cycle 30 to 40km, or go to the gym – you may need around 0.75 to 1.2g per kg.

In recent years, there's been a rise in products marketed as 'high-protein', including powders, shakes and snack bars, as well as milk, yogurt, breads and cereals that have up to double the normal amount of protein. Watch out as some of these also have added sugars and fats.

For most people, these products are not necessary. A balanced diet with foods that are naturally high in proteins, such as lean meats, fish, beans, lentils, tofu and low-fat yogurt, already provides enough protein.



A: Honey might be natural but that does not mean it's healthy. Honey is a free sugar. It's not like the natural sugars locked away in the cells of whole fruit and vegetables, which come with vitamins and fibre.

Eating too much free sugar can contribute to weight gain, which in turn can increase your risk of heart disease and type 2 diabetes. You should aim to have no more 30g a day of free sugars, including honey.

Because honey contains traces of vitamins, minerals and antioxidants, you might see claims that it supports heart health, digestion and immunity. But there's no strong evidence to back this claim. To get any health benefits, you'd need around 80g of honey per day, which would also mean having a lot of free sugars. This would cancel out any potential positives.

While honey has a lower glycaemic index (GI) compared to sugar, people with diabetes should still have it in moderation as it can spike blood sugar levels. Some honeys have added glucose or corn syrup, which can raise the GI. A small drizzle of honey can add flavour and sweetness, but naturally sweet foods like berries, bananas or dates are a healthier choice.

## Get your questions answered

- ► Find more answers from our experts online at bhf.org.uk/ ask-dietitian including: Is porridge good for you? Should I take turmeric supplements?
- Send your questions to hmeditor@bhf.org.uk
- ▶ Go to page 2 for more ways to contact us.

## Q: What happens if my triglyceride levels are too high?

A: Triglycerides are the most common fat found in the blood. If you have permanently high triglycerides, this can increase your risk of heart and circulatory disease.



**Dell Stanford**Senior Dietitian,
British Heart
Foundation

A simple blood

test can find out your levels and it's often done with tests for cholesterol. The test can be taken 'non-fasting' or 'fasting'.

If your non-fasting triglyceride level is over 2.3mmol/L or your fasting level is over 1.7mmol/L, your doctor will talk to you about ways to lower your triglycerides. You may be asked to have a fasting test if your non-fasting level is between 10 and 20mmol/L.

If your fasting test is more than 10mmol/L or your non-fasting test is more than 20mmol/L, you may be referred to a lipid specialist doctor.

Cutting back on saturated fats, sugar, processed foods and alcohol, eating a balanced diet, maintaining a healthy weight and being more physically active can help lower your triglycerides. If lifestyle changes do not lower the levels enough, then you may need medication such as statins.



## 5 easy ways

## to work out at home

How to do the recommended 150 minutes of moderate-intensity physical activity each week, without going to the gym

Tackle your chores Whether your dishes have mounted up, your closet is calling for a clear out, your bins need taking out or your bed sheets need changing, seize the opportunity to move your body into action. Work your muscles and move your joints, while earning extra points for productivity.

Take the stairs Use any excuse to take the stairs. For example, while waiting for the kettle to boil, take the opportunity to step up and down one step as a mini workout. Try to do it 10 times (or as many as you

can manage) stepping with your right foot first, and then alternating. This will increase your strength and stamina.





Get mini-movement breaks For every hour sitting down, try to move for five to 10 minutes. Do things like walking on the spot, going upstairs to tidy up, making yourself a cup of tea. You'll be surprised how little it takes to build up your fitness levels over time.

Clean your windows Window cleaning is one household task that really helps to strengthen the arm muscles and improve your range of motion at the shoulder joints. Play your favourite music and put some welly into wiping those windows. It's the perfect excuse to up your movement quota.

Stagger your food shop Do smaller, more regular grocery shopping trips on foot. Carrying bags is great for grip strength, and walking will help improve your fitness levels and your heart and lung health.



## Easy and effective

## aerobic exercises

Try these low-intensity cardio exercises from a cardiac rehab expert that are safe for you to do at home

Aerobic exercise, also known as cardiovascular or cardio exercise, is any movement that increases your heart and breathing rate.

It's an important way to look after your heart, especially if you have a heart condition or any risk factors, such as high cholesterol or high blood pressure.

You can do these exercises standing up or sitting down. You should feel warmer and slightly breathless but still able to talk. If they feel too difficult, slow down or make the movements smaller.

Aim to do them at least two to three times a week. Make sure to warm up before you begin and cool down afterwards.

Check with your doctor before you start if you have a heart or circulatory condition, high blood pressure or diabetes. And if you feel unwell or notice any chest pain or palpitations while you're exercising, stop immediately.



Hara Markos
Cardiac
Rehabilitation
Exercise
Physiologist,
Mid and South
Essex NHS
Foundation Trust

## Warm up

A warm-up helps to gradually increase your heart rate and get your muscles moving



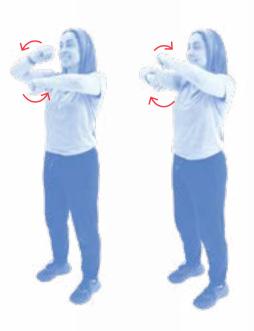
Marching on the spot

- 1 Sit or stand with your feet hip-width apart.
- 2 Start marching lightly on the spot at a comfortable pace.
- 3 Swing your arms by your sides to help with the movement.
- 4 March on the spot for around one minute.
- 5 Start rolling your shoulders backwards and march for another 30 seconds.

**Tip:** After you finish exercising, you can march on the spot again to help you cool down.

## Aerobic exercises

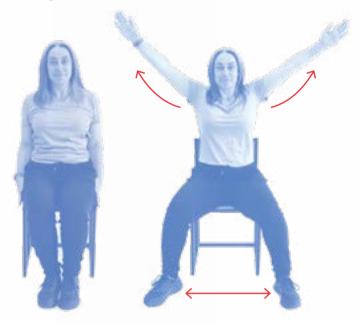
Spend about 10 to 20 seconds doing each exercise. Then take a short break to catch your breath, before moving onto the next one



## Speedball arms

- 1 Sit or stand with your feet hip-width apart.
- 2 Stack both arms on each other, bent at the elbows, at shoulder height in front of you.
- 3 Rotate both arms around each other as fast as you can, keeping them at shoulder height.
- 4 Keep doing the exercise for 10 to 20 seconds.
- 5 Change the direction you're rotating your arms and repeat for another 10 to 20 seconds.

**Next step:** Keep your feet moving by marching on the spot at the same time.



## Seated star jumps

- 1 Sit on a solid chair with your back straight, feet together and arms by your sides.
- 2 Extend both of your legs straight out to the sides, pointing your toes upwards. At the same time, lift your arms out and up until they're above your head.
- 3 Return to the starting position with your feet together and arms by your side.
- 4 Repeat the exercise eight to 12 times.

**Next step:** Try the exercise standing up. Jump both legs out to the side as you lift your arms over your head. •



## Discover more online

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

## Tell us what you think

Did you find these tips useful? Are there other exercises you'd like to see? Email hmeditor@bhf.org.uk or write to the address on page seven.



"Coming from a big family of nine children, I've seen heart disease affect many people around me. My parents, oldest brother, and several close relatives all passed away from heart attacks. One of my sisters lives with angina, while my niece was diagnosed with heart diseae at just 33—then had a heart attack at 49. Others have been affected, too.

With so much family history, I knew I was at risk – but I never expected my own diagnosis to come so suddenly.

Before my heart event, I was a teaching assistant in the same school for 22 years and I loved it. At weekends I ran my face painting business and helped with the two youngest of my five grandchildren, who all live nearby. There were times I felt breathless, but I put that down to my asthma. I had no idea how poorly I was.

### I fainted at the school

But it all came home to me when a few days before Christmas 2023 I fainted while on playground duty. I was taken to hospital, where doctors did tests and told me I had high cholesterol and high triglycerides. The doctor explained this had led to angina, when the arteries in your heart are narrowed, and can cause symptoms like chest pain and breathlessness.

I don't remember being afraid when I heard that. I thought, 'At least mine has been found and hopefully it can be fixed.' I always



ate healthily but the doctor said my high cholesterol was caused by familial hypercholesterolaemia (FH). This is a genetic condition that causes high cholesterol from birth. I was put on statins straight away to lower my cholesterol. My son has had his cholesterol tested, and my daughters and other family members will have to be tested too. I have also been prescribed a GTN spray to use if I get angina pain.

## "Waiting to go down for surgery, I was blasting Whitney Houston and dancing in my chair"

## Reality hit hard

It was hard adapting to the changes I had to make in my life. The consultant said I could no longer use my exercise bike and advised against going to work while I was waiting for my full results.

After a while the school suggested retirement to me as an option, and to be honest I just thought slowing down would be good for my health.

Real life

ernadette had

work and now spends time

to retire from

pottering in

her garden

It was hard leaving work because I loved working with the children. But I carried on visiting the school and when I did, I felt like a celebrity—because the children all came flying over to see me.

As I live in a remote village, my son Gareth, his wife Sam and his family took me in and looked after me until I was settled on taking all the new medication.

But my breathlessness got worse as time went on, to the stage that I could only walk up a few stairs before I got puffed out. My whole life was turned upside down.

In February, I had a call to say all my results were back in and that I needed coronary artery bypass surgery. Three of my coronary arteries were narrowed, restricting blood flow to my heart.

## Dancing into surgery

I finally had the operation in April 2024. On the day, I was sat in my room waiting to go down to surgery, blasting Whitney Houston and dancing in my chair. I was grateful and thankful that it had been found and there were surgeons and cardiologists who could help to make me better. Heart bypass surgery gave me a second chance.

After the operation, I stayed with my son again for about four weeks to start my recovery. The main problem was pain in my chest from the surgery, and I couldn't get comfortable at night in bed. The cardiac rehab nurses rang me weekly to check on my progress. They were a lifeline for me as they were only a phone call away.



## "Now I know how important it is to look for the signs of heart disease"

## Facing a setback

By October 2024 I was getting out of breath again. More tests have shown that two of the bypass grafts are partly blocked.

It means I have had to go back on medication for my angina, and I may need stents in the future to reopen the bypass grafts.

I find now that I get more anxious than I did before, and I get worried if I have angina pain. But I'm very lucky to have a lovely family.

My daughter Ceri Anne lives with me, and my other daughter, Natalie, lives nearby. My son Gareth is not far away. We're all very close and we look after each other.

My life has completely changed from working seven days a week to a much quieter existence. One of the best things about being retired is that I can go and see my best friend Nora in her care home at least twice a week. I start a sing-song with Nora and everyone joins in. A nurse said that I bring a lot of joy.

I like to take my daughter's dog, Bohdi, out and to potter about in the garden. I've also been writing a book about my life and childhood growing up in such a big family in Liverpool. And I have joined the parent-teacher association of my grandchildren's school.

I'm only in my 60s and hopefully have a long life ahead of me. I only went to hospital because I fainted. Now I know how important it is to look for the signs of heart disease, before it's too late. I'm one of the lucky ones."

## Get more info and support

► Go to **page 29** to learn more about triglycerides.

## Anxiety

## and heart conditions

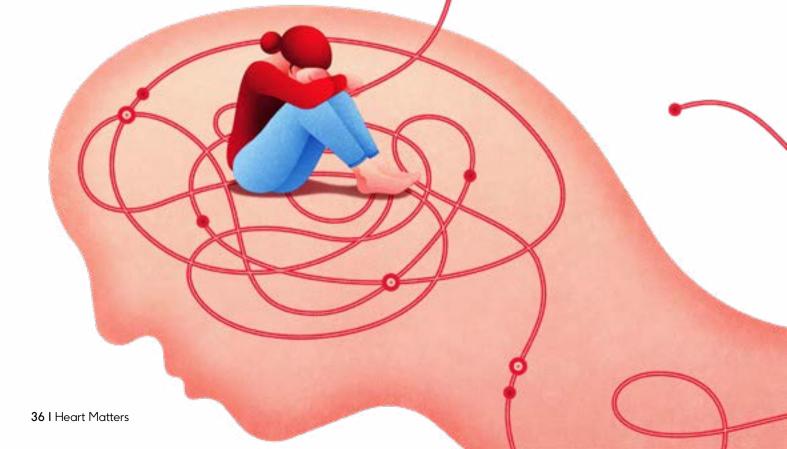


Dr Katie Murray (DClinPsy) Clinical Psychologist, Imperial College Healthcare NHS Trust

Feeling worried about your heart? A clinical psychologist explains how some fears can turn into anxiety and shares tips to ease symptoms Anxiety is a natural human response to stress or things that we think are dangerous. We usually experience anxiety as a feeling of constant worry or fear.

Most of us will have feelings of anxiety from time to time, including when facing health problems. But when anxiety lasts for a long time or is overwhelming and gets in the way of our everyday lives, it might be turning into an anxiety condition. So it's important to get support from your GP or a mental health professional if your symptoms do not ease.

Asking for help can feel scary at first, but doing so is a powerful step toward feeling better and taking care of your future health and wellbeing.



Anxiety can be triggered or worsened by health experiences. If you've had a heart attack you may worry about it happening again. If you have a pacemaker or ICD (implantable cardioverter defibrillator), you may fear getting

recovering well after surgery.

The sudden diagnosis of a heart or circulatory problem can itself be a huge shock, especially if you have previously thought of yourself as a healthy person.

a shock from your device or worry

if it will work properly. Or you may

have had a traumatic experience

in hospital or worry that you're not

Being diagnosed or experiencing a heart problem like a heart attack can change how you think about yourself. You may see yourself as weak or vulnerable and worry about how others may view you. Other worries that can develop

into anxiety include the fear of dying and leaving family behind or worrying about getting back to work and supporting yourself financially.

## What are the symptoms?

Some of the most common symptoms of anxiety include:

- Feeling nervous, worried and fearful.
- ► Catastrophising: you may get caught up imagining worst-case outcomes.
- Physical symptoms: when you're experiencing anxiety, the body's fight-flight-freeze response can cause physical symptoms, such as heart palpitations or an increased heart rate, a dry mouth, nausea, dizziness, rapid breathing, sweating, sleep problems, trouble concentrating, changes in appetite, and bowel problems like diarrhoea and constipation.

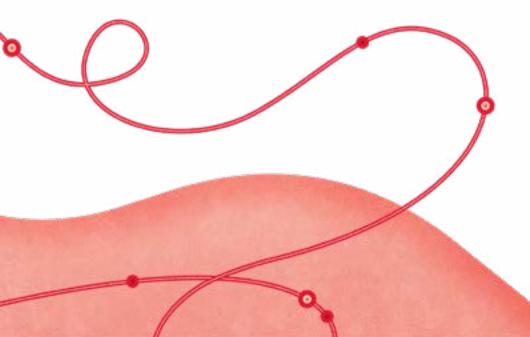
## Heart attack or panic attack?

Heart attacks and panic attacks share many similar symptoms, like chest pain or tightness, shortness of breath, sweating and feelings of dread. If you're unsure, it's always safest to call 999 and seek medical help.

► Avoiding situations or seeking reassurance: you might feel a strong urge to get away from situations you find stressful, for example, avoiding hospital appointments or watching hospital dramas on TV that could remind you of your heart problems.

You may avoid doing anything that could raise your heart rate, like exercise. Or feel the need to seek reassurance by checking your pulse or blood pressure frequently, always wanting another person around you, or often visiting your doctor.

- ▶ Difficulty sleeping: you may find it hard to get to sleep because you are worrying, or you might wake up in the night feeling anxious, particularly if you have had a heart event at night.
- ► Exhaustion: if you have been experiencing long-term anxiety, you may feel very tired. In some cases, if anxiety is left untreated for a long time it can affect the immune system. This means you may feel run-down and more likely to suffer from colds and viruses.



## How is anxiety treated?

Anxiety is usually treated with talking therapies like cognitive behavioural therapy (CBT), which helps change thought patterns and behaviours that are keeping you stuck in the cycle of anxiety.

For more severe anxiety, a combination of therapy and medication might be used. You can access treatment through:

- your GP, cardiologist, or cardiac rehab nurse
- or, in England, you can self-refer to talking therapies by searching online for "NHS talking therapies".

## "Most of us will have feelings of anxiety from time to time"

## Why is it important to get treatment for anxiety?

It is normal for anxiety to be higher after experiencing a heart event, and for many people anxiety will lessen over time as you recover and get back to normal life.

But, if anxiety persists and is interfering with your everyday life, it's important to seek help.

If left untreated, long-term anxiety can have a harmful impact on your mental and physical health. It can limit daily activities, affect relationships, disrupt sleep, and lead to unhealthy behaviours that can raise the risk of heart disease.

## 6 self-help tips

While waiting for formal treatment, or alongside formal treatment, there are things you can do to help ease feelings of anxiety – both in the moment and over the long term.

Grounding with senses
When you're feeling
overwhelmed, grounding
practices, like the 5-4-3-2-1
technique, can help bring your
attention back into the present
moment by engaging your senses.
Do this by naming:

- ▶ five things you can see
- lacktriangleright four things you can feel or touch
- three things you can hear
- two things you can smell
- and one thing you can taste.

## Calm breathing

Breathing techniques can help calm you by encouraging you to take slower, deeper breaths. To try diaphragmatic breathing:

- Imagine your stomach is like a balloon inflating as you breathe in and deflating as you breathe out.
- ▶ Place one hand on your chest and the other on your belly, focusing on expanding your belly while keeping your chest relatively still.
- As you breathe in, allow your belly to expand so you're breathing from your diaphragm (the domeshaped muscle that sits below your lungs and above your stomach) rather than your chest.
- ► Hold this for a few seconds and then breathe out slowly while tensing your abdominal muscles.



## 3 Dropping anchor This mindfulness technic

This mindfulness technique has three parts to it:

- ➤ Take time to acknowledge any difficult feelings you may have instead of trying to push them away.
- Try to connect with your body by focusing on how your feet feel on the floor, or by getting up and gently moving around the space you're in.
- ▶ Engage with the present moment by noticing what's going on around you. Focus on what you can see and hear to give a sense of stability and bring you back to the present moment.

## 4 Understand triggers and challenge anxious thoughts

Keep a diary of when you feel most anxious and what's going through your head at the time. Doing this regularly may help you to find themes in your triggers, helping you to manage them.

When you feel calmer, look at the diary to see what thoughts make you most anxious. Notice if any are 'worst-case scenario' thoughts, where your mind has jumped to the worst possible outcome. Try to gently challenge these by asking, 'Am I overestimating the chance of something terrible happening?'

"Keeping a diary can help you understand and manage your triggers"



## **5** Tackle behaviours that are keeping you stuck

See if you can gradually reduce any reassurance seeking or avoidance behaviours, to help break the cycle of anxiety.

For example, if you usually check your pulse rate multiple times a day, set yourself a goal to reduce the number of times you're checking by a small amount each week.

If you're avoiding going out for a walk by yourself, set yourself a goal of walking a very short distance and then returning home. If you feel comfortable, gradually increase the distance each time.

Think carefully before using health monitoring devices, like fitness watches or health apps on your phone. For some people, these can make anxiety worse.

## Make lifestyle changes

Getting enough sleep, eating a healthy diet, exercising regularly, and doing enjoyable activities can all improve your overall wellbeing in the long term. Other changes that could help you feel calmer include drinking less caffeine and alcohol, being in nature more often, meeting up with friends, and even watching your favourite funny films.

## Get more info and support

- Visit mind.org.uk or call their helpline on 0300 102 1234 (9am to 6pm, Monday to Friday) for mental health support.
- Visit anxietyuk.org.uk for support with anxiety.
- ▶ Join our online community on healthunlocked.com/bhf to talk to others with heart conditions.



## What's next in ... Vascular dementia research

A group leader at the BHF-UK DRI Centre for Vascular Dementia Research **Dr Rikesh Rajani** (PhD) tells us how science could help treat the condition

## Q: Why is research into vascular dementia important?

**A:** Most people associate dementia with Alzheimer's disease, but vascular dementia can be just as devastating for people with the condition and their loved ones.

It's the second most common form of dementia, affecting at least 180,000 people in the UK, and this number is expected to rise dramatically over the next 25 years. But despite how common it is, vascular dementia research is generally understudied and underfunded.

In 2023, British Heart Foundation partnered with the UK Dementia Research Institute to create the BHF-UK DRI Centre for Vascular Dementia Research. This was an important step, showing that vascular dementia is being taken seriously. The centre combines

the expertise and funding of both organisations and helps researchers with different specialties across the UK to work together. Importantly, it brings together scientists in the lab with clinical researchers who work with patients.

## Q: How could research lead to new treatments for vascular dementia?

**A:** Some risk factors, such as high blood pressure, obesity, smoking









## 180,000+ people in the UK are living with vascular dementia

and diabetes, can be treated with medications and lifestyle changes to reduce the chance of developing vascular dementia.

However, there is currently no treatment that specifically treats vascular dementia itself or stops it from progressing.

To find this kind of treatment, we need to better understand the root causes of the condition. The most common cause of vascular dementia is small vessel disease. This is when the tiny blood vessels in the brain do not work properly.

My work focuses on getting a better understanding of how small vessel disease damages white matter, the regions of the brain made up of nerve fibres which transmit messages.

Another approach is to focus on treating the changes in the brain's blood vessels that happen in small vessel disease. The clinical director at our centre, Professor Joanna Wardlaw, is running a trial, called LACI-3, to see if two existing drugs used to treat heart and circulatory conditions can be repurposed for this.

There are also studies looking into the genes that can put people at greater risk of developing small vessel disease and vascular dementia.

## Q: Is vascular dementia an inherited condition?

**A:** There is a hereditary element to vascular dementia, but the forms of vascular dementia which are directly inherited are rare. Generally, if multiple family members have had it, you are slightly more likely to get it. But it does not mean you will.

The extent to which hereditary

factors are important is still being looked at.

Science

### Q: Can it ever be cured?

**A:** The ultimate goal would be to create a simple blood test that could identify people at risk and be able to provide them with treatment to stop the disease from developing.

We're in the early stages of research working towards this. Professor Wardlaw, for example, is looking at chemical markers in the blood that might show how symptoms will develop.

While the blood test is a long-term goal, there are more immediate advances likely to happen which can help people at a higher risk of developing vascular dementia. For example, there are researchers looking at which blood pressure medications might be the most effective for preventing or slowing the progression of vascular dementia.

While a cure may not be imminent, we are making progress in understanding the disease and finding ways to help people with vascular dementia live better lives.

## Fact or fiction?

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

## Can statins lower your risk of dementia?

If dementia has affected your family, you might have noticed headlines suggesting that statins could lower the chances of developing the condition.

These widely-prescribed medicines lower 'bad' cholesterol—including LDL cholesterol—in your blood, reducing your risk of having a heart attack or stroke.

So, when new research suggested that having healthy LDL cholesterol levels may cut the chances of developing dementia – and that taking statins that lower cholesterol could reduce your risk even more – UK newspapers jumped on the story.

The study, published in the Journal of Neurology, Neurosurgery and Psychiatry in April 2025, compared levels of LDL cholesterol in 217,960 people from South Korea and their risk of developing dementia. Firstly, they found people with healthy LDL cholesterol levels (below 1.8mmol/L) had a 26 per cent lower chance of developing any kind of dementia compared to those with high LDL levels (above 3.4mmol/L). Those with healthy levels also had a 28 per cent lower chance of developing Alzheimer's-related dementia.

The researchers also found that taking statins could have an extra effect on lowering dementia risk.

The results showed that those with healthy cholesterol levels who took statins were 13 per cent less likely to develop any kind of dementia and 12 per cent less likely to develop Alzheimer's-related dementia, compared to those who did not take them.

Overall, the media did a good job of reporting on the study. However, many newspapers overstated the potential benefits of statins for preventing dementia, without exploring the limitations of the research. And, while the findings look promising, the study is observational.

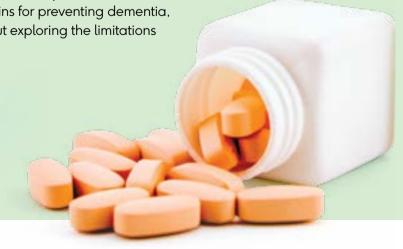
This means the research can reveal possible links between drugs and disease, but it does not show cause and effect.

## **OUR VERDICT**

We already know statins play a crucial role in lowering LDL cholesterol levels and reducing the risk of heart and circulatory diseases. This research suggests that taking statins and keeping LDL levels moderately low might help lower dementia risk too.

But while these findings are exciting, the evidence is not yet conclusive. And there are many more risk factors for developing dementia than high cholesterol.

"People with healthy cholesterol levels were less likely to develop dementia"





## Is Mounjaro better than Wegovy for weight loss?

A new study has shown that the weight-loss injection tirzepatide (Mounjaro) is more effective than semaglutide (Wegovy). It found tirzepatide reduced body weight in people with obesity by just over 20 per cent, whereas semaglutide cut it by nearly 14 per cent.

Both medicines mimic a hormone called GLP-1 that makes you feel full, so you eat less. However, tirzepatide also mimics another hormone that regulates appetite, called GIP.

The study, published in the New England Journal of Medicine in May 2025, involved 751 people with obesity. They were asked to take the maximum amount of either tirzepatide or semaglutide they could tolerate via weekly injections for nearly a year and a half.

Currently, only semaglutide is approved in the UK to reduce the risk of serious heart problems in people with obesity. But the researchers suggested that tirzepatide could also be used to reduce the risk of heart and

circulatory diseases caused by obesity, by helping people lose more weight.

Eli Lilly, the company that manufactures Mounjaro (tirzepatide), funded the study.

Many UK news outlets reported on the study. Some headlines suggested the study found tirzepatide was the most effective weight-loss injection. This is misleading as the study did not include the weight-loss injection liraglutide (Saxenda). which is available on the NHS.

## **OUR VERDICT**

While both injections can help you lose weight if you have obesity, this study suggests Mounjaro may be more effective. But more research is needed to show if Mounjaro can lower the risk of heart and circulatory diseases by as much or more than Wegovy.

## Find more online

➤ Other fact-checks include: Why the carnivore diet is not good for your health. Go to bhf.org.uk/factcheck

## Science news

Discover the lifesaving research BHF is funding

Heart rhythm's body clock link Dr Alicia D'Souza at Imperial College London is studying human heart cells to see why a dangerous irregular heart rhythm, known as ventricular arrhythmia, is more likely in the early morning than other times of day.



## £50m to tackle inequalities British Heart Foundation (BHF) is

partnering with the National Institute for Health and Care Research to fund a £50 million 'inequalities challenge'. It aims to close existing health gaps that mean ethnic minorities and people in deprived areas often have a higher risk of heart and circulatory diseases.

## Hope is good for the heart

A review of 12 studies involving 5,540 people with a heart or circulatory disease, authored by Dr Alexander Montasem at the University of Liverpool, found that having greater feelings of hope was linked with a lower risk of a heart attack and reduced symptoms, such as angina.







# Christmas cards now available in store and online

Packs from £4 and single cards from £1.50







Visit bhf.org.uk/christmas-cards, scan the QR code, or visit us in store today

