

About the British Heart Foundation

As the nation's heart charity, we have been funding cutting-edge research that has made a big difference to people's lives.

But the landscape of heart disease is changing. More people survive a heart attack than ever before, and that means more people are now living with heart disease and need our help.

Our research is powered by your support. Every pound raised, every minute of your time and every donation to our shops will help make a difference to people's lives.

If you would like to make a donation, please:

- call our donation hotline on 0300 330 3322
- visit bhf.org.uk/give or
- post it to us at BHF Customer Services, Lyndon Place, 2096 Coventry Road, Birmingham B26 3YU.

For more information, see **bhf.org.uk**

Contents

About this booklet	4
What is cardiovascular disease?	6
What increases my risk of cardiovascular disease?	12
Having a health check	14
How can I reduce my risk of cardiovascular disease?	16
Smoking	17
Blood pressure	20
Cholesterol	23
Physical activity	27
Weight and body shape	30
Diabetes	35
Healthy eating for your heart	39
Other things you can do	46
Family history	49
A final word	51
For more information	52
Index	56
Have your say	58

About this booklet

This booklet aims to help you look after your heart health and reduce your risk of developing cardiovascular disease.

The term 'cardiovascular disease' covers all diseases of the heart and circulation, including coronary heart disease (angina and heart attack) and stroke. It is sometimes called 'heart and circulatory disease'.

The booklet is for people who do not already have a heart condition. If you do have a heart condition, you may find it more useful to read some of our other booklets, which have been specially written for people with heart conditions (see page 53).

In this booklet we explain:

- what cardiovascular disease is, with a focus on coronary heart disease and stroke
- the factors that can increase your risk of developing cardiovascular disease
- what a health check is, and how it can help you find out if you are at risk of developing cardiovascular disease, and
- the everyday lifestyle changes you can make to reduce your risk of cardiovascular disease.

This booklet does not replace the advice that your doctor or nurse may give you, but it should help you to understand what they tell you.

What is cardiovascular disease?

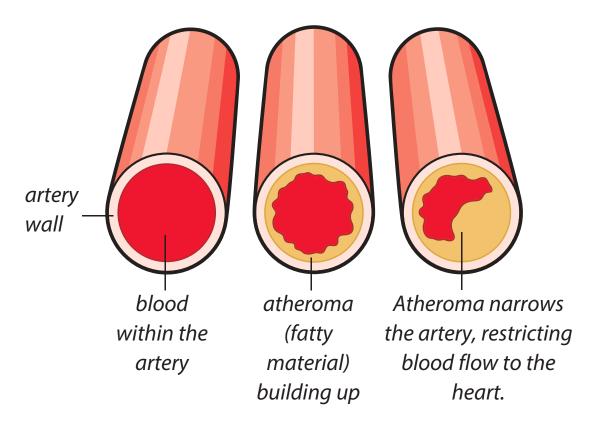
Cardiovascular disease includes all diseases of the heart and circulation. This includes coronary heart disease (angina and heart attack), heart failure, congenital heart disease and stroke. Of these diseases, coronary heart disease is the biggest killer in the UK. Both coronary heart disease and stroke are usually caused by the gradual build-up of fatty material within the walls of the arteries. We explain more about this below.

Cardiovascular disease is also known as 'heart and circulatory disease'.

Coronary heart disease

Coronary heart disease can cause the symptoms of angina and can lead to a heart attack. It begins when the coronary arteries (the arteries that supply oxygen-rich blood to the heart muscle) become narrowed by a gradual build-up of fatty material within their walls. This condition is called atherosclerosis and the fatty material is called atheroma.

How atheroma builds up



When fatty material builds up in the arteries, the arteries become narrow and it is more difficult for the blood to flow through them.

Angina

In time, your arteries may become so narrow that not enough blood can flow through to your heart muscle. This can cause **angina**. Angina is a symptom of coronary heart disease. It is the chest pain or discomfort you feel when your arteries cannot deliver enough blood to your heart muscle.

For more information on angina, see our booklet Angina.

Heart attack

A heart attack happens when a coronary artery becomes blocked by a blood clot. If the atheroma in your arteries becomes unstable, a piece of it may break off and lead to a blood clot forming. If the blood clot blocks your coronary artery and cuts off the supply of oxygen-rich blood to your heart muscle, your heart muscle may become permanently damaged. This is known as a heart attack (or myocardial infarction).

During a heart attack, you could develop a lifethreatening heart rhythm which may lead to a cardiac arrest. This is when someone loses consciousness and stops breathing, and their heart stops pumping.

A heart attack is a medical emergency. If you ever think that you are having a heart attack, call 999 immediately for an ambulance. We describe the symptoms of a heart attack on the next page.

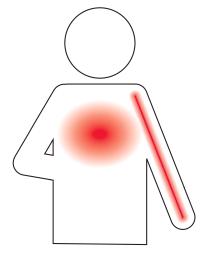
For more information about heart attacks, see our booklet Heart attack.

Heart attack? Know the symptoms ... and what to do

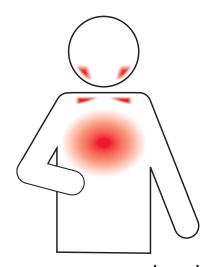
The symptoms of a heart attack



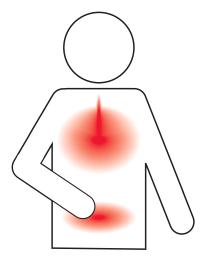
Pain or discomfort in the chest that doesn't go away.



The pain may spread to the left or right arm ...



... or may spread to the neck and jaw.



You may feel sick or short of breath.

Think quick ... act fast. Call 999 immediately.

Stroke

A stroke happens when the blood supply to part of the brain is cut off – for example, if an artery that carries blood to your brain becomes severely narrowed or blocked by a blood clot.

Without a blood supply, brain cells can be damaged or destroyed, so a stroke may affect the way your mind or body functions.

Every year, around 152,000 people in the UK have a stroke. That's one person every three minutes. It is estimated that in the UK there are about 1.2 million people who have had a stroke.

How to recognise if someone may be having a stroke ... and what to do

If you suspect that you or someone else is having a stroke, you need to act **FAST**. To remember the signs of a stroke and what to do, think 'FAST'.

Facial weakness – Can they smile? Has their mouth or eye drooped?

Arm weakness – Can they raise both arms?

Speech problems – Can the person speak clearly and can they understand what you say?

Time to call 999.

Sometimes the symptoms of a stroke can go away after a few minutes or hours and disappear within 24 hours. This is called a transient ischaemic attack or TIA (sometimes called a mini stroke). If you or someone you are with experience any one of the symptoms on the previous page, call 999 immediately.

For more information, contact the Stroke Association on 0303 3033 100 or visit www.stroke.org.uk

What increases my risk of cardiovascular disease?

A risk factor is something that increases your likelihood of getting a disease. There are several risk factors for cardiovascular disease. The main ones are shown below.

- Smoking.
- High blood pressure.
- High blood cholesterol.
- Physical inactivity.
- Being overweight or obese.
- Having diabetes.
- Having a family history of coronary heart disease or stroke. This means if your father, mother, brother or sister has, or had, coronary heart disease or a stroke at a young age (under 65 for women or under 55 for men).
- Your sex. Men are more likely to develop coronary heart disease at an earlier age than women.
- Age. Your risk increases as you get older.
- Ethnic background. People from South Asian or African Caribbean backgrounds are at a higher risk of getting some of the risk factors mentioned above. For example, if you are of a South Asian or African Caribbean background, there is an increased risk of

developing diabetes, and you may be more likely to have high blood pressure.

The following factors may also increase your risk of developing cardiovascular disease.

- Poverty. People on lower incomes are more likely to have the risk factors for cardiovascular disease, and socio-economic reasons may make it more difficult for them to make healthy choices.
- How you deal with stress.
- High alcohol intake.

The more risk factors you have, the more likely you are to develop cardiovascular disease. But even though you can't change all of your risk factors – for example, you can't change your age - there is plenty you can do to reduce your risk of disease and protect your heart.

We explain more about what you can do to reduce your risk on pages 16 to 48.

Having a health check

You can find out about your future risk of developing cardiovascular disease by having a health check. If you live in England, are aged between 40 and 74, and have not already been diagnosed with cardiovascular disease, kidney disease, diabetes or dementia, you should be invited to have a free health check at your local GP surgery, to assess your risk of those conditions. Free health checks are also available in Scotland for 40-64 year olds, and in Wales for those aged over 50.

In England and Scotland, the health check is carried out by your GP or practice nurse. It includes checking your blood pressure and cholesterol, and an assessment of your lifestyle. Some health checks also include a pulse check. In Wales, the health check is done online, with telephone support. Certain pharmacies offer health checks, but you may have to pay for these.

A health check takes into account all the risk factors that may affect you, rather than focusing on just one thing such as your cholesterol level. This is because the more risk factors you have, the greater your chance of developing cardiovascular disease.

After your health check, your GP or practice nurse will offer you support and advice on how to reduce your risk of cardiovascular disease and keep your heart healthy. Your GP will also consider if you need any treatment – such as medicines to treat any symptoms you may have, or to reduce the impact of any risk factors.

If you live in Northern Ireland, you can ask your GP for a general health assessment to check your blood pressure, cholesterol level and glucose level.

How can I reduce my risk of cardiovascular disease?

Research shows that making changes to your lifestyle can have a major effect on reducing your risk of cardiovascular disease.

Knowing about your risk factors – how they affect your health and how they increase your risk - may help you to make lifestyle changes and can help you to feel more in control of your heart health. On the next pages we explain more about each of the risk factors and what you can do about them.

For more information on how to reduce your risk of cardiovascular disease, see our DVD Risking it. See page 52 for how to order a copy.

Smoking

Smoking is one of the major causes of cardiovascular disease.

How does smoking damage your heart?

Smoking damages the lining of the arteries, and this can lead to the build-up of atheroma (fatty material) in your arteries.

The chemicals in cigarettes can have various effects on the heart. Carbon monoxide reduces the amount of oxygen that the blood can carry to the heart and around the body. Nicotine stimulates the body to produce adrenaline, which makes the heart beat faster and raises blood pressure, and causes the heart to work harder. Smoking may also makes your blood more likely to clot. All of these things increase the risk of developing atheroma (fatty material within the walls of the arteries), which can lead to angina, heart attack or stroke.

What is second-hand smoke?

Second-hand smoke – or passive smoking – is where non-smokers inhale other people's smoke. Research shows that non-smokers who live with smokers have a greater risk of cardiovascular disease than those who don't live with smokers.

What you can do

Stopping smoking is the single most important thing you can do to improve your heart health.

If you want to quit, you'll find it helps to have some extra support.

- Ask at your GP surgery if there is a nurse or counsellor who can help. Or look for a local stop-smoking service, or contact one of the organisations listed on page 55.
- You could also ask your doctor or pharmacist about nicotine replacement therapy (NRT) or medicines that can help you quit.

Practical tips to help you stop smoking

People who prepare and plan to stop smoking are much more likely to be successful.

Make an action plan.

- Choose a date to give up and stick to it.
- Get support. Tell your friends and family that you're quitting.
- Keep yourself busy, to help take your mind off cigarettes. Try to change your routine, and avoid the shop where you usually buy cigarettes.
- Throw away all your tobacco, lighters and ashtrays.

• Treat yourself. If possible, use the money you save by not smoking to treat yourself to something special.

For more information, see our booklet Stop smoking.

Blood pressure

Blood pressure is the pressure of the blood in your arteries. You need a certain amount of pressure in your arteries to keep the blood flowing. Your heart pumps blood around the body through the arteries by contracting and relaxing.

Your blood pressure is written as two numbers – for example, 120/80mmHg. ('mmHg' stands for millimetres of mercury.) The first number is the systolic pressure and the second is the diastolic pressure.

Systolic blood pressure is the highest level your blood pressure reaches, when your heart contracts and blood is forced through the arteries.

Diastolic blood pressure is the lowest level your blood pressure reaches, when your heart relaxes between each beat.

The recommended target for people aged between 18 and 79 years is a clinic blood pressure below 140/90mmHg. (A 'clinic blood pressure' means when your blood pressure is measured by a nurse or doctor at your GP practice or a blood pressure clinic.) For those aged 80 years or more, it should be below 150/90mmHg.

What is high blood pressure?

High blood pressure – also called hypertension – is when your blood pressure is consistently higher than the recommended level. Having high blood pressure greatly increases your risk of having a cardiovascular event such as a heart attack or a stroke. And, over time, high blood pressure can cause the heart to become abnormally large, or the pumping action of the heart to become less effective (which is what happens in heart failure).

High blood pressure is said to be a 'silent threat', as there are usually no symptoms, and the only way of knowing if you have high blood pressure is to have your blood pressure measured. Your doctor or nurse will measure your blood pressure as part of your health check. (See page 14.)

What causes high blood pressure?

The following can all contribute to high blood pressure.

- Physical inactivity.
- Being overweight or obese.
- Having too much salt in your diet.
- Drinking too much alcohol.
- Not eating enough fruit and vegetables.
- Your family history. If your parents, brothers or sisters have, or had, high blood pressure, you may have a greater chance of developing it too.

What you can do

If you have high blood pressure, it is essential that you control it. Even reducing your blood pressure by a small amount can lower your risk of problems in the future.

Your doctor may prescribe some medicine for you, to help you control your blood pressure.

The following tips can help to reduce your blood pressure and protect your heart.

- Do more physical activity.
- Keep to a healthy weight.
- Cut down on salt.
- Cut down on alcohol.
- Eat more fruit and vegetables.

We explain more about how to do all these things on pages 27 to 47.

For more information, see our booklet Blood pressure.

Cholesterol

Cholesterol is a fatty substance which is found in the blood. It is mainly produced by the liver. Cholesterol plays an essential role in how every cell in the body works. However, too much cholesterol in the blood can increase your risk of cardiovascular disease.

Cholesterol is carried around the body by lipoproteins. Lipoproteins are a combination of cholesterol and proteins. There are two main types.

- LDL (low-density lipoproteins) is the harmful type of cholesterol. This is sometimes called LDL cholesterol.
- HDL (high-density lipoproteins) is a protective type of cholesterol. It is sometimes called HDL cholesterol.

Having too much harmful cholesterol in your blood can increase your risk of getting cardiovascular disease. The risk is particularly high if you have a high level of LDL cholesterol and a low level of HDL cholesterol.

What causes high cholesterol?

One of the causes of high blood cholesterol is eating too much saturated fat. (On page 43 we give examples of foods that contain saturated fat.)

However, some people have high blood cholesterol even though they eat a healthy diet. For example, they may have inherited a condition called familial hypercholesterolaemia (FH). For more about this, see our booklet Inherited heart conditions: Familial hypercholesterolaemia.

Triglycerides

Triglycerides are another type of fatty substance in the blood. People with a high triglyceride level have a greater risk of developing cardiovascular disease.

Triglycerides are found in foods from animal sources, like dairy products and meat. People who are overweight, or who eat a lot of fatty and sugary foods, or who regularly drink too much alcohol, are more likely to have high triglyceride levels.

How are cholesterol and triglyceride levels measured?

Your doctor or nurse will take a blood test to measure your total cholesterol, LDL and HDL, and triglyceride levels. These are measured in units called millimols per litre of blood (mmol/l). This blood test will be done as part of your health check.

You may be given some special instructions before your blood test. For example, if you're having your triglyceride level measured, you will be asked not to eat anything and to drink only clear fluids for 12 hours before the test. You may also be asked not to drink any alcohol for 24 hours before the test. You should always follow the instructions that your doctor or nurse gives you.

What you can do

To help reach a healthy cholesterol level and reduce your risk of cardiovascular disease, you need to do the following.

- Cut right down on saturated fats and replace them with monounsaturated and polyunsaturated fats.
- Cut down on foods containing trans fats.

We explain more about all these different types of fats and which foods they are found in on page 40.

Also, taking part in regular physical activity can help to increase your HDL cholesterol (the 'protective' type of cholesterol).

Will I need to take cholesterol-lowering medicine?

Your GP may prescribe cholesterol-lowering medicine for you, such as statins. Whether you need to take

medicine to lower your cholesterol depends not just on your cholesterol level, but also on your overall risk of cardiovascular disease. For example, if you don't have a high cholesterol level, but you do have a high overall risk of cardiovascular disease, it is likely that you will benefit from taking cholesterol-lowering medicine to protect your heart.

For more information, see our booklets Reducing your blood cholesterol and Eating well, and our leaflet Cut the saturated fat.

Physical activity

Physical activity has many benefits, both for your heart and for your general wellbeing. It helps to:

- lower your blood pressure
- improve your cholesterol levels
- control your weight and body shape
- reduce the risk of diabetes or help control diabetes
- relieve stress and anxiety and help you look and feel good
- prevent blood clotting
- improve muscle and bone strength, and
- reduce the risk of certain types of cancer.

In England, about seven in every ten adult women, and six in every ten adult men, don't do enough physical activity to benefit their health.

What you can do

The best activity for your heart health is moderateintensity rhythmic (aerobic) activity – for example, brisk walking, cycling or swimming. 'Moderate-intensity' means that it should make you feel warm and breathe more heavily than usual, but you should still be able to talk.

Aim to do at least 150 minutes of moderate-intensity physical activity a week. For example, you could do 30 minutes a day on at least five days a week.

You can do the 30 minutes either all in one go or in several shorter bouts of about 10 minutes at a time. However, if you're not used to doing this amount of physical activity, it is important that you build up to this level over a period of time.

Try building activity into your daily routine. Choosing a mixture of activities will help keep you motivated. Some good options include:

- taking the stairs instead of the lift or escalator
- gardening and housework
- walking as much as possible in your lunch break
- getting off the bus or train one stop earlier when you go to work or do the shopping, and
- getting an exercise DVD and doing your exercise at home.

To find out about local walking groups, leisure centres and exercise classes, ask at your local library or town hall.

Whatever sort of exercise you do ...

- Build up your physical activity level gradually.
- Make sure you warm up before and cool down after each period of exercise. That means starting slowly for the first few minutes and building up gradually, and at the end, spending some time slowing down gradually.
- Avoid doing activities after a large meal, or in very hot or very cold temperatures, or at high altitudes.
- If you have any long-term illness, have high blood pressure, or are taking medicine, or if you're not sure about the level of exercise you should be doing, speak to your GP before you start exercising.
- If you feel tired, breathless or dizzy, or if you have pain or feel unwell, stop exercising. If the symptoms don't go away, or if they come back later, see your doctor or go to your nearest accident and emergency department.

For more information, see our booklets Get active, stay active (if you're aged 35 to 50) or Be active for life (if you're over 50). You may also be interested in taking part in one of our BHF events. See our website bhf.org.uk

Weight and body shape

The number of people in England who are overweight or obese is increasing rapidly. More than one in every four adults in England are obese. This is one of the highest rates of obesity in Europe.

If you're overweight or obese, you have a higher risk of developing cardiovascular disease. Keeping to a healthy weight and body shape can help to protect you against diabetes and high blood pressure, and also helps to control your cholesterol level.

Fatty and sweet foods are very high in calories. If you eat more calories than your body burns up, these extra calories are stored as fat, resulting in weight gain. You are even more likely to put this weight on if you are physically inactive.

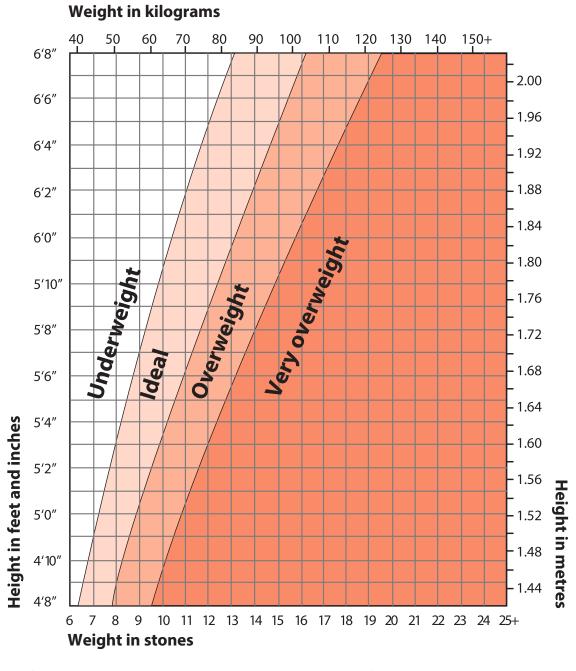
Are you a healthy weight and body shape?

You can measure your weight and body shape to find out if you are at an increased risk of developing cardiovascular disease.

Your weight

The chart on the next page is a guide for you to find out if you are an ideal weight – that is, a healthy weight for your height. If you fall into the 'Overweight' or 'Very overweight' category in the chart, your health may be at risk.

Take a straight line up or down from your weight, and a line across from your height (without shoes). Put a mark where the two lines meet to find out if you are a healthy weight. This is only an approximate guide.



Adapted from the height/weight chart by kind permission of the Food Standards Agency

Your body shape

Carrying too much weight around your middle increases your risk of developing coronary heart disease, stroke, high blood pressure and diabetes.

To find out if your body shape is increasing your risk of cardiovascular disease, measure your waist with a tape measure. Your GP or nurse may do this as part of your health check.

To measure your waist yourself, find the midpoint between the bottom of your ribs and the top of your hips. For most people this is at the level of the tummy button. Breathe out normally and measure around your waist. Try to relax, and avoid breathing in while taking your measurement. Check your measurement in the box on the next page.

People of South Asian background are more likely to have a higher proportion of body fat to muscle than the rest of the UK population, and they also tend to carry this fat around their middle. This means that South Asians have a greater risk of developing problems such as coronary heart disease and stroke at a lower waist size than other people in the UK.

	Your health is at risk if you have a waist size of:	Your health is at high risk if you have a waist size of:
Men	Over 94 centimetres (about 37 inches)	Over 102 centimetres (about 40 inches)
South Asian men		Over 90 centimetres (about 35½ inches)
Women	Over 80 centimetres (about 31½ inches)	Over 88 centimetres (about 34½ inches)
South Asian women		Over 80 centimetres (about 31½ inches)

What you can do

If you are overweight or if you have a waist size that shows you are at risk, it is important to make healthy lifestyle changes to reduce, or prevent any further increase in, your weight and waist size.

The best way to lose weight and reduce your waist size is to do the following.

- Reduce your calorie intake. You can do this by reducing portion sizes and cutting down on the amount of fat and sugar in your diet.
- Increase your daily physical activity. Physical activity helps you to burn calories, which will help you to lose weight.

We explain more about healthy eating on page 39. For more information on how to increase the amount of physical activity you do, see page 27.

Try not to lose weight too quickly. Slow and steady weight loss – about one or two pounds (between a half and 1 kilo) a week – is healthier, and you're more likely to keep the weight off for good. Losing even a small amount of weight will benefit your health.

For more information on how to lose weight, see our booklet So you want to lose weight ... for good. Or, if you're very overweight, see our booklet *Take control of your* weight.

Diabetes

Almost three million people in the UK have been diagnosed with diabetes. Diabetes significantly increases the risk of developing cardiovascular disease, and can cause other serious health problems too.

When you digest food, your body produces glucose (sugar), which our cells use for energy. A hormone called insulin helps the glucose to enter the cells, which helps to control how much glucose is in the blood. Diabetes develops when your body doesn't produce enough insulin, or the insulin doesn't work effectively, leading to abnormally high levels of glucose in the blood.

Type 1 diabetes is when your body cannot make any insulin. This type of diabetes usually happens in children and young adults.

Type 2 diabetes is the more common type of diabetes. It happens when not enough insulin is produced, or when the insulin made in your body doesn't work properly. It tends to develop gradually as people get older usually after the age of 40. It is closely linked with being overweight and not being physically active. You are also more likely to develop this condition if you have a family history of diabetes.

If you have diabetes, you are more likely to have a high cholesterol level and high blood pressure. Diabetes also increases the effect of some of the other risk factors for cardiovascular disease - such as smoking and being overweight.

Your ethnic background may be a factor too. If you are of a South Asian or African Caribbean background, there is an increased risk of developing diabetes.

Deprivation is also linked to diabetes. In the UK, disadvantaged people are two and a half times more likely than average to have diabetes at any given stage of their life. This is because deprivation is strongly associated with many of the other risk factors for cardiovascular disease. For example, nowadays cheaper food options tend to be unhealthy foods which can pave the way to an increase in body weight, and in cholesterol and blood pressure levels – factors which also increase the risk of diabetes.

If you have a health check, your doctor or nurse may do a blood test to measure your glucose level, to check for diabetes.

What you can do

If you don't have diabetes, you can greatly reduce your risk of developing it by controlling your risk factors for cardiovascular disease.

If you do have diabetes, it is very important to make sure you control your blood glucose, and also your blood pressure and cholesterol. This will help to keep your risk of cardiovascular disease as low as possible. Doing more physical activity, eating a healthy, balanced diet, and controlling your weight and body shape, will all help to reduce your risk. (For information about all these, see pages 27 to 45.) If you are diagnosed with diabetes, you may also need to take a cholesterol-lowering medicine such as statins to help protect your heart.

For more information, see our booklet Diabetes and your heart.

Lyn's story

Lyn Rodney, aged 54, explains what motivated her to make changes to her lifestyle, and how she did it.

"In 2009 I was diagnosed with type 2 diabetes and had to stay in hospital for over five days. My nurse encouraged me to immediately change my lifestyle to better control my diabetes and also to reduce my risk of cardiovascular disease. Being a single mum in full-time employment, there was a lot of stress on me, so that's how junk food started, and all the comfort eating. I was 17 stone then and led a very sedentary lifestyle.

When I was discharged from the hospital, my devastated son told me he thought I was going to die. That was motivation for me to make some changes. I changed my eating habits, making time to cook healthy meals, reducing portion sizes, and checking food labels. I also became more physically active by going for daily walks and joining the gym. My son joins me sometimes.

I have since lost over 2½ stone, and my lifestyle changes have transferred on to my son who has also lost some weight and is more health-aware now. We both feel much better for it and are determined to keep up the changes."

Healthy eating for your heart

In this section we explain how to eat a healthy, balanced diet to help protect your heart. The main points are as follows.

- Eat plenty of fruit and vegetables.
- Choose healthier fats.
- Follow a Mediterranean diet
- Cut down on salt.

We explain more about how to do all these things below.

Eat plenty of fresh fruit and vegetables

Eating a healthy, balanced diet which includes at least five portions of a variety of fruit and vegetables a day will make sure that you get a combination of vitamins and minerals to help keep you healthy.

What you can do

Eat a wide variety of fruit and vegetables. They can be fresh, frozen, chilled, canned, dried, cooked or raw.

There is no evidence that taking vitamin tablets or supplements has the same benefits as eating fruit and vegetables.

Choose healthier fats

Foods containing fat contain a combination of saturated fats, monounsaturated fats and polyunsaturated fats. Choosing healthier fats can help to protect your heart. But remember that all fats are high in calories. So, if you are watching your weight, you should limit the amount of all the fats you eat.

What you can do

- Cut down on saturated fats such as butter, cheese, sausages and fatty meats, which raise cholesterol levels. Replace them with healthier monounsaturated and polyunsaturated fats. See page 42 for examples of foods containing all these fats.
- Cut down on foods containing trans fats as they can increase your total cholesterol and LDL cholesterol levels. Trans fats are formed when vegetable oils are 'hydrogenated'. They can be found in processed foods like some cakes, biscuits, crackers and hard margarines. Foods that have 'hydrogenated oil or fat' or 'partially hydrogenated oil or fat' in the list of ingredients are likely to contain trans fats. Trans fats are also found naturally in very small amounts in dairy foods and meat.

 Reduce the total amount of fat you eat by cutting down on foods such as pastries and fatty crisps, and replacing them with healthier fruit and vegetables. Fill up on wholegrain versions of starchy foods instead, such as bread, rice, and pasta.

Choosing healthier fats

To help protect your heart, you need to cut down on saturated fats and trans fats and replace them with monounsaturated and polyunsaturated fats. Omega-3 fats are good for your heart too.

		Unsaturated fats
	Monounsaturated fats	Polyunsaturated fats
Which foods are these fats found in?	 Found in: olive oil and rapeseed oil avocado nuts and seeds (almonds, cashews, hazelnuts, peanuts and pistachios). Some spreads are made from monounsaturated fats. 	 Found in: corn oil, sunflower oil and soya oil nuts and seeds (walnuts, pine nuts, sesame seeds and sunflower seeds), and oily fish such as herring, mackerel, pilchards, sardines, salmon, trout and fresh tuna. Some spreads are made from polyunsaturated fats.

	Saturated fats	
Omega-3 fats	Saturated fats	Trans fats
Found in fish oil.	Found in: • butter • hard cheese • whole milk • fatty meat • meat products • biscuits • cakes • cream • lard • dripping • suet • ghee • coconut oil • palm oil • pastry.	Found in: pastries cakes biscuits crackers fried foods takeaways hard margarines. Foods that have 'hydrogenated oils or fats' or 'partially hydrogenated oils or fats' in the list of ingredients are likely to contain trans fats.

Follow a Mediterranean diet

There is evidence that the 'Mediterranean diet' can reduce the risk of cardiovascular disease. A Mediterranean diet incorporates the basics of healthy eating, but it has an emphasis on eating less meat and more fish, fruit, vegetables, grains, nuts, pulses and beans. It also includes using unsaturated oils instead of saturated fats such as butter. Olive oil (a monounsaturated oil) is the most commonly used oil in Mediterranean countries.

It seems that it's the combination of all the different foods - along with the Mediterranean lifestyle and eating pattern that go with it – that provides the heart health benefits.

Aim to eat a couple of portions of fish each week, and make one of these portions an oily fish. Try sardines on toast, or mackerel in a salad, or stir salmon through pasta.

Also, cut down on the foods that provide a lot of saturated fat in your diet – such as full-fat dairy products and butter - and replace them with monounsaturated and polyunsaturated fats. See page 42 to find out which foods contain these fats.

Cut down on salt

People who have a lot of salt in their diet are more likely to have high blood pressure. Most people eat far more

salt than they need. It is recommended that adults have no more than 6 grams of salt a day – that's about one teaspoonful.

It is the sodium in salt that contributes to high blood pressure. There is sodium in all types of salt, whether it's salt in grains, crystals or flakes.

What you can do

- Cut down on processed foods that contain a lot of salt. Three-quarters of the salt we eat is hidden in processed foods such as ready meals, packet and canned soups, instant noodles, ketchups and sauces, sausages and burgers, and salty savoury snacks.
- Don't add salt to your food at the table.
- Cook without adding any salt. Use extra pepper, herbs, garlic, spices or lemon juice to add flavour to your food instead.

Within a few weeks, your taste buds will change and you will get used to less salt and appreciate other flavours more.

For more information, see our booklets Cut down on salt and Guide to food labelling.

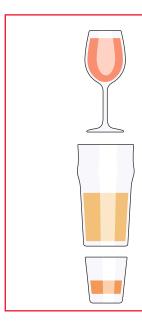
Other things you can do

Alcohol

If you drink alcohol, make sure you drink within the recommended limits and avoid binge-drinking. It is better to have just a small amount regularly rather than large amounts in one go.

- Men should not regularly drink more than 3 to 4 units of alcohol a day.
- Women should not regularly drink more than 2 to 3 units of alcohol a day.

These guidelines apply whether you drink every day, once or twice a week, or just occasionally.



1 unit of alcohol =

- a small glass (100ml) of wine (10% ABV [alcohol by volume])
- or half a pint (about 300ml) of normal-strength lager, cider or beer (for example, 3.5% ABV)
- or a pub measure (25ml) of spirits.

To work out how many units of alcohol you're drinking, use our interactive alcohol unit calculator at bhf.org.uk/alcoholcalculator

Moderate drinking – 1 or 2 units of alcohol a day – may offer some protection from coronary heart disease for some people. However, if you don't already drink alcohol, there is no need for you to start, as there are much healthier ways to look after your heart.

Drinking more than the recommended limit does not protect the heart and can lead to damage to the heart muscle, high blood pressure, stroke and some cancers. Alcohol is high in calories too, so it can lead to weight gain.

Reducing stress

Challenges can help to keep us motivated, but when we feel unable to cope with the high demands that are placed on us, we experience stress. Feeling isolated can make you feel even more stressed.

The way you deal with stress can encourage unhealthy behaviour, such as smoking, drinking too much alcohol, eating unhealthily or being less physically active. These can all increase your risk of developing cardiovascular disease.

It's important to learn how to relax and deal with stress effectively. Here are some tips to help.

 Try to identify situations that make you feel stressed, and avoid them if you can.

- Be realistic about what you can achieve and learn to say 'no' to unnecessary demands.
- Doing something active such as going for a brisk walk or a run – can help you let off steam.
- Try relaxation techniques or join a yoga class.
- If you feel overwhelmed, talk to a friend or a partner, or ask your GP for advice.

For more information, see our booklet Coping with stress.

Family history

If you have a family history of certain cardiovascular diseases such as coronary heart disease or stroke, you may have an increased risk of developing that particular disease yourself. A family history means if your father, mother, brother or sister developed coronary heart disease or had a stroke at a young age (under 65 for women, and under 55 for men).

Family behaviour can be a factor too. Lifestyle habits, such as a poor diet or smoking, can sometimes be passed on in families.

Genes may also play a role in the risk of developing coronary heart disease or having a stroke, although more research is needed to understand this. No single gene has been identified as being responsible, and it is likely that several genes may have a role. There is no genetic test available to find out if the risk of coronary heart disease and stroke runs in families.

What you can do

If cardiovascular disease runs in your family, you need to make an extra effort to reduce your other risk factors. It's vital to control your weight, eat healthily, take regular physical activity and avoid smoking. (See pages 17 to 45.) Tell your doctor if you have a family history of cardiovascular disease, as he or she may want to check your blood pressure or carry out a health check. You can't change your family background, but you can choose your lifestyle!

A final word

It's never too late to change your lifestyle and protect your heart – or to prevent your heart problem from getting worse. To begin with, if you are over 40, find out if you are eligible to have a free health check with your GP or practice nurse (see page 14). If you are, call your GP surgery today to make an appointment.

Whatever your age, do see your GP if you think you may have any of the risk factors we discuss in this booklet.

And why not look back at the risk factors on page 12 and start tackling the one thing you most want to change?

Your health is important. Coronary heart disease is the single biggest killer in the UK. Take action to protect your heart now.

For more information

British Heart Foundation website bhf.org.uk

For up-to-date information on heart disease, the BHF and its services.

Heart Helpline

0300 330 3311 (a similar cost to 01 and 02 numbers) For information and support on anything heart-related.

Genetic Information Service

0300 456 8383 (a similar cost to 01 and 02 numbers) For information and support on inherited heart conditions.

Booklets and DVDs

To order our booklets or DVDs:

- call the BHF Orderline on 0870 600 6566
- email orderline@bhf.org.uk or
- visit bhf.org.uk/publications

You can also download many of our publications from our website. For a list of resources available from the BHF, ask for a copy of our catalogue Take heart. Our booklets are free of charge, but we would welcome a donation. (See page 2 for how to make a donation.)

Heart Information Series

This booklet is one of the booklets in the *Heart Information*. Series. The other titles in the series are as follows.

Angina

Atrial fibrillation

Blood pressure

Cardiac rehabilitation

Caring for someone with a heart condition

Coronary angioplasty

Diabetes and your heart

Having heart surgery

Heart attack

Heart rhythms

Heart transplantation

Heart valve disease

Implantable cardioverter defibrillators (ICDs)

Keep your heart healthy

Living with heart failure

Medicines for your heart

Pacemakers

Peripheral arterial disease

Physical activity and your heart

Primary angioplasty for a heart attack

Reducing your blood cholesterol

Returning to work with a heart condition

Tests for heart conditions

Our services

For more information about any of our services, contact the **Heart Helpline** on **0300 330 3311** or visit **bhf.org.uk**

Emergency life-support skills

For information about Heartstart – a free, two-hour course in emergency life support skills, including what to do if someone seems to be having a heart attack - call the BHF Helpline on 0300 330 3311 or visit bhf.org.uk

Heart Matters

Heart Matters is the BHF's free, personalised service that provides support and information for people who want to improve their heart health. Join today and enjoy the benefits, including *heart matters* magazine and an online members' area. Call the Heart Helpline on 0300 330 3311, or join online at bhf.org.uk/heartmatters

Useful organisations

Blood Pressure UK

www.bloodpressureuk.org

Diabetes UK

Phone: 0345 123 2399

www.diabetes.org.uk

NHS Smokefree

Phone: 0800 022 4332

www.nhs.uk/smokefree

NHS Smokefree can help you find your local NHS stop

smoking service.

Quit

Phone: 0800 00 22 00

www.quit.org.uk

Stroke Association

Phone: 0303 3033 100

www.stroke.org.uk

Index

activity	12, 27
alcohol	13, 46
angina	4, 6, 7
atheroma	6, 7
blood pressure	12, 20
cardiac arrest	8
cardiovascular disease	4, 6
cholesterol	12, 23
coronary heart disease	4, 6
diabetes	12, 35
eating	39
ethnic background	12, 32, 36
exercise	12, 27
family history	12, 49
fats	25, 39, 40, 42
fish	44
fruit	39
health check	14
healthy eating	39
heart attack	6, 8
Heartstart	55
lifestyle	16
medicines	15, 22, 25
Mediterranean diet	44
obesity	12, 30

overweight	12, 30
physical activity	12, 27
risk factors	12, 14, 16
salt	21, 22, 44
saturated fats	23, 25, 40, 43, 44
shape (body shape)	30, 32
smoking	12, 17
stress	13, 47
stroke	4, 6, 10
symptoms of heart attack	9
of stroke	10
trans fats	25, 40, 43
triglycerides	24
vegetables	39
waist	32
weight	12 30

Have your say

We would welcome your comments to help us produce the best information for you. Why not let us know what you think? Contact us through our website at bhf.org.uk/contact. Or, write to us at the address on the back cover.

Acknowledgements

The British Heart Foundation would like to thank all the GPs, cardiologists, nurses and other health professionals who helped to develop the booklets in the *Heart Information Series*, and all the patients who commented on the text and design.



Coronary heart disease is the UK's single biggest killer.

For over 50 years we've pioneered research that's transformed the lives of people living with heart and circulatory conditions. Our work has been central to the discoveries of vital treatments that are changing the fight against heart disease.

But so many people still need our help.

From babies born with life-threatening heart problems to the many Mums, Dads and Grandparents who survive a heart attack and endure the daily battles of heart failure.

Join our fight for every heartbeat in the UK. Every pound raised, minute of your time and donation to our shops will help make a difference to people's lives.

