

MACMILLAN
CANCER SUPPORT

HEART HEALTH AND CANCER TREATMENT



In partnership with



“My nurse explained everything that was happening and that it could be managed. She has kept adjusting my medication and it has improved my breathing.”

Philippa, diagnosed with cancer



About this booklet

This booklet is about heart health and cancer treatment. It is for anyone who:

- has been told their cancer treatment may affect their heart
- had a heart condition before starting cancer treatment
- wants to know more about keeping their heart healthy.

The booklet explains how the heart works and how different cancer treatments may affect the heart. It also has information about managing heart problems and looking after your heart.

We hope it helps you deal with some of the questions you may have. We cannot give advice about the best treatment for you. You should talk to your doctor, who knows your medical history.

How to use this booklet

The booklet is split into sections to help you find what you need. You do not have to read it from start to finish. You can use the contents list on page 3 to help you.

It is fine to skip parts of the booklet. You can always come back to them when you feel ready.

Turn to pages 108 to 116 for some useful addresses and websites. If you find this booklet helpful, you could pass it on to your family and friends. They may also want information to help them support you.

Quotes

In this booklet we have included quotes from people who have heart problems and have had cancer treatment, which you may find helpful. These are from people who have chosen to share their story with us. This includes Philippa, who is on the cover of this booklet. To share your experience, visit **macmillan.org.uk/shareyourstory**

For more information

If you have more questions or would like to talk to someone, call the Macmillan Support Line free on **0808 808 00 00**, 7 days a week, 8am to 8pm, or visit **macmillan.org.uk**

If you would prefer to speak to us in another language, interpreters are available. Please tell us, in English, the language you want to use.

If you are deaf or hard of hearing, call us using NGT (Text Relay) on **18001 0808 808 00 00**, or use the NGT Lite app.

We have some information in different languages and formats, including audio, eBooks, easy read, Braille, large print and translations. To order these, visit **macmillan.org.uk/otherformats** or call **0808 808 00 00**.

Contents

The heart and heart problems	5
Cancer treatment and your heart	27
Having treatment for cancer	45
Looking after your heart	71
Tips for heart health	89
Financial support and work	93
Further information	101



THE HEART AND HEART PROBLEMS

The heart and how it works	6
Heart problems	10
Risk factors for heart problems	19

The heart and how it works

The heart is a large muscle that pumps blood around your body. The blood delivers oxygen and nutrients around your body and takes away carbon dioxide and waste products.

The heart is divided into 4 chambers – 2 on the right and 2 on the left:

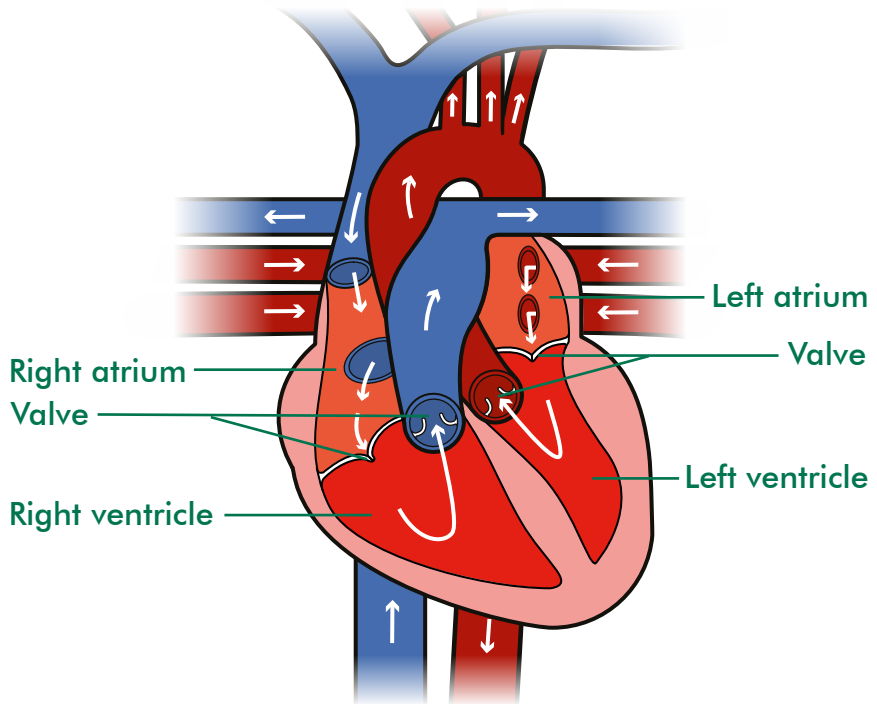
- The 2 smaller upper chambers collect blood going into the heart. These chambers are called the right atrium and the left atrium.
- The 2 larger lower chambers pump blood out of the heart. These chambers are called the right ventricle and the left ventricle.

There are 4 valves inside the heart. They open and close as the heart pumps blood. The valves keep the blood flowing in one direction through the heart.

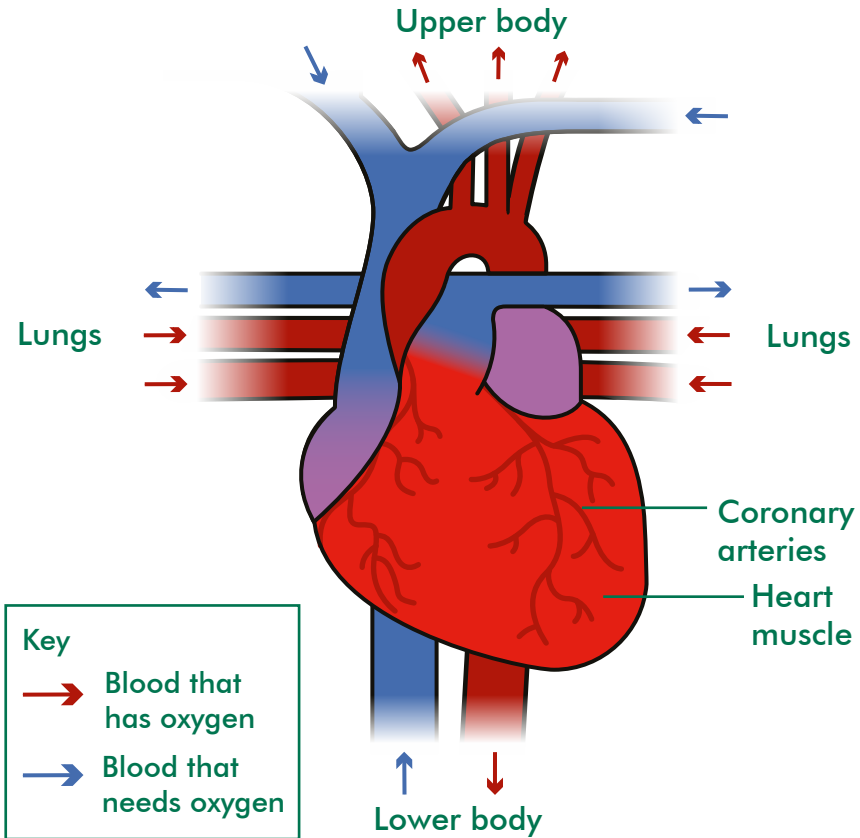
Blood travels around the body through tubes called blood vessels. The blood going to the heart is low in oxygen. It travels through the heart and is pumped out to the lungs.

In the lungs, the blood picks up oxygen and gets rid of carbon dioxide, which is then breathed out. The blood carrying oxygen travels back through the heart and is pumped out to the body again.

The inside of the heart



The outside of the heart



Like the rest of your body, the heart needs its own blood supply to bring it oxygen.

Small blood vessels on the outside of the heart carry blood and oxygen to the heart muscle. These blood vessels are called coronary arteries (see the diagram on the opposite page).

The heart has its own electrical system that tells it when to beat and pump blood around the body. A group of cells called the sinus node send an electrical signal through the heart to start each beat. This happens about 60 to 100 times a minute. The sinus node is also known as the heart's natural pacemaker.

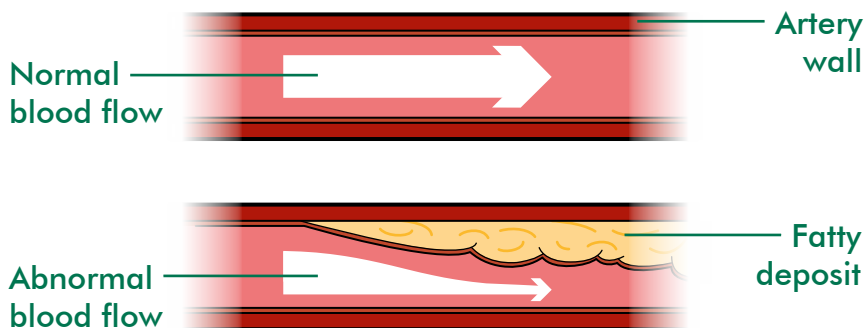
Heart problems

Problems can happen when parts of the heart become diseased or damaged.

Coronary heart disease (CHD)

Coronary arteries are the small blood vessels that carry blood and oxygen to the heart muscle (see the diagram on page 8). Sometimes, fatty deposits (called atheroma) can build up inside the arteries. This can make the arteries narrow and is called coronary heart disease (CHD) or coronary artery disease.

A normal artery and a narrowed artery



Certain things, called risk factors can increase the risk of CHD. These include:

- smoking
- being overweight
- high blood pressure
- a high blood cholesterol level
- diabetes
- a lack of exercise
- age – you are more likely to develop CHD as you get older
- a family history of CHD
- some cancer treatments.

The more risk factors you have, the more likely you are to develop CHD. We have more information about risk factors on pages 19 to 25.

Symptoms of CHD

Sometimes a blood vessel gets so narrow that it does not let enough blood and oxygen flow to the heart muscle. This can cause symptoms.

The main symptom of CHD is chest pain or discomfort, known as angina. Angina often feels like a heaviness or tightness in your chest. Some people describe a feeling of:

- a dull ache – a bit like indigestion
- severe tightness.

The pain and discomfort may spread to your arms, neck, jaw or stomach.

Other symptoms of CHD include:

- feeling short of breath
- extreme tiredness (fatigue) on physical exertion.

These symptoms often develop when you are physically active, exercising or stressed. They may also develop after a meal, or in cold weather. Symptoms usually go away when you rest and relax.

**'I started feeling
breathless after
chemotherapy.
One time I drove
to hospital for
my appointment
and when I got
out of the car,
I was struggling
to breathe.'**

Philippa



Heart attacks

Sometimes a piece of fatty deposit can break off and a blood clot forms. This may block the blood vessel, stopping the flow of blood to parts of the heart. This is called a heart attack. It can cause permanent damage to the heart muscle.

The symptoms of a heart attack vary from person to person. The most common sign is sudden pain or discomfort in your chest that does not go away.

For some people, the pain is severe. Other people just feel uncomfortable. Sometimes the chest pain or discomfort:

- feels like tightness, heaviness or burning in your chest
- may spread to the arms, neck, jaw, stomach or back.

You may also:

- feel sweaty
- feel dizzy or light-headed
- be short of breath
- feel sick or vomit
- feel generally unwell.

If you think you or someone else is having a heart attack, call 999 immediately for an ambulance.

Heart muscle damage

Damage to the heart muscle can make it harder for the heart to pump blood around the body.

The most common reasons for heart muscle damage are:

- a heart attack
- high blood pressure
- heart muscle disease, which is also called cardiomyopathy
- problems with the heart valves or rhythm
- being born with a heart problem (congenital heart disease)
- some infections
- using recreational drugs or excessive alcohol
- some cancer treatments.

Heart failure

Damage to the heart muscle can lead to heart failure. This does not mean that the heart stops. It just means that it does not pump blood around the body as well as usual.

Symptoms of heart failure can include:

- feeling short of breath, when you are physically active, or at rest
- feeling unusually tired or weak (fatigue)
- swollen feet, ankles, legs or tummy (abdomen).

Heart valve disease

The heart valves can become stiff and not open properly. Or they may not close tightly and the blood may leak backwards.

The main causes of heart valve disease are:

- infection
- damage to the heart muscle from a heart attack
- disease of the heart muscle (cardiomyopathy)
- being born with an abnormal heart valve (congenital heart valve disease)
- getting older
- radiotherapy to the heart or nearby areas.

You may not have any symptoms, but the main symptoms of heart valve disease are:

- feeling unusually tired
- feeling short of breath
- swelling of the legs, feet and ankles.

If valve problems are not treated it can put a strain on the heart. This can sometimes lead to heart failure over time.

Electrical heart problems

A problem with the heart's electrical system may make your heart beat:

- too fast
- too slow
- with an irregular pattern.

This is different to the normal changes in heart rhythm that can happen during the day. For example, your heart may beat slower when you are resting, and faster when you are active or feeling anxious.

An abnormal heart rhythm is called an **arrhythmia**.

There are many reasons why someone may have an abnormal heart rhythm. It is more common in older people or people who already have a heart condition. Some cancer treatments can also affect the electrical system and how the heart beats.

Many people have palpitations from time to time. This is the sensation of feeling your heart beating. It may feel like your heart is:

- fluttering
- pounding
- beating too fast, too slow or irregularly
- skipping a beat.

For most people palpitations are harmless and do not mean anything is wrong with your heart. But sometimes it can be a sign of a problem.

Symptoms of arrhythmia

Some arrhythmias are more serious than others. The symptoms depend on the type of arrhythmia you have.

The most common symptoms include:

- palpitations
- feeling dizzy
- breathlessness
- blackouts (fainting).



Risk factors for heart problems

Risk factors are things that can make you more likely to develop certain heart problems. Some risk factors cannot be changed. You can control other risk factors by making changes to your lifestyle or by taking medicines.

If you are worried about any of these risk factors, talk to your GP or nurse. They can give you information about your risk of future heart problems and advice about reducing this risk. You can also find out more about risk factors on the British Heart Foundation website at **bhf.org.uk**

Risk factors you cannot control

There are some risk factors that you cannot change.

Age

As your body gets older, you are more likely to develop coronary heart disease (CHD) or have a heart attack (see pages 10 to 14).

Family history

Some heart problems can run in families. You have a higher risk if your parents, brothers or sisters have had heart problems.

Ethnicity

People in the UK who come from a South Asian background, may have a higher risk of developing CHD than the rest of the UK population. CHD can lead to a heart attack. You are also more likely to have diabetes, which is another risk factor for heart problems.

If you are from an African Caribbean background, you are more likely to have other risk factors. These include high blood pressure and diabetes.

Risk factors you can control

There are some risk factors that you can control by changing your lifestyle (see pages 72 to 87) or with medicines from your doctor (see pages 59 to 63). This lowers your chance of developing CHD or having a heart attack. Even if you already have a heart problem, you can help your heart by controlling these factors.

Smoking

Smoking increases your risk of CHD or a heart attack in several ways:

- It damages the lining of your coronary arteries, which can lead to a build-up of fatty deposits (atheroma).
- It reduces the amount of oxygen in the blood. This means your heart has to work harder to supply the body with enough oxygen.
- It makes your blood more likely to clot. This increases your risk of a heart attack or stroke.
- It makes your heart beat faster and work harder.

Weight and body shape

If you are overweight or carry more weight around your waist, you have a higher risk of developing CHD. You are also more likely to develop conditions that can cause heart problems, such as diabetes or high blood pressure.

You can check whether you are a healthy weight and body shape in two ways.

Body Mass Index (BMI)

BMI is a measure of whether your weight is healthy for your height. The table below shows how BMI can check if you are underweight, a healthy weight or overweight.

Your GP or practice nurse can tell you what your BMI is. Or you can check it online using a BMI calculator. Visit bhf.org.uk/bmi

BMI	Weight
Less than 18.5	Underweight
18.5 to 24.9	Healthy weight
25 to 29.9	Overweight
30 or more	Very overweight

Waist measurement

Whatever your height or weight, having too much fat around the middle of your body increases your risk of heart problems. You can measure your waist by placing a tape measure halfway between your lowest rib and the top of your hip bone. For most people, this will be at the level of their tummy button. You can check if your waist measurement is putting your health at risk on the British Heart Foundation's website. Visit **bhf.org.uk**

A healthy waist measurement varies depending on your ethnic group.

For people of white European heritage:

- Women have an increased risk if their waist measures more than 80 cm (31.5 inches). The risk is severe if it measures over 88 cm (35 inches).
- Men have an increased risk if their waist measures more than 94 cm (37 inches). The risk is severe if it measures over 102 cm (40 inches).

People of South Asian, African-Caribbean, Black African, Chinese and Middle Eastern heritage have a greater risk of heart problems at a lower waist measurement:

- For women, the risk is severe if their waist measures more than 80 cm (31.5 inches).
- For men, the risk is severe if their waist measures more than 90 cm (35.5 inches).

Physical activity

People who spend more time sitting or being inactive have a higher risk of developing CHD, high blood pressure and diabetes.

Regular activity helps to keep your heart healthier. It can:

- lower your cholesterol
- keep your blood pressure at a healthy level
- help control your diabetes.

We have more information on pages 77 to 82. You may also find our booklet **Physical activity and cancer** helpful (see page 104).

High blood pressure

Blood pressure measures the pressure of your blood as your heart pumps it out to your body. If the pressure is high it can damage the arteries. This increases the risk of a heart attack or stroke. High blood pressure can also damage the heart muscle which can lead to heart failure.

You can improve your blood pressure by:

- being more physically active
- losing weight
- reducing the salt in your diet
- eating more fresh fruit and vegetables
- drinking less than 14 units of alcohol each week and not drinking alcohol for several days each week.

Your doctor may also give you medicines to help control your blood pressure.

High cholesterol

Cholesterol is a fatty substance found in the blood. If there is too much cholesterol, fatty material can build up in the artery walls. This can increase the risk of CHD and heart attack.

You can improve your cholesterol level by:

- eating a healthy diet – choosing unsaturated fats instead of saturated fats (see pages 74 to 75)
- stopping smoking
- being more physically active
- keeping to a healthy weight and waist measurement.

Your doctor may also give you medicines to lower your cholesterol levels.



Diabetes

Diabetes is a condition where the level of sugar in the blood is too high. There are two main types:

- **Type 1 diabetes** is rare. It is more common in children or young adults. This type of diabetes is not related to diet or lifestyle. It is treated with insulin by injection or through a pump.
- **Type 2 diabetes** is more common and usually affects adults over the age of 40. This type is much more likely if you are overweight or physically inactive. It is treated with a healthy diet and physical activity. Tablets and insulin can also help manage it.

Over time, diabetes can damage the heart and blood vessels. This can increase the risk of high blood pressure and coronary heart disease (see ages 10 to 14).

If you have diabetes, keeping your blood sugar under control will help reduce your risk of heart problems. Your doctor or nurse can give you more advice about this.

You may also find our booklet **Diabetes and cancer treatment helpful** (see page 104).



CANCER TREATMENT AND YOUR HEART

How cancer treatments can affect your heart	28
Chemotherapy	30
Targeted therapies	34
Radiotherapy	38
Hormonal therapies	40
Surgery	42
Cancer research trials (clinical trials)	43

How cancer treatments can affect your heart

Some cancer treatments can affect how your heart works. This may cause heart problems that are either short-term (temporary) or long-term (permanent). Problems may develop during or soon after cancer treatment. Some problems may develop many years later. These are called late effects.

The risk of heart problems depends on:

- the type of cancer treatment you have
- how much treatment you have.

Your risk may be higher if:

- you have other risk factors for heart problems (see pages 19 to 25)
- you had a heart problem before starting cancer treatment (see pages 10 to 18)
- you have several cancer treatments at the same time.

Your cancer doctor will explain if a cancer treatment is likely to affect your heart. If you are worried about heart problems, ask them for more information.

If your treatment has finished and you are worried about your heart, talk to your GP. Sometimes it is hard to remember the details of your cancer treatment. Your cancer doctor or your GP can give you more information and answer any questions you have.

If you had cancer treatment as a child, you may have a higher risk of developing heart problems as an adult. This depends on the type of cancer treatment you had.

Some people will have regular follow-up appointments for the rest of their life to check their heart health.

We have more information about late effects of cancer treatment on our website (see page 104).

Your data and the cancer registry

When you are diagnosed with cancer in the UK, some information about you, your cancer diagnosis and your treatment is collected in a cancer registry. This is used to plan and improve health and care services. Your hospital will usually give this information to the registry automatically. There are strict rules to make sure the information is kept safely and securely. It will only be used for your direct care or for health and social care planning and research.

Talk to your doctor or nurse if you have any questions. If you do not want your information included in the registry, you can contact the cancer registry in your country to opt out. You can find more information at **macmillan.org.uk/cancerregistry**

Chemotherapy

Some types of chemotherapy may cause heart problems. The risk can be higher if you are:

- taking several chemotherapy drugs together
- having chemotherapy with chest radiotherapy
- also having some types of targeted therapies.

Your age when you have chemotherapy may also increase the risk of heart problems. With some types of chemotherapy the risk of a heart problem is increased in:

- young children
- people over 65 years old.

Your cancer doctor will explain any risks before you start chemotherapy.

Different drugs can cause different problems:

- Some drugs are only likely to cause heart problems if you have a high dose. Your cancer doctor will plan your treatment carefully and record the doses you are given.
- Some drugs may cause heart changes during or shortly after you have treatment.
- Some drugs can cause heart problems many years later – these are known as late effects (see pages 28 to 29).

Some chemotherapy drugs are given into a vein (intravenously) with large amounts of fluid. If you already have a heart condition, this can put pressure on your heart and may cause problems. Your nurse will monitor you for any signs of problems while you have these treatments.

Before treatment, you may have blood tests and a scan to monitor how your heart is working. For some types of chemotherapy, you will have these tests again during and after your treatment. These tests look for early signs of heart muscle damage and monitor your heart function. You may not have any symptoms, but it is important to treat early signs to stop further damage. We have more information about tests on pages 50 to 58.

Sometimes chemotherapy causes symptoms that need urgent treatment to prevent serious problems. You should tell your doctor or nurse straight away if you:

- have chest tightness, pain or discomfort
- have pain that spreads to your shoulders, neck, back, jaw or arms
- feel unwell, sick or sweaty
- have shortness of breath or are wheezing
- black out (faint)
- feel dizzy or light-headed
- can feel your heart beating (palpitations).

If you get any of these symptoms during treatment, your doctors will stop the chemotherapy drug and check your heart. They may change the type of chemotherapy to one that does not cause heart problems.

We have more information about different chemotherapy drugs on our website. You may also find our booklet **Understanding chemotherapy** helpful (see page 104).

Anthracyclines

Anthracyclines are a group of chemotherapy drugs that most commonly affect the heart. They are used to treat many different types of cancer.

This type of chemotherapy includes the drugs:

- doxorubicin, which is also called Adriamycin®
- epirubicin
- daunorubicin
- idarubicin
- mitoxantrone.

Many people who have these drugs do not develop any heart problems. But sometimes they can cause heart muscle damage. This can cause symptoms during, shortly after or years after treatment (late effects).

To help reduce the risk of heart problems, doxorubicin can be wrapped in a fatty covering called a liposome. The liposome helps prevent the drug from reaching areas with small blood vessels, such as the heart. This treatment is called liposomal doxorubicin (Caelyx®, Myocet®). Your cancer doctor can tell you if it is suitable for you.

Other chemotherapy drugs

Sometimes other types of chemotherapy drugs can affect the heart. A small number of people may develop heart problems. These may develop within hours or up to a few days after having these treatments.

Alkylating agents

Alkylating agents are used to treat many different types of cancer. Commonly used alkylating agents include:

- cyclophosphamide
- carmustine
- ifosfamide.

Taxanes

These are used to treat different types of cancer including ovary, breast, prostate and lung cancer. The 2 main taxanes are:

- paclitaxel
- docetaxel.

Fluoropyrimidines

These chemotherapy drugs are used to treat different cancers, such as bowel and breast cancer. Commonly used fluoropyrimidines include:

- fluorouracil (5FU)
- capecitabine.

Other commonly used chemotherapy drugs can also affect the heart. But the risk of heart problems with these drugs is small. They include:

- bleomycin
- cisplatin
- fludarabine
- gemcitabine
- mitomycin.

We have more information about chemotherapy drugs on our website (see page 104).

Targeted therapies

Targeted therapy drugs are used to treat many different cancers. There are different types of targeted therapy. Some of them can affect the heart.

Different drugs can cause different heart problems (see pages 10 to 18). Some may cause high blood pressure or abnormal heart rhythms. Others can cause symptoms of angina or heart failure. Researchers are still looking at the effect some newer drugs have on heart health.

Before treatment, you may have blood tests and scans to monitor how your heart is working (see pages 50 to 58). For some types of targeted therapy, you will have these tests again during and after your treatment. This is done to look for early signs of heart muscle damage. You may not have any symptoms, but it is important to monitor your heart. This is so that any early signs can be treated to stop further damage.

There are many different targeted therapy drugs. Over the next few pages are examples of the different types of targeted therapy drugs that may affect the heart. Your cancer doctor, specialist nurse or pharmacist will talk to you about the drug you are having. They will explain any risks before you start treatment.

We have more information about targeted therapies and many of the different targeted therapy drugs on our website (see page 104).

Cancer growth inhibitors

Chemical signals tell cells in the body how and when to develop and divide. Cancer growth inhibitors are treatments that make it difficult for cancer cells to receive these signals.

Cancer growth inhibitors that can affect the heart include:

- trastuzumab
- sunitinib
- pazopanib
- ponatinib
- sorafenib
- dasatinib
- lenvatinib
- nilotinib.

Angiogenesis inhibitors

Tumours need a blood supply to be able to survive. Without a good blood supply, the tumour does not get the oxygen and nutrients it needs. This may slow the tumour's growth or sometimes shrink it. Angiogenesis inhibitors block the chemical signals cells use to make blood vessels grow. This makes it difficult for a tumour to develop the network of blood vessels it needs to get a blood supply.

Angiogenesis inhibitors that can affect the heart include:

- bevacizumab
- everolimus.

Checkpoint inhibitors

Checkpoint inhibitors affect a type of white blood cell called a lymphocyte. Lymphocytes are an important part of the immune system. When they are active, they can attack another cell such as a cancer cell. Checkpoint inhibitors block the signals that 'switch off' lymphocytes. This means the lymphocyte stays active and is able to attack the cancer cells.

Some checkpoint inhibitors can cause inflammation of the heart (myocarditis) and arrhythmias. Checkpoint inhibitors that can affect the heart include:

- nivolumab
- pembrolizumab.



Immune system modulators

Immune system modulators help the immune system work better.

Examples that may affect the heart function include:

- lenalidomide
- pomalidomide
- thalidomide.

Proteasome inhibitors

Proteasome inhibitors interfere with enzymes (proteasomes) that are found in all cells, including cancer cells. This may cause the cancer cells to die and can stop them from growing.

Proteasome inhibitors that can affect heart function include:

- carfilzomib
- bortezomib
- ixazomib.

Radiotherapy

Most people who have radiotherapy do not develop heart problems after treatment. Radiotherapy is only likely to cause heart problems if the heart is in the area being treated. For example, this could be if you have radiotherapy for breast cancer in the left breast. If you have radiotherapy to another part of your body, away from the heart, it is unlikely to damage the heart.

Radiotherapy techniques are very accurate. Treatment can usually be planned to avoid affecting the heart. This means heart problems after radiotherapy have become rare.

Radiotherapy to the heart can:

- affect the coronary arteries, which can lead to coronary heart disease
- cause inflammation of the layers that cover of the heart (pericarditis)
- cause a build-up of fluid between the layers that cover the heart (pericardial effusion)
- damage the heart muscle
- damage the heart valves
- affect the heart's electrical system and cause an abnormal rhythm.

The risk of damage to the heart depends on:

- the total dose of radiotherapy given
- how much of the heart is in the treatment area.

The higher the overall dose of radiotherapy and the amount of the heart exposed, the greater the risk of damage. But the risk is still very small.

The risk of heart damage is also increased if:

- you are having chemotherapy at the same time
- you already have a heart condition.

After radiotherapy

Heart problems can sometimes happen during treatment. Or they may develop months or years later (late effects).

If you were told the radiotherapy may affect your heart, you can reduce the risk by making healthy lifestyle choices (see pages 72 to 87).

Your GP may arrange regular appointments after cancer treatment to check for signs of heart problems. At the appointments, you may have:

- your blood pressure checked
- a blood test to check your cholesterol levels
- scans to check how your heart is working.

If you notice any warning signs of heart problems (see page 86), tell a doctor as soon as possible.

Hormonal therapies

These drugs are often used to treat breast cancer or prostate cancer. Sometimes they are used to treat other types of cancer.

Hormonal therapies do not usually damage the heart directly, but they can affect your risk factors for heart problems. They may raise your blood pressure or cholesterol levels. People also tend to gain weight while taking hormonal therapies. This can increase your risk of developing diabetes and heart problems in the future. Women taking hormonal therapies may have an early menopause. The risk of heart problems increases in women after the menopause.

If you are taking a hormonal therapy, you can reduce these risks by making healthy lifestyle changes (see pages 72 to 87). Your doctor may also suggest treatments for high blood pressure or high cholesterol.

We have more information about hormonal therapy drugs on our website (see page 104).



Surgery

Surgery is one of the main treatments for cancer.

Sometimes surgery can put the heart under stress and cause heart problems. Having drugs to keep you asleep during surgery (general anaesthetic) may also cause heart problems for some people.

If you have a healthy heart, surgery is not usually a problem. But there may be a higher risk of damage to the heart for people who:

- had heart problems before surgery
- have diabetes
- are over 70 years old
- have high blood pressure
- smoke
- are overweight.

If you have minor surgery and only need to be asleep (anaesthetised) for a short time, the risk may be small.

If you have major surgery and need to be asleep for several hours, the risk can be greater.

Your doctor will talk to you about the possible risks of your surgery. Before you have a general anaesthetic, you will have some tests. These are to check your heart and make sure you are fit enough for surgery. If you have a high risk of serious heart problems, your doctors may suggest other cancer treatments you can have.

Cancer research trials (clinical trials)

Your cancer doctor may talk to you about having cancer treatment as part of a clinical trial. Clinical trials test new treatments or new ways of giving treatments.

Before you decide if you want to take part, your doctor or a clinical researcher will explain the trial. They will give you information about any known side effects of the treatment. They may not know all the effects these treatments have on the heart. If you join the trial, you will be monitored closely for side effects.

If you develop any warning signs of heart problems (see page 86), tell a doctor or nurse straight away.

We have more information about clinical trials in our booklet **Understanding cancer research trials (clinical trials)**. See page 104.

**'My heart nurse
has always been
a great support.'**

Philippa



HAVING TREATMENT FOR CANCER

Planning cancer treatment	46
If you already have a heart problem	48
Tests to check heart health	50
If heart problems develop	59
After cancer treatment	67

Planning cancer treatment

Before you have cancer treatment, your cancer doctor will explain your treatment plan. They will tell you about any possible benefits and disadvantages of the treatment, including any possible risks to your heart.

Your cancer doctor may check your heart health. They will ask whether you have any heart problems or risk factors such as:

- high blood pressure
- high cholesterol
- diabetes (see page 25).

They will ask what treatments you have had or are having for these conditions. If you are not sure or cannot remember the name of a condition or treatment, check your medical notes. Your cancer doctor might also speak to your GP or cardiologist (heart doctor). You may also have tests to check your heart health (see pages 50 to 58). For some cancer treatments, you may have these tests even if you do not have heart problems. Tests can be repeated during and after treatment to check for any heart changes.

'Before surgery I had a pre-op visit to the hospital and had an electrocardiogram as part of that. It was very routine. A few days later, I was told my results were unusual and that people with a heartbeat pattern like mine usually have a pacemaker.'

Judith

Making your decision

Making a decision about your cancer treatment can be complicated. For many people, the possible benefits of cancer treatment are greater than the risk of possible heart problems later in life. But it is your decision.

Your doctor and nurse will help you understand the benefits and risks of having treatment. It is important to understand this information before you decide what is right for you. You might find it helps to make a list of the questions you want to ask. Some people take a relative or friend with them. This may help you remember what was said.

You will normally have time to think about your decision, and another appointment with your doctor or nurse to discuss it.

We have further information to help you make your decision in our booklet **Making treatment decisions** (see page 104).

'My team gave me the best information to help me make my decision. They explained everything in a way I could understand. My cardiologist didn't become part of the team treating the cancer, but they did exchange emails about my situation.'

Judith

If you already have a heart problem

Not all cancer treatments are suitable for people with heart problems. But this can depend on the type of heart problem and how well-controlled it is. Your cancer doctor will talk to you about this. If a cancer treatment is likely to cause serious problems, they may suggest a different type of treatment.

If you are having a cancer treatment that might make a heart problem worse, you may need:

- heart tests before, during or after cancer treatment
- other treatments to control the heart problem.

You might need to go to extra appointments before cancer treatment starts. Your cancer doctor may arrange for you to see your cardiologist (heart doctor) for specialist advice about the heart problem. If this delays your cancer treatment, you may feel frustrated or worried. But it is important to get the right information, treatment and advice. This way, you can have the cancer treatment as safely as possible.

You may find it helpful to:

- know who to contact if you have a question about your cancer treatment, heart problems or test results
- check what will happen next at the end of each appointment
- speak to your specialist doctors, GP or nurse specialist about any worries you have – they should have access to your test results and medical notes.

If you have an implanted electronic device

Some people have an electrical device placed under the skin near the heart. It is used to treat abnormal heart rhythms. These are:

- pacemakers
- implantable cardioverter defibrillators (ICDs).

Radiotherapy and some types of scans can affect how these devices work. So it is important to tell your healthcare team if you have one. They will plan any scans and treatment to avoid affecting your device. They will also arrange any extra monitoring you need to check your device or adjust its settings.

'As well as visiting the hospital for treatment, they had to check my pacemaker was still working. That meant extra visits to a different hospital when I had radiotherapy.'

Judith

Tests to check heart health

Your doctors may use different tests to check how well your heart is working before, during and after your cancer treatment. How often you have tests depends on the type of treatment and whether you already have heart problems.

Your cancer doctor or nurse will explain any tests that you need. Some people find it helpful to have a relative or friend come with them to the test.

You can find more information and videos of people having heart tests on the British Heart Foundation website. Visit **bhf.org.uk/information/support/tests**

Blood tests

Blood tests help check how well your heart is working. They are also used to monitor the effects of any heart medicines you take. The most common blood tests used to check heart health are:

- **Cardiac enzyme tests (including troponin test)** – These can help show whether your heart muscle has been damaged.
- **Natriuretic peptide tests (BNP or NT-proBNP)** – These can help show whether you have heart failure. A high level may be a sign of heart failure. If the level is high, you will need further tests such as a heart ultrasound (an echocardiogram).
- **Urea and electrolytes (U&E) tests** – These give information about the levels of sodium and potassium in your blood. Sodium and potassium are important for the function of your heart. U&Es also show how well your kidneys are working. Your kidneys may be affected by any medicines you are taking.

- **Full blood count (FBC)** – This test measures the number of different types of blood cells in your blood – red cells, white cells and platelets. It also measures the level of haemoglobin (Hb) in your blood. Haemoglobin carries oxygen around the body.
- **Cholesterol blood tests** – Having too much cholesterol in your blood increases the risk of heart problems. If your cholesterol level is high, you can make changes to your lifestyle that can help reduce it. Your doctor may also suggest that you take a cholesterol-lowering medicine.

Electrocardiogram (ECG)

This test:

- records the electrical activity of the heart
- measures the heart's rate and rhythm
- detects heart rhythm problems
- sometimes shows if someone has had a heart attack in the past
- can show if the heart is enlarged or thickened.

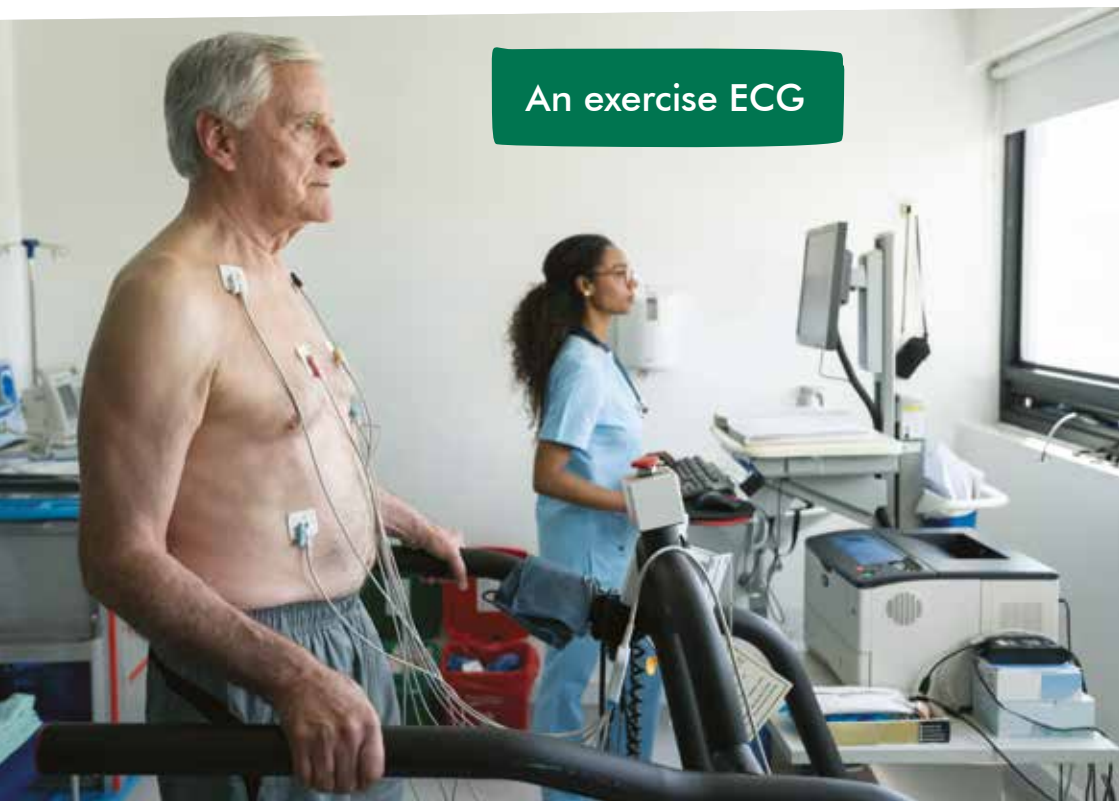
Small sticky pads (electrodes) are placed on your chest, arms and legs. Wires connect the pads to an ECG recording machine. This picks up the electrical signals that make your heart beat. The electrical activity is recorded and printed on paper. The test takes about five minutes and is painless. You need to lie still during the ECG, as moving can affect the results.

24-hour ECG

An ECG can also be recorded over 24 to 48 hours. This is also called Holter monitoring or ambulatory ECG monitoring. You have electrodes put on your chest. The wires attached to these will be taped down. The wires go under your clothes to a small portable recorder on a belt around your waist. While you are wearing the ECG recorder, you can do everything you would normally do except have a bath or shower. When the test is finished, you return the recorder to the hospital. Your doctor will check the results.

Exercise ECG

The aim of this test is to see how your heart works when you are more active. It is sometimes called a stress test. An ECG is recorded while you are walking on a treadmill or cycling on an exercise bike.



Angiogram

This test:

- looks inside your coronary arteries to find out if any of them are narrowed, and how severe the narrowing is
- gives information about how effectively your heart is pumping
- gives information about the blood pressure inside your heart.

You will be asked not to eat or drink anything for several hours before your angiogram. You will have a local anaesthetic injection to numb the skin in your groin or on your arm. The doctor then makes a small cut. They insert a thin, flexible tube called a catheter into an artery. Using x-ray, the catheter is guided to the heart.

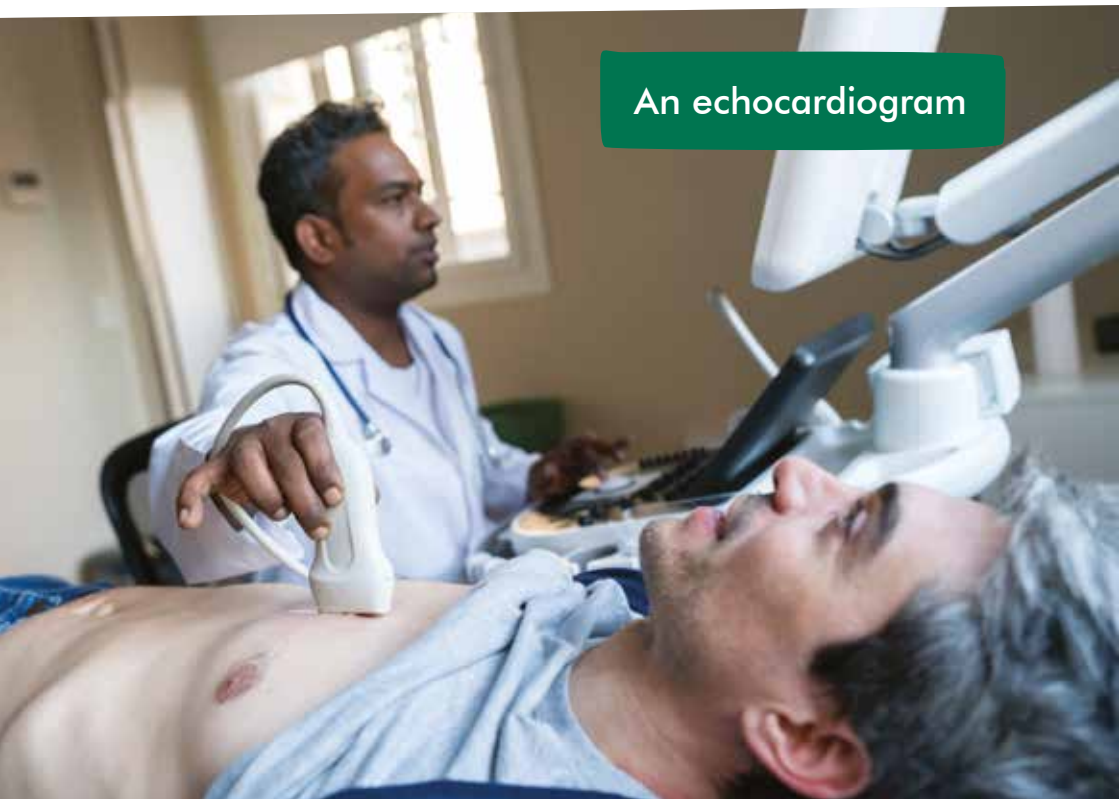
The doctor will inject dye into the catheter and take x-rays. You might feel a hot, flushing sensation from the dye. Tell your doctor if you feel uncomfortable or unwell at any time.

Ultrasound of the heart (echocardiogram)

An echocardiogram (echo) uses sound waves to build up a detailed picture of your heart. It is like the ultrasound scan used during pregnancy. It gives information about:

- the structure of the heart
- the heart valves
- how well the heart is pumping.

You will be asked to lie down. When you are comfortable, some gel is rubbed on your chest. A probe is then placed over different areas of your chest. This probe gives off pulses of sound waves, which echo against the structures of the heart. These echoes are picked up by the probe. They are shown as pictures on the screen of the echo machine.



The test can take from 15 to 60 minutes. It is painless, but it may cause some discomfort if you have had recent surgery on your chest. Your doctor can give you painkillers to help with this.

Trans-oesophageal echocardiogram (TOE)

Some people will have a trans-oesophageal echocardiogram (TOE). This test takes more detailed pictures of the heart from inside the gullet (oesophagus). The gullet is the tube that connects your mouth to your stomach. It lies behind your heart. This means a TOE can get a closer and clearer picture of the heart valves.

Before you have a TOE, you may be given drugs to make you feel sleepy (sedation). Your doctor will gently pass a small, flexible ultrasound probe through your mouth and into the throat. You will then be asked to swallow.

The test usually takes around 20 minutes. It can feel uncomfortable, but it should not be painful. You can usually go home after the sedation has worn off.

CT scan

A CT scan takes a series of x-rays, which build up a three-dimensional picture of the inside of the body. It can be used to look at the structure and the pumping action of your heart. A CT coronary angiogram is a type of CT scan that helps show the blood flow through the coronary arteries.

Before a CT scan, you may be given a tablet or injection of a drug that slows your heartbeat slightly. A slower heartbeat makes it easier to get clear scans. You will also have a dye injected into a vein in your arm. This dye helps show how blood is moving through the heart.

You lie on a bed which is moved inside the scanner. The scanner is shaped like a large doughnut. A small amount of radiation is used during a CT scan. If you are pregnant, talk to your doctor before having this test.

Cardiac MRI scan (CMR)

An MRI scan uses magnetism to build up detailed pictures of areas of your body. A cardiac MRI scan gives information about:

- the structure of the heart
- the heart valves
- how well the heart is pumping.

The scanner is a powerful magnet, so you may be asked to complete and sign a checklist to make sure it is safe for you. The checklist asks about any metal implants you may have. These could include a pacemaker, surgical clips, bone pins, artificial joints or artificial heart valves, nerve stimulators or a cochlear implant. It is safe to have an MRI if you have coronary stents in place.

You should also tell your doctor if you have ever worked with metal or in the metal industry. This is because very tiny fragments of metal can sometimes lodge in the body.

Having metal in your body does not always mean you cannot have an MRI scan. Your doctor and radiographer will decide if the MRI scan is safe for you. If you are not able to have an MRI scan, another type of scan can be used.

Some tattoo ink contains traces of metal. Most tattoos are safe. But tell the radiographer immediately if you feel any discomfort or heat in your tattoo during the MRI scan.

Before the scan, you will be asked to remove any metal belongings including jewellery. For some cardiac MRIs, the doctor will inject a dye into a vein in the arm. This does not usually cause discomfort. The dye helps to give a clearer picture of the heart muscle and the blood flow through and around the heart. Your doctor can tell you more about this.

During the test you will lie very still on a couch inside a long cylinder (tube) for up to an hour. It is painless but can be slightly uncomfortable, and some people feel a bit claustrophobic. If you are worried about this, tell your doctor before having the scan. You may be offered a mild sedative drug to help you relax. The scanner is also noisy, but you will be given earplugs or headphones. You can hear, and speak to, the person operating the scanner.

Myocardial perfusion scan

This scan shows how well the heart is pumping and looks at the flow of blood to the heart muscle.

It may be used to check for heart changes caused by some types of chemotherapy or targeted therapy treatment.

During the scan, your doctor will give you an injection of a small amount of radioactive dye.

A special camera then takes images of your heart. This measures how the dye is pumped through your heart. The scan may be done while you are resting and during exercise on a treadmill or exercise bike.

You may be asked to avoid close contact with children and pregnant women for a few hours after. If you are pregnant or breastfeeding, talk to your doctor before having this test.

24-hour ambulatory blood pressure monitor

Some cancer drugs can cause high blood pressure. Your cancer doctor or nurse will check your blood pressure regularly. But sometimes they may want to monitor it over a longer time.

This can be done with a portable (ambulatory) blood pressure monitor. You wear it for 24 hours while you continue most of your normal routines. You should not have a bath or shower.

A blood pressure cuff (a band) is wrapped around your upper arm. A tube goes from the cuff, under your clothes, to a small monitor on a belt around your waist.

The cuff inflates around your arm and records your blood pressure. It does this automatically at regular times. For example, it could happen every 30 minutes during the day and every hour at night. The monitor records your blood pressure measurements and the time they were taken.

After 24 hours, the monitor is removed. The information is collected for your doctor to check.

If heart problems develop

If you develop heart problems during or after cancer treatment, your doctors will talk to you about the best way to manage them. Heart problems are often treated with medicines. Some conditions are treated with a heart procedure or surgery.

Your cancer doctor may arrange for you to see a heart doctor (cardiologist) for advice. Some heart problems will be managed and monitored by your GP.

If you are having cancer treatment when the heart problem starts, your cancer doctor may suggest changing your treatment to prevent further damage. These changes may include:

- stopping cancer treatment for a time
- lowering the dose
- changing to a different treatment that is less likely to cause heart problems
- stopping cancer treatment completely.

Heart medicines

Medicines are often used to treat heart problems. They may also be used to help protect your heart during cancer treatment. Your doctor or pharmacist can give you more information about your heart medicines. You can also get more detailed information from the British Heart Foundation. Visit **[bhf.org.uk/medicines](https://www.bhf.org.uk/medicines)**

**'My nurse explained everything.
She has been fantastic.'**

Philippa



ACE inhibitors

ACE inhibitors make your blood vessels relax and widen. This reduces the amount of work your heart has to do and can also lower your blood pressure. So, ACE inhibitors are used to treat high blood pressure and heart failure. They are also used after a heart attack.

Examples are enalapril, ramipril and lisinopril.

Angiotensin receptor antagonists (ARBs)

ARBs work in a similar way to ACE inhibitors. They relax and widen your blood vessels. They are used to treat high blood pressure and heart failure. They are also used after a heart attack.

Examples are candesartan, losartan and valsartan.

Beta blockers

Beta blockers work by slowing your heart rate, which means your heart has less work to do. They can help control angina and reduce the risk of a heart attack in people who have already had one. They can also be used to treat abnormal heart rhythms, heart failure and high blood pressure.

Examples are carvedilol, bisoprolol and atenolol.

Calcium channel blockers

These medicines reduce the amount of calcium entering the cells in the heart muscle and blood vessel walls. Calcium is needed to make the muscles and vessels contract. If there is less calcium the heart muscle and blood vessels relax. This can help lower blood pressure and treat angina.

Examples are amlodipine and diltiazem.

Cholesterol-lowering medicines (statins)

These medicines reduce the amount of cholesterol in the blood. This can reduce your risk of coronary heart disease, heart attack and stroke.

Examples are simvastatin, atorvastatin and rosuvastatin.

Diuretics (water tablets)

Diuretics encourage the kidneys to make more urine, which is then passed out of the body. This reduces the amount of fluid and salts in the body, which can reduce the pressure on the heart muscle. Diuretics are used to treat heart failure and high blood pressure.

There are different types of diuretics which work in slightly different ways. Your doctor or pharmacist can tell you more about the type of diuretic you are taking.

Examples are bumetanide and furosemide.

Anti-platelet medicines

Platelets are cells in your blood that form clots to help stop bleeding. Anti-platelet medicines help to make the blood less sticky and reduce the risk of clots forming.

People who have a higher risk of heart attack or stroke may be given an anti-platelet medicine to help reduce the risk. This includes people with coronary heart disease, angina, or people who have had a previous heart attack or stroke.

Some types of chemotherapy may cause a low level of platelets in your blood. If this happens, your cardiologist and cancer doctor may suggest stopping the anti-platelet medicine for a time. You will have regular blood tests to check your platelet levels.

Examples are aspirin and clopidogrel.

Anticoagulants

Anticoagulants prevent harmful blood clots from forming, which can reduce the risk of a stroke. They are most commonly prescribed for people who have certain abnormal heart rhythms, or who have an artificial heart valve.

Examples are warfarin, apixiban, edoxaban and rivaroxaban.

Nitrates

Nitrates are used to treat angina. They relax the muscles in the walls of the coronary arteries. This improves the amount of blood that is supplied to the heart.

Examples are glyceryl trinitrate (GTN) and isosorbide mononitrate.

'I had to deal with my heart condition before I could continue cancer treatment. It was an anxious couple of months, but my teams worked together to make sure they were doing what was best for me.'

Judith

Heart procedures and surgery

Some heart problems can be treated with a procedure or surgery rather than medicines. This is always carried out by a specialist doctor, such as a cardiologist or a cardiothoracic surgeon. They will explain your treatment in detail, including possible risks and benefits.

Heart procedures and surgery are not always possible. It can depend on the heart problem and your general health. Sometimes the risks of a procedure or surgery are too high. Your doctor may suggest heart medicines or healthy lifestyle changes instead.



Angioplasty

If coronary heart disease has caused narrow arteries and symptoms of angina, this can be treated with a procedure called angioplasty. It is often done at the same time as an angiogram (see page 53).

During angioplasty, the narrowed artery is widened using a small balloon. A small tube (stent) is then put into the artery. The stent helps to keep the artery open. The stent helps blood flow through the artery to the heart muscle.

Coronary bypass surgery

Coronary bypass surgery is used to treat coronary heart disease and angina. It involves bypassing a narrowed artery. The surgeon uses a small section of an artery or vein from another area of your body. They attach this above and below the narrow section of coronary artery.

Heart valve surgery

If you have a heart valve problem, it can affect how blood flows through your heart. You may be able to have an operation to repair or replace the valve.

Implanted electrical devices

Some people have surgery to implant an electrical device to treat certain heart conditions. There are different types of device, including:

- pacemakers
- implantable cardioverter defibrillators (ICDs).

These can help treat electrical problems such as abnormal heart rhythms or a slow heartbeat. Sometimes pacemakers are used to treat heart failure because they can help improve the pumping action of the heart.

Cardioversion

This treatment aims to get an abnormal heart rhythm back to a normal pattern. Cardioversion involves giving the heart a controlled electric shock using electrodes that are placed on the chest. It is carried out in hospital so that the heart can be carefully monitored. You will be sedated so that you are asleep during the procedure.

Catheter ablation

Some types of abnormal rhythm can be treated using a procedure called catheter ablation.

During the procedure, a thin tube (catheter) is inserted into a vein or artery in your groin. The catheter is guided to the area in your heart that is causing the abnormal rhythm. Heat (radiofrequency) or extreme cold (cryoablation) is then given through the catheter. Doing this:

- destroys the area of the heart muscle that triggers the abnormal rhythm
- can break the abnormal electrical circuits in the heart.

Your doctor will give you more information about these different treatments. You can also find out more about them on the British Heart Foundation website. Visit **bhf.org.uk/treatments**

After cancer treatment

If you develop any symptoms of heart problems during or after cancer treatment, tell your doctor straight away. They will assess you and arrange any tests or treatment you need.

Some people will have regular follow-up appointments to check their heart health after cancer treatment. This is useful for people who:

- developed a new heart problem during cancer treatment
- developed heart changes during cancer treatment
- had a cancer treatment that may cause heart problems many years later
- have other risk factors for heart problems.

'I continue to have haematology follow-up appointments every 8 weeks with bloods and PET scans as deemed necessary. My haematologist is amazing and emails me at home and allows me to contact him with any concerns.'

Philippa



Follow-up appointments may be with a GP, practice nurse or a member of the cardiology team at the hospital. You may have regular blood pressure or cholesterol blood tests. Some people will have scans to check how the heart is working. Ask your cancer doctor or GP for more advice about your situation.

If your cancer treatment is unlikely to cause heart problems, you may not need follow-up appointments. But if you have other risk factors for heart problems, you can talk to your GP or nurse. They can give you information about your risk of future heart problems and how to reduce your risk. They can also talk to you about a health check to assess risk of heart disease and other conditions.

Pregnancy after cancer treatment

Pregnancy and giving birth can put pressure on your heart. Women who are thinking about having a baby after cancer treatment should ask their doctor for advice.

Your doctor may arrange for you to see a cardiologist. They can give you specialist advice before or during your pregnancy. You may also have extra tests to check your heart health while you are pregnant.



LOOKING AFTER YOUR HEART

Keeping your heart healthy	72
Eat well	73
Keep active	77
Stop smoking	83
Coping with stress	84
Warning signs of heart problems	86
Share your experiences	87

Keeping your heart healthy

You can improve your heart health at any age, even if you already have a heart problem. Making changes such as eating well or stopping smoking can help before, during or after cancer treatment.

Even small changes can make a difference. Keeping your heart healthy is important throughout your life, not just during cancer treatment.

If you need more advice or support with keeping your heart healthy, talk to your doctor or nurse.

The British Heart Foundation has more information about how to keep your heart healthy. Visit www.bhf.org.uk/informationsupport/support/healthy-living

‘When I got the diagnosis it made me take a look at myself. I realised that I needed to turn a corner, start exercising and change my diet. It was time to make a major change.’

David

Eat well

A healthy diet can help prevent some heart problems. It can also help with weight control, high blood pressure, cholesterol levels and diabetes.

A healthy diet includes:

- at least five portions of fruit and vegetables every day – try to have a variety of types and colours
- meals based on starchy foods (carbohydrates), such as potatoes, bread, cereal, rice, pasta, noodles and couscous – choose wholegrain or wholemeal where possible
- beans, pulses, fish, egg, meat and other non-dairy sources of protein, such as tofu, bean curd and nuts
- some dairy and dairy alternative products (such as soya milk) – choose lower fat and lower sugar where possible
- small amounts of unsaturated oils and spreads
- small amounts of food and drinks that are high in fat, salt or sugar – try to have these less often
- plenty of fluids (6 to 8 cups or glasses a day) that are low-sugar or sugar-free – water, tea, coffee and lower-fat milk all count.

The British Heart Foundation has more information about healthy eating for your heart. Visit **[bhf.org.uk/healthyeating](https://www.bhf.org.uk/healthyeating)**

Fats

To keep your heart healthy, choose foods that contain healthy unsaturated fats instead of saturated fats.

Too much saturated fat can raise cholesterol levels in the blood and increase the risk of heart disease. Foods high in saturated fat include: cheese, butter, ghee, burgers, sausages, samosas, biscuits, pastries, cakes and chocolate.



Monounsaturated fats and polyunsaturated fats are healthy fats. See the table below for examples of healthy fats.

Healthy fats	Examples
Monounsaturated – can help protect the heart	<ul style="list-style-type: none">• Olive or rapeseed oil.• Some nuts and seeds, including almonds and cashews.• Spreads that are made from these oils.
Polyunsaturated – can help lower cholesterol	<ul style="list-style-type: none">• Soya, vegetable or sunflower oil.• Some nuts and seeds, including walnuts and sesame seeds.• Spreads that are made from these oils.
Long-chain Omega-3 fats	<p>This is a type of polyunsaturated fat found in oily fish, such as:</p> <ul style="list-style-type: none">• mackerel• salmon• sardines• trout• kippers• pilchards• herring.

Alcohol

It is also important to avoid drinking too much alcohol or binge drinking. This can increase the risk of arrhythmias and high blood pressure, and can damage the heart muscle.

NHS guidelines suggest that both men and women should:

- not regularly drink more than 14 units of alcohol in a week
- spread the alcohol units they drink in a week over three or more days
- try to have several alcohol-free days every week.

A unit of alcohol is half a pint of ordinary strength beer, lager or cider, one small glass (125ml) of wine, or a single measure (25ml) of spirits.

There is more information about alcohol and drinking guidelines at **[drinkaware.co.uk](https://www.drinkaware.co.uk)**

Keep to a healthy weight

If you are overweight, losing weight will help to protect your heart. If you want and need to lose weight, the British Heart Foundation has more information (see pages 102 to 103).

Cancer and cancer treatment can cause problems that may make keeping to a healthy weight more complicated. We have more information about healthy eating and managing your weight (see page 104).

If you are finding it hard to keep to a healthy weight, talk to your GP or nurse. They can give you advice and may arrange for you to see a dietitian for more support.

Keep active

Regular physical activity helps to keep your heart healthy. It can also help control risk factors for heart disease, such as:

- high blood pressure
- high cholesterol
- being overweight
- diabetes.

'I'm a somewhat overweight, 71 year old diabetic with high blood pressure, thyroid and cholesterol problems and have had cancer. If I can still walk over the Shropshire Hills, there is hope for anyone!'

Alfred

You may find it hard to think about being active when you are coping with cancer and possible side effects of treatment. But even making small changes can help. You could:

- go for a walk once or twice a day
- do some gardening
- go cycling
- wash the car
- dance
- park your car some distance from work or the shops and walk the rest of the way
- get off the bus one or two stops early and walk the rest of the way
- use the stairs instead of the lift or escalator.

As well as helping your heart, there are lots of other benefits to being active. It can:

- improve your mood and quality of life
- help reduce tiredness and some other side effects of cancer treatment
- help strengthen your muscles, joints and bones.

If you are having cancer treatment or are worried about getting more active for any reason, talk to your doctor. They can give advice and may be able to arrange more support for you.

We have more information about ways to keep active. You may find our booklet **Physical activity and cancer** helpful (see page 104).



How much activity is recommended?

There are UK recommendations on physical activity. Adults are advised to do one of the following every week:

- at least 2 and a half hours (150 minutes) of moderate-intensity aerobic activity
- at least an hour and a quarter (75 minutes) of vigorous-intensity aerobic activity
- a combination of both moderate and vigorous aerobic activity.

To do 150 minutes of activity in a week, you could do 30 minutes of activity on 5 days of the week. You could break this up into 10 minutes of activity, 3 times a day. It is important to build this up slowly, at a pace that is comfortable for you.

It is also important to do activities that improve muscle strength on at least 2 days of the week, such as digging in the garden or carrying shopping bags.

Be active

Keep your heart and mind healthy

How often?

150

minutes
of moderate
activity a week

or

75

minutes
of vigorous
activity a week



Walk



Run



Gardening



Sport



Swim



Stairs

Build strength

Strengthen muscles,
bones and joints

2

days a week



Gym



Aerobics



Carry bags

Sit less



TV



Sofa



Computer

Break up long periods of sitting down to help keep your muscles,
bones and joints strong.

How much activity is right for you?

What and how much you do will depend on the following:

- How fit you were before you were diagnosed. If you were active before, you may be able to continue with the same activities when you feel able to.
- The type of cancer and treatments you had or are still having. There may be some activities you need to be careful with.
- Any symptoms or treatment side effects you have.
- Your age and any long-term conditions you have, such as heart problems.
- Whether you have bone loss, lymphoedema, peripheral neuropathy or a stoma because of the cancer or its treatment.

During your treatment, your energy levels will change from day to day. The main goal is for you to try to spend less time sitting or lying down. If you can, you should try to balance small amounts of light or moderate exercise with periods of rest.

Choose an activity you enjoy and set some goals for yourself. But if you feel very tired the day after activity, you may be trying to do too much, too soon. Over time, you will be able to increase the amount you do.

After treatment ends, increase your activity slowly. Try to increase slowly to the suggested 150 minutes of moderate-intensity activity or 75 minutes of vigorous-intensity activity a week. There are more tips on keeping active in our guide **Move more: your guide to becoming more active** (see page 104).

Stop smoking

If you smoke, giving up is the best thing you can do for your heart. After you stop smoking, your risk of developing coronary heart disease or having a heart attack dramatically reduces.

If you are thinking about quitting, there are organisations that can help:

- In England, visit the NHS website at **nhs.uk/smokefree** or call the free Smokefree National Helpline on **0300 123 1044** (Monday to Friday, 9am to 8pm, and Saturday and Sunday, 11am to 4pm).
- In Scotland, visit NHS inform at **nhsinform.scot/healthy-living/stopping-smoking** or call the free Smokeline on **0800 84 84 84** (Monday to Friday, 8am to 10pm, and Saturday and Sunday, 9am to 5pm).
- In Wales, visit Help Me Quit at **helpmequit.wales** or call the free Stop Smoking Wales Helpline on **0808 252 8216** (Monday to Thursday, 8am to 8pm, Friday, 8am to 5pm, and Saturday, 9am to 4pm).
- In Northern Ireland, visit Want 2 Stop at **want2stop.info**

You could also speak to your doctor for advice and to find out about more support in your local area.

We have more information on in our booklet **Giving up smoking** (see page 104). The British Heart Foundation also has information about stopping smoking, such as their **Understanding smoking** leaflet (see pages 102 to 103).

Coping with stress

Cancer can be stressful for lots of reasons. You may be dealing with some difficult emotions, worrying about the future, and coping with treatment and side effects.

Stress can raise your blood pressure and put more strain on your heart than usual. Smoking, drinking alcohol or over-eating to cope with stress can also increase the risks to your heart.

If you already have a coronary heart disease (CHD), feeling extremely stressed or anxious can sometimes cause symptoms such as angina.

It is important to find healthy ways of coping with stress. You could try some of these ideas:

- **Talk about it.** This is not always easy, but it can often help you feel better. You may want to talk to someone you know well, such as family or friends. Or you may decide to talk to your GP or nurse specialist, or a religious leader.
- **Ask for more support.** If you have questions about your treatment or other worries, ask your doctor or nurse. And if you feel you need more help to cope, let them know.
- **Work out what makes it worse.** Once you know what makes you stressed, avoid these things or get help so you can cope with them.
- **Find ways to relax.** You could try listening to relaxing music or doing some physical activity, such as walking, swimming or yoga. Some people find that complementary therapies help, such as a massage.

The British Heart Foundation has information about heart health and coping with stress on their website at **bhf.org.uk/stress**

And there is further information about coping with stress on the NHS Moodzone website. Visit **nhs.uk/conditions/stress-anxiety-depression**

If you want to talk about how you are feeling, you can call the Macmillan Support Line on **0808 808 00 00**.



Warning signs of heart problems

If you have any warning signs of heart problems, it is important to let your doctor know straight away. **Early treatment for a heart problem can prevent further problems.**

Sometimes the symptoms of heart problems are like the symptoms of other conditions. But it is important to get any new symptom checked by your doctor. Always tell your doctor if you:

- have chest discomfort, pain or tightness
- have pain that spreads to your arm, neck, jaw, stomach or back
- feel short of breath
- feel unusually tired or weak (fatigue)
- have swelling in your feet, ankles, tummy or lower back
- have palpitations, which might feel like a thumping or fluttering in your chest
- have blackouts (fainting)
- feel dizzy or light-headed.

A heart attack is life-threatening. If you think you or someone else is having a heart attack, phone 999 for an ambulance straight away.

Share your experiences

Your experience may be helpful to other people with cancer who are about to start treatment. It may help them to hear how you have coped with any heart problems before treatment or because of it.

There are many ways you can share your experience. You can:

- join a patient or support group – you can find support groups near you at **macmillan.org.uk/supportgroups** or **bhf.org.uk/search/location-search**
- volunteer with a cancer or heart disease charity – you can often find out more on the charity's website
- take part in research or fill in a satisfaction questionnaire – ask your healthcare team for more information, or let them know what you think about the care you had.

If you want to get more involved, most hospitals have patient and public involvement departments or Patient Participation Groups. They can give you more information about the different opportunities available.



TIPS FOR HEART HEALTH

Top 10 tips for heart health

90

Top 10 tips for heart health

These tips will help to keep your heart healthy before, during and after cancer treatment.

- 1** Before you start your cancer treatment, tell your cancer doctor if you already have a heart problem. You should also tell them if you have any risk factors, such as high blood pressure, high cholesterol or diabetes.
- 2** Ask your cancer doctor if the treatment you are having is likely to affect your heart. If it is, find out how they will monitor your heart during your treatment.
- 3** If you have a heart problem, your doctor will want to make sure it is controlled before your cancer treatment starts. For example, if you know your blood pressure is usually high, get it checked by your GP. You may be prescribed medicines to control it.
- 4** Do not stop taking any medication that you have for your heart unless you have been told to. If you have side effects, talk to your doctor.
- 5** When you finish cancer treatment, ask your cancer doctor if you will need regular heart check-ups. Ask how long these need to continue for.

- 6** Go to your heart follow-up appointments, even if you do not have any heart symptoms. Remember that some heart problems may not cause symptoms. But problems may show up on tests during follow-up appointments. Any problems can be treated quickly and more serious heart problems can be prevented.
- 7** Know the warning symptoms of heart problems (see page 86). If you get any of them, contact your GP.
- 8** If you have risk factors for heart problems (see pages 19 to 25), ask your GP or nurse for advice about reducing your risk. Your GP or nurse can also talk to you about a health check to assess your risk of heart disease.
- 9** If your lifestyle means you are at a greater risk of heart problems, try to make some changes (see pages 72 to 87).
- 10** Get more information and support about heart disease and keeping your heart healthy from the British Heart Foundation(see pages 102 to 103). Call their Heart Helpline on **0300 330 3311** (Monday to Friday, 9am to 5pm). If you need more information about cancer and its treatment, contact Macmillan Cancer Support on **0808 808 00 00** (7 days a week, 8am to 8pm).

'My lifestyle hasn't changed a lot, but I'm more conscious now that I know about my heart condition. I do try to take care of myself.'

Judith

'My healthcare professionals have suggested that most people with my medical diagnoses probably wouldn't be working but I feel it is good for my mental well-being.'

Philippa



FINANCIAL SUPPORT AND WORK

Financial help and benefits	94
Work	98

Financial help and benefits

When you are affected by cancer, you might need help with extra costs. Or you might need financial support if you have to stop working.

Statutory Sick Pay

If you work for an employer and take time off sick, you may be able to get Statutory Sick Pay. Your employer will pay this for up to 28 weeks.

Benefits

Benefits are payments from the government to people who need financial help. You can find out more about benefits and apply for them online. Go to **gov.uk** if you live in England, Wales and Scotland or **nidirect.gov.uk** if you live in Northern Ireland.

Here are some benefits that you might be able to get if you are affected by cancer.

Employment and Support Allowance (ESA)

This benefit is for people under State Pension age who cannot work because of illness or disability. There are different types of ESA:

- Contribution-based ESA may be available if you have paid enough National Insurance.
- Income-related ESA may be available if your income and savings are low, or if you cannot get contribution-based ESA. Income-related ESA is gradually being replaced by a new benefit called Universal Credit.

Personal Independence Payment

This benefit is for people aged between 16 and 64 who have problems moving around and looking after themselves. You must have had these difficulties for at least 3 months and expect them to last for at least 9 months.

Attendance Allowance

This benefit is for people aged 65 or over who have problems looking after themselves because of an illness or disability. This could mean getting out of bed, having a bath or getting dressed. You must have had these problems for at least 6 months.

Special rules

If you are terminally ill, and your doctor thinks you may be expected to live for less than 6 months, you can apply for some benefits using a fast-track process called special rules. Your claim will be dealt with quickly and you will get the benefit you applied for at the highest rate. It does not matter if you live longer than 6 months. Your doctor or specialist nurse will need to fill out a form for you.

Help for carers

Carer's Allowance is a weekly benefit that helps people who look after someone with a lot of care needs. If you do not qualify for it, you can apply for Carer's Credit.

Carer's Credit helps prevent gaps in your National Insurance record if you have to stop working while you are caring for someone else. You do not get money, but it protects your right to a State Pension later in life.

Macmillan Grants

Macmillan Grants are small, mostly one-off payments to help people with the extra costs that cancer can cause. They are for people who have a low level of income and savings.

If you need things like extra clothing, help paying heating bills or even a relaxing holiday, you may be able to get a Macmillan Grant.

How much you get will depend on your situation and needs. The average grant is around £380, but this may change. A grant from Macmillan would not normally affect the benefits you are entitled to. It is an extra bit of help, not a replacement for other support.



Insurance

If you have, or have had, cancer, you may find it hard to get certain types of insurance. This includes life and travel insurance. A cancer diagnosis might also mean that you can get a payout from an insurance scheme that you already have.

If you are looking into buying insurance or making a claim, one of our financial advisers can help. Call **0808 808 00 00**.

We have more information in our booklets **Insurance** and **Travel and cancer** – see page 104. Our Online Community forum **Travel insurance** may also be helpful. Visit **macmillan.org.uk/travelinsurancegroup**

More information

The benefits system and other types of financial support can be hard to understand. Macmillan has experienced welfare rights advisers and financial guides. You can speak to one by calling the Macmillan Support Line on **0808 808 00 00**.

You can also get information about benefits and other types of financial help from Citizens Advice – see page 112.

Our booklet **Help with the cost of cancer** has lots more information – see page 104.

Work

You may not know how cancer will affect your work, now or in the future.

It is a good idea to talk to your manager early on. If your workplace has a human resources (HR) or personnel department, contact them as soon as you can. If they know how the cancer or treatment may affect your ability to work, they can support you better.

Some people stop working during cancer treatment and for a while after, until they feel ready to go back. Others carry on working, perhaps with reduced hours or other changes to their job.

Some people may decide not to go back to work. Or they may choose to do something different. Others may not be able to go back to work because of the effects of cancer on their health. Going back to work may depend on the type of work you do or how much your income is affected.

It is important not to take on too much, too soon. Your cancer doctor, GP or specialist nurse can help you decide when and if you should go back to work.

Our booklets **Work and cancer**, **Working while caring for someone with cancer** and **Self-employment and cancer** have more information that may be helpful – see page 104. There is also lots more information at [macmillan.org.uk/work](https://www.macmillan.org.uk/work)

Employment rights

If you have, or have ever had cancer, the law considers you to be disabled. This means you cannot be treated differently (less favourably) than other people at work because of cancer. If you are treated less favourably because of cancer, this is called discrimination.

The law also says your employer has to make reasonable adjustments (changes) to your workplace and their work practices.

If you live in England, Scotland or Wales, you are protected by the Equality Act 2010. If you live in Northern Ireland, you are protected by the Disability Discrimination Act 1995.

Our booklet **Your rights at work when you are affected by cancer** has more information – see page 104.

'I was determined to try and continue working so I reduced my hours to 22½ over 3 days.'

Philippa



FURTHER INFORMATION

How the British Heart Foundation can help you	102
About our information	104
Other ways we can help you	105
Other useful organisations	108

How the British Heart Foundation can help you

The British Heart Foundation (BHF) is beating heartbreak forever from the world's biggest killers.

We raise money to fund research to prevent, treat and cure heart and circulatory diseases, the world's biggest killers. From heart attacks and stroke to congenital heart disease and vascular dementia, we search for ways to help people live longer, healthier lives. And with continued donations from the public, we will beat heartbreak forever.

Visit **bhf.org.uk** to find out more or make a donation.

Information and support

If you or someone you know has been diagnosed with a heart or circulatory disease, you may be feeling worried, overwhelmed or anxious. We want to make sure that you have all the information, support and guidance you need.

We produce a range of resources online and available to order to help you look after your health or to manage your heart or circulatory disease, including:

- **Keep your heart healthy**
- **Heart failure**
- **Tests**
- **Medicines for my heart**

To order any of our heart health information:

- call the BHF Orderline on **0300 200 2222**
- email **orderline@bhf.org.uk**
- visit **bhf.org.uk/publications** where you can also download many of our publications.

Heart Helpline

Call the British Heart Foundation's helpline on **0300 330 3311** for information and support about heart and circulatory diseases and their risk factors.

Lines are open Monday to Friday, 9am to 5pm and calls cost a similar rate to 01 and 02 numbers

Heart Matters

Heart Matters is the British Heart Foundation's award-winning free magazine. It is for anyone with heart and circulatory diseases like heart disease, stroke and vascular dementia, and their risk factors like diabetes. Join today at **bhf.org.uk/heartmatters** to receive Heart Matters in print or online.

Heart support groups

The BHF has hundreds of heart support groups across England and Wales that offer the chance to meet people and share experiences. They are open to anyone with any kind of heart condition, as well as their partners and families. To find out if there is a heart support group in your area:

- contact the Heart Helpline on **0300 330 3311**
- email **heartsupportgroups@bhf.org.uk**
- visit **bhf.org.uk/supportgroups**

About our information

We provide expert, up-to-date information about cancer. And all our information is free for everyone.

Order what you need

You may want to order more booklets or leaflets like this one. Visit **be.macmillan.org.uk** or call us on **0808 808 00 00**.

We have booklets about different cancer types, treatments and side effects. We also have information about work, financial issues, diet, life after cancer treatment and information for carers, family and friends.

Online information

All our information is also available online at **macmillan.org.uk/information-and-support**. You can also find videos featuring stories from people affected by cancer, and information from health and social care professionals.

Other formats

We also provide information in different languages and formats, including:

- audiobooks
- Braille
- British Sign Language
- easy read booklets
- eBooks
- large print
- translations.

Find out more at **macmillan.org.uk/otherformats**

If you would like us to produce information in a different format for you, email us at **cancerinformationteam@macmillan.org.uk** or call us on **0808 808 00 00**.

Other ways we can help you

At Macmillan, we know how a cancer diagnosis can affect everything, and we're here to support you.

Talk to us

If you or someone you know is affected by cancer, talking about how you feel and sharing your concerns can really help.

Macmillan Support Line

Our free, confidential phone line is open 7 days a week, 8am to 8pm. Our cancer support specialists can:

- help with any medical questions you have about cancer or your treatment
- help you access benefits and give you financial guidance
- be there to listen if you need someone to talk to
- tell you about services that can help you in your area.

Call us on **0808 808 00 00** or email us via our website, **macmillan.org.uk/talktous**

Information centres

Our information and support centres are based in hospitals, libraries and mobile centres. There, you can speak with someone face to face.

Visit one to get the information you need, or if you'd like a private chat, most centres have a room where you can speak with someone alone and in confidence.

Find your nearest centre at **macmillan.org.uk/informationcentres** or call us on **0808 808 00 00**.

Talk to others

No one knows more about the impact cancer can have on your life than those who have been through it themselves. That's why we help to bring people together in their communities and online.

Support groups

Whether you are someone living with cancer or a carer, we can help you find support in your local area, so you can speak face to face with people who understand. Find out about support groups in your area by calling us or by visiting **macmillan.org.uk/selfhelpandsupport**

Online Community

Thousands of people use our Online Community to make friends, blog about their experiences and join groups to meet other people going through the same things. You can access it any time of day or night. Share your experiences, ask questions, or just read through people's posts at **macmillan.org.uk/community**

The Macmillan healthcare team

Our nurses, doctors and other health and social care professionals give expert care and support to individuals and their families. Call us or ask your GP, consultant, district nurse or hospital ward sister if there are any Macmillan professionals near you.

Book reviews

Our volunteers review many books about cancer. These include people's stories of living with cancer, and books for children. Visit **publications.macmillan.org.uk** and search 'book reviews'.

'Everyone is so supportive on the Online Community, they know exactly what you're going through. It can be fun too. It's not all just chats about cancer.'

Mal

Help with money worries

Having cancer can bring extra costs such as hospital parking, travel fares and higher heating bills. If you've been affected in this way, we can help.

Financial guidance

Our financial team can give you guidance on mortgages, pensions, insurance, borrowing and savings.

Help accessing benefits

Our benefits advisers can offer advice and information on benefits, tax credits, grants and loans. They can help you work out what financial help you could be entitled to. They can also help you complete your forms and apply for benefits.

Macmillan Grants

Macmillan offers one-off payments to people with cancer. A grant can be for anything from heating bills or extra clothing to a much-needed break.

Call us on **0808 808 00 00** to speak to a financial guide or benefits adviser, or to find out

more about Macmillan Grants. We can also tell you about benefits advisers in your area. Visit **macmillan.org.uk/financialsupport** to find out more about how we can help you with your finances.

Help with work and cancer

Whether you're an employee, a carer, an employer or are self-employed, we can provide support and information to help you manage cancer at work. Visit **macmillan.org.uk/work**

Work support

Our dedicated team of work support advisers can help you understand your rights at work. Call us on **0808 808 00 00** to speak to a work support adviser (Monday to Friday, 8am to 6pm).

Macmillan Organiser

This includes a records book to write down information such as appointments, medications and contact details. You can also download the app on IOS or Android.

Other useful organisations

There are lots of other organisations that can give you information or support.

Heart support organisations

The British Cardiac Patients Association

Tel 0122 384 6845

Email admin@bcpa.eu

www.bcpa.eu

Gives support, reassurance and practical advice to people with heart problems, their family and carers.

Cardiomyopathy UK

Tel 0800 018 1024

(Mon to Fri, 8.30am to 4.30pm)

www.cardiomyopathy.org

Offers information and support for people living with cardiomyopathy. Has support groups across the UK.

Heart UK

Tel 0345 450 5988

Email ask@heartuk.org.uk

www.heartuk.org.uk

Provides support, guidance and education to people with concerns about cholesterol.

General cancer support organisations

Cancer Black Care

Tel 0208 961 4151

www.cancerblackcare.org.uk

Offers UK-wide information and support for people with cancer, as well as their friends, carers and families, with a focus on those from BME communities.

Cancer Focus

Northern Ireland

Helpline 0800 783 3339

(Mon to Fri, 9am to 1pm)

Email nurseline@

cancerfocusni.org

www.cancerfocusni.org

Offers a variety of services to people affected by cancer in Northern Ireland, including a free helpline, counselling and links to local support groups.

Cancer Research UK**Helpline** 0808 800 4040

(Mon to Fri, 9am to 5pm)

www.cancerresearchuk.org

A UK-wide organisation that has patient information on all types of cancer. Also has a clinical trials database.

Cancer Support Scotland**Tel** 0800 652 4531

(Mon to Fri, 9am to 5pm)

Email info@cancersupportscotland.org**www.cancersupportscotland.org**

Runs cancer support groups throughout Scotland. Also offers free complementary therapies and counselling to anyone affected by cancer.

Maggie's Centres**Tel** 0300 123 1801**Email**enquiries@maggiescentres.org**www.maggiescentres.org**

Has a network of centres in various locations throughout the UK. Provides free information about cancer and financial benefits. Also offers emotional and social support to people with cancer, their family, and friends.

Penny Brohn UK**Helpline** 0303 300 0118

(Mon to Fri, 9.30am to 5pm)

Emailhelpline@pennybrohn.org.uk**www.pennybrohn.org.uk**

Offers a combination of physical, emotional and spiritual support across the UK, using complementary therapies and self-help techniques.

Tenovus**Helpline** 0808 808 1010

(Daily, 8am to 8pm)

Emailinfo@tenovuscancercare.org.uk**www.tenovuscancercare.org.uk**

Aims to help everyone in the UK get equal access to cancer treatment and support. Funds research and provides support such as mobile cancer support units, a free helpline, benefits advice and an online 'Ask the nurse' service.

General health information

Health and Social Care in Northern Ireland

www.hscni.net

Provides information about health and social care services in Northern Ireland.

Healthtalk

Email info@healthtalk.org

www.healthtalk.org

www.healthtalk.org/young-peoples-experiences (site for young people)

Has information about cancer, and videos and audio clips of people's experiences. Also provides advice on topics such as making decisions about health and treatment.

NHS.UK

www.nhs.uk

The UK's biggest health information website.

Has service information for England.

NHS Direct Wales

www.nhsdirect.wales.nhs.uk

NHS health information site for Wales.

NHS Inform

Helpline 0800 22 44 88

(Mon to Fri, 8am to 10pm,
Sat and Sun 9am to 5pm)

www.nhsinform.scot

NHS health information site for Scotland.

Patient UK

www.patient.info

Provides people in the UK with information about health and disease. Includes evidence-based information leaflets on a wide variety of medical and health topics. Also reviews and links to many health- and illness-related websites.

www.qub.ac.uk/nicr

Counselling

British Association for Counselling and Psychotherapy (BACP)

Tel 0145 588 3300

Email bacp@bacp.co.uk

www.bacp.co.uk

Promotes awareness of counselling and signposts people to appropriate services across the UK. You can search for a qualified counsellor on the website.

UK Council for Psychotherapy (UKCP)

Tel 0207 014 9955

Email info@ukcp.org.uk

www.psychotherapy.org.uk

Holds the national register of psychotherapists and psychotherapeutic counsellors, listing practitioners who meet exacting standards and training requirements.

Emotional and mental health support

Mind

Helpline 0300 123 3393

(Mon to Fri, 9am to 6pm)

Text 86463

Email info@mind.org.uk

www.mind.org.uk

Provides information, advice and support to anyone with a mental health problem through its helpline and website.

Samaritans

Helpline 116 123

Email jo@samaritans.org

www.samaritans.org

Samaritans branches are located across England, Ireland, Scotland and Wales.

Provides confidential and non-judgemental emotional support, 24 hours a day, 365 days a year, for people experiencing feelings of distress or despair.

Financial or legal advice and information

Benefit Enquiry Line Northern Ireland

Helpline 0800 220 674

(Mon, Tue, Wed and Fri, 9am to 5pm, Thu, 10am to 5pm)

Textphone 028 9031 1092

www.nidirect.gov.uk/money-tax-and-benefits

Provides information and advice about disability benefits and carers' benefits in Northern Ireland.

Citizens Advice

Provides advice on a variety of issues including financial, legal, housing and employment issues. Use their online webchat or find details for your local office in the phone book or by contacting:

England

Helpline 03444 111 444

www.citizensadvice.org.uk

Wales

Helpline 03444 77 2020

www.citizensadvice.org.uk/wales

Scotland

Helpline 0808 800 9060

www.citizensadvice.org.uk/scotland

Northern Ireland

Helpline

028 9023 1120

www.citizensadvice.co.uk

Civil Legal Advice

Helpline 0345 345 4345

(Mon to Fri, 9am to 8pm, and Sat, 9am to 12.30pm)

Minicom 0345 609 6677

www.gov.uk/civil-legal-advice

Has a list of legal advice centres in England and Wales and solicitors that take legal aid cases. Offers a free translation service if English is not your first language.

Department for Work and Pensions (DWP)

Personal Independence Payment (PIP)

Helpline 0345 850 3322

(Mon to Fri, 8am to 6pm)

Textphone 0345 601 6677

Carer's Allowance Unit

Tel 0800 731 0297

Textphone 0800 731 0317

(Mon to Thu, 8.30am to 5pm,
and Fri, 8.30am to 4.30pm)

www.gov.uk/browse/benefits

Manages state benefits in England, Scotland and Wales. You can apply for benefits and find information online or through its helplines.

GOV.UK

www.gov.uk

Has information about social security benefits and public services in England, Scotland and Wales.

Money Advice Scotland

Tel 0141 572 0237

Email info@moneyadvice-scotland.org.uk

www.moneyadvicescotland.org.uk

Use the website to find qualified financial advisers in Scotland.

National Debtline (England, Wales and Scotland)

Tel 0808 808 4000

(Mon to Fri, 9am to 8pm, and
Sat, 9.30am to 1pm)

www.nationaldebtline.org

A national helpline for people with debt problems. The service is free, confidential and independent. Has an online chat service with an expert debt advisor.

NiDirect

www.nidirect.gov.uk

Has information about benefits and public services in Northern Ireland.

Personal Finance Society – 'Find an Adviser' service **www.thepfs.org/yourmoney/find-an-adviser**

Use the website to find qualified financial advisers in your area of the UK.

The Money Advice Service Helpline

0800 138 7777 (English)
0800 138 0555 (Welsh)
(Mon to Fri, 8am to 8pm, and
Sat, 9am to 1pm)

Typetalk

18001 0300 500 5000

Email enquiries@
moneyadvice.service.org.uk
**www.moneyadvice.service.
org.uk**

Runs a free financial health check service and gives advice about all types of financial matters across the UK. Has an online chat service for instant money advice.

Unbiased.co.uk

Helpline 0800 023 6868

Email contact@unbiased.co.uk
www.unbiased.co.uk

You can search the website for qualified advisers in the UK who can give expert advice about finances, mortgages, accounting or legal issues.

Equipment and advice on living with a disability

British Red Cross

Tel 0344 871 11 11

Textphone 020 7562 2050

Email

contactus@redcross.org.uk

www.redcross.org.uk

Offers a range of health and social care services across the UK, such as care in the home, a medical equipment loan service and a transport service.

Disability Rights UK

Tel 0330 995 0400

Email

enquiries@disabilityrightsuk.org

www.disabilityrightsuk.org

Provides information on social security benefits and disability rights in the UK. Has a number of helplines for specific support, including information on going back to work, direct payments, human rights issues, and advice for disabled students.

Disabled Living Foundation (DLF)

Helpline 0300 999 0004

(Mon to Fri, 10am to 4pm)

Email info@dlf.org.uk

www.dlf.org.uk

Provides free, impartial advice about all types of disability equipment and mobility products.

Scope

Helpline 0808 800 3333

(Mon to Fri, 9am to 5pm)

Email helpline@scope.org.uk

www.scope.org.uk

Offers confidential advice and information on living with disability. Also supports an independent, UK-wide network of local Disability Information and Advice Line services (DIALs) run by and for disabled people. Support for young people

Support for older people

Age UK

Helpline 0800 055 6112

(Daily, 8am to 7pm)

www.ageuk.org.uk

Provides information and advice for older people across the UK via the website and advice line. Also publishes impartial and informative fact sheets and advice guides.

LGBT-specific support

LGBT Foundation

Tel 0345 330 3030 (Mon to Fri, 10am to 10pm, and Sat 10am to 6pm)

Email helpline@lgbt.foundation

www.lgbt.foundation

Provides a range of services to the LGBT community, including a helpline, email advice and counselling. The website has information on various topics including sexual health, relationships, mental health, community groups and events.

Support for carers

Carers Trust

Tel 0300 772 9600

(Mon to Fri, 9am to 5pm)

Email info@carers.org

www.carers.org

Provides support, information, advice and services for people caring at home for a family member or friend. You can find details for UK offices and search for local support on the website.

Carers UK

Helpline (England, Scotland, Wales) 0808 808 7777

(Mon and Tue, 10am to 4pm)

Helpline (Northern Ireland)
0289 043 9843

www.carersuk.org

Offers information and support to carers across the UK. Has an online forum and can put people in contact with support groups for carers in their area.

Disclaimer

We make every effort to ensure that the information we provide is accurate and up to date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication, or third-party information or websites included or referred to in it. Some photos are of models.

Thanks

This booklet has been written, revised and edited by Macmillan Cancer Support's Cancer Information Development team. It has been approved by our Chief Medical Editor, Dr Tim Iveson, Macmillan Consultant Medical Oncologist.

With special thanks to: June Davison, Senior Cardiac Nurse, British Heart Foundation; and Dr Alexander Lyon, Senior Lecturer and Honorary Consultant Cardiologist.

With thanks to: Dr Sinead Clarke, Cancer Lead GP and Cancer Lead; Victoria Katzer, Pharmacist; Jenny King, Chemotherapy Nurse Specialist; and Dr Gill Levitt, Retired Paediatric Oncologist.

Thanks also to the people affected by cancer who reviewed this edition, and those who shared their stories.

We welcome feedback on our information. If you have any, please contact **cancerinformationteam@macmillan.org.uk**

Sources

We've listed a sample of the sources used in the booklet below. If you would like further information about the sources we use, please contact us at **cancerinformationteam@macmillan.org.uk**

Asnani et al. Clinical manifestations, monitoring, and diagnosis of anthracycline-induced cardiotoxicity. UpToDate online. Updated Jul 2018 (accessed Oct 2018).

Marks et al. Cardiotoxicity of radiation therapy for breast cancer and other malignancies. UpToDate online. Updated Feb 2019 (accessed Oct 2018).

Yahalom and Lunning, Chapter 139: cardiac toxicity. In: DeVita, Hellman and Rosenberg's Cancer: principles & practice of oncology. 10th edition. Wolters Kluwer. 2015.

Zamorano et al. 2016 ESC Position Paper on cancer treatments and cardiovascular toxicity developed under the auspices of the ESC Committee for Practice Guidelines. European Heart Journal. 2016.

Can you do something to help?

We hope this booklet has been useful to you. It's just one of our many publications that are available free to anyone affected by cancer. They're produced by our cancer information specialists who, along with our nurses, benefits advisers, campaigners and volunteers, are part of the Macmillan team. When people are facing the toughest fight of their lives, we're there to support them every step of the way.

We want to make sure no one has to go through cancer alone, so we need more people to help us. When the time is right for you, here are some ways in which you can become a part of our team.



Share your cancer experience

Support people living with cancer by telling your story, online, in the media or face to face.

Campaign for change

We need your help to make sure everyone gets the right support. Take an action, big or small, for better cancer care.

Help someone in your community

A lift to an appointment. Help with the shopping.
Or just a cup of tea and a chat. Could you lend a hand?

Raise money

Whatever you like doing you can raise money to help.
Take part in one of our events or create your own.

Give money

Big or small, every penny helps.
To make a one-off donation see over.

Call us to find out more

0300 1000 200

macmillan.org.uk/getinvolved

Please fill in your personal details

Mr/Mrs/Miss/Other

Name

Surname

Address

Postcode

Phone

Email

Please accept my gift of £

(Please delete as appropriate)

I enclose a cheque / postal order /
Charity Voucher made payable to
Macmillan Cancer Support

OR debit my:

Visa / MasterCard / CAF Charity
Card / Switch / Maestro

Card number

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Valid from

--	--	--	--

Expiry date

--	--	--	--

Issue no

--	--	--	--

Security number

--	--	--	--

Signature

Date / /

Don't let the taxman keep your money

Do you pay tax? If so, your gift will be worth 25% more to us – at no extra cost to you. All you have to do is tick the box below, and the tax office will give 25p for every pound you give.

- ☐ I am a UK tax payer and I would like Macmillan Cancer Support to treat all donations I make or have made to Macmillan Cancer Support in the last 4 years as Gift Aid donations, until I notify you otherwise.

I understand that if I pay less Income Tax and/or Capital Gains Tax than the amount of Gift Aid claimed on all my donations in that tax year it is my responsibility to pay any difference. I understand Macmillan Cancer Support will reclaim 25p of tax on every £1 that I give.

Macmillan Cancer Support and our trading companies would like to hold your details in order to contact you about our fundraising, campaigning and services for people affected by cancer. If you would prefer us not to use your details in this way please tick this box. ☐

In order to carry out our work we may need to pass your details to agents or partners who act on our behalf.



If you'd rather donate online go to macmillan.org.uk/donate

Please cut out this form and return it in an envelope (no stamp required) to:
Supporter Donations, Macmillan Cancer Support, FREEPOST LON15851,
89 Albert Embankment, London SE1 7UQ

This booklet is for anyone who has cancer and is worried about heart health. It explains how cancer treatments can affect the heart and how to cope with heart problems. It also include tips for heart health.

We're here to help everyone with cancer live life as fully as they can, providing physical, financial and emotional support. So whatever cancer throws your way, we're right there with you. For information, support or just someone to talk to, call **0808 808 00 00**, 7 days a week, 8am to 8pm, or visit **macmillan.org.uk**

Would you prefer to speak to us in another language? Interpreters are available. Please tell us in English the language you would like to use. Are you deaf or hard of hearing? Call us using NGT (Text Relay) on **18001 0808 808 00 00**, or use the NGT Lite app.

Need information in different languages or formats? We produce information in audio, eBooks, easy read, Braille, large print and translations. To order these, visit **macmillan.org.uk/otherformats** or call our support line.

If you have questions about your heart health, call the Heart Helpline on **0300 330 3311**, Monday to Friday, 9am to 5pm, or visit **bhf.org.uk**

MACMILLAN
CANCER SUPPORT
RIGHT THERE WITH YOU

© Macmillan Cancer Support, February 2019. 3rd edition. MAC14637_E03_N.
Next planned review 2021. Macmillan Cancer Support, registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). Also operating in Northern Ireland. Printed on sustainable material. Please recycle.

 The Information Standard Certified member	This organisation has been certified as a producer of reliable health and social care information. www.theinformationstandard.org
---	--

What's this logo? Visit macmillan.org.uk/ourinformation