

Heart Matters

Inspiration | Information | Support

Winter 2024/25

Heart attacks in women

Find out what British Heart Foundation is doing to close the gender care gap

Back in the game

How walking football helps Chella stay active

Statin alternatives
Are they effective?

FOCUS ON: Heart failure

Tips for living with the condition, plus how science will change future treatments

British Heart Foundation



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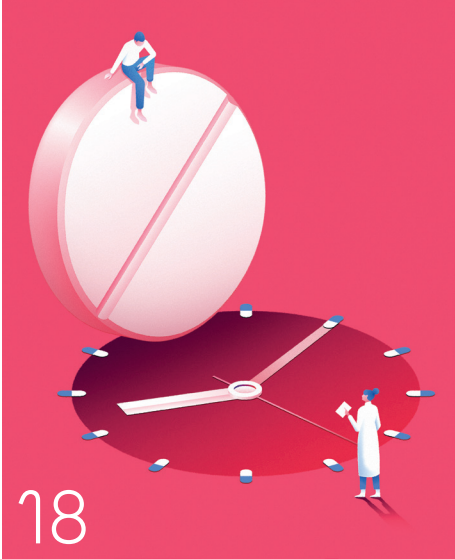
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Helen did not believe she was having a heart attack



Content you can trust

We put together each issue of Heart Matters with the help of healthcare professionals including doctors, cardiologists, psychologists and specialist nurses. Every article is triple-checked by our specialist cardiac nurses and dietitians, as well as our research and statistics experts. We take pride in being editorially independent, meaning our information will never be influenced by 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.

Editor's letter



As we step into a new year, I hope you find a moment to pause, reset and recharge. Living with a heart condition sometimes means slowing down and finding new ways to enjoy your favourite activities. Our cover star Chella Chilombo Sikazwe and fellow football enthusiast Kevin McGovern-Ims share how walking football has been a game-changer for their health and wellbeing (page 36). This issue includes a special feature on women and heart attacks (page 10). We report that women often delay seeking help, are more likely than men to be misdiagnosed, and less likely to get vital treatment – and look at what BHF is doing to close the care gap. We've packed in lots of tips to help you stay healthy this winter. Cheese lovers will enjoy our guide to making a healthier cheese board, including cheeses ranked best to worst for health (page 26). Our dietitian also reveals five inflammation-fighting foods (page 24). As part of your new year reset, consider making time for self-care. A clinical psychologist offers tips on how to look after your own wellbeing, even when you're caring for others (page 34). For those managing heart failure, we've included tips on how to live well and improve your quality of life (page 30). Do not miss our interview with BHF-funded researcher Professor Ajay Shah, who shares three exciting breakthroughs that could transform the way we detect and treat heart failure (page 42). As we look ahead to 2025, I wish you much health and happiness. If you've found this magazine helpful and can support our work, we would greatly appreciate your donation. Your generosity funds lifesaving research and helps us to reach more people with trusted health information. To donate, visit bhf.org.uk/HMdonate or send a cheque payable to British Heart Foundation to BHF, 2300 The Crescent, Birmingham, B37 7YE.

Rachel Beaven

Rachelle Beaven, Editor

 **Have your say on Heart Matters**
Is there something we could do better? Go to bhf.org.uk/heartsurvey to complete our short questionnaire and tell us what you thought of this issue. We'd love to hear your views on our latest articles, as well as your own ideas for future stories you'd like us to cover. Prefer to write us a letter? You can also post your comments to Heart Matters at our address on page four.

Your letters



We love to read your emails, letters and tips, so keep writing:
hmeditor@bhf.org.uk or **Heart Matters, British Heart Foundation,**
180 Hampstead Road, London NW1 7AW

Is broccoli bad for you?

I read the healthier gut swaps article by Dr Megan Rossi (Autumn 2024, page 24; bhf.org.uk/gut) and I was confused to read on the illustration that she seemed to be saying that broccoli is not a healthy option. I eat broccoli most days as it's a high-fibre veg. Why is the diagram apparently showing it's not healthy?

Jan White, Dorset

Tracy Parker, BHF Senior Dietitian, says:

You're quite right Jan, broccoli is a healthy vegetable and a great choice for your diet. The suggestion to swap it for mixed stir-fry vegetables was not meant to imply it is unhealthy. It is just an example of how to include an even greater variety of healthy foods to boost your gut health.

"I'm in a 20-month queue for a follow-up appointment"

In response to your 'Hearts need more' campaign article (Autumn 2024, page 10; bhf.org.uk/hearts-need-more)



I wanted to share my experience. I suffer from atrial fibrillation and, after a worrying experience, I

dialled 999. I waited more than five hours for an ambulance to arrive. I was taken to my local hospital, where I waited 19 hours to be seen by a doctor and treated.

Now I am in a 20-month queue for a follow-up appointment, which is unacceptable. Best regards BHF team. Keep up the great work.

Patricia Housley, Yorkshire

We'd love to hear your views: take our survey

Here at Heart Matters, we value your feedback. Whether you read the magazine cover to cover, or just enjoy browsing for recipes and tips, we'd like to know what you think of our latest issue.

Our short readers' survey takes about 10 minutes to complete and will help us make the magazine even better. Your answers will be used to shape future Heart Matters stories – so take this chance to tell us what you would like to read about next.

- Go to bhf.org.uk/heartsurvey to take the survey.

**HAVE
YOUR
SAY
by 20th
March**

Tried and tested by you

Help with hydration

I am terrible at remembering to drink water. I bought a bottle that breaks the day down and shows how much I must drink each hour. It has made it so much easier, and the bottle sits on my desk at work as a constant reminder

Julie Moakes, Lancashire

A tip for staying hydrated is to use a drink reminder app (Summer 2024, page 27; bhf.org.uk/dehydration). You can set reminders for every 30 minutes or select hourly intervals. I record what I drink every day, and it works perfectly.

Sylvia McKay, Yorkshire

In the past I rarely had enough fluid per day – too busy, or too preoccupied. I recently bought a small teapot, which I pour my drinks from throughout the day. This has helped me nearly double my typical daily intake of fluid.

Nina Rye, Norfolk

Shakshuka with a twist

This is my first attempt at making shakshuka from your recipes. The twist I added was shallow fried chicken as my son does not like poached eggs. It was delicious. Thanks for the recipe, I will definitely be making this again. Keep the recipes coming.

Bernard Hardman, Lancashire



Easy strength exercises

I found the exercises in your article on strength exercises (Summer 2024, page 36; bhf.org.uk/strength-exercises) brilliant and very easy to follow. They have encouraged me to do more daily because they are so straightforward and sensible. I have struggled to keep fit as I am waiting for a replacement knee, but these are just fine. They are comfortable and realistic. Thank you.

David Cooper, Cambridgeshire



I love these exercises. I've just been told I have osteoporosis so am working on strengthening my bones. And these exercises are really helping me.

Debbie Kershaw

Cholesterol-lowering lunch idea

As a keen cook and someone who has been warned I need to improve my cholesterol levels, here's my new favourite quick and easy lunch. It incorporates some of the best foods to keep high cholesterol in check.

- 2 slices of wholemeal, oat or seeded bread, toasted
- 1 small avocado, mashed
- 2 eggs, poached
- 1 tomato, sliced

Andy Rattle, Norfolk

Wonderful ways to keep walking

I endorse everything you say about walking in your article (Summer 2024, page 32; bhf.org.uk/walkingbenefits). I recently learnt about the benefits of walking backwards. It has helped me increase the length of my stride and walk faster.

Paul Busby, Sussex

I had a heart attack in February and have found ways of walking when the weather's bad. I do circuits in undercover shopping centres. Normally these places are bright and airy even on a dull day, which lifts your mood.

Kate Wheatley, Yorkshire

I'm 75 and have always enjoyed walking in the Lake District and Yorkshire. Nowadays my walking is limited because of knee problems, so I do shorter walks more frequently. If the weather stops me getting out, I watch walking videos on YouTube. I call it 'hearth rug walking'.

Pauline Curwen, Northumberland

I have a real passion for walking and find it's the only way to clear my head and stretch my body. Even a short walk for five to 10 minutes makes me feel so much more energised. I find a quick lunchtime stroll on workdays works wonders to keep me motivated and fresh for the afternoon. To keep things interesting, I like to mix my walks with my love of photography (this also gives me an excuse to get my breath back when I'm gasping for air). Here is one of my favourite photos, taken on a coastal walk in Filey, Yorkshire.

Amanda Best, Nottinghamshire



Weekend lie-ins may lower chance of heart disease and stroke

Catching up on sleep on a Saturday and Sunday may reduce the risk of heart and circulatory conditions by a fifth, a new study suggests.

Researchers in China analysed data from over 90,000 British people to see if extra sleep at the weekends affected their risk of stroke, coronary heart disease, heart failure or atrial fibrillation.

After 14 years, they found people who got the most extra sleep at the weekend were 19 per cent less likely to develop these conditions than those who got the least.

BHF Associate Medical Director, Professor James Leiper, said: "Lots of us do not get enough sleep, and while a weekend lie-in

“Those getting the most extra sleep were 19% less likely to have heart disease

is no replacement for a regular good night's rest, this study suggests it might help reduce the risk of heart disease.

"We know that lack of sleep can affect our overall wellbeing. This research is an important reminder of how important it is to try to get at least seven hours sleep every night."

The study was presented at this year's ESC Congress.

Invasive treatment could help stop further heart attacks in older people

Over 75-year-olds who have an invasive procedure after a heart attack are less likely to have another heart attack than those who do not, suggests new research funded by British Heart Foundation (BHF).

The study aimed to find out if performing a coronary angiogram on people aged 75 and over who'd had an NSTEMI heart attack, as well as giving them medicines, led to better outcomes.

An NSTEMI heart attack is when the blood vessels to the heart are severely narrowed but not blocked.

During a coronary angiogram doctors inject dye into these blood vessels, called coronary arteries, and then take an X-ray to see if they've narrowed.

The National Institute for Health and Care Excellence (NICE) recommends the procedure for everyone suspected of having an NSTEMI heart attack within three days if they're at risk of another heart event.

However, according to the lead researcher, Interventional Cardiologist Professor Vijay Kunadian, only 14 per cent of people aged over 85 have a coronary angiogram because of doctors' concerns about complications such as bleeding or stroke after the test. Professor Kunadian presented the findings at the European Society of Cardiology (ESC) Congress in London in September.

The study involved 1,518 people, with an average age of 82, who'd had an NSTEMI heart attack. Half were given the



Professor Kunadian says older adults can miss out on care

Only 14% of over-85s have an angiogram

recommended medicines, and the other half were given the same medicines and a coronary angiogram.

The angiogram group was also given treatment to reopen their coronary arteries to restore blood flow (revascularisation) a few days later if needed.

The study found that around four years later those in the coronary angiogram group were 25 per cent less likely to have had another heart attack than those who only had medicines.

"In the context of NSTEMI... [by using coronary angiogram] we're certainly reducing future heart attacks and future repeat procedures," Professor Kunadian told the congress.

But, having a coronary angiogram did not lead to a lower risk of dying from heart disease than medicines alone.

The study, known as the SENIOR-RITA trial, has been published in the New England Journal of Medicine.

Warning: 5,000 more early heart deaths a year

Five thousand more people a year could die early from heart and circulatory diseases in a decade's time unless the government takes urgent action, warns BHF in a new report.

The report, which calls for a national Heart Disease Action Plan, shows that premature heart-related deaths in England are rising. In 2022 alone, more than 39,000 people died before turning 75 from heart and circulatory conditions. This is the highest annual number since 2008.

If this death rate continues, the number of early deaths will likely rise due to England's ageing and growing population and could hit nearly 45,000 in 2035, the report says.

This would mean over 5,000 more deaths a year from heart and circulatory disease in the under 75s than in 2022.

Launching the report, BHF Chief Executive, Dr Charmaine Griffiths, said the government needed to take bold and targeted action now to stop these extra deaths.

This included cutting long waiting times for treatment, introducing measures to make everyday foods healthier and funding important research, said Dr Griffiths.

"There is no time to waste," she said. "Early deaths from conditions like heart attack and stroke are rising, the NHS is facing unprecedented pressure, and we urgently need to find more revolutionary treatments and cures."

“There is no time to waste

Artwork linking oral health to heart health wins BHF award

A researcher who used bacteria to create a picture of a heart sitting inside a tooth has won the Supporters' Favourite at BHF's annual Reflections of Research scientific image competition.

Dr Susanth Alapati, Clinical Research Fellow at the University of Aberdeen, grew bacteria found in the mouth in a petri dish to create the unusual artwork.

The image reflects his BHF-funded research on how bacteria that causes gum disease can potentially enter the bloodstream through chewing and raise the risk of heart conditions.

"Research consistently shows that oral health issues are connected to higher risks of heart disease. That's why it's important to maintain good oral hygiene," he told the judges.



Endometriosis may raise heart attack risk

Women with endometriosis are nearly a third more likely to have a heart attack or stroke in the long term than those without the condition, research presented at the ESC Congress shows.

Researchers in Denmark compared data from 60,000 women with endometriosis – where tissue lining the womb grows in other parts of the body – to 240,000 without it. None had a heart condition at the start of the study, which tracked their health for an average of 17 years.

They predicted women with endometriosis had a 31 per cent higher risk of heart attack or stroke, a 24 per cent higher risk of abnormal heart rhythm, and a five per cent higher risk of heart failure over 40 years.



Diary dates

January – September 2025

Ultra Challenge Series. Join the UK's biggest trek series. Walk, jog or run along stunning coasts or beautiful trails in the British countryside. Find out more bhf.org.uk/hmextrachallenge or call 0300 222 5721 (weekdays 9am to 5pm).

January – October 2025

AJ Bell Great Run Series. From thrilling 5ks to the iconic Great North Run, this collection of running events brings together communities. More information at bhf.org.uk/hmgreatrunseries or call 0300 222 5721 (weekdays 9am to 5pm).

15 June 2025

London to Brighton Bike Ride. Take in the sights as you travel from city to coast on our iconic 54-mile bike ride. Find out more at bhf.org.uk/l2b or call 0300 222 5721 (weekdays 9am to 5pm).

5 July 2025

Bournemouth Pier to Pier Swim. Take on the epic 1.4 mile open water swim from Boscombe Pier to Bournemouth Pier. Get a free expert training plan when you sign up. Go to bhf.org.uk/hmpierto pier or call 0300 222 5721 (weekdays 9am to 5pm).

Behind the headlines

Daily Express, 25 July 2024

“Cheap pill almost everyone takes could cause heart attack and stroke”

Common painkillers including ibuprofen and naproxen are being prescribed to people with heart and circulatory conditions, and may be causing worsening symptoms and strokes, according to research in the British Medical Journal (BMJ).

The study suggests people with heart failure, or those taking blood thinners



(anticoagulants) to prevent blood clots, are losing years of good health after taking non-steroidal anti-inflammatory drugs (NSAIDs). These medicines are commonly used by doctors to treat pain and inflammation.

The National Institute for Health and Care Excellence (NICE) says NSAIDs should be prescribed with caution to people with heart failure and those taking anticoagulants as

they are at high risk of serious side effects, such as worsening heart failure symptoms, stroke, heart attack and bleeding in the gut.

But analysis of data on nearly 11 million people in England found oral NSAIDs were still being prescribed to some of these high-risk people.

The UK researchers predicted NSAIDs could cause 6,700 more cases of worsening heart failure and an extra 2,000 strokes in those taking anticoagulants over the next 10 years across Britain.

However, the study also showed only very small numbers of people who had heart failure, or were taking anticoagulants, were being prescribed NSAIDs.

Just eight per 1,000 with heart failure and 22 per 1,000 on anticoagulants. And less than one in 1,000 of them had experienced a serious side effect.

Several UK newspapers reported on the study including the Daily Express, The Independent, the Daily Mail and The Sun. But none made it clear that very few high-risk people were being prescribed NSAIDs and were affected by serious side effects.

Many of the headlines also did not reflect that NICE already warns about the increased risk of serious side effects from NSAIDs in people with heart and circulatory diseases.

The Sun, 4 July 2024

“Drinking tea for decades is best beverage for protecting your heart, experts claim”

Regularly drinking tea for many years may lower your risk of dying from heart and circulatory diseases, according to new research.

The study found adults who drank up to two cups of tea a day for more than seven years had a 19 per cent lower risk of dying from a heart attack or stroke than those who drank less or no tea.

Every extra cup a day lowered their risk by four per cent, suggests the study published in the Current Developments in Nutrition journal.

The researchers looked at two published studies which asked people how often they drank tea. One from the United States followed people for an average of 7.3 years, and another based in China followed them for an average of 18.5 years.

However, we do not know what kind of tea people in the studies were drinking. Some may have had green tea, while others may have drunk black tea with milk and sugar.

The study caught the attention of The Sun and the Daily Mirror. Both claimed it showed that tea was the best drink for “protecting your heart”. However, this is misleading as the research was observational and does not prove tea lowers the risk of dying from heart disease, just that there is a link.

OUR VERDICT

While it does not prove cause and effect, this study supports earlier research linking tea to better heart health. But try not to add sugar, and use low-fat milk rather than whole fat, if you’re having several cups a day. This is because too much sugar and saturated fat can lead to weight gain and high cholesterol levels, which in turn can increase your risk of heart attack and stroke.

OUR VERDICT

If you’re under 65, do not have these conditions, and only take NSAIDs such as ibuprofen occasionally, the risk of heart-related complications from them is very low. Speak to your doctor if you have heart, kidney or gut problems, or are taking an anticoagulant, as NSAIDs should be used with caution.

What we've learned this issue



We learn something new with each issue of Heart Matters. Here are some of the highlights that caught our eye this time

Diets rich in a wide range of fruits, vegetables, wholegrains, fish and healthy oils help lower inflammation, reducing the risk of heart disease.

Anti-inflammatory foods for a healthier heart, page 24



Some medicines can affect each other, changing the way they work. If you take several pills a day, you may need to space them out through the day.

Does it matter what time you take your medicines? page 18



For women, smoking or having diabetes is linked with an even greater risk of having a heart attack than for men.

Mind the gender gap, page 10



If your feet are always cold, compression socks can warm them up by helping blood to flow. But ask your doctor first.

5 ways to boost your circulation, page 33



If you do just one thing...

Try swapping hard cheeses like Parmesan and regular Cheddar, which tend to be higher in saturated fat, for ricotta, Edam, or reduced-fat Cheddar, which are lower in saturated fat.

Make a cheese board that's good for you, page 26

Rapeseed oil has the least saturated fat of any oil. It also has the best balance of omega-3 and omega-6 polyunsaturated fats, which are linked to a lower risk of heart and circulatory diseases.

Is rapeseed oil healthy? page 29

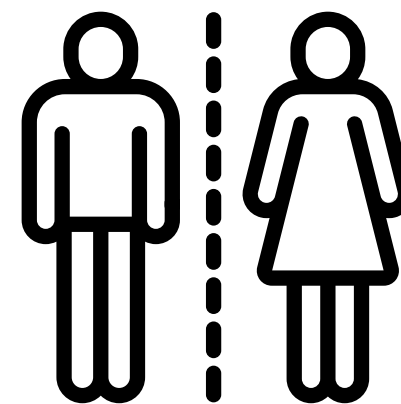


The Mexican tetra fish can repair damage to its own heart. Scientists funded by British Heart Foundation are studying whether this can be reproduced in people who have heart failure after a heart attack.

What's next in heart failure, page 42



Mind the gender gap



Women who have heart attacks face poorer care than men. Find out what British Heart Foundation is doing to close the gap – and what you can do too

When Helen Wilberforce had a heart attack in 2023, she could not believe it was happening. She considered herself a healthy 72-year-old and when she found herself in A&E, she joked with the doctor.

"I teased, 'Oh, this looks serious,' as a trolley was wheeled into my bay," she recalls. "Then the doctor said, 'It's for you. You've had a heart attack.'"

Earlier that day she had googled 'heart attack symptoms' after

struggling to catch her breath and experiencing a strange feeling in the middle of her chest. "The advice was to call 999 but I didn't want to make a fuss, so I called NHS 111," says Helen, who lives in Holmfirth, West Yorkshire.

The responders recognised something serious was happening and called an ambulance that took her to A&E. She needed open-heart surgery to bypass the three blocked blood vessels (coronary arteries) that

had caused her heart attack. She now realises that the symptoms she did not think were serious were in fact a medical emergency. "If I hadn't made that call, I could have died," she says.

Worse diagnosis and treatment

Helen is one of the 33,000 women who are admitted to hospital due to a heart attack each year in the UK. That is the equivalent of one woman every 16 minutes.

Yet heart attacks are often seen as being a 'man's problem'.

"It's true more men than women have heart attacks. But just because something is less common does not mean it's uncommon," says Dr Sonya Babu-Narayan, British Heart Foundation (BHF) Associate Medical Director.

She points out that coronary heart disease, which causes most heart attacks, is the biggest killer of women

worldwide, and kills twice as many in the UK as breast cancer each year.

"When it comes to heart attacks, the odds are stacked against women. They are more likely than men to have a delay in being diagnosed or be misdiagnosed," explains Dr Babu-Narayan.

"Women may be less aware that heart attacks can affect them, or be more hesitant to seek medical help.

"But even when they do, they are

more likely to be dismissed." Dr Babu-Narayan points to the example of the AI-powered virtual GP app, Babylon. It made headlines a few years ago because, with the same symptoms and medical history, the algorithm suggested very different courses of action for men and women.

Men were advised to go to A&E to rule out a heart attack, while women were told they might be having a panic attack, best treated at home. She says: "This is an example of an AI algorithm amplifying existing inequalities in women's treatment."

Before becoming a doctor herself, Dr Babu-Narayan witnessed her own mother face such discrimination. "The last time I saw my mother alive, she was in the cardiac ward, weeping from the pain in her chest. I was told at the time, 'Indian women always complain about pain.'"

Helen Wilberforce might not be here today if she had not googled 'heart attack symptoms'



Photography by Joanne Crawford, Ollie Holder, Jo Hanley

Dr Sonya Babu-Narayan, BHF Associate Medical Director, is calling for an end to inequalities in heart care



Nicola Topping's symptoms, later found to be angina and a heart attack, were at first dismissed as 'indigestion'



Sadly, inequalities still exist. A study in the journal *Heart* this year showed that women, Black people and people from low-income households are less likely to be offered heart surgery in England. And when they do have heart surgery, the results are not as good. Women are more likely to die in the year after heart surgery.

"Women are less likely to have treatments such as stents, heart surgery, medicines such as statins and access to cardiac rehabilitation, which can reduce the risk of a heart attack happening again," says Dr Babu-Narayan. "When it comes to heart care, women are under-treated and under-supported."

What you can do

If you are a woman, or you are thinking about your female friends and relatives, BHF wants to empower you.

We want to help you understand your risk, recognise the symptoms of a heart attack, and know how and when to get medical help:

Understand your risk

Heart attack risk factors for men and women include if:

- You have high blood pressure, high cholesterol or uncontrolled diabetes.
- You smoke, have an unhealthy diet, or drink more than 14 units of alcohol per week.
- You are not physically active.
- You have a family history of heart disease.

For women, smoking or having diabetes is linked with an even greater risk of having a heart attack than for men, so there's even more reason to try to quit smoking and keep diabetes in check. There are also other risks specific to women. "Having

periods early, recurrent still births or miscarriages, experiencing diabetes or high blood pressure during pregnancy, or going through menopause early could put you at a higher risk," says Dr Babu-Narayan.

Doctors do not routinely ask about these factors when assessing women's risk, she explains. Therefore, women might want to bring these factors up when talking to their doctor. She also points out that when oestrogen levels drop leading up to, during, and after menopause, cholesterol levels, weight and blood pressure can rise, putting you at greater risk. This is a time to keep a closer eye on your health by checking these levels.

Know the symptoms

Heart attacks do not always look like they do on television, with someone dramatically clutching their chest in agony. It's also a common misconception that women and men experience different heart attack symptoms. Research, funded by us, shows that both men and women can have a range of symptoms, including:

- chest pain or discomfort that may feel like pressure, tightness, gripping, squeezing, aching, or heaviness on the chest that comes on suddenly and does not go away
- pain or discomfort that may spread to one or both of your arms, or your neck, jaw, back or stomach
- shortness of breath
- feeling dizzy or lightheaded
- a feeling that is similar to indigestion, feeling sick (nausea), or being sick (vomiting)
- sweating
- a sudden feeling of anxiety that can feel like a panic attack.

If you think you're having a heart attack, call 999 immediately.

Get the care you need

"Do not dismiss your symptoms. Even if it's a false alarm, it's better to be

reassured," says Dr Babu-Narayan.

She says that if you think you might be having a heart attack, say so. "This will trigger others to consider it, whether it's your family who may need to call for help, paramedics in the ambulance, or doctors at the hospital.

"If you feel you are not being heard, do not feel shy to say it twice, or perhaps ask the doctor, 'How do you know I am not having one?'"

This is an approach Nicola Topping, from Linlithgow, near Edinburgh, wishes she'd taken. In November 2017, the then 47-year-old called an ambulance. She had chest discomfort, was hot and sweaty and had an upset stomach. The paramedics told her she was not having a heart attack, and she was not taken to hospital.

But she had a family history of heart problems and continued to have chest discomfort after that night, so she sought more medical help. Two different doctors told her it was probably indigestion and gave her tablets to try.

When the indigestion tablets did not work, she persisted in seeking answers and eventually, 18 months later, was seen by her usual doctor, who had returned from maternity leave.

A referral to a heart specialist, "just to rule things out", led to a diagnosis of angina. "I was told from what they could see, and what I told them, I probably did have a heart attack that night the paramedics came. They said an upset tummy and clamminess can be symptoms. It's not always the gripping pain you see in movies."

She says, "If I could go back, I would have asked more questions, I would have pushed to go to the hospital sooner. When someone in a more educated position tells you, 'You're definitely not having a heart attack', you want to accept that.

"But I knew something wasn't right. I think, as women, we're sometimes too accepting."

Coronary heart disease **kills twice as many women** in the UK as breast cancer



Every **16 minutes** a woman in the UK is admitted to hospital due to a heart attack



Consider taking part in research

Current guidelines about how best to diagnose and treat heart attacks have been developed through decades of research. However, only about a third of participants in studies into heart and blood vessel (cardiovascular) disease are women.

More women are needed, says Dr Babu-Narayan. "If you're asked to take part in a trial, perhaps consider it. Do not be afraid to ask questions and find out more."

How BHF is helping

We're taking action on several fronts:

Raising awareness

Through information such as this article, which you can help us share with friends and family, we support women to understand their risks, the symptoms of heart attacks, and when to call for urgent help.

Fighting for fairer research

We use our position as one of the world's biggest funders of cardiovascular science to increase women's representation in research.

Since 2021, any scientist applying for our funding has to explain how they will recruit a representative range of participants and our new application forms include a section on male and female representation in the study.

Promoting women in science

Within a generation, we want to see an equal number of men and women scientists being funded. We support women's careers in cardiology, for example by hosting Women in Science events.

Dr Babu-Narayan says: "We know when there are both women and men in the team, more women are recruited into trials. Diverse teams with diverse ways of thinking also lead to better research and innovation."

Influencing the government and NHS

Since 2019, our policy teams have put out Bias and Biology reports for each of the UK's four nations, which highlight gender inequalities in heart care and call for improvements.

This has helped influence government plans, for example the Scottish Women's Health Plan for 2021-24 included clear aims and actions for women's heart health.

"It's about moving beyond 'bikini medicine', the idea that women's health is only about breasts and ovaries," explains Dr Babu-Narayan. "Changing entrenched inequalities and biases will not be easy, but it will be worthwhile." ●

- If you'd like to share your story about poor heart attack care, email us at hmeditor@bhf.org.uk or send a letter to the address on page four.

“We need to move away from ‘bikini medicine’, the idea that women’s health is only about breasts and ovaries

Ask the expert

Send in your health questions

Email: hearthelpline@bhf.org.uk

Call our Heart Helpline: **0808 802 1234**

Write to: **Heart Matters, British Heart Foundation, 180 Hampstead Road, London NW1 7AW**



Professor Mark Kearney
BHF Professor of Cardiovascular and Diabetes Research at the University of Leeds

Q Should I get my blood sugar levels checked if I do not have diabetes?

A Professor Mark Kearney says:

We all need some sugar in our blood to provide our body with energy. After you eat, the level of a hormone called insulin rises briefly. Insulin stimulates the liver and muscles to take up sugar in the form of glucose from the blood, which your body can then use as energy.

If you do not have enough insulin, or if you have insulin resistance, which means the body does not react as it should to insulin, sugar stays in the bloodstream. Over time, high blood sugar levels can damage your blood vessels.

This can lead to health problems such as coronary heart disease, eye disease and kidney disease. It is important to know if you have high blood sugar, so you can control the levels and reduce the risk of these conditions.

People with high blood sugar levels can develop diabetes, which has symptoms that include needing to wee a lot, feeling more thirsty, hungry or tired

than usual, losing weight or blurred eyesight. But if you have high blood sugar that's not diabetes, you may not have any symptoms. The way to find out and prevent further health problems is to have a blood test to check your sugar levels.

If you have coronary heart disease, you'll be offered a blood sugar test as part of your routine checks. If you have a family history of diabetes you'll have your blood sugar checked as part of the NHS Health Check in England for people aged 40 to 74. Or you can ask your GP. Your blood will be tested for a substance called glycated haemoglobin, which is known as HbA1c. It's made when the glucose in your body sticks to red blood cells. The test shows your average blood sugar levels for the last two to three months. Ideally, it should be less than 42mmol/mol.

But if your HbA1c is more than 48 mmol/mol, or more than 7 mmol/L after you have been fasting, then your blood sugar is high. Your doctor will talk to you about how to reduce your levels.

Q What is sudden cardiac death and why does it happen?

A Ruth Goss says:

Sudden cardiac death (SCD) is an unexpected and sudden death that is thought to be caused by a cardiac arrest brought on by a heart condition. Tragically, thousands of people's lives end this way every year in the UK.

A cardiac arrest is caused by a dangerously abnormal heart rhythm (arrhythmia). Some conditions increase the risk of having one, including inherited heart conditions, heart failure and a history of life-threatening heart rhythms.

Many people affected by SCD do not know they have, or are at risk, of these heart conditions, so their death comes out of the blue. Because of this, doctors will study their body after death (a postmortem) to try and find out which heart condition caused their death.

However, sometimes doctors cannot find a cause for why someone has died from SCD because their heart appears normal at postmortem.

When this happens, the person's cause of death will often be recorded as sudden arrhythmic death syndrome (SADS), which affects around 500 people in the UK every year.

Sometimes SADS is caused by inherited heart conditions that have gone undetected and can cause cardiac arrests. But, someone may still be diagnosed with SADS, even if the structural changes to the heart that are usually seen by doctors on examination are too small to be seen.

Losing someone to sudden cardiac death or SADS can be extremely difficult. You may ask yourself why it happened, and what happens next? You may also be worried about your own health and that of your loved ones.

Whatever you're feeling, support is available. Speak to your GP about your heart health and how to access local bereavement and support services.

- Learn more about sudden arrhythmic death syndrome at bhf.org.uk/sads



Ruth Goss
Senior Cardiac Nurse at British Heart Foundation

Q What are ectopic beats? Can they damage your heart?

A Julie Ward says:

Ectopic beats are early (premature), or extra heartbeats, which can cause palpitations that feel like your heart is skipping or missing a beat.

They're common, with most people experiencing ectopic beats at some point in their lives, especially at times of hormonal changes, such as menopause.

Ectopic beats are usually harmless and do not damage the heart. In fact, many people who have them have no symptoms, or have them while they're asleep.

However, if you do experience symptoms, you may feel like your heartbeat is racing, or is irregular with skipped or extra beats, or you may feel a pounding, thumping or fluttering.

Ectopic beats, which doctors may call a heart arrhythmia, can last for seconds, minutes, or longer.

They also come in different patterns, for example, you may have one ectopic beat before every normal heartbeat, or several ectopic beats

in a row. You may also feel a sensation in your chest, neck or throat.

Common causes include strenuous exercise, lack of sleep, stress, anxiety, alcohol, smoking and caffeine. If any of these are triggers for you, try to avoid them. Some medicines cause ectopic beats too, so check your medicine leaflets. But always see your GP before stopping any medications.

Not all ectopic beats need treatment. If you are unsure or have frequent or lengthy spells of palpitations, speak to your doctor to discuss whether you need to have your heart monitored.

They may want to do an ECG (electrocardiogram that monitors the heart's rhythm), or a series of ECGs called a Holter Monitor test, or an echocardiogram, which is a scan of the heart, to see if there are any underlying heart issues.

To relieve anxiety and stress try breathing exercises, yoga and mindfulness, and avoid alcohol, coffee and cigarettes.

- Find out more at bhf.org.uk/palpitations



Julie Ward
Senior Cardiac Nurse at British Heart Foundation

Your guide to statin alternatives

We look at four other medicines that lower cholesterol to see how well they work and who can be prescribed them under NHS rules

Statins are a group of medicines that help lower cholesterol levels in the blood. They have been around since the 1980s and are widely prescribed for high cholesterol when lifestyle changes have not been enough to lower cholesterol to healthy levels.

Lowering high cholesterol is important. If left untreated, it can increase the risk of a heart attack or stroke.

This is because high cholesterol can cause the build-up of fatty material (plaques) in the walls of the arteries,

causing them to narrow. This is a process called atherosclerosis.

There's lots of research showing statins are safe and effective. Studies show they can lower your 'bad' LDL cholesterol by up to 30 per cent at low

“If left untreated, high cholesterol can increase the risk of a heart attack or stroke”

Part 1

Look out for part 2 on natural alternatives to statins in the next issue of Heart Matters or visit bhf.org.uk/naturalalternatives

doses, and more than 40 per cent at the highest doses.

Most people have no side effects from statins. However, some people do – the most common are muscle pains and aches. This means they need to take an alternative cholesterol-lowering medicine. And others may need to take another medicine, as well as a statin, to help bring their cholesterol levels down to healthy levels.

Here we look at four medicines that doctors can prescribe as an alternative, or add-on, to statins.



Ezetimibe

This comes as a tablet that's taken once a day. It works by blocking the absorption of cholesterol from food in your stomach into the bloodstream, which leads to lower cholesterol levels.

This means the liver has to use more cholesterol from the blood to make bile, which is an essential substance for digestion. This, in turn, lowers blood cholesterol levels even further.

The National Institute for Health and Care Excellence (NICE) says doctors can prescribe ezetimibe for people who cannot take statins due to side effects, or alongside statins in those who need extra help to lower their cholesterol levels.

However, it's not as effective as most statins on its own. Ezetimibe lowers 'bad' LDL cholesterol by 15 to 22 per cent when used alone, but when taken with a statin it lowers it by 21 to 27 per cent.

Possible side effects include stomach pain, diarrhoea, flatulence and tiredness.



Bempedoic acid

This cholesterol-lowering medicine only came into use in the UK in 2021. It's taken daily and comes as its own pill or in a combined pill with ezetimibe.

Like statins, bempedoic acid reduces the production of cholesterol in the liver, which in turn lowers cholesterol levels in the blood.

But it differs from statins in that it only works in the liver, so there's less risk of side effects like muscle pain.

However, it's not quite as effective as a statin on its own, only lowering 'bad' LDL cholesterol by 17 to 28 per cent. When taken with ezetimibe it's more effective, giving around a 28 per cent reduction in cholesterol levels.

For this reason, NICE says it should only be prescribed with ezetimibe – either for people who cannot take statins due to side effects, or when ezetimibe does not lower cholesterol enough on its own.

Common side effects include a lack of red blood cells (anaemia), gout, high levels of uric acid in the blood, and pain in the hands, feet and arms.



PCSK9 inhibitors

These are given as an injection under the skin every two to four weeks. They stop a protein called PCSK9 from working, which then allows the liver to remove more 'bad' LDL cholesterol from the blood.

Studies show that PCSK9 inhibitors can lower 'bad' LDL cholesterol by up to 60 per cent. In people with heart and circulatory diseases, they also reduce the risk of death from a heart condition or having a heart attack or stroke by 20 per cent.

NICE recommends PCSK9 inhibitors only for people who have had a heart attack or stroke already, where the maximum dose of statins has not lowered their cholesterol to the desired level.

People with a genetic condition called familial hypercholesterolaemia, which can lead to very high cholesterol levels, are also eligible for NHS prescriptions.

Reported side effects are few but include flu-like symptoms or soreness around the injection site.



Inclisiran

This is one of a new class of medicines known as gene-silencing drugs.

Inclisiran works similarly to PCSK9 inhibitors, but it uses RNA therapy to block or 'silence' the gene that produces the PCSK9 protein, rather than acting on the protein itself like PCSK9 inhibitors. This boosts the liver's ability to remove harmful cholesterol from the blood.

It is given as an injection under the skin. After an initial dose, another injection is given three months later, and then you only need injections twice a year after that.

Trials show that inclisiran can reduce 'bad' LDL cholesterol by up to 52 per cent. However, under NICE guidance, it can only be prescribed to people who have had a heart attack or stroke, when statins have not lowered their cholesterol levels enough. It can be given on its own, or with statins and other cholesterol-lowering drugs, except PCSK9 inhibitors.

Reported side effects include pain and redness or a rash at the injection site. ●



See our information on statins at bhf.org.uk/statins

Does it matter what time you take your medicines?

Pharmacist Antania Tang untangles this complicated question

When you take your medicine can impact how it works. Some are more effective at certain times of day, while others can have inconvenient side effects if taken at the wrong time.

Why there can be a 'best time'

Factors that affect what time you should take your medicine include:

The body's natural rhythms

Your body clock can influence how well medications work. For example, you produce more cholesterol at night.

How long the medicine lasts

Some medicines are processed quickly by the body and may need to be taken multiple times in a day, while other, slow-release medications stay in the body for a longer time.

Taking with meals

Some medications need to be taken on an empty stomach, while others need food to help them be absorbed.

Side effects

Sometimes common side effects need to be considered. For example, if a medicine makes you drowsy, it might be better to take it at night. By contrast, if a medication makes you pee a lot, you may not want to take it just before bed.

Drug interactions

If you've been prescribed many medicines, you'll need to chat with

your pharmacist or GP to understand how they might affect each other (this is known as 'drug interactions'). You may need to take them spaced out at different times of the day.

Guidance for specific medicines

Below are the usual recommendations for medicines taken by people with heart conditions, high blood pressure, high cholesterol or type 2 diabetes.

But remember that everyone's health needs are different. Talk to your doctor or pharmacist about what will work best for you.

Anticoagulants

Taken to prevent blood clots, these are sometimes called 'blood-thinners'. For some anticoagulants, the time you take it is not important. Others, such as rivaroxaban, need to be taken with food to help your body fully absorb them.

“Stick to taking your medicine around the same time each day

Antiplatelets

These prevent platelets (a type of blood cell) forming blood clots. Some, like a 75mg dose of clopidogrel, are usually

given once a day and it does not matter what time you take it, as long as it's around the same time each day.

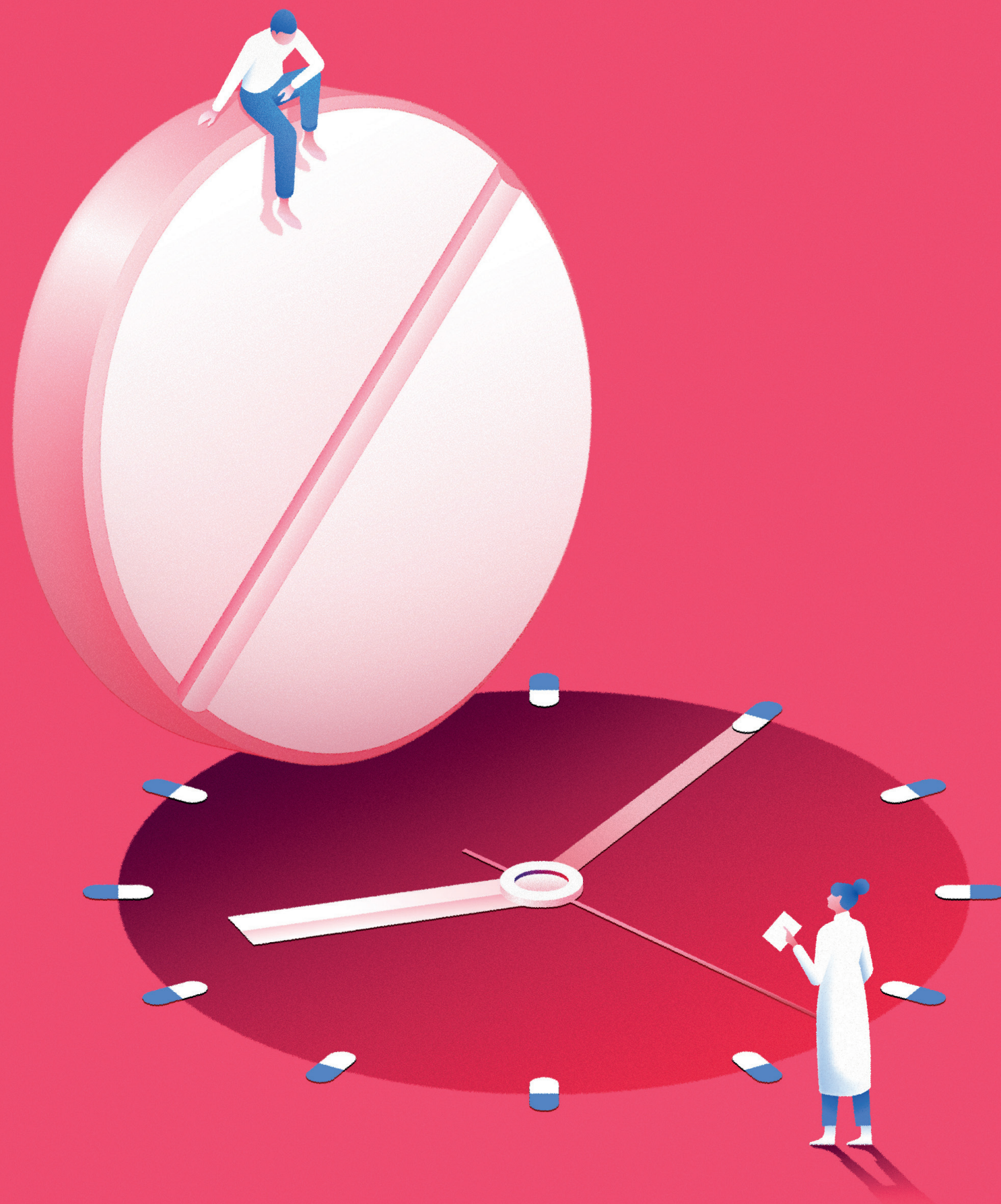
By contrast, ticagrelor is typically given twice a day. On the first day, you may be asked to take the tablets at the same time, but afterwards you'll space them out in the morning and evening.

Blood pressure tablets

Many types of medicines are used to treat high blood pressure and you may be prescribed more than one. Here are the best times to take each type:

- **Angiotensin receptor blockers and ACE inhibitors**, such as candesartan and ramipril, work by widening your blood vessels. These can make you feel dizzy when you take your first dose, so it is usually suggested you take your first dose at bedtime. After that, you can take it at any time of day, as long as it's the same time every day.
- **Beta blockers** like bisoprolol, slow down your heart rate making it easier for your heart to pump blood around your body, which lowers your blood pressure. They can also make you feel dizzy at first. So, it's best to take your first dose at bedtime until you no longer feel dizzy, before switching to the morning.
- **Calcium channel blockers** help your blood vessel walls relax. Some, like amlodipine, are taken once a day at a regular time of your choice. ▶

Illustration by Chen Wu



Verapamil can be taken once or twice daily, depending on what it is being taken for. If you are taking it during day, it should be spaced out, with most people taking it in the morning and lunchtime.

- **Diuretics**, also known as water tablets, help the body get rid of water. As they make you pee, people often take them in the morning, so they do not disturb sleep.

Statins to lower cholesterol

Your body produces more cholesterol at night, so it is often recommended that simvastatin and pravastatin should be taken in the evening. Other statins are broken down less quickly by the body and will still be present in your body at night, when it needs it most, even if you take them in the morning.

Type 2 diabetes medicines

Medications for type 2 diabetes, such as metformin and gliclazide, often need to be taken with meals. They come as standard tablets, which are taken three times a day with breakfast, lunch and dinner, or as slow-release tablets, taken once a day.

5 tips for always taking your medicines on time

Whatever time you take medicine, it's important to stick to the same time each day. These five tips can help you:

1 Read the labels

Follow the instructions from your doctor or pharmacist, or the medicine's label or leaflet. If you cannot read the labels, ask your pharmacist to do larger text.

2 Choose a time you can stick to

Consider your daily routine and pick a time that's convenient and easy to remember. You may want to 'habit stack' where you 'pin' one habit, such as taking a pill, to something you do regularly, like having breakfast, a morning coffee, or brushing your teeth.

When should you take blood pressure tablets? What the science says...

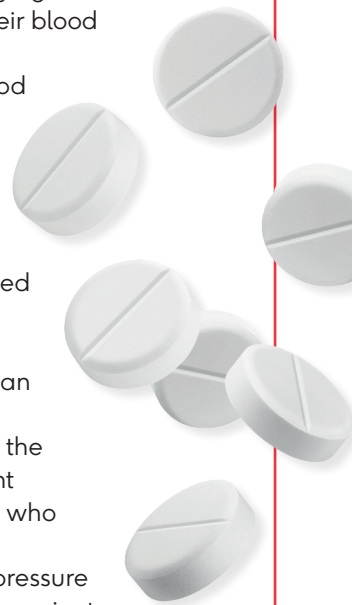
Blood pressure normally falls when we sleep before rising again in the morning. But when someone has high blood pressure, their blood pressure might not fall at night.

This led to the idea that it might be better to take blood pressure tablets at night. However, the British Heart Foundation-funded Treatment In the Morning versus Evening (TIME) trial showed that blood pressure medication worked equally well, whether taken in the morning or evening.

In the trial, over 21,000 people were randomly assigned to take their blood pressure tablets either between 6am and 10am, or 8pm and midnight. They kept to the same time of day throughout the study and were followed for an average of five years.

The researchers, led by Professor Tom MacDonald at the University of Dundee, found that there was no significant difference between the groups in the number of people who had a heart attack or stroke or died.

Professor MacDonald said: "People with high blood pressure may choose to take their medication at a time that is convenient for them and minimises any undesirable effects."



3 Use memory aids

If you take many different pills, it can be helpful to have a pill box, which is sectioned off into days of the week and morning, lunchtime and evening. However, not all medicines will be suitable to put in the box. Put the pill box in an obvious place, such as beside the bed or kettle, where you'll see it at the right time of day. Some people find pill time apps useful, or they set reminders on their phone, or use an old-fashioned alarm clock.

4 If you forget to take a tablet

There's no need to worry if you miss a dose. You'll often find instructions in the medicine's leaflet about what to do if this happens. If you're unsure, visit or call your local pharmacist.

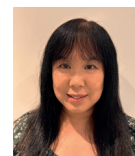
If you regularly forget, ask your pharmacist if they can help. Under the Equality Act, pharmacists must make

sure people receive their medicine in a way they can actually take it. Some pharmacies may be able to supply your medicines in a tray already sorted by days of the week and times of day.

5 Ask for a medicines review

Talk to your doctor or pharmacist if you're struggling to take your medicines correctly. They may be able to make it easier for you, for example, getting your prescription switched from tablets taken many times a day to a slow-release version that you only need to take once daily. ●

Meet the expert



Antania Tang is a senior advice and support pharmacist at the National Pharmacy Association.

'Marry Me' chicken

Win someone's heart with this healthy version of a popular internet recipe.



Preparation time: 5 mins

Cooking time: 25 mins

Serves: 2

Suitable for home freezing

Each portion contains

Energy	Carbo- hydrate	Fibre	Sugars	Fat	Saturates	Salt
1422kj 338kcal 17%	9.2g	1.4g 5%	5.9g Low 7%	11.9g Med 17%	3.4g Low 17%	0.76g Low 13%

% = of an adult's reference intake (traffic light colours are based on per 100g)

Ingredients

2 skinless chicken breasts

2 tsp vegetable oil

1 shallot, finely diced

2 cloves garlic

2 tsp sundried tomato puree

1 tbsp tomato puree

150g (5oz) low-fat cream cheese

Pinch of chilli flakes (optional)

6 basil leaves

Method

1 Place the chicken breasts inside a plastic bag. Bash with a rolling pin to flatten them to about 1cm thick. Season with a little black pepper.

2 Heat the oil in a medium frying pan and fry the shallots for 3 to 4 minutes until transparent.

Add the chicken breasts and fry for 5 minutes on each side, until browned.

Add the garlic and fry for 1 minute.

3 Add 100ml cold water to the pan with both tomato purees, the cream cheese, and chilli flakes, if using.


4 Bring to the boil, then turn down the heat and simmer for 10 minutes until the chicken is no longer pink in the centre. Tear the basil into the sauce just before you serve it. ▶



How we made it healthier

Using low-fat cream cheese instead of cream makes the dish lighter without compromising on the creamy texture of the sauce.

Red pepper, carrot and lentil soup

 **Preparation time:** 15 mins
Cooking time: 40 mins
Serves: 2
Suitable for home freezing (up to three months)

Each portion contains

Energy 880kj 208kcal 10%	Carbo- hydrate 33.3g	Fibre 8g 27%	Sugars 11g Low 12%	Fat 3.9g Low 6%	Saturates 0.3g Low 2%	Salt 0.11g Low 2%
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% = of an adult's reference intake (traffic light colours are based on per 100g)



How we made it healthier

This soup is jam-packed with vegetables and pulses, which count towards your 5-a-day.

Ingredients

- 2 tsp vegetable oil
- 1 small onion, peeled and finely diced
- 1 medium carrot, diced
- 1 red pepper, deseeded and diced
- 1 stick celery, diced
- 2 cloves garlic, crushed
- 100g (3.5oz) red lentils
- 3 tbsp tomato puree
- 1 tsp mixed dried herbs
- Pinch of chilli flakes (optional)

Method

1 Heat the oil in a medium pan, then add the onion, carrot, pepper, celery and garlic. Cook


for 2 minutes on a high heat. Then reduce to a very low heat, cover the pan, and cook for 15 minutes, stirring occasionally. This will make the vegetables tender and bring out the maximum flavour.

2 Remove the lid, turn up the heat to high, and fry the vegetables, stirring occasionally until they are lightly browned and caramelised.

3 Add the lentils, tomato puree, herbs, chilli flakes and 500ml (17fl oz) water. Bring to the boil, cover with a lid and cook for 20 minutes, adding a little extra water if needed, until the lentils are tender. You can either puree the mixture until smooth or serve chunky.



One-pot pork with parsnips

 **Preparation time:** 15 mins
Cooking time: 1 hour 30 mins
Serves: 2
Suitable for freezing

Each portion contains

Energy 1880kj 446kcal 22%	Carbo- hydrate 38.2g	Fibre 9.8g 33%	Sugars 13.5g Low 15%	Fat 13.4g Low 19%	Saturates 3.9g Low 20%	Salt 0.39g Low 7%
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% = of an adult's reference intake (traffic light colours are based on per 100g)

Ingredients

- 2 tsp vegetable oil
- 400g (14oz) extra-lean diced pork leg
- 1 onion, chopped
- 1 carrot, diced
- 2 celery sticks, chopped
- 2 parsnips, cut into chunks
- 1 bay leaf
- 3 sage leaves, chopped
- 1 thyme sprig
- 2 tsp Dijon mustard
- 125ml (4fl oz) dry cider or apple juice
- 2 medium potatoes, cut into chunks
- 100g (3.5oz) green beans
- 1 tsp cornflour
- 2 tbsp low-fat creme fraiche

Method

1 Heat the oil in a medium to large pan and fry the pork for 5 minutes, or until lightly browned. Remove the meat from the pan with a slotted



How we made it healthier

Using extra-lean pork, which is high in protein but low in fat, means this recipe gives you a generous portion size while also being relatively low in calories. It's a good example of how choosing healthy ingredients allows you to eat larger portions for fewer calories.



spoon. Add the onion, carrot and celery to the pan and fry on a low heat for 10 minutes until tender.

2 Return the meat to the pan with the parsnips, bay leaf, sage, thyme leaves and mustard, and grind in some black pepper. Pour over the cider or apple juice and enough water to cover the meat.

3 Bring to the boil, then reduce the heat, cover with a lid and simmer

for 45 minutes, or until the meat is tender.

4 Add the potatoes (and a little extra water if needed) and cook for a further 15 minutes. Then add the green beans and cook for a further 5 minutes.

5 Mix the cornflour with 1 tbsp cold water and add to the pan, stirring until thickened. Stir in the creme fraiche just before serving. ●



Tried this at home?

We'd love to hear what you thought of our recipes, and any tweaks you made to them. Email your thoughts and photos to hmeditor@bhf.org.uk or write to the address on page four.

Anti-inflammatory foods for a healthier heart



BHF Senior Dietitian Tracy Parker reveals how your diet can affect inflammation in your body and heart

Inflammation is the body's natural defence system, but it can also play a role in heart and circulatory diseases. Research shows that diet can impact inflammation, either for better or worse.

How does inflammation affect the heart?

Chronic inflammation plays a key role in atherosclerosis, where fatty material (plaque) builds up inside blood vessels. This can lead to heart attacks and strokes.

Is diet linked to inflammation?

Research suggests that what we eat can influence inflammation. Certain

foods like blueberries, olive oil, spinach, green tea, turmeric and oily fish may have anti-inflammatory effects, while processed meats, foods high in saturated fat and sugary drinks can promote inflammation.

However, most studies have been conducted in labs using concentrated extracts, so it's unclear if these individual foods alone can prevent or cause inflammation.

The strongest evidence comes from population studies on whole diets. They show that eating patterns which are rich in fruits, vegetables, wholegrains, unsaturated oils, beans, nuts, and fish, such as the

DASH (Dietary Approaches to Stop Hypertension) and Mediterranean diets, lower heart disease risk.

They do this by improving risk factors like cholesterol and blood pressure and reducing inflammation.

In contrast, diets high in calories, processed meats, butter, sweets, sugary drinks and refined grains are linked to higher inflammation and an increased risk of coronary heart disease.

The exact mechanisms are not fully understood, but the anti-inflammatory benefits seem to come from a variety of healthy foods working together.

Rather than focusing on specific foods, it's best to eat a diverse range of fruits, vegetables, wholegrains, fish and healthy oils to help lower inflammation in the body.

Foods that fight inflammation

Fruit and vegetables

They contain antioxidants which give plants their vibrant colours, help protect cell linings and may prevent, delay or repair cell damage caused by inflammation.

Tip: Aim to eat at least five portions of different fruits and vegetables daily. Choose a variety of vegetables in different colours like dark green, orange, yellow, red and purple.

Wholegrains, beans, lentils, nuts and seeds

These are excellent sources of fibre, which helps lower cholesterol and fuel the growth of healthy gut bacteria, supporting your immune system.

Tip: Go for wholegrains like brown rice, wholemeal bread and oats. Replace half your meat with beans and lentils and snack on a handful of nuts and seeds.

Oily fish

Omega-3 fats from oily fish like mackerel, salmon and sardines help to lower blood pressure, levels of unhealthy triglyceride fats and inflammation, cutting your risk of coronary heart disease. Eating omega-3 rich foods

is more beneficial than taking supplements.

Tip: Aim for a portion of oily fish a week. Fresh, frozen, or tinned fish in spring water all count. Walnuts, pecans, linseeds, and rapeseed oil also contain smaller amounts of omega-3s.

Fermented foods

Fermented foods, such as yogurt, kefir (a fermented milk drink), cottage cheese, kombucha (a fermented tea) and kimchi (Korean fermented vegetables), are full of 'healthy' bacteria which support your gut and immune health.

Tip: Substitute yogurt or kefir for milk in cereal, smoothies, or baking. Try kombucha instead of sweetened drinks and use sauerkraut (fermented cabbage) or kimchi as an alternative to coleslaw.

Is there a specific anti-inflammatory diet?

There's no official anti-inflammatory diet. If you're looking for an anti-inflammatory way of eating, consider the Mediterranean and DASH diets. These diets emphasise naturally anti-inflammatory foods and avoid those that can cause inflammation. They are also known to reduce the risk of coronary heart disease.

What else reduces inflammation?

As well as a healthy diet, you can help control inflammation by adopting other healthy habits like not smoking, staying physically active, and maintaining a healthy weight. These habits also help to lower cholesterol, blood pressure and blood sugar levels, keeping your heart healthy too. ●

Foods that lead to inflammation

Processed meat

Bacon, sausages, and salami are high in saturated fat and salt, which can raise cholesterol and blood pressure, and contribute to inflammation.

Tip: Go for lean cuts of meat, chicken or fish instead. If you choose processed meats, keep the portions small and balance them with plenty of vegetables, beans and wholegrains.

Sugary and fatty foods

Foods like sugary drinks, cakes and biscuits are high in calories. Eating too much of them can lead to weight gain, and raised cholesterol and triglyceride levels, which are linked to inflammation.

Tip: Try swapping sugary drinks for water, no-added-sugar squash, or low-fat milk. Instead of cakes and biscuits, go for fruit, plain popcorn or unsalted nuts.

Make a cheese board that's good for you

If you're crackers about cheese but want to protect your heart, our tips will help transform your cheese board into a healthier spread that's still packed with flavour

The variety of flavours and textures that a cheese board can offer makes it a popular choice to share with friends and family all year round. But while most cheeses are a good source of protein and calcium, they can also be high in calories, saturated fat (saturates) and salt. So, eating too much cheese can lead to high cholesterol and high blood pressure, raising your risk of coronary heart disease.

Some types of crackers can also be high in salt, and jams or chutneys are often high in sugar. This means traditional cheese boards may not be the best option if you're trying to protect your heart. The good news is that with a few smart swaps and additions you can make a healthier cheese board to satisfy your appetite for savoury flavours and creamy textures.

Choosing your cheese

Most supermarkets should have a good variety of cheese to choose from. Try keeping your selection to a maximum of two or three different cheeses, choosing types that are lower in saturated fat.

You can use the information on the next page as a guide to help you.

If you have a favourite cheese that is high in saturated fat or salt, you can still enjoy it by having a smaller amount.

Hard or crumbly cheeses tend to be higher in saturated fat. Try swapping Parmesan, Stilton, Red Leicester and Double Gloucester for Edam, feta, or reduced-fat Cheddar.

Good options for softer cheeses are mozzarella and ricotta. They are fresh-tasting and naturally lower in saturated fat and salt compared to many other cheeses. If you like French cheese, try Camembert. While it's still quite high in salt and saturated fat, it typically contains less than Brie or Roquefort.

Fruit and vegetables

Aim to fill most of the board with fresh fruit and vegetables. They'll give a sweet and refreshing contrast to the savoury cheese, while also adding extra vitamins and fibre to the spread. Also, by opting for fruit and avoiding traditional condiments like jam, chutney or honey, you'll reduce your intake of sugar in one simple step.

Along with grapes, figs, berries, sliced peaches, apples and pears work well with cheese. For the vegetables, some good options are sliced bell peppers, carrots, cucumber and radishes.

Wholegrains and nuts

Wholegrains and nuts add healthy fats, protein and fibre, making your cheese board more filling and nutritious.

Some crackers are high in salt and saturated fat, such as those that are sprinkled with salt crystals or baked with cheese. Instead, try using wholegrain crackers, oatcakes, or a thinly sliced wholemeal baguette as the base for your cheese and toppings.

Adding a small handful of plain almonds or walnuts can also give crunch and variety.

Healthy extras

For additional variety, why not include some olives or healthy dips. It means there's more choice on your board to cater to different tastes if you're sharing it with family or friends. It also gives something to dunk your sliced vegetables or wholegrain crackers into.

Hummus or low-fat yogurt-based dips are healthier alternatives to mayonnaise or sour cream-based dips.

A small handful of olives is a tasty addition to any cheese board. You can rinse the olives in water before serving to help remove excess salt.

Serving tips

With any type of cheese board or sharing platter, how you serve the food can be just as important as the type of food you have on offer when it comes to making it healthier.

To help with portion control, a good rule of thumb is to aim for 30g of cheese per person (around the size of a matchbox). Another tip is to pre-cut the cheeses into bite-sized pieces before you arrange them on the board. Doing this means you will not be tempted to cut larger pieces. So you'll reduce the chances of overeating.

We eat with our eyes first, so why not make your cheese board look fantastic by alternating the colours and textures of your food. ●



Which cheeses are healthiest?

Cheese is a major contributor to unhealthy fat (saturates) in our diet. We've ranked popular cheeses by their total fat per 100g, so you can choose which ones to indulge in and which ones to eat in moderation

LOW-FAT CHEESES



Quark
Fat 0.2g
Saturates 0.1g



Low-fat cottage
Fat 2g
Saturates 1g

MEDIUM-FAT CHEESES



Low-fat cream cheese
Fat 4g
Saturates 2g



Cottage cheese
Fat 4g
Saturates 2g



Ricotta
Fat 8g
Saturates 5g



Half-fat Cheddar
Fat 16g
Saturates 10g

HIGH-FAT CHEESES



Mozzarella
Fat 18g
Saturates 13g



Feta
Fat 20g
Saturates 14g



Camembert
Fat 23g
Saturates 14g



Paneer
Fat 24g
Saturates 15g



Brie
Fat 29g
Saturates 18g



Parmesan
Fat 30g
Saturates 19g



Cheddar
Fat 35g
Saturates 22g



Mascarpone
Fat 44g
Saturates 29g

Ask the expert

Send in your health questions

Email: hearthelpline@bhf.org.uk

Call our Heart Helpline: 0808 802 1234

Write to: **Heart Matters, British Heart Foundation,**
180 Hampstead Road, London NW1 7AW

Q What are wholegrains and how can I include more in my diet?

A Wholegrains are the seeds of plants like wheat, corn, barley, rye, rice, oats and buckwheat. In their unprocessed form, they contain all three layers – the bran, endosperm, and germ – which provide vitamins, minerals, fibre, carbs, polyphenols and healthy fats.

It's this complete package of nutrients, as well as their high fibre content, that make them good for you. They help you maintain a healthy weight, lower your risk of coronary heart disease and improve gut health.

When wholegrains are processed, for example to make

white flour for bread, pasta, cakes and pastries, the bran and germ layers are removed. This strips away most of the healthy nutrients. That's why it is important to keep your grains 'whole' as often as you can.

Wholegrain foods can be eaten 'whole' such as oats, brown and wild rice, or milled into flour, or cracked or popped like bulgur wheat and popcorn.

To see if a food is wholegrain, check a wholegrain is among the first ingredients listed on the label. Look for the word 'whole', as in 'wholemeal', 'wholegrain' or '100 per cent wholewheat'.

Adding more wholegrains to your diet can be simple:

- Swap white bread, pitta and chapati for wholegrain versions.
- Switch white rice, noodles and regular pasta for brown rice, wholegrain pasta, soba noodles or boiled grains such as barley, buckwheat, bulgur, freekeh or sorghum.
- Sub out white rice cereals and cornflakes for wholegrain porridges, puffed brown rice, bran or oat flakes.
- Snack on rye crispbreads, oatcakes and unsalted popcorn or popped sorghum.



Tracy Parker
Senior Dietitian
at British Heart
Foundation



Q Is rapeseed oil healthy?

A Rapeseed oil is a seed oil, like sunflower or corn oil. It is low in saturated fat, the fat that can raise cholesterol levels. In fact, it has the lowest amount of saturated fat of any oil. It has just half the amount found in olive oil.

Rapeseed oil is also high in healthy unsaturated fats, the type that help lower cholesterol. It has the second highest level of monounsaturated fats after olive oil. And it has the best balance of omega-3 and omega-6 polyunsaturated fats of all plant oils.

It is grown in the UK and comes in refined and unrefined (often labelled as 'cold-pressed') forms.

Refined rapeseed oil has a higher smoke point, so does not lose healthy nutrients when used at high temperatures. This makes it suitable for cooking.

Look on the labels of regular 'vegetable oil' and you'll often find it's 100 per cent rapeseed oil, so this can be a healthy, cheap option. Save the more expensive, flavourful cold-pressed varieties for drizzling on salads. There were concerns in the past about

rapeseed oil containing erucic acid, but modern rapeseed oils are almost completely free of it and are safe to use.

Early research also suggested that high intakes of omega-6 could increase inflammation. However, recent studies show rapeseed's unique combination of omega-3 and omega-6 is linked to a lower risk of heart and circulatory diseases.

While rapeseed oil can be a healthy addition to your diet, like all oils, it is high in calories, so use it sparingly. ●

Living well with heart failure

From symptoms to medicine side effects and sex, heart failure can affect your life in many ways. Here are our tips for living as well as possible

The main job of your heart is to pump oxygen-rich blood around your body. Heart failure is when it cannot do this as well as it should.

The condition's name can sound alarming, but it does not mean your heart is not working. It is better to think of it as not working as well as it should, so you need some support to help it work better.

The main symptoms of heart failure are feeling tired and breathless, either while resting or when active. Other symptoms include a swollen stomach, feet, ankles, or legs, or feeling dizzy or lightheaded.

While there is no cure for heart failure, research is happening, including studies funded by British Heart Foundation (BHF), that's helping to improve the way we diagnose and treat heart failure, so that people can live longer and have a better quality of life.

Here we suggest some ways to manage the condition so you feel as well as you can.

Understanding your treatments

Once you have a diagnosis of heart failure, your doctor will talk to you about treatments that will help your heart to work better. This can include devices such as special pacemakers

and medicines, which are the most common treatment. These include:

- An ACE inhibitor that widens your blood vessels, reducing your heart's workload and improving blood flow to your heart. There are a number of ACE inhibitors such as ramipril, captopril, enalapril, fosinopril, lisinopril, perindopril and quinapril.
- Entresto (a combination of two drugs sacubitril and valsartan) which works in a similar way to ACE inhibitors and has additional benefits for those who are offered it.
- Beta blockers that slow your heart rate, reducing how hard it has to work.
- Water tablets, also called diuretics, which help your body get rid of excess water.

There are also other medicines your doctor may suggest. Most heart failure medicines work by lowering your blood pressure or heart rate to help your heart work more effectively.

Your doctor or specialist heart failure nurse will start you on a low dose and increase it until they get

the best results for you. However, like all medicines, they can cause side effects, such as feeling lightheaded and dizzy.

If you experience any side effects discuss them with your nurse, GP or cardiologist (do not just stop taking your medicines). They may suggest lowering the dose, or if the side effects are too much for you, they may change your medicine.

Getting the balance and dose of your medication right is important so you can feel as well as possible. However, be aware, this can take time.

Diuretics work differently. They stop the build-up of fluid in your body, which happens when your heart is not working properly, by helping the kidneys get rid of excess water in your pee.

Normally you will be advised to take your diuretics at a time that means you do not have to get up too often in the night. Or, if you have a day out planned, think about the best time to take them and check with your nurse or doctor that they are happy with the plan.

Some people with heart failure may benefit from surgery if they have an underlying condition that can be corrected, such as a heart valve defect or a blocked coronary artery. ▶

“**Getting the balance and dose of your medicine right can take time**”

Dealing with symptoms and medicine side effects

Heart failure, and the medications for it, can make you feel tired and breathless – which happens when the fluid build-up backs up to the lungs because your heart is not pumping as well as it should.

You may find that you're more out of breath when you're doing activities such as walking or going upstairs. So, it's important to pace yourself by breaking up your activities with rest. At night you may find propping yourself up in bed with pillows helps your breathing.

If you have a busier day than usual planned, make sure you rest on the days before and after. Asking for help from family and friends can be difficult at first, but you may find they're happy to pitch in with day-to-day tasks such as shopping, cooking or running errands.

Exercising can also be a challenge. But staying active within your limits is good for your heart and can boost your energy levels. Before starting a new exercise, discuss it with your doctor and remember that you may have to start at a lower level than you are used to.

But it is still possible to stay active. For more on exercising safely go to bhf.org.uk/heartfailureexercise and go to bhf.org.uk/exercisesshortbreath to read about exercising when you have shortness of breath.

Deciding about work

You should be able to continue to work if you feel well enough. You may need to speak to your manager about making some changes, such as working shorter hours or moving to a different role.

If your role involves a lot of physical activity, you may think about changing your job. Some roles, such as pilots, bus and lorry drivers, or positions in the armed forces, have rules about working

with long-term heart conditions. If you have financial worries, talk to the Citizens Advice Bureau (citizensadvice.org.uk) or your local Jobcentre Plus (gov.uk) to find out what benefits you are entitled to.

“

Talk to your doctor or nurse about sex... they're used to discussing all sorts of topics

Taking care of relationships

You might feel tired and lethargic and may not feel you have enough energy for sex. Be honest and open with your partner and talk about how you feel.

You may be able to think about having sex at times of the day when you have more energy. You could also try out different positions to find the most comfortable for you.

You can talk to your doctor or nurse about sex as well. You may find it difficult at first, but they're used to discussing all sorts of topics, and many people feel glad they've started the conversation with their healthcare professional.

- Find out more at bhf.org.uk/sex

Coping with worry and low mood

It's natural to feel worried, stressed or to experience low mood after being diagnosed with heart failure.

Your work or family life may change, or you may have worries about money, or about the future. Talking to loved ones and friends about your feelings and finding ways to manage stress can help.

Continuing to get out if you can, doing activities you enjoy and seeing your friends will help lift your mood. You may decide to join a local heart

support group where you can share your experiences with others.

- Visit bhf.org.uk/supportforyou for tips on everyday living, emotional support or how to join a heart support group.

Protecting your heart health in cold weather

The heart has to work harder in cold weather to keep your core body temperature stable. It's fine to go out in winter weather but wrap up warmly with plenty of layers.

On a very cold day you may prefer to stay active indoors. Find out more about cold weather and your heart at bhf.org.uk/coldweather

Some heart failure medicines affect the circulation of blood in the outer parts of the body (peripheral circulation), so your hands and feet can feel cold. You can read tips to boost your circulation on the opposite page.

Both flu and Covid-19 can be more serious for people with heart failure, so it's important to talk to your doctor or nurse about getting all the vaccines you are eligible for.

- Learn how scientists are looking at ways to improve heart failure treatments in the future in our article 'What's happening next in heart failure' on page 42. ●

Information and support

- Our 'Understanding heart failure' booklet gives a short overview for when you are first diagnosed: bhf.org.uk/understandheartfailure
- Your guide to heart failure is a detailed guide on living with the condition: bhf.org.uk/heartfailureguide
- To find out more about BHF-funded heart failure research visit bhf.org.uk/heartfailureresearch

5 ways to boost your circulation

If your hands and feet always feel freezing in winter, it could be a sign of poor circulation. Here are our tips to improve blood flow

1 Wear compression stockings

These tight knee-length socks squeeze your legs to keep blood moving back up to your heart. But speak to your doctor if you're thinking about using compression stockings, as they may irritate and even damage your skin, or cause pain, if you do not have the right size.



2 Stay active

Whether it's walking, swimming or gardening, exercise can get your blood pumping. But even just moving around after you've been sitting down for a while can help. If you have difficulty standing, try wiggling your toes or rotating your ankles.

3 Eat a healthy diet

If you're living with excess weight, your heart has to work harder to pump blood around your body. You're also at a higher risk of fatty material (plaques) building up in your arteries. As well as regular exercise, eating a healthy diet can help you lose weight. Swap food such as crisps, cakes, sweets and processed meats for plenty of fruit, vegetables, unsalted nuts, oily fish, seeds and wholegrains.

4 Drink more water

Around half of your blood is made of water, so if you're not drinking enough, you'll have less blood in your body and your blood may become thicker. Try to drink six to eight glasses of fluid a day to keep things moving. This could include water, low-fat milk, squash with no added sugar, and tea and coffee in moderation. But if you have heart failure, check with your doctor, as you may need to drink less.

5 Keep your legs elevated

Try to prop up your feet to at least hip level height when you're sitting down. This makes it easier for the blood in your legs to travel back up to your heart. If you often nod off when sitting upright in a chair, lie down in your bed when you're tired to stop blood pooling in your legs. And if you have heart failure, try not to lift your legs too high, as built-up fluid in your lower body could go back to the heart. ●



The art of self-care

Looking after your own physical and emotional wellbeing is essential for overall health. We speak to clinical psychologist Mina Arvanitopoulou about how to overcome barriers to meeting your own needs

If you have a heart or circulatory condition, or you care for someone with one, it's important to look after your own needs. "Self-care is about looking after your physical and mental health to achieve and maintain a good quality of life," explains Mina Arvanitopoulou,

Lead Clinical Psychologist in Cardiology at Guy's and St Thomas' NHS Foundation Trust in London.

But some of us neglect our own needs, Mina adds, saying this is often because we prioritise other people's needs over our own, especially when

we care for someone else. Or we do not have the time for self-care, or we feel too guilty or tired to take care of our own needs.

"Many of us think it's selfish to devote time to our own needs, and feel guilty if we do," says Mina.

"But if we do not take time to exercise, sleep and eat well, and enjoy ourselves, we can slip into unhealthy patterns of behaviour, such as comfort-eating, smoking and relying on alcohol to unwind."

These unhealthy behaviours can not only take a toll on your physical health but, because the body and mind go hand in hand, on your mental health too, adds Mina.

"Looking after yourself is not a selfish thing to do," she says. "Self-care promotes mental and physical health so, in reality, we are in a much better position to look after others when we look after ourselves first."

“We are in a much better position to look after others if we look after ourselves first

The benefits of self-care

"A regular self-care routine will lower stress, anxiety and depression, and improve your mood, energy, sleep and productivity. It's also easier to cope with life's problems and challenges when you have some meaningful activities and tools in place to help you recover physically and mentally," Mina explains.

Self-care can be anything from taking a short time out from your responsibilities for a daily walk, to taking a year out to travel the world.

It all depends on your role, phase in life, interests and values. "Ideally we need to practise self-care daily, and this can take any shape or form as long as it promotes your physical and mental wellbeing," says Mina.

7 ways to build self-care into your routine

1 Stay active

Keep active within your own limits. This could be swimming or going to the gym, exercising at home, walking, running or trying a new sport. Walking in nature, in a park or green space, can be especially therapeutic. Your local park or a community group may offer organised walks that combine being active with a chance to socialise.

2 Improve your sleep routine

If you're not sleeping well, you may benefit from making lifestyle changes. Eating your last meal of the day earlier and avoiding caffeine and screens in the evenings may help. A regular, calming bedtime routine, listening to relaxing music, reading, or breathing exercises can help you wind down.

3 Practise mindfulness

Learn to take some pauses in your daily life. This is when you stop 'doing' and practise 'being'. You can try mindfulness meditation that involves noticing what you're sensing and feeling in the moment without any judgement, slowing down your thoughts, and letting go of tension.

4 Do something creative

The pressure of everyday responsibilities can make it easy to overlook creative interests and skills. Think about reconnecting with something you loved when you were younger or had more time for it. Drawing, painting, music, dancing or singing in a choir can all be relaxing and energising. And if done as a group activity, they can offer the chance to make new friends and gain a feeling of belonging.

5 Make time for friends and family

Set aside time to see friends and family, share experiences and have fun. If you're usually the host, or feel responsible for providing food and drink, you may think about meeting somewhere other than your home. You can then fully relax and enjoy the experience.

6 Take regular breaks

Try to avoid taking too much on. Have an early night when you feel tired. Instead of scrolling on your phone you could try relaxing activities, such as a long bath or listening to your favourite music. If you work, rethink the belief that you always have to 'push through'. Take regular annual leave and support or sick leave if needed. If you have caring responsibilities, arrange respite care and learn to ask others for help. Go to [bhf.org.uk/respitecare](https://www.bhf.org.uk/respitecare) to find out more.

7 Try talking therapy

You can see therapy as a lasting investment in yourself. Among other benefits, a therapist can help you learn how to be kind and compassionate to yourself, and can help you understand what your self-care needs are and how to meet them. Speak to your GP about finding a local therapy service. Or, in England you can refer yourself: search online for 'NHS talking therapies'. ●

The joys of walking football

Lifelong football devotees Chella Chilombo Sikazwe and Kevin McGovern-Ims both discovered walking football after developing heart problems. They talk about how it has improved their health and wellbeing

Football has been at the centre of Chella Chilombo Sikazwe's life for almost 50 years, so it was very difficult for him when a heart attack threatened to put an end to his playing.

The 68-year-old sports fan, from Leeds, grew up in Zambia, where his interest in team sports began. When he was a young man Chella (pictured right) moved to the UK to study engineering at university. He kept up his interest in football, playing through university social clubs and the local amateur Leeds Sunday Football League.

Chella was so passionate about the game that when he was in his 40s, he even took over the running and management of one of the Leeds Sunday league teams for 12 years.

Chella's heart problems started a few years later. In July 2020 he was working in security services at a university when he had a heart attack. In the run up he had felt dizzy on a few occasions. After one episode, he went to A&E to get checked out and was told he'd had a heart attack.

Chella had a stent fitted to reopen a

blocked coronary artery. "Afterwards I was more careful about what I did and more conscious of my health," he says.

"My recovery was slow. At first I could not walk far or do vigorous activity. I felt very frustrated not being able to play football, go running or do sessions at the gym – all things I like to do to maintain my physical and mental wellbeing and to meet other people."

The slower pace is safer

It was during his recovery that Chella heard about walking football. He joined a local club, and he has not looked back.

"Walking football is fantastic because there are protective measures and a slower pace," says Chella. "It's a bit safer and gives you more encouragement and confidence to play."

“Maintaining physical activity helps me feel better about myself

Chella says the walking version of the game suits him at his age as he no longer suffers from injuries, or constantly feels stiff from knocks and falls experienced during normal football. He adds that the other, older players share their health stories readily; so much so that he sometimes refers to their sessions, as 'walking clinics'.

"For me it's about meeting new people and learning from them," he says. "Sharing with them, enjoying ourselves, and growing in our personal development. I'm maintaining a certain level of physical activity which keeps me healthy and confident and has improved my wellbeing. I feel better about myself."

Football's the love of my life

Kevin McGovern-Ims, 65, from Bromsgrove, shares Chella's sporting passion. "I've been lucky that I've been involved in, and in love with, sport all my life," says Kevin, who grew up in Dundee. "My two brothers and I played amateur football and, ▶





Photography by Tim Bekir

like everybody else in Scotland, I had dreams of playing for the fabulous Celtic Football Club.” Although these dreams did not come true, his love of football remained a constant. Wherever he worked and wherever he lived, Kevin (pictured left) always found a football club to play with.

In 2000, Kevin moved to Shropshire to work in the IT industry and a group of friends invited him to join their five-a-side football team. “That became the most important part of my week,” he says. “It was quite a hectic, intense game and it was cathartic. It really got rid of all the stress that you build up.”

Goodbye to ‘hectic’ games

When he was in his 50s, Kevin passed out one day during a five-a-side game in Shrewsbury. He had tests and was diagnosed with hypertrophic cardiomyopathy.

It’s a condition where the muscle wall of the heart becomes thickened and stiff, making it hard for the heart to pump blood out of your heart and around your body.

Kevin says the cardiologist sat him down and said he needed to make some changes, especially with regards to sports. “In other words, I had to slow down and say goodbye to my weekly five-a-side games,” says Kevin. “Obviously, that was quite a blow to me because playing footy really was my heartbeat.”

Kevin was determined to stay active. Shortly after the conversation with his cardiologist, he learned about walking football and was delighted to discover his football days were far from over.

“I was aware of walking football, but I had never played it,” says Kevin. “So I sat down with my wife and we looked into it. In 2016, a few years after my diagnosis, I reached out to Hindlip FC, a walking football group in Worcestershire, and went to see

“Playing footy was my heartbeat

them. When I met them, I thought, you know what, it doesn’t look too bad and it’s a lot more active than it sounds.”

Kevin adds, “Because I’ve always been playing football, I adapted to it very quickly and it became as much a part of my life as regular football had been before my diagnosis.”

In fact, Kevin became so passionate about the game that he qualified as an official Walking Football Association (WFA) referee and tournament referee. He now also referees in walking football leagues in Birmingham and Worcestershire.

Winning for mental health too

Kevin says the game has many mental, as well as physical, benefits. “So many men struggle with their mental health and do not have the opportunity to discuss it,” he says.

But through sport, he has gained confidence to discuss mental health issues with his peers. “Sport has been my crutch,” he says.

“Really, wherever I’ve lived and worked throughout my life. As soon as I reconnect with sport, my mental health improves,” he says.

Chella agrees. He has found great comfort in getting to know people who can really empathise with him. “I find meeting and talking to other people very useful and reassuring,” he says. “Because we are a similar age and have had similar experiences, you don’t feel like you’re on your own.”

Chella is now involved with two walking football teams and recently started playing table tennis with a group for over 55s. He adds: “After a certain age, so many people suffer health conditions. Sharing with people helps, because you know you’re not the only one. You meet people in similar situations who are enjoying their life. If I stayed at home alone, I would not experience that.”

“My advice to someone who is interested in walking football would be to just give it a go and see how you feel. I think you’ll end up going often.”

Kevin points out that there are walking versions of many sports. “After a heart event, the sooner you can get back to being active again, the sooner you’ll start to feel stronger and better.”

How to get involved in walking sports

According to the Walking Football Association (WFA): “Walking football is a unique small-sided ball game created by John Croot in 2011. It’s the game you love and remember but played in a new way.”

England Football’s website says it’s ideal for those who want to “play football for longer, make new friends, get out of the house and stay active”.

The game is like association football but there is no running, jogging or heading the ball. Tackling is with reduced physical contact, which makes it safer for players. Visit the WFA’s website at thewfa.co.uk to learn more about walking football or to find a team near you.

There are walking versions of many other sports, including basketball, cricket, hockey, netball, rounders, rugby and tennis. At justgetactive.co.uk you can find out more about different walking sports.

Search the Walking Sports Directory at walkingsports.com to find out about walking sports near you. ●

Simple stretching exercises to improve your flexibility

Having joints and muscles that move easily is vital for overall health. Here exercise specialist Andrew Scard takes us through five stretches for the legs, arms and back

When it comes to exercise for people with heart and circulatory conditions, the focus is often to lose weight, or to build up fitness and strength as part of cardiac rehabilitation after surgery.

But doing exercises that improve our flexibility are important too, especially as we age. These types of exercises involve movements that stretch muscles, making them longer and more flexible.

By stretching your muscles in this way, blood flow increases to your muscles and joints, allowing you to be more physically active. It also improves your range of body movement, which will help you to continue to do everyday tasks, like household chores and washing and dressing yourself.

Being more flexible reduces your risk of getting injured too. This is because your muscles and joints can move more easily, and your balance is better meaning you're less likely to fall over and hurt yourself.

There are many ways to do stretching exercises, but in this article we will look specifically at 'static stretching'. This is when you stand, sit or lie in a still position while you stretch different parts of your body.

When should I do stretching?

Stretching cold muscles can increase the risk of injury so it's best to avoid stretching in a warm-up routine.

Instead, stretch after your warm-up, or after you exercise when muscles are most elastic to reduce the risk of injury.

How should I feel stretching?

When doing each stretch, move your body until you feel a bit of tension in your muscles (it should not be painful).

As your body adapts to this type of training, and you become more flexible, you may need to increase the range of movement to feel that slight tension.

How often should I stretch?

Aim to do flexibility training two to three times a week. Hold each stretch for 30 seconds and repeat the stretches two to four times each. Start with repeating each stretch twice and gradually build up to three times, then four times when you feel comfortable to do so.

If you're not sure you're doing the right flexibility exercises for you, or you're concerned that they may make a medical condition or injury worse, consult your doctor first.

Here are five exercises to try at home. Start standing, then move to the seated exercises, and finish lying down on the floor, or a firm bed.

Meet the expert



Andrew Scard is a clinical specialist exercise practitioner for Aneurin Bevan University Health Board.

Hamstring stretch

- Have a chair or worktop close by in case you need to hold on to something for balance.
- From standing, take a small step forward with your right foot.
- Keeping your front leg straight, slowly bend the back knee while moving your buttocks backwards and putting your weight onto your back leg, like you are sitting back down.
- Hold this position for 30 seconds, then bring yourself gradually back up.
- Repeat stepping forward with the left leg.
- If you cannot feel the stretch, lift the toes on the front foot when it's in the lowered position.
- If you still cannot feel the stretch, then increase the distance of the step forward so you sit deeper.



Photography by Ollie Holder

Quadriceps stretch

- Stand sideways on to a firm chair, such as a dining table chair.
- Place your right hand onto the back of the chair for balance.
- Bring the left heel towards your buttock by bending at the knee.
- Hold your foot to keep your knee pointing at the floor.
- If you cannot feel the stretch then pull your foot nearer to your buttocks using your hand, but keep your bent leg in place with the knees next to each other.
- Hold for 30 seconds, then slowly lower your leg to the floor.
- Turn so your left hand is on the chair and repeat on the other side.



Overhead triceps stretch

- Sit on a firm chair with your back straight.
- Raise your right arm straight up into the air.
- Bend your right arm at the elbow and place the palm of your right hand on the back of your neck or between your shoulder blades (depending on how far you can reach).
- Reach your left arm over your head and place your left hand on your right elbow.
- Gently pull your right elbow closer to the centre of the body and slightly down, lowering your right hand further down your back.
- Hold for 30 seconds, then gently release and return your arms to your side.
- Repeat on the other side using your left arm.



Shoulder stretch

- Sit on a firm chair with your back straight.
- Raise your right arm horizontally out in front of you.
- Bring your right arm across your body so it is pointing to the left.
- Place your left hand above the right elbow on your upper right arm (do not hold onto the elbow joint).
- Gently pull your right arm closer to your body using your left hand.
- Hold for 30 seconds.
- Release the stretch and return your arms to your side.
- Repeat on the other side using the left arm.



Knee to chest

- Lie on the floor (or a bed) on your back with your legs out straight and together.
- Slowly bring your right knee towards your chest while keeping your left leg on the floor (or bed).
- Place your hands under your knee on your raised leg (but not under the joint) and ease your knee further towards your chest.
- Hold for 30 seconds, slowly release your right leg to the starting position and repeat on your left leg.



Scan this code for more stretching exercises from our expert.



Tried these at home?

Did you do any of these stretching exercises at home? Let us know, and if you like, please send us photographs of you trying them out. Email us at hmeditor@bhf.uk.org or write to the postal address on page four.



Heart failure

Professor Ajay Shah tells us about three key developments in heart failure science that will see better disease detection and treatments in years to come

Heart failure affects more than one million people in the UK and is one of British Heart Foundation (BHF)'s key research areas with £50 million currently invested in the condition.

We talk to leading heart failure expert Professor Ajay Shah, director of the King's BHF Centre of Research Excellence at King's College in London, to find out how breakthroughs in science will improve prevention and treatments of heart failure in the future.

Q: What's most exciting in heart failure research right now?

A: Currently, we do not have a cure for heart failure, and most treatments

only improve the condition, or prevent things from getting worse. But what if we could design treatments that completely repair the heart, so it goes back to normal? This is one of the most exciting areas scientists are working on.

Also promising is research into how to stop heart failure from happening in the first place, and 'precision medicine' that makes treatments more effective by tailoring them for each person.

Q: What treatments to repair the heart are being investigated?

A: Researchers are looking at how to get the heart to repair itself in people who have heart failure after a heart

attack. These people develop heart failure because some of the heart muscle dies and is replaced by scar tissue that is stiffer than normal tissue.

In these cases, if we want to get the heart working normally again we need to do two things: get the heart muscle that's been damaged to renew itself, and find a way of getting rid of the scar tissue. Some of the research is looking to see if this can be done with biological treatments, which are based on naturally occurring chemicals in the body. We call these treatments 'biologics'.

Biologics are exciting because we have many instances in normal human and animal biology where organs in the body are repaired naturally. This happens in very, very young human babies. And in animal biology some fish, like the Mexican tetra fish, can completely repair their own hearts.

So what we're trying to figure out is how to persuade the body to do that in adult humans, in a safe and effective way.

Q: Will this use RNA therapy?

A: Yes, one of the most promising biological treatments is called RNA therapy. This uses similar science to the mRNA technology in some Covid-19

vaccines. These contain a 'messenger RNA' that instructs the body to produce a protein. This protein then triggers the body to produce antibodies against the coronavirus.

In a similar way, we could use medicines based on RNA genetic material. This is because some RNA material can instruct the heart to repair itself. So we'd package that up in a way that's safe to put it into the body, where it could trigger the heart to start repairing itself.

RNA therapies for the heart will not come as a vaccine like the Covid-19 vaccines, but will be delivered to the heart in another way, which we still need to work out. These biological treatments that repair heart failure could be about six to 10 years away.

Q: Could heart failure be prevented in the future?

A: About 50 per cent of people with heart failure have a type called HFrEF (see box on previous page) that develops after a heart attack.

We already know a lot about how to prevent people from having heart attacks, such as lifestyle changes and treatments to reduce high blood pressure and cholesterol levels, which in turn stop people from developing HFrEF heart failure.

The other 50 per cent of people with heart failure have another type called HFpEF (see box), which is linked to lifestyle conditions such as excess



weight and diabetes. This type of heart failure is becoming more common because doctors are getting better at diagnosing it, and people are living longer with these lifestyle conditions.

However, we do not have detailed knowledge of how and why people develop HFpEF. So researchers are looking at how to identify it and treat it at an earlier stage. This will come with advances in 'precision medicine', which we hope will be game-changing for people with HFpEF in 10 to 12 years.

Q: What is 'precision medicine'?

A: We have lots of treatments for heart failure, but we're still not very good at working out who is at risk of it and which treatment is best for each person.

But we think we can develop ways to be more precise by using state-of-the-art heart scans, new blood tests, genetic information, and learning from other medical areas like cancer care where treatment is already very precise.

Using technology like AI we are able to analyse data from hundreds of thousands of people to try and find the best ways to treat individuals. Some of the tools that do this are already here, like ones that help general doctors detect people at risk of HFpEF heart failure. And these will get better and better over the next couple of years. ●

What is heart failure?

Heart failure is when your heart does not pump blood around the body as well as it should because it's damaged. This can happen suddenly or over months or years. The damage can affect the amount of blood the heart can squeeze out of its main chamber with every heartbeat. This is called the 'ejection fraction' and helps doctors to diagnose different types of heart failure. The main two types are:

- **HFrEF:** 'Heart failure with a reduced ejection fraction'. This can happen when the heart is damaged or weakened by heart conditions like a heart attack or heart valve disease.
- **HFpEF:** 'Heart failure with a preserved ejection fraction'. This is thought to be caused by conditions like high blood pressure and atrial fibrillation, and lifestyle factors like advancing age, excess weight and diabetes.

Over **1 million** people in the UK have heart failure



BHF is currently investing **£50m** into heart failure research



To donate to BHF and support more important research like Professor Ajay Shah's visit bhf.org.uk/hmdonate



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