

Type 2 Myocardial Infarction (MI) / Heart attack

Information for patients and their
families



Cardio-Respiratory
Service



Contents

Introduction	3
The Heart And Coronary Arteries	3
What is a heart attack?	4
Type 1 heart attack	4
Type 2 heart attack	4
Symptoms of a heart attack	7
How the heart muscle heals	7
Recovery Following A Type 2 Heart Attack	8
Physical activity	8
Breathlessness	13
Your emotional recovery	14
Information for spouses, partners and family	16
Driving	17
Flying advice	19
Returning to work	21
Medication	23
Resuming sexual activities	23
Healthy Living Advice	27
Smoking	27
High blood pressure	32
Cholesterol	33
Diet: getting the balance right	34
Cardioprotective diets	40
Being overweight	46
Alcohol	49
Further Contacts	51
Medication Record	59
Personal Progress Section	60
Progress Record	61

Introduction

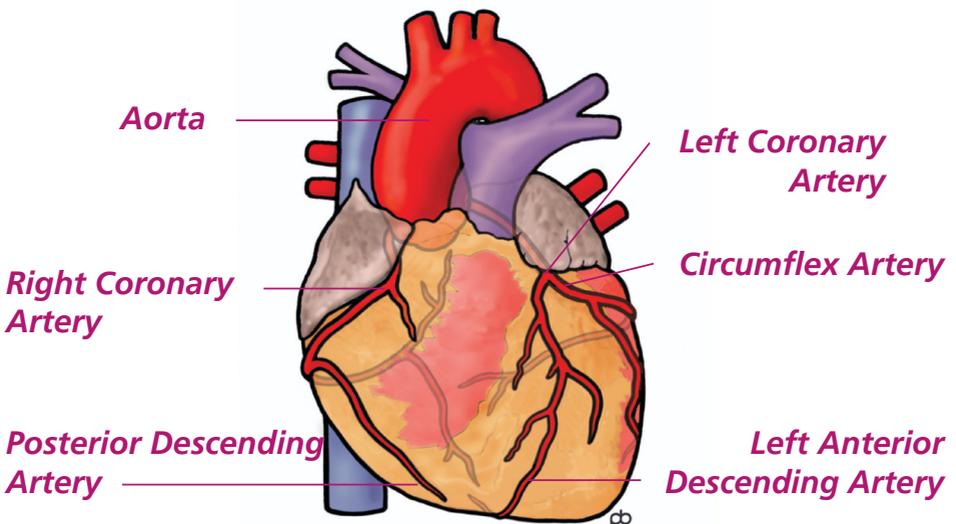
You are likely to have been given this booklet if you have a diagnosis of Type 2 Heart Attack or Myocardial Infarction (MI).

The booklet aims to explain the difference between a Type 1 Heart Attack and Type 2 Heart Attack. The booklet also provides some recovery and healthy lifestyle advice.

The heart and coronary arteries

The heart is a powerful muscle which pumps blood around your body. This muscle needs a supply of nutrients (food) and oxygen in order to keep healthy and work properly. The heart muscle gets its own blood supply from arteries known as the coronary arteries.

There are two main coronary arteries; the left and the right. The left one divides into two main branches which then divide further. The right one also further divides, so that all of the heart has a blood supply.



What is a heart attack?

A heart attack occurs when the blood supply to the heart muscle is interrupted for long enough to cause some damage to the heart muscle beyond.

Type 1 heart attack

The arteries supplying the heart can become diseased by a condition known as atherosclerosis (this is also known as hardening of the arteries, plaque build-up and furring up of the arteries). Atherosclerosis is caused by the build-up of fatty deposits inside the artery. These deposits can narrow the artery; causing not enough blood to reach the heart muscle but may be present for years without causing any problems. This is known as coronary artery disease.

A Type 1 Heart Attack occurs when a fatty deposit in one of the coronary arteries splits open or 'ruptures'. This causes a blood clot to form in the artery. The blood supply to the heart muscle beyond the blockage is cut off for a period of time long enough to result in some damage to that area of heart muscle. A type 1 heart attack can sometimes be the first sign of coronary heart disease.

Type 2 heart attack

A Type 2 heart attack happens when there is insufficient blood flow (therefore oxygen) to the heart muscle to meet the demand required at the time. Some people with Type 2 heart attacks have coronary artery disease, but the heart attack is not caused by rupture of a fatty deposit. There are several reasons why people may have a type 2 heart attack.

The main reasons are listed below:

- **Coronary artery spasm** – The coronary arteries, like all arteries have a muscular layer. The muscular layer can sometimes suddenly constrict or tighten and this is known as coronary artery spasm. This can deprive the heart muscle of blood and oxygen and cause a heart attack. Spasm can happen randomly without clear cause or it can be triggered by emotional stress, medicines, street drugs (cocaine) and exposure to extreme cold.
- **Arrhythmia or abnormal heart rhythm** – this can be a fast, slow or sometimes irregular heartbeat. Normally, the heart beats at approximately 60-90 beats per minute and it can be felt by taking your pulse over a minute. The beats should be regular as the heart should beat in a synchronised way. Sometimes these arrhythmias, if prolonged, can reduce the blood supply to the heart or the heart can go too fast for the amount of blood that is supplied – either way the heart does not get enough oxygen for a period of time long enough to cause a heart attack.
- **Anaemia** – a condition in which you don't have enough healthy red blood cells to carry adequate oxygen to the body's tissue. This can be caused by bleeding, iron deficiency or other causes. If severe this can reduce the oxygen carrying capacity of the blood specifically in the heart muscle which can result in a heart attack.
- **Surgery** – after or during the physical stress of surgery – this can sometimes reduce the flow in the coronary arteries
- **Severe Hypotension/ severe hypertension** – very low or very high blood pressure that causes an inadequate flow of blood to the body's organs, including the heart, can cause a heart attack.

- Pneumonia or other infection/severe illness
- Respiratory failure – with severe hypoxaemia (an abnormal low concentration of oxygen in the blood)
- Coronary embolism – an obstruction in the coronary artery due to a blood clot or other foreign matter gets stuck while travelling through the blood stream, causing heart muscle damage.
- Coronary artery dissection – is caused by mechanical injury of the arterial wall. This can be due to complication of invasive procedures like coronary angiography or balloon angioplasty. In spontaneous coronary artery dissection, one of the coronary arteries develops a tear, causing blood to flow between the layers which force them apart. This narrows or blocks the artery and can cause a heart attack because blood flow cannot reach the heart muscle.
- Valvular heart disease / aortic stenosis or regurgitation
- Heart Failure – when the normal pumping of the heart is reduced

Symptoms of a heart attack

Symptoms of a heart attack usually last longer than 30 minutes and are not relieved by rest or medication, such as GTN spray.

Symptoms can include:

- tight crushing chest pain which is sometimes severe
- discomfort in the arms, neck, jaw, back or stomach
- you may feel sick, sweaty, short of breath or dizzy.

(Symptoms vary; some people will feel severe pain while others may just feel uncomfortable).

How the heart muscle heals

The heart begins to heal during the first few weeks after a heart attack.

It heals in two ways:

1. By forming scar tissue – in time, scar tissue replaces the damaged heart cells, making the injured part of the heart muscle less elastic.
2. By expanding the smaller blood vessels – small arteries near the damaged area begin to expand bringing more blood to the surrounding tissue. This healing process varies between individuals.

Recovery following a type 2 heart attack

The recovery advice given to you by your consultant may differ to the following advice given in this book. This may be due to the cause of your heart attack.

Physical activity

If you have recently had a heart attack, physical activity will play an important part in your recovery. It is natural to be concerned about what you can and cannot do safely. This book aims to give you some guidance to build up your physical activity level.

The benefits of physical activity

People who have had a heart attack can benefit from regular moderate intensity physical activity. Not everyone will get the same benefits, but most of the benefits listed below can come from regular physical activity.

Physical activity can:

- Reduce the risk of more heart problems
- Improve your long term health
- Help you feel more confident
- Control your weight
- Improve blood cholesterol
- Decrease your blood pressure
- Give you stronger bones
- Help you feel more relaxed and happier
- Control blood glucose levels
- Make you feel good about yourself.

Regular light to moderate physical activity will help you to stay healthy and reduce your chance of future heart problems.

Aim to build up gradually to at least 30 minutes of moderate intensity physical activity on most days of the week. This can be broken down into 10 minute sections.

Everyday activity

This section is designed to help you return to everyday life after you come home from hospital. **It is a guide only and you must remember that everybody recovers at different rates and has different levels of fitness.** As with everything, you should start gently and build up gradually.

How much you feel able or want to do will depend on your usual daily routine. You may find it useful to break down a task into more manageable chunks, giving yourself time to rest. If you experience any pain or discomfort STOP doing the task.

While you are exercising or active – a 'normal' level of breathlessness when active is still being able to carry out a conversation while you are active.

First week at home

This is the first week of recovery after your stay in hospital. Take things slowly and rest if you need to.

You could start with everyday activities such as walking around the house/ garden and climbing stairs, building up your activities gradually. You can start stage one of the walking program (see below).

After first week you can start to do some light gardening and light housework.

This can be built up gradually over the next four weeks. Concentrate mainly on following the walking program.

Avoid for four weeks:

- Lifting, pulling and pushing anything heavy
- Heavy housework such as cleaning or vacuuming
- Strenuous gardening

Walking guidelines after you leave hospital

During your first week at home you may start the walking programme. Start by walking outdoors for five minutes at an easy stroll. Avoid it if you feel tired or unwell or if the weather is very bad.

How you feel is the best guide to what the safe level of physical activity is for you. Start by walking on the flat and avoid hills at first. Always walk at a comfortable pace for you.

Walking programme instructions

- Start at stage one of the walking guidelines and remain at each stage for at least two consecutive days or up to several days depending on how you feel.
- Only move onto the next stage when you feel comfortable with the current stage. As you progress it may take longer before you move onto the next stage.
- If you are unwell, do not do the activity. You may need to drop back a stage or two when you feel well enough to resume the activity.

Walking programme

<i>Stage</i>	<i>Time in minutes</i>	<i>Times per day</i>	<i>Pace</i>
One	5	1-2	Stroll
Two	10-15	2	Comfortable
Three	15-20	2	Comfortable
Four	20-25	1-2	Comfortable/stride out
Five	25-30	1-2	Comfortable/stride out
Six	30+	1-2	Comfortable/stride out

Warm up and cool down

It is very important that you include a warm up and a cool down into your activity. The warm up prepares the body for the activity ahead. It should be a gradual build-up of movements before you start the main part of your programme. It will increase your heart rate and breathing rate.

The cool down should be a gradual decrease of movement at the end of your activity. It will bring down your heart rate and breathing rate and return your body to its pre- activity condition.

What about hobbies and sports?

After a heart attack you may take up a hobby or sport such as cycling, swimming, tennis, golf or bowls or any other activity. You will need to build up to the activity gradually. The ACPICR (Association of Chartered Physiotherapists in Cardiac Rehabilitation) has information leaflets on a number of activities. These are available at <http://acpicr.com>

The type of straining that you get from lifting heavy weights and other strenuous activities and sports can raise your blood pressure and should be avoided in the early stages after a heart attack. Gradually building up resistance training with weights can be part of your healthy physical activity programme.

Things to remember

Do's

- Warm up and cool down
- Gradually build up your activity
- Wear comfortable clothes and footwear
- Drink fluids during and after activities
- Find an activity that you enjoy and that suits your level
- Avoid alcohol before activities

Don'ts

- Exercise if you are unwell
- Exercise after eating
- Overdo the activity
- Continue with the activity if you get any of your symptoms
- Exercise in extreme temperatures

Exercise for life!

It is important that you choose a physical activity that you enjoy, so you will be more likely to continue with it. Involve your family and friends in the activities.

Any extra activity you can add into your life will significantly benefit your health.

Why not try?

- Walking to work
- Parking the car further away from the shops
- Getting off the bus one or two stops earlier
- Use the stairs instead of the lift or escalators.

Breathlessness

Is it common to become breathless when walking or doing tasks?

It is quite normal to breathe a bit harder than normal when you are physically active. If you get breathless when physically active, pacing your activities or resting usually helps. Sometimes people find they get very worried about breathing a bit harder than usual. This worry can lead to the body becoming tenser which may make relaxed breathing more difficult. Recognising when breathing harder is normal and learning how to relax can both be of help if you think this applies to you.

How do i know when i should ask for help?

Everyone gets a bit breathless at times if they have to do something they're not used to and find it a bit of a challenge. However, if you find that you are experiencing any of the following, please seek help:

- The breathlessness comes on suddenly
- Is different from normal
- Does not go with rest
- Comes on when you are not active
- Or, if you find that you are gradually getting more breathless over a few days.

Your emotional recovery

It is commonly believed that stress and worries can lead to a person having a heart attack. However, there is actually little good scientific evidence to support this. It is true that people who are under high levels of stress are likely to smoke or drink more, both of which contribute to risk, but stress itself is not believed to be problematic.

For most people, having a heart attack comes as quite a shock and people experience a variety of feelings and emotions. It is also normal to become more aware of your heartbeat or to feel twinges in your chest. It can take time to come to terms with what has happened. It is important to remember that there is no right or wrong way to feel. You might find that talking things over with family or friends is helpful.

Anxious feelings

Some people feel very anxious or nervous and you may find that you have good and bad days. This can result in you feeling tearful and a bit down, or getting more angry or irritated with things that you had been able to cope with before. These feelings are all perfectly normal and usually pass with time. Some people talk about having vivid dreams or nightmares after the heart attack. This too is quite normal and usually passes in time.

It is also common for partners and family members to try to over-protect people who have had heart problems. It is natural for those who are close to you to feel worried and want to help, but it is easy to become over-protective and try to wrap someone in cotton wool.

Relaxation or meditation

It is common to have difficulties sleeping after heart problems and to feel more tired than normal. This usually improves over time, but relaxation or meditation can be of help. Relaxation CDs designed specifically for people with heart problems are available. Relaxation audio files can be found at:

www.nthw.nhs.uk/pic/relax.php

Pacing yourself

As part of your recovery, it is important to get back to doing things that you enjoyed before. The rate at which different people are able to do this will vary. Some people say that they have lost confidence or trust in their body. This can take time to re-build.

For some people, the worry caused by having heart problems stops them from activities they previously enjoyed, even after they have been told that they can do them. If you find yourself doing this, here is some advice you might find useful.

- Set yourself a target. For example, some people want to get back to doing the gardening or jobs around the house. Break the target down into smaller chunks; you may decide that weeding a whole flowerbed would be too much. Think about how much you might be able to do without becoming tired. If this is five minutes of light weeding, have a go. Be prepared to stop if it gets too much. If you found it easy, think about doing a bit more next time, e.g. 10 minutes. However, make sure you do not do more than you had planned to do on one day as rushing into things can make you feel more tired

- You may be worried about going out alone straight away. Try going somewhere nearby with someone else the first time. When you feel okay about doing this, go some of the way on your own, then gradually do more to build up your confidence.

How about the future?

For some people, recovering from heart problems can be the start of some positive changes. Many people become a lot fitter and may take up new activities such as swimming or walking.

Others realise the importance that some things - and some people - have to them and are determined to make time for themselves to do things they enjoy. Worrying will not bring on heart problems, but people often realise that they would like to be less stressed and do something about it. Many people get a real sense of achievement from giving up smoking or doing something else to feel healthier.



Information for spouses, partners and family

If someone close to you has had a heart attack you may find this very upsetting. This is entirely normal and reading through this booklet may be helpful as it will give you more information about what to expect.

You may find yourself doing a lot of worrying, particularly when the person you are caring for first comes out of hospital. This is quite normal and usually improves with time. It

might be tempting to want to do everything for them. This is generally unhelpful, as it can lead to both of you feeling stressed. You may also start to feel a bit resentful.

It is important that the person you are caring for gradually begins doing things they have been told are appropriate, in order to build up their strength again. Try to encourage them to stick to the goals they may have set.



You can play an important role in the person's recovery, but it can also be very tiring. Sometimes carers can start to feel run down, perhaps because they are not sleeping as well or are feeling worried, particularly at night. It is important that you also take time to look after yourself. Try to take a rest when you can. It may also help to talk to a close friend, or your doctor.

Driving

Here are some common questions and answers about driving after a heart attack or angina. This is only a guide and assumes no other disqualifying conditions.

I have had a heart attack. Will i be allowed to drive and do i need to inform the dvla?

The Driver and Vehicle Licensing Agency (DVLA) is the government department responsible for deciding whether a licence holder may drive a motor vehicle. Many conditions may stop a person from driving either permanently or temporarily.

Usually, you should be able to drive a private car four weeks after having a heart attack, unless you have any other disqualifying condition.

You may be able to drive one week after a heart attack **only** if:

- Your consultant has told you that you can
- You have had a heart scan before discharge **and** the result is good and there are no other disqualifying conditions.

You do not need to inform the DVLA. You should however inform your insurance company. If you do not, your insurance may not be valid. It is also a good idea to have someone with you (who is insured to drive your car) the first time you drive and to go on a short journey. It is also important to remember you are not exempt from wearing a seat belt because you have had a heart attack.

What about the driving i do for my job?

If you are a HGV (heavy goods vehicle) or PSV (public service vehicle) driver, there are special requirements for getting re-licensed when you have had a heart attack. You can get details of these from the DVLA.

Before you can drive again, you need to wait at least six weeks and have an exercise ECG or other functional test. It may take time before you get the appointment for the exercise ECG. It is important that the results of this test show no significant changes to your heart rhythm, that you had no chest pain during the test and that your blood pressure did not drop after the test.

If you are a taxi driver and you have had a heart attack you will need to inform the local council that you are licensed with. They will send you a form to for your GP to fill in. You will not be able to drive a taxi again until the form has been assessed by the council taxi licensing office.

For further information, please contact:

Drivers Medical Group, DVLA,
Swansea, SA99 1TU

Tel: 0300 790 6806

www.dvla.gov.uk



Flying advice

When can i fly after a heart attack?

Most airlines will not allow flying in the first week after your heart attack.

Flying should normally be delayed for **six weeks**, for short distance flights, after which the risks of problems related to the heart attack are lower. This delay period may need to be extended if you had any complications after your heart attack.

In some circumstances you may be able to fly after 10 days however you **must** discuss this with your doctor.

If you are planning on travelling on a long distance flight, it is advised that it may be better to wait for 12 weeks.

If you have a holiday planned, please discuss this with your doctor. It may also be helpful to consider where you are going, the length of time you will be travelling and the provision of medical services once you arrive at your destination. Your doctor may suggest further restrictions if you are going to a remote location, or not in easy reach of medical care.

Is there anything i should do during the flight?

If you have a long flight (over two hours), it is best to walk in the aisle at regular intervals so that you reduce the risk of a venous thrombosis (blood clot) in the legs. If it is difficult to walk in the aisle, you could move your feet for several minutes every half an hour to prevent sluggish circulation in the legs.

It is best to avoid alcohol and limit drinks containing caffeine (tea, coffee and cola). Drink plenty of water to avoid dehydration, which is especially common during night flights.

What about insurance cover?

The NHS does not pay for treatment whilst you are out of the UK. You will need to take out travel insurance and let them know that you have had a heart attack. You can arrange this through your travel agent or insurance broker.

Travelling abroad without insurance cover is unwise and potentially hazardous. Insurance cover should not be a problem with stable conditions, although an increased premium is possible. You will need to shop around for the best deal. Make sure you read the small print to ensure your condition is covered.

For further information or advice please contact:

Aviation Health Unit
CCA Safety Regulation Group
Aviation House
Gatwick Airport South
West Sussex RH6 0YR
Email: AHU@caa.co.uk
Telephone: 01293 573 674



Handy hints when flying

- Plan your journey carefully allowing plenty of time
- Avoid rushing and lifting heavy bags
- Ask your airline for assistance at the airport if you think you might get

angina brought on by the hectic activity involved in travelling

- Keep plenty of your usual medication with you in your hand luggage. Also take your prescription (for the customs officer) and discharge summary or medical report. Under current security restrictions, you cannot carry containers with liquids, gels or creams (including medication) that exceed 100ml in your hand luggage
- You can carry essential medicines of more than 100ml on board, but you'll need prior approval from the airline and airport and a letter from your doctor or a prescription
- Dosing frequency should be maintained across time zones

Returning to work

Many people have questions about going back to work. The following gives some general advice.

I had a heart attack how soon can I return to work?

Going back to work is often a major concern if you are recovering from a heart attack or an acute cardiac illness. Between 62% and 92% of people who worked before their heart attack are likely to return to work. You are likely to be fit for light



work in about **four to six weeks**. If your job is more physically demanding, you may need about **12 weeks**. If you have had a heart attack and are looking for a new job, your cardiologist may be able to give you a fitness report that you can use to reassure prospective employers of your ability to work.

Will i be able to do as much as before?

You might be able to discuss with your employer ways in which you can modify your work to avoid the heaviest jobs. If your organization has an occupational health service, you will be able to talk to someone about your heart attack and your return to work. They might be able to suggest way of modifying your role while you recover, like returning to work in phases.

Exercise and health education has increased the number of people successfully returning to work. Many people find that full recovery from a heart attack makes them more conscientious in their work than before. But even if you have fully recovered, you might be at the age where early retirement is an option.

How do i get a fit note?

Please ask your ward nurse about a fit note before leaving hospital or you can get it from your GP.

Does cardiac illness affect my status as an employee?

You might be worried that your job will be downgraded or that your promotion prospects will be affected by your illness. The Disability Discrimination Act makes it unlawful for employers to discriminate against employees on the grounds of a declared disability, unless they can show it would be unreasonable to make the necessary modifications to allow you to return to work.

For further information on your rights or if you feel you are being discriminated against, contact the:

Equality and Human Rights Commission

Website: www.equalityadvisoryservice.com/

Post: FREEPOST Equality Advisory Support Service FPN 4431

Phone: 0808 800 0082

Text: 0808 800 0084

Medication

Your consultant may decide that regular medication is advised and the type of medication will depend on the cause of your type 2 heart attack/MI. The ward staff will discuss your medication with you when they give it to you to take home. It is very important to continue taking this medication. If you have any problems with any medication that you are taking please discuss this with your GP.

Resuming sexual activities

Many people who have had a heart attack or angina fear it will put a stop to their sex lives. This need not be the case. Most people who have had a heart attack or angina are able to resume normal sexual activity with no problems.

After you have been discharged from hospital, you are advised to gradually increase your daily exercise as you gain strength and confidence, pacing yourself, as you feel most comfortable. This applies to all your activities, including sexual intercourse.

Many people have concerns about having sex after a heart attack. Some frequently asked questions include the following:

I don't feel like having sex. Is this normal?

It is very common for people who have heart problems to experience a temporary loss of sex drive. This is normal and will return, given time. Many people and their partners feel anxious and frightened about having sex after heart problems. If, after reading this booklet, you are still experiencing anxieties and concerns, then contact your cardiac rehabilitation nurse for further advice and support.

How demanding is sex on the heart?

Having sex can increase the heart rate and blood pressure. The maximum heart rate with sexual activity is approximately 120 beats per minute. This is similar to climbing two flights of stairs or walking about 300 yards on the level. If sex does bring on angina, taking a GTN spray or tablet, beforehand, will usually prevent chest pain or discomfort.

When can i resume sexual intercourse?

Sexual activity can begin once modest levels of activity become part of your normal lifestyle. If you have made a good recovery after your heart attack, it is safe to resume sexual activity when you feel ready, usually after about 4 weeks. The risk of you having another heart attack is very small, but is slightly higher than for someone who has never had a heart problem. If you are physically active, the chance of sex bringing on another heart attack is only 2.5 in a million.

I am unable to maintain an erection. Why?

Erection problems were once thought to be caused most commonly by psychological or emotional reasons, such as the breakdown of a relationship, worries about work or just general stress. We now recognize that physical ailments, such as heart disease, high blood pressure or diabetes, can also cause erection problems. Men with heart disease, high blood pressure or narrowed arteries may notice a slow but continuing change in being able to achieve or maintain an erection. The same process, which can cause heart disease and linked conditions, also affects the penis. When arteries in the general circulation become blocked, blood flow, which is necessary for an erection, is restricted to the penis as well.

I am being treated for heart disease, and have erection problems. Is my medication to blame?

Certain medication can affect the ability to get or keep an erection. Your doctor can review whether there is a strong link between medication for your heart condition and erection problems. Usually, changing your regular medication will not be the answer to improving your erections. Only your doctor can advise you on this. It is critical that you do not stop taking or change your medication without your doctor's advice.

Is it safe to take medications for erection problems along with other medications?

You may have been prescribed with sildenafil (Viagra®), vardenafil (Levitra®) or tadalafil (Cialis®) for erection problems. Do not take these within six weeks of your heart attack. These are not safe to take if you have been prescribed nitrates (e.g. GTN spray or isosorbide mononitrate), nicorandil, nebivolol or doxazosin. Before taking Viagra® following a heart attack, consult your doctor to make sure it is still safe to

do so. Always see your doctor rather than self-prescribing or obtaining them from another source.

Are there times to avoid sex?

Sex is best avoided in the following situations:

- When it is very hot or cold – the heart has to work harder to maintain body temperature
- Immediately after eating a heavy meal – the digestive system uses a big blood supply to digest food. It is advisable to wait at least three hours after eating a heavy meal
- After drinking excessive alcohol – this reduces the heart's circulation and may cause erection difficulties
- Casual sex, or sex with a new partner in unfamiliar surroundings, can increase the incidence of sudden heart attacks. It is thought that this is due to the increased excitement.

Useful Addresses:

College of Sexual Relationship and Therapists (COSRT) / British Association for Sexual and Relationship Therapy (BASRT)

PO Box 13686

London

SW20 9ZH

Phone: 0208 543 2707

Email: info@cosrt.org.uk or info@basrt.org.uk

Relate

The Gallery

Oxford Chambers

Oxford Place

Leeds LS1 3AX

Phone: 0130 234 7444 or 0300 100 123

Healthy living advice

Smoking

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

How does smoking affect my health?

- When you smoke, the chemicals released into your body make your blood more sticky
- Smoking encourages fatty deposits to collect in the lining of the arteries of the heart. This narrows the arteries which can reduce blood flow to the heart. These fatty deposits can also rupture causing a tear in the lining of the artery causing the fatty deposits to leak out and block the artery, which may cause a heart attack
- Smoking tends to increase your blood cholesterol levels. It reduces the HDL (the good cholesterol), thereby increasing the LDL (bad cholesterol). See page 33.
- When you smoke a cigarette, the burning process produces a gas called carbon monoxide. This gas is poisonous. In the body it sticks to the red protein of blood cells, making the blood less able to carry oxygen. This will starve the heart and other organs of vital oxygen and nutrients
- Nicotine in cigarettes stimulates the body to produce adrenaline. This makes the heart work harder and can raise blood pressure. The high nicotine levels in cigarettes are the addictive part of the cigarette.



From the minute you stop smoking there are health benefits. Below are some of the benefits outlined by the nhs:

20 Minutes	Blood pressure and pulse return to normal
1 Hour	Your circulation improves, your hands and feet feel warmer
8 Hours	Nicotine and carbon monoxide levels fall and the oxygen in your blood begins to return to normal
1 Day	Carbon monoxide is now completely removed from the body, the lungs work more efficiently
2 Days	Nicotine is now removed from the body, your taste and smell improves
3 Days	The lungs begin to clear mucus and smoking debris, you may develop a cough but your breathing will soon become easier
2 Weeks	Withdrawal symptoms begin to ease, walking and daily tasks should become easier
1 Month	Withdrawal symptoms have now stopped, your breathing and energy levels continue to improve
6 Months	Risk of heart attack, cancer and other smoking related diseases begins to fall and you feel better about yourself!

What support is there to help you stop smoking?

- Whilst in hospital, you can ask any of the ward staff for advice or help.
- Support from healthcare professionals will start in hospital and can continue at home. When you make the decision to stop smoking, you will be given advice on preparing to stop and how to cope once you have stopped. You will also be advised on medication which may be appropriate to help you stop

- Once home, One You Leeds www.oneyouleeds.co.uk can offer continued support. If you contact them within two weeks of stopping smoking they can provide nicotine replacement therapy (NRT) for up to 12 weeks. The service provides over 40 support sessions throughout Leeds, including 1:1 or group sessions.
- Your community pharmacy might also offer a smoking cessation support advice and medicines. Please ask your pharmacist for advice.

To find out more, ask the ward staff, your pharmacist or contact One You Leeds on 0800 169 4219 or self refer through their website.

Nicotine replacement therapy (nrt)

Nicotine Replacement Therapy (NRT) replaces a small amount of the nicotine that you used to get from cigarettes. It is the addictive nature of nicotine that makes it hard for many people to quit. NRT provides you with some help with the addiction and allows you to deal with the habit side of smoking first. Remember you are four times more likely to quit for good using a combination of medication and specialist support. There are a number of Nicotine replacement products available you:

<i>Nicotine Patches</i>	Applied on the skin for 16 or 24hrs
<i>Gum</i>	2 doses available, chewed as required
<i>Lozenge</i>	2 doses available, used as required
<i>Oral Spray</i>	Quick acting spray for cravings
<i>Nasal Spray</i>	Quick acting spray for cravings
<i>Micro tab</i>	Dissolves under the tongue

Inhalator

Mimics smoking, can be used for up to 8-5 minute sessions daily

Oral Film

Clear film dissolves on roof of mouth

Visit: www.nhs.uk/smokefree to find out more

A Stop Smoking advisor can advise you on which types of NRT would be most suitable for you and which products can be combined to achieve the best outcomes.

The use of medications to stop smoking

There are two medications that can also be considered to help you stop smoking; these should only be considered under advice from a specialist who can prescribe, such as the Stop Smoking advisor or your GP. Using medications such as those listed below can double your chances of stopping smoking. However, they can have side effects and may not be recommended in certain health conditions.

- **Champix® (Varenicline), this is a 12 week course of tablets.** The medication both mimics the effect of nicotine in the body and blocks the nicotine receptors in the brain; this reduces the urge to smoke and relieves withdrawal symptoms. Some of the side effects that you may experience with this medication are feeling sick, headaches and difficulty sleeping. If you feel that this medicine is affecting your mood (e.g. feeling low), please discuss with your healthcare professional.
- **Zyban® (Bupropion), this is an 8 week course of tablets.** The medication works on neurotransmitters in the brain and reduces symptoms of withdrawal from nicotine. Some of the side effects you may experience are a dry mouth and mouth ulcers. Some people find that this drug can cause

dizziness and lightheadedness; if that does happen, and you drive, avoid driving and discuss with your healthcare professional. Zyban® does not combine well with some medications and therefore advice should be taken from a healthcare professional before taking.

For more information on these medications, including further cautions and side effects you can speak with your Stop Smoking advisor or doctor, you could also visit: www.ash.org.uk

These medications do not 'make' you stop smoking; you still need determination to succeed and to break the smoking habit. When taking either medication you will be expected to keep in touch with a Stop Smoking Advisor to support you in your 'quit' attempt.

The use of e-cigarettes to stop smoking

- Electronic Cigarettes or Vapourisers do not contain tobacco; they create vapour from liquid nicotine. E-cigarettes are not licenced for use as Nicotine Replacement Therapy (NRT) at present
- Public Health England state that e-cigarettes are at least 95% less harmful than smoking.
- E-cigarettes are the most popular quit smoking aid and when combined with specialist stop smoking support can be the most effective way to quit smoking for good. One You Leeds can offer you both and also advise on coming off e-cigarettes too.
- Although One You Leeds do not currently provide e-cigarettes, their stop smoking advisers can support you to prevent relapse to cigarettes.

High blood pressure

Blood pressure is the force that circulating blood puts on the artery walls. When blood pressure is high, there is more pressure on the artery wall than usual. Some people have high blood pressure and do not know they have it. This extra pressure damages the smooth lining of the arteries and makes it easier for cholesterol and fat to build up along the artery walls. As the arteries become clogged with these fatty layers (atherosclerosis), less blood gets through. This causes the heart to beat harder as it tries to pump blood through narrowed arteries. If untreated, high blood pressure may in time damage the heart, brain and kidneys. It is a leading cause of heart attacks and strokes, heart or kidney failure.

The exact cause of high blood pressure is not fully known for many people. High blood pressure can be lowered with medication.

How do i control blood pressure?

- Get your blood pressure checked regularly or as often as your doctorsuggests
- Stop smoking
- Take your medications regularly as prescribed
- Reduce your salt intake and try to avoid processed, convenience and fast foods
- Fruit and vegetables provide us with a good source of potassium which can help control your blood pressure. Aim for five portions of fruit and vegetables a day
- Reduce stress by learning new ways to relax and by exercising
- Lose weight if needed. The heart has to pump harder to supply an overweight body with blood and oxygen.

Cholesterol

Cholesterol and triglycerides are fatty chemicals in the blood. There are two main types of cholesterol; LDL 'bad cholesterol' which carries cholesterol from the liver to the rest of the body, and HDL 'good cholesterol' which returns excess cholesterol to the liver.

While foods with plant stanols and sterols are thought to reduce the absorption of cholesterol from the gut (British nutritional foundation), they do not provide sufficient reduction in cholesterol and should not replace the medicines prescribed to lower cholesterol. They can be taken alongside the cholesterol-lowering medicines that you were prescribed. Plant stanols and sterols are usually added to particular spreads and yoghurts and they are also found naturally in nuts and seeds and some fruits and veg.

If you have high levels of cholesterol and triglycerides, your risk of CHD is greater.

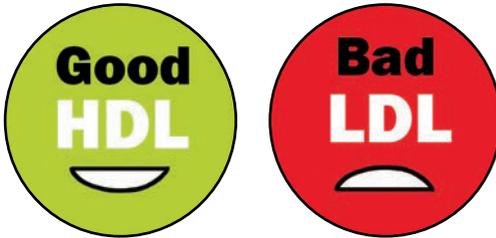
High levels of LDL cholesterol stick to the walls of your arteries and make plaque. This plaque blocks the arteries, interfering with the blood flow which can make a heart attack more likely.

The treatment for high cholesterol is now as routine as that of other common conditions. Treating raised blood cholesterol is a positive way you can do something to avoid future heart problems. The next section provides information about diet which can help you to control your blood cholesterol levels.

The aim of your cholesterol lowering medications is to reduce the bad cholesterol (LDL) to less than 1.8 mmol/L. If LDL is not measured then we aim for more than 40% reduction in non-HDL cholesterol (which is your total cholesterol excluding good cholesterol).

It is recommended that once starting cholesterol-lowering medications, you have your cholesterol checked after three months and then at least yearly, unless advised otherwise. This can be carried out by your local GP practice.

Cholesterol



Diet: getting the balance right

Overall dietary balance is important. No single food contains all the essential nutrients the body needs to be healthy and function efficiently. A balanced diet should include a variety of foods.

The following illustration represents each of the five food groups and gives a guide to the proportions of food we need to achieve a balanced diet.

Eatwell Guide

Use the Eatwell Guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group.

Check the label on packaged foods

Each serving (150g) contains

Energy	Fat	Saturated fat	Salt
194kcal	1.3g	0.4g	0.5g
250kcal	LOW	HIGH	MED
13%	4%	7%	38%
			15%

Typical values (as sold) per 100g: 697kcal / 167kcal

Choose foods lower in fat, salt and sugars

Choose wholegrain or higher fibre versions with less added fat, salt and sugar

Potatoes, bread, rice, pasta and other starchy carbohydrates

Eat at least 5 portions of a variety of fruit and vegetables every day

Fruit and vegetables

Eat less often and in small amounts

Beans, pulses, fish, eggs, meat and other proteins

Eat more beans and pulses, 2 portions of sustainably sourced fish per week, one of which is oily. Eat less red and processed meat

Dairy and fat and sugar

Choose lower fat and lower sugar

Oil & spreads

Choose unsaturated oils and use in small amounts



Water, lower fat milk, sugar free drinks including tea and coffee all count.

Limit fruit juice and/or smoothies to a total of 150ml a day.

Per day 2000kcal 2500kcal = ALL FOOD + ALL DRINKS

Sources: Public Health England in association with the Welsh Government, Food Standards Scotland and the Food Standards Agency in Northern Ireland © Crown copyright 201

Adapted from The Eatwell Guide as per crown copyright protection.

Potatoes, bread, pasta, rice & other starchy carbohydrates

Ideally, each meal should be based on starchy foods. Starchy foods are bulky, low in fat and the wholegrain versions are higher in fibre, so it can be a good idea to choose brown rice, wholewheat pasta and wholemeal bread for example. They provide us with the energy and also provide some calcium, iron and B vitamins. This group also includes rice, pasta, noodles.

Fruit and vegetables

Aim to eat five portions of fruit and vegetables each day. Choose a variety; fresh, frozen and tinned all count. These foods provide us with important antioxidant vitamins and minerals such as potassium and folic acid. They are also an excellent source of soluble fibre. Fruit and vegetables are low in fat and calories, so they make the ideal snack.

Dairy & alternatives

Where possible try to choose low fat varieties. These foods provide us with a good source of protein, calcium and some fat soluble vitamins. This group includes milk, cheese, fromage frais, yoghurt, cream, butter and calcium fortified dairy alternatives.

Beans, pulses, fish, eggs, meat & other proteins

This group provides us with a good source of protein, iron, B vitamins, zinc and magnesium. Try and choose lean cuts and low fat alternatives where possible. You can include your oily fish in this group, which is an excellent source of omega 3 fatty acids. This group includes eggs, nuts, textured vegetable protein, beans, lentils and tofu.

Fish

If you eat fish, eat a variety, including oily and white (such as cod or haddock) and have 2-3 servings per week.

Oily fish are rich in omega 3 oils. These can help to make your blood less sticky, reduce the risk of blood clots and help the blood to flow around the body more easily.

If you don't eat fish, you may need to take in omega oils in other ways, which may be nuts and seeds, but could be other ways (see cardioprotective diets).

The most common oily fish are mackerel, pilchards, sardines, kippers and salmon. These can be fresh, frozen or tinned. A portion is approximately 4oz (100g). Tuna is not a good source of omega 3's.

Ideas to get you started:

- Sardines/pilchards on toast
- Tinned salmon sandwiches
- Salmon steak with potatoes and vegetables

The healthiest choices of tinned oily fish are those in tomato sauce or spring water rather than those in brine. You should aim for one portion of oily fish a week and one or more portions of another type of fish.

Nuts and seeds

Flaxseed and walnuts are another source of omega 3 oils.

Try to include 4-5 servings of unsalted nuts, seeds, beans or lentils per week particularly if you do not eat fish.

Fruit and vegetables

These are an important part of keeping healthy. Aim for at least five portions a day. This should be a variety of fruits and vegetables. Fruit and vegetables contain antioxidant vitamins, minerals and fibre that can keep your heart healthy.

A portion is:

- A small bowl of salad
- One third of an aubergine or half a pepper
- Two florets broccoli
- Three tablespoons of vegetables (these can be either fresh, frozen or tinned) like carrots, peas, sweetcorn, cabbage, beans.



Or

- One apple, banana or nectarine
- One handful of grapes, strawberries or cherries
- One slice of pineapple, pawpaw, mango or melon
- Two plums, satsumas or kiwis
- Three dried apricots, prunes or figs
- • 5-6 passion fruits or lychees
- One small glass of fruit juice (150mls) – this only counts once a day

Fresh, frozen, tinned and dried fruit all count towards your five a day. (Potatoes are starchy and therefore do not count towards five a day).

Five easy ways to five a day

Five easy ways to 5 a day

Breakfast:

- One glass of fresh fruit juice/vegetable juice
- One bowl of cereal with dried fruit

Lunch:

- Salad in sandwich
- Add salad or vegetables to a hot meal
- Piece of fruit as a dessert

Evening meal:

- Serve two types of vegetables with your main meal
- Tinned fruit in fruit juice and low fat yoghurt
- Stewed fruit

Snacks:

- Try raw vegetable sticks like celery, carrots and cherry tomatoes, fresh fruit or dried fruit

Check this website for further examples (<https://www.bhf.org.uk/information-support/support/healthy-living/healthy-eating/recipe-finder>)

Cardioprotective diets

Cardioprotective diets generally follow the Eatwell Guide principles and are linked with a healthier heart. One example would be a Mediterranean style of eating. This is one well known whole dietary approach that may suit you.

Be mindful that other dietary approaches may work better for you, but the most important thing is to think of your diet as a whole. Continue with any cardiac beneficial, whole dietary approaches that suit you.

If you want to try, you can make your diet more Mediterranean by following the guide below.

- Have you tried **using olive oil or rapeseed oil**? These oils are higher in monounsaturated fat. Using unsaturated fats instead of saturated fats in cooking and preparing food is advisable.
- If you're eating **five portions of veg and fruit a day** – try to aim for eight portions. Eating a wide variety of fruit and vegetables every day helps ensure adequate intake of many vitamins, minerals, phytochemicals and fibre. Studies have shown that eating plenty of these foods is protective for cardiovascular disease (CVD) and cancer.
- Where to start with plant based eating... **Eat at least three servings (of 150g) of legumes (beans and pulses)** each week. These foods are high in soluble fibre and other useful nutrients. Regular consumption is advisable for those with raised cholesterol.
- Try to **minimise red meat and other meat products** – Choose lean or white meats instead. When cooking grill or roast without fat, casserole or stir fry. Choose to eat chicken or

turkey routinely instead of pork, beef or lamb. 'White meat' choices are lower in saturated fat. Remove the skin and consider your cooking method.

- **Eat at least three servings of fish (100-150g) or seafood (200g) each week.** Eat more oily and white fish. Oily fish is an excellent source of essential omega-3 fats. White fish is very low in saturated fat.
- **Aim to eat less butter, margarine or cream** - avoid having this every day. These foods are high in saturated fat which can increase your blood cholesterol level. Try plant-based or reduced-fat alternatives.
- **Avoid sugar sweetened fizzy beverages.** Excessive consumption of sugar-sweetened beverages can worsen many risk factors for CVD so keep consumption to less than once a day.
- **Eat less than three servings of commercial sweets/pastries each week** and eat less processed food. These foods are usually high in saturated fat, salt or sugar and often contain trans fats. Replacing these with healthy snacks such as fruit or unsalted nuts is beneficial.
- **Introduce at least one serving (of 30g) of unsalted nuts each week.** Nuts are rich in unsaturated fat, phytosterols, fibre, vitamin E and iron, e.g. walnuts, almonds, hazelnuts
- **Get cooking! Flavour pasta, vegetable or rice dishes with garlic, tomato, leek or onion** and try to introduce to meals at least twice a week. Using a tomato and garlic or onion or leek-based sauce regularly is a key feature of the Mediterranean diet

Fat

A cardio protective style of eating is not necessarily low in fat, but the type of fat is important. There are two groups of fats: saturated and unsaturated. Healthy fats are better than very low fat. The cardio protective diet is more beneficial than a very low fat diet in prevention of CVD. If you need to reduce your weight, then you need to eat less fat of any kind and this should be a small proportion of your overall diet. Replacing saturated with unsaturated fat is better than replacing it with carbohydrates or protein.

<i>Type of fat</i>	<i>Examples of foods</i>
Unsaturated Fat Unsaturated fats in small amounts are thought to be better for us as they help to lower your ldl (bad chol; total cholesterol and helps to lower your LDL ('bad' cholesterol). There are 2 types: Monounsaturated and Polyunsaturated.	Monounsaturated Fat: Avocados, olives, olive oil, rapeseed oil. Almonds, cashews, hazelnuts, peanuts, pistachios and spreads made from these nuts.
	Polyunsaturated Fat: Oily fish, corn oil, sesame oil, soya oil, and spreads made from those oils. Flaxseed, pine nuts, sesame seeds, sunflower seeds, and walnuts.

<p>Saturated Fat Saturated fats usually come from animal products. These fats tend to be solid at room temperature. Although we need a small amount of these fats in our diet, larger amounts can be harmful because they can raise your LDL or 'bad' cholesterol, so try to reduce the amount you eat. They need to be a very small percentage (less than 10%) of your diet. Try to reduce the amount you eat or substitute with polyunsaturated fats.</p>	<p>Processed meats like sausages, ham, burgers. Fatty meat. Hard cheeses including cheddar. Whole milk and cream, butter, lard, dripping, ghee, suet, palm oil and coconut oil, pies, cakes, biscuits, pastries, fried foods</p>
<p>Trans Fat Trans fats are thought to behave in a similar way to saturated fats and are therefore harmful when taken in excess quantities. Try to avoid these when possible.</p>	<p>May be in some fried foods, takeaways, processed snacks like biscuits, cakes or pastries. Hard margarines</p>

Information taken from British Heart Foundation website:
<https://www.bhf.org.uk>

Ideas to help:

- Use a monounsaturated spread instead of butter e.g try olive oil based spreads
- Oven bake or grill instead of frying
- If frying try to use olive, rapeseed or linseed oil instead
- Buy leaner cuts of meats and remove the visible fat from meat before cooking
- Skim excess fat off stews and casseroles

- Remove skin from chicken and turkey
- Choose low fat dairy products such as low fat cheese and low fat milk.

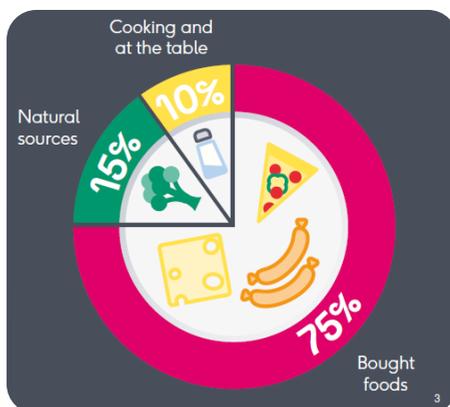
Salt

Most of us consume more salt than we need. The general recommendation for salt intake is to not exceed the maximum of 6g daily, regardless of blood pressure. High salt intakes can contribute to a higher risk of cardiovascular disease, in the following ways:

- Increasing blood pressure
- Retaining fluid
- Impairing endothelial function
- Increasing arterial stiffness

The following tips can be helpful to reduce the amount of salt in your diet:

- Gradually reduce the amount of salt you add to foods (in cooking and at the table) to allow you to adapt to the changes in taste
- Use other means of seasoning such as pepper, herbs, spices and lemon juice to flavour foods
- Pre-prepared foods, breads, sauces and soups can contain a lot of salt – check the labels and try lower salt varieties or prepare foods yourself without adding salt if possible.



Source of image: BHF (British Heart Foundation)

Be mindful that 75% of the salt we consume comes from pre-made foods.

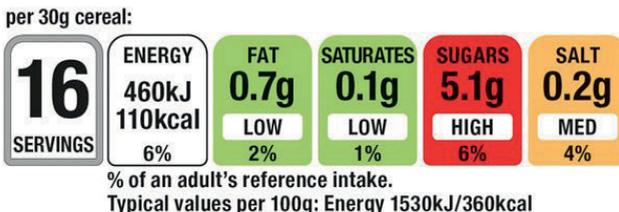
Foods high in sugars

These foods should be eaten in small quantities. They provide excess calories and can contribute to weight gain. It is important to limit the amount of 'free sugars' in the diet. Too much free sugar can raise your triglycerides (fatty chemicals in the blood). Free sugar includes sugar added to food and drinks (either at home or during manufacturing) and sugar naturally found in foods like honey, agave syrup or fruit juice. Adults can have up to 30g of 'free sugars' a day. The sugar found naturally in whole fruits and vegetable is not free sugar and does not need to be included in this amount. There is advice on how to cut down on sugar on the NHS live well website. This group includes biscuits, cakes, ice cream, sweets, chocolate and fizzy or sweetened drinks.

How do i understand food labels?

Nutrition labels can help you choose between products and keep a check on the amount of foods you are eating that are high in fat, saturated fat, sugar and salt.

Packaging often shows foods in 'traffic light' colours, so that you can see at a glance if they are high (red), medium (amber) or low (green) in fats, sugar or salt. For a healthier choice, try to choose products that have more greens and ambers than reds.



If you have a smart phone you can download the food4life food scanner App. You can scan product bar codes to check levels of sugar, saturated fat, salt and calorie content of the item. This will allow you to make an informed choice about your purchase (or product at home).

Being overweight

If you are overweight, then aiming to reduce your weight by 10% is beneficial. For example, if you are 18 stone, aim for 16 stone or if you are 14 stone aim for 13 stone. This will reduce the strain on your heart and will help lower your blood pressure. If you follow the dietary advice to reduce fat intake, your weight should come down. Waist size is an indicator for heart disease risk. 37 inches for a man and 31.5 inches for a woman is the top end of waist measurement that is considered healthy (BNF).

You can reduce your energy intake by changing the snacks you eat, (e.g crisps, cakes, biscuits) to the fruits and vegetables suggested. Do not forget that all alcoholic drinks contain calories.

Be careful when choosing low fat foods as some can still be high in calories due to the amount of sugar in the foods e.g fruit juices, reduced calorie biscuits and low fat yoghurts.

You may notice that you tend to eat more when you are feeling worried, low in mood or bored. If this happens to you, try and find an activity or hobby that will take your mind off food or have a glass of water or no added sugar squash instead.

Keeping a diary of what you eat and drink can also help you to find ways in which you can reduce the amount of energy you eat. The support of your friends and family is also important to help you to keep motivated.

See the following website for further details: <https://www.nhs.uk/livewell/healthy-weight/start-the-nhs-weight-loss-plan/>

Leeds One you have EatWell, Weight Management and Cooking Skills programmes that can support you with general healthy eating, weight loss (in participants with a greater than 25 BMI) and cooking skills with classes run by Zest and Jamie Oliver's Ministry of Food. leedsonyou.co.uk, 0800 169 4219.

There are also tools and information on the British Heart Foundation website that can help you to build healthier eating habits into everyday life (for example Heart Matter Healthy Recipe Finder).

BMI Chart

Weight	lbs	Healthy										Overweight					Obese					Extremely Obese				
		100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	
	Kgs	45.5	47.7	50.0	52.3	54.5	56.8	59.1	61.4	63.6	65.9	68.2	70.5	72.7	75.0	77.3	79.5	81.8	84.1	86.4	88.6	90.9	93.2	95.5	97.7	
Height	in/cm	Underweight					Healthy					Overweight					Obese					Extremely Obese				
5'00" - 152.4		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
5'01" - 154.9		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40		
5'02" - 157.4		18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39		
5'03" - 160.0		17	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	32	32	33	34	35	36	37	38	
5'04" - 162.5		17	18	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	31	32	33	34	35	36	37	
5'05" - 165.1		16	17	18	19	20	20	21	22	23	24	25	25	26	27	28	29	30	30	31	32	33	34	35	35	
5'06" - 167.6		16	17	17	18	19	20	21	21	22	23	24	25	25	26	27	28	29	29	30	31	32	33	34	34	
5'07" - 170.1		15	16	17	18	18	19	20	21	22	22	23	24	25	25	26	27	28	29	29	30	31	32	33	33	
5'08" - 172.7		15	16	16	17	18	19	19	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	32	32	
5'09" - 175.2		14	15	16	17	17	18	19	20	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	31	
5'10" - 177.8		14	15	15	16	17	18	18	19	20	20	21	22	22	23	24	25	25	26	27	28	28	29	30	30	
5'11" - 180.3		14	14	15	16	16	17	18	18	19	20	21	31	22	23	23	24	25	25	26	27	27	28	29	30	
6'00" - 182.8		13	14	14	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	29	
6'01" - 185.4		13	13	14	15	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	
6'02" - 187.9		12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	
6'03" - 190.5		12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	26	
6'04" - 193.0		12	12	13	14	14	15	15	16	17	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	

Alcohol

Drinking more than the recommended amount of alcohol can have a harmful effect on your heart and general health. It can cause abnormal heart rhythms, high blood pressure, damage to your heart muscle and other diseases such as stroke, liver problems and some cancers.

Alcohol is also high in calories so it can lead to weight gain. (See drinkaware.co.uk to check calorific value of alcoholic drinks.) It also lowers your inhibitions which might mean you find it harder to stick to your healthy eating plans when you have been drinking. If you are trying to lose weight, cut down on alcohol.

If you drink alcohol it is important to keep within the guidelines:

- **You** should not regularly drink more than **14 units a week**.
- Spread your drinking over three days or more if you drink as much as 14 units a week.

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

Most people don't drink alcohol every day - but if you do, try having some days off – aim for at least two alcohol free days a week. Just make sure you don't increase the amount you drink on the other days.

Drinking large amounts of alcohol in one go can cause damage to your heart muscle so avoid drinking six or more units in a day on a regular basis.

Your GP can help to support you in reducing your alcohol consumption if you decide you would like to do this. If you

are a dependent drinker, please seek medical advice before you stop drinking suddenly.

You can find more information at www.drinkaware.co.uk

Alcohol Units



*1 single
measure
of spirits*



*1 single
measure
of aperitifs*



*1 small
glass of
sherry*



*1 small
glass of
wine*



*1/2 pint of
ordinary
strength beer,
lager or cider*

Ensure you check the strength of what you are drinking, as this will affect the units, particularly if you are drinking stronger ales or lagers.

Consider the measures you pour when you are drinking at home, as these tend to be more generous than standard pub measures.

If you require further information or support with reducing your alcohol intake, please seek advice from your GP.

Further contacts

Health advice

Emergency sms service for hard of hearing and deaf people

Allows registered mobile phones to text an emergency to 999. A text relay assistant will speak your emergency to the 999 operator. You must register your mobile phone with the service before an emergency happens.

Text register to 999.

Website: www.emergencysms.org.uk

NHS choices

NHS Choices is an online health information service. It has a self-help guide, a list of common health questions and a health A-Z. It contains over 700 topics covering illnesses and conditions, tests and dentist or support groups online.

Website: www.nhs.uk

NHS 111

111 is the NHS non-emergency number. It's fast, easy and free.

Call 111 and speak to a highly trained adviser, supported by healthcare professionals. Available 24 hours a day, 365 day a year, free from landlines and mobile phones.

Tel: 111

Advice

Citizens advice bureau

City Centre CAB, 31 New York St, Leeds, LS2 7DT

Tel: 0113 223 4400

Text relay: 0344 411 1445

Website: www.citizensadvice.org.uk/local/leeds

Directgov money tax and benefits

Directgov is the official online government information service. The Money, Tax and Benefits section includes information on tax and any benefits you may be entitled to (including details of how to make a claim). Other topics covered include pensions, mortgages, managing your finances and managing debt.

Website: www.directgov.uk

Alcohol/drug misuse

Alanon

National 24hr helpline & local meetings in Leeds for friends/families of problem drinkers.

Tel: 0800 008 6811

Email: enquiries@al-anonuk.org.uk

Website: www.al-anon.org.uk/groups/leeds

Alcoholics anonymous

Daily meetings in the Leeds area for people who have experienced problems with alcohol and want to stop drinking.

Helpline: 0113 245 4567

Website: www.alcoholicsanonymous.org.uk/

Email: help@alcoholics-anonymous.org.uk

Forward leeds

Alcohol and drug service in Leeds for adults, young people and families

Tel: 0113 887 2477

Email: info@forwardleeds.co.uk

Website: www.forwardleeds.co.uk

Anxiety & Depression

Improved Access To Psychological Therapies (IAPT)

This is a service aimed at supporting people suffering from depression and anxiety disorders.

Tel: 0113 843 4388

Anxiety management 'APP'

SAM is an application to help you understand and manage anxiety

Website: www.sam-app.org.uk

Samaritans

Confidential 24-hour listening service.

Tel: 0113 245 6789

Free phone: 116 123

Email: jo@samaritans.org

Website: www.samaritans.org

Bereavement

Cruse bereavement care

Bereavement support, information and advice for any bereaved person, regardless of age, nationality or belief.

Tel: 0113 234 4150

Website: www.cruse.org.uk

Email: leeds@cruse.org.uk

Carers

Leeds Carers Centre

First Floor Leeming House, Vicar Lane, Leeds LS2 7JF

Advice, information, financial help, social events, courses & support from other carers.

Tel: 0113 3804300

Email: advice@leeds.org.uk

Disability

Dial: disablement information & advice line

The Mary Thornton Suite, Armley, Grange Drive, Leeds LS12 3QH

Information & advice line covering most aspects of disability including: benefits, access, education and employment, holidays and leisure. Enquiries by phone or letter.

Tel: 0113 467 6981

Text relay: 18001 + 0113 + 378 2990

Website: www.dial-leeds.org.uk

Driving

Driving And Vehicle Licensing Association (DVLA)

Drivers Medical Enquiries, DVLA, Swansea, SA99 1TU

Drivers medical information can now be found under the Motoring section in Directgov. Directgov was created to provide all UK citizens easy access to public services in one place.

Website: <http://www.dvla.gov.uk>

Exercise

A website full of ideas from the walking the way to health initiative.

Website: www.walkingforhealth.org.uk

Information

One you leeds

One you Leeds are a useful source to help you have a healthy lifestyle offering help and advice for diet, smoking, alcohol use.

Tel: 0800 169 4219

Website: www.oneyouleeds.co.uk

British Heart Foundation

Offers information and advice covering specific conditions, treatments and information about looking after your heart.

Tel: 020 7935 0185

Helpline: 0300 330 3311

Email: supporterservices@bhf.org.uk

Website: www.bhf.org.uk

NHS smoking helpline

Advice on stopping smoking.

Helpline: 0300 123 1044

Website: <http://www.nhs.uk/smokefree>

oneyouleeds.co.uk

Tel: 0800 169 4219

Eatwell

Information on healthy diets, understanding food labels and on health issues like obesity. It can help you find a registered dietician or nutritionist.

Website: www.nhs.uk/Livewell/healthy-eating

Heart UK

Cholesterol Charity which provides information on the risks of high cholesterol and cardiovascular disease.

Tel: 01628 777 046

Helpline: 0345 450 5988

Email: ask@heartuk.org.uk

Website: www.heartuk.org.uk

Healthtalk

Healthtalk lets you share in other people's experiences of health and illness

Website: www.healthtalk.org

Patient medicines helpline

Tel: 0113 206 4376

Email: medicines.information@nhs.net

Medication

Medicines information

Website: www.leedsth.nhs.uk/a-z-of-services/leeds-pharmacy-services/contact-us/

Older people

Age UK, Leeds

Provides range of services for older people from Leeds including meals on wheels, hospital aftercare, educational and social courses, insurance & advocacy.

Tel: 0113 389 3000

Website: www.ageuk.org.uk

Leeds neighbourhood network schemes

Age UK also provides information regarding Neighbourhood network schemes. Neighbourhood Network Schemes are community based, locally led organisations that enable older people to live independently and pro-actively participate within their own communities.

Tel: 0113 389 3000

Website: www.ageuk.org.uk/leeds/about-age-uk-leeds/neighbourhood-network-schemes/

PALS

Patient Advice & Liaison Service

Great George Street, Leeds, LS1 3EX

A PALS officer can give you advice about what services might be available in your area. Advice can also be given about how to lodge a complaint.

Tel: 0113 206 7168 or 6261

Email: patientexperience.leadsth@nhs.net

Website: www.leadsth.nhs.uk/patients-visitors/patients-and-visitor

Voluntary services/networks in Leeds

If you're looking for support/assistance on discharge there is a vast amount available. You can get assistance with practical tasks such as shopping and gardening, assistance with checking benefits and completing the forms, social groups and drop-in centres to name a few.

These services are available through three main networks that can be accessed by telephone or on-line. They are:-

Leeds directory

Whose aim to support you to live well

Tel: 0113 378 4610

Website: <http://leedsdirectory.org>

Neighbourhood network solutions - older peoples forum

Tel: 0113 244 1697

Website: www.opforum.org.uk.

Royal voluntary services

Aim to find the voluntary service that's right for you

Tel: 0330 555 0310

Website: www.royalvoluntaryservice.org.uk

Medication

Name of Medication	What's it for?	Strength	Morning	Lunch time	Evening	Bedtime	Other Times	Comments

Personal Progress Section

You may find it useful to record and monitor your progress, blood pressures, cholesterol tests, weight, and medication on the charts below. Speak to your cardiac rehabilitation nurse if you need help or have any concerns.

Goals for a healthy heart

Stop Smoking	Control Blood Pressure (BP)	Increase Physical Activity	Maintain Healthy Weight
There are no safe limits	Aim for BP below 140/90* or 130/80 for people with diabetes.	Aim for 20-30 minutes of moderate intensity exercise most days.	Aim for BMI less than 25 or waist circumference less than 94cm - Men 80cm - Women
Eat Healthy Balanced Diet	Drink Sensibly	Reduce your cholesterol	
Eat a Mediterranean style diet (see page 40).	Keep your alcohol intake to no more than 14 units per week split over at least 3 days.	Aim for a total cholesterol less than 4mmol/L and an LDL cholesterol below 1.8mmol/L	

***Please note, this target may differ depending on your health conditions.**

Progress

Date	BP	HR	Chol	Waist Circ	Weight	Smoking Cigarettes p/d	Alcohol units p/w	Activity Levels	Healthy Eating

MEMBERSHIP APPLICATION

Membership of TAKE HEART is open to anyone for a once only fee of £1.50. In return you will receive a regular newsletter keeping you informed of the charity's activities.

YOU CAN ALSO JOIN ONLINE AT: www.takeheart.net

Title: Surname(s):.....

First Names: Member 1:.....

Member 2:.....

Address:

.....

Postcode:.....

Telephone: Date:.....

An attractive Take Heart badge is available at £1.00. Please indicate the quantity required and add the cost to the Membership fee.

No of Badges required:

I enclose a cheque/postal order for £..... **payable to TAKE HEART.**

DONATION FORM

Donations should be sent to: THE TREASURER, TAKE HEART, 'F' FLOOR, JUBILEE WING,
LEEDS GENERAL INFIRMARY, LEEDS LS1 3EX.

I would like to make a donation of £..... to TAKE HEART.

Name:.....

Address:

.....

.....

Postcode:..... Date:.....

If you are a UK taxpayer, the Charity can benefit further from your donation.

If you would like further details, please tick this box:

PLEASE MAKE ALL CHEQUES PAYABLE TO TAKE HEART.

**DONATIONS ARE ALWAYS WELCOME AND WILL BE
ACKNOWLEDGED, AND PUBLISHED IN OUR NEWSLETTER**

Please send completed Membership/Donation forms to:

THE TREASURER, TAKE HEART, 'F' FLOOR, JUBILEE WING,
LEEDS GENERAL INFIRMARY, LEEDS LS1 3EX. TEL: 0113 392 288.



THE PUBLICATION OF THIS
BOOKLET HAS BEEN FINANCED
BY TAKE HEART

Raising funds exclusively for the
Yorkshire Heart Centre
at Leeds General Infirmary,
St James's Hospital
and its units within the
Leeds Teaching Hospitals NHS Trust

TAKE HEART
F Floor, Jubilee Building,
The General Infirmary at Leeds, LEEDS, LS1 3EX
Telephone: 0113 392 2888
Email: office@takeheart.net Web: www.takeheart.net

The contents of this book were developed from some existing material. More than 20 people from the Leeds Cardiac rehabilitation team, Leeds Cardiology team, Take Heart and Medical Illustration helped to produce this booklet. We also received valuable feedback from service users. We would like to thank everyone who gave their time.



Registered Charity No. 1002063

Raising funds exclusively for the Yorkshire Heart Centre at Leeds General Infirmary, St James's Hospital and its units within the Leeds Teaching Hospitals NHS Trust.



What did you think of your care?

Scan the QR code or visit bit.ly/nhsleedsfft

Your views matter



© The Leeds Teaching Hospitals NHS Trust • 1st edition (Ver 1)
Developed by: Gill Whittle, Team Leader - Cardiac Rehabilitation
Produced by: Medical Illustration Services • MID code: 20230725_001/BP

LN005665
Publication date
09x/2023
Review date
09/2024