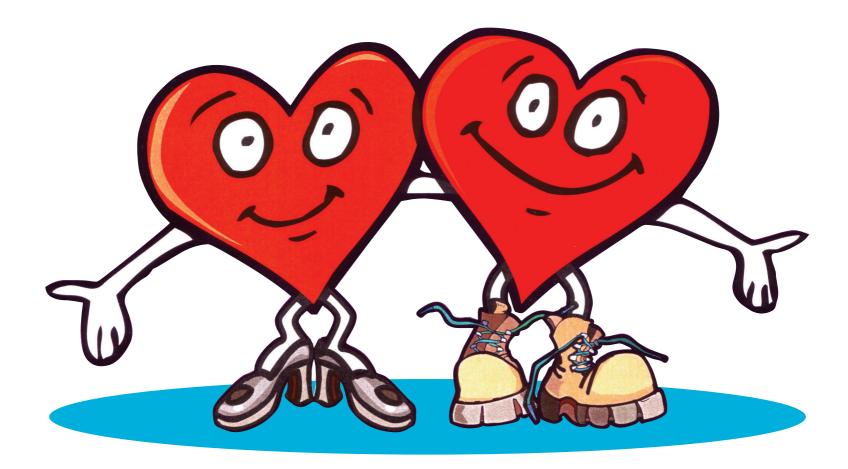


RUH Information for Patients

After a Heart Attack





This booklet is a guide for patients who have had a heart attack and for their relatives.

It is meant to be quite general and not a substitute for the individual advice you will receive from all the team involved in your care.

Useful contacts: **Cardiac Rehabilitation Department** C/o Cardiac Ward B45 Royal United Hospital Combe Park Bath BA1 3NG

Tel/Answer phone: 01225 825028 Email: ruh-tr.CardiacRehab@nhs.net

Please ring your GP for medical advice Out of Hours please ring 111 Emergency / Urgent care please dial 999

British Heart Foundation: Heart information line: 0300 330 3311 Monday - Friday 9am-6pm www.bhf.org.uk

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SECTION 1 : HEART ATTACKS

What is a Heart Attack

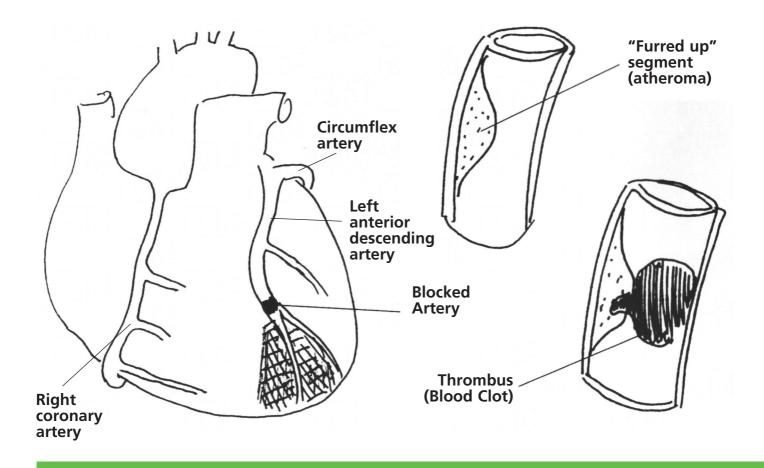
A heart attack occurs when one of the coronary arteries supplying the heart muscle becomes blocked.

The artery is usually blocked by a thrombus (a blood clot) on top of a narrowed or "furred up" segment, (often called a plaque).

A portion of heart muscle that the artery was supplying then becomes damaged and stops working normally. The damaged area is eventually replaced by scar tissue. It takes about 6 weeks for this process to happen.

Doctors and nurses use the term myocardial infarction, (or MI) for a heart attack because it describes what happens to the heart muscle (the **myocardium**) when its blood supply is cut off (a process called **infarction**).

Diagram of a heart attack and of a narrowed artery blocked by a blood clot.



Page 3

♥ What causes a Heart Attack?

The coronary arteries can become "furred up" by a gradual build up of fatty material over many years. This process is known as **atherosclerosis**.

The walls of these diseased arteries (or plaques) may crack which then causes blood cells (called platelets) to be attracted to that area. A blood clot may form on top of this, which may block the artery.

There is no <u>single</u> cause for arteries to become narrowed but the more risk factors you modify the less likely you are to have further heart problems.

Modifiable

 SMOKING HIGH CHOLESTEROL HIGH BLOOD PRESSURE LACK OF EXERCISE POOR DIET BEING OVERWEIGHT STRESS EXCESS ALCOHOL DIABETES 	Think about and tick the risk factors that apply to you.
Non Modifiable	10 900.
 FAMILY HISTORY GETTING OLDER GENDER ETHNICITY 	200
There may also be other causes of heart a as spasm of the coronary arteries. Use of can cause this to happen, such as heroin, ecstasy.	illegal drugs

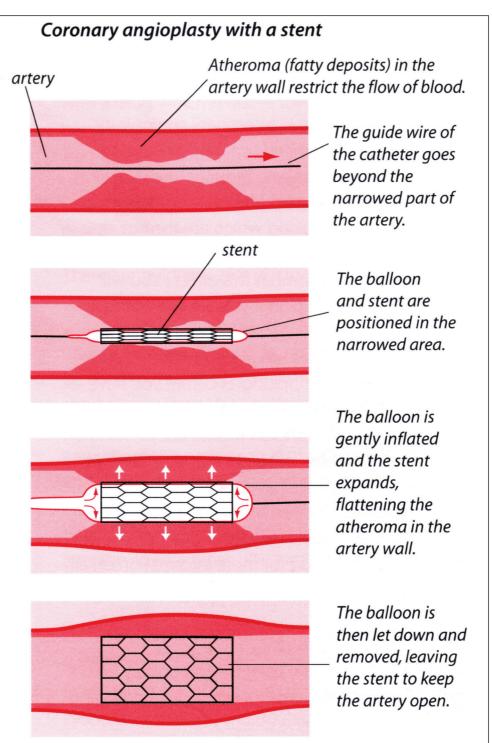
SECTION 2 : TREATMENT AND TESTS

If your doctor tells you that you have had a heart attack it is very important to treat this as quickly as possible to reduce the amount of damage to your heart.

PRIMARY CORONARY ANGIOPLASTY or PERCUTANEOUS CORONARY INTERVENTION (PCI)

This is a treatment to open the blocked coronary artery by stretching the atheromatous plaque with a balloon and then inserting a stent. The stent is a very fine tubular framework made of inert metal, designed to support the artery in its newly opened position. A number of stents are available but the ideal choice for you will be made by your cardiologist.

For more information see Tests and Investigations.



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Images courtesy of BHF

V TESTS AND INVESTIGATIONS

Angiography / Cardiac catheterisation

The majority of patients who have been admitted to hospital with a heart attack or unstable angina will have their coronary arteries assessed either during the initial admission or during a readmission.

A catheter (a fine hollow tube) is passed into your coronary arteries via an artery in the top of your leg or wrist. A dye is then injected into the arteries and X-rays are taken at different angles. This allows the network of coronary arteries to be viewed and any narrowed sections to be identified.

You will be awake throughout the procedure so that you can tell the doctor if you have any chest pain. The test should not be painful as you will have had a local anaesthetic first but you may be aware of a hot flush or warm feeling when the dye is being injected. You may also feel pressure around the area where the catheter is inserted.

Your doctor will discuss the findings of the angiogram with you and the treatment which is recommended.

Sometimes treatment to open the arteries called **CORONARY ANGIOPLASTY** can be carried out at the same time as the investigation.

There are leaflets, for example by the British Heart Foundation, explaining these tests if you require additional information.

Echocardiogram (Echo)

This is a non-invasive ultrasound scan. It is useful to assess the size and pumping action of the heart and the effectiveness of the heart valves.



You may be referred for **Coronary Artery Bypass Surgery** when one or more of the arteries are significantly narrowed. Sometimes the coronary arteries are too small to allow a stent to be inserted or the narrowed areas may be extensive or in a position which is difficult to reach by a catheter and therefore unsuitable for angioplasty. Your Cardiologist will discuss how the decision to refer you for bypass surgery has been reached.



All patients will be on certain medications which we know help your heart to heal and protect it for the future. Some of these have side effects, which we will tell you about. It is **essential** that you keep taking them unless directed otherwise by a doctor. Commonly prescribed drugs are:

1) Anti Platelet Drugs

eg: Aspirin, Clopidogrel, Ticagrelor.

These work by stopping the platelet cells in the blood sticking together. This helps to prevent abnormal blood clots which can then block narrowed blood vessels. This reduces the risk of further heart attacks by at least a quarter.

2) Betablockers

e.g: Bisoprolol, Atenolol, Metoprolol.

These are given to most patients because they reduce the chance of further cardiac events. They act by lowering the heart rate. This in turn reduces the amount of work the heart needs to do. They may also be used to reduce risk of abnormal heart rhythms.

3) ACE Inhibitors

e.g: Ramipril, Perindopril, Lisinopril.

These improve the amount of exercise a patient can take and reduce breathlessness by improving the pumping action of the heart. They work by dilating blood vessels which in turn lowers the blood pressure and off load pressure from the heart. They also reduce the chance of further cardiac events.

4) Statins

e.g: Simvastatin, Atorvastatin, Pravastatin, Rosuvastatin.

These drugs work to reduce the amount of cholesterol produced by your liver. Studies have shown that statins, taken over long periods can significantly reduce your risk of further cardiovascular events. If you have been started on these drugs, your cholesterol level will need to be checked in 2-3 months and then at regular intervals by your GP practice.

SECTION 3 : THE RECOVERY PHASE

WHAT HAPPENS IN HOSPITAL?

Once you have received your initial treatment for your heart attack you may then spend some time on the coronary care unit (CCU).

During your admission you will be given drugs to control any pain, to try to reduce the size of your heart attack; and to reduce complications. Your heart rhythm will be monitored using a heart monitor.

You and your family will be given further information about the treatment you are receiving and you will have the opportunity to talk about what has happened.

When your doctors are satisfied with your progress, you will be transferred to a ward where the main focus will be preparing you for discharge.

Most patients will go home between the 3rd and 4th day.

MOBILITY IN HOSPITAL AFTER A HEART ATTACK:

This will depend on your individual condition but in general once you have been pain free and the doctors are happy with your progress you can begin to start gently walking around on the flat. You should not leave the ward area you are in unless you have checked with your nurse.

By the time of your discharge you should be gently extending the distance you are walking and have had a shower.

We hope to help you to answer the following questions:

- Why might it have happened to me?
- What specific drugs do I need?
- What dietary changes do I need to make?
- What about work, driving, sex, holidays and exercise when I leave hospital?
- What and when are my follow-up appointments?
- What is cardiac rehabilitation?

How to exercise safely

'The How it Feels Scale'

The scale is also known as 'The Scale of Perceived Exertion' and can be used as a guide for ensuring that you are exercising at the right intensity to gain maximum benefits.

1.	VERY, VERY LIGHT / NO PROBLEM
2.	VERY LIGHT / VERY EASY
3.	FAIRLY LIGHT / EASY
4.	MODERATE / BEGINNING TO FEEL PUFFED
5.	FAIRLY HARD / FEELING A BIT PUFFED
6.	HARD, FEELING PUFFED
7.	VERY HARD / TIRING
8.	VERY, VERY HARD / VERY TIRING
9.	EXHAUSTED / OUT OF BREATH / SHATTERED
10.	MAXIMUM / EXHAUSTED

No. 1 - relates to sitting in a chair doing nothing at all.

No. 10 - relates to the hardest exercise you have ever done.

In the initial phase of recovery (6 weeks) after your heart attack, you should stay within levels 1-3 on the scale and not participate in prolonged activities that make you feel puffed.

When you have been told that you can progress to more moderate exercise, ensure that you gradually warm up and then progress to moderate exercise remaining within levels 4 to 6 on the scale. If at any time you find that you are unable to get your breath or that the workload is too hard (i.e 7-10 on the scale); then ease back until you find that you are less puffed and back in the 4-6 zone on the scale.

HOME WALKING PROGRAMME

Because the damaged area of heart muscle takes about 4-6 weeks to recover, it is recommended that you observe the following guidelines to allow your heart to stabilise and prevent complications.

Increase your level of activity **GRADUALLY**. Aim to stay at level 1-3 on the 'How it Feels Scale.

- You must not push yourself too hard.
- Be prepared to stop and rest.
- Do not ignore symptoms such as chest tightness, undue breathlessness or excessive tiredness.
- Avoid walking for 2 hours after a large meal or when it is very cold or windy.
- Avoid steep inclines.
- It is important to warm up prior to any exercise. You may wish to use the mobility exercises to do this.

A member of the cardiac rehabilitation team or one the nurses will see you before you leave the hospital and fill in the sections below.

WEEK 1 AT HOME

Walk for _____ minutes each day this week. The distance does not matter, walk at a pace you feel comfortable with and stick to the time limit.

If you are unable to manage this level of activity take short walks around your home 2-3 times a day. Climb stairs slowly and only when necessary. Wander into the garden for some fresh air. Introduce the walking programme when you feel stronger.

Gradually increase your walk to	minutes a day
Gradually increase your walk to	minutes a day
Gradually increase your walk to	minutes a day
Gradually increase your walk to	minutes a day
Gradually increase your walk to	minutes a day
	Gradually increase your walk to Gradually increase your walk to Gradually increase your walk to Gradually increase your walk to



HOME ACTIVITIES IN RECOVERY PERIOD

You may start doing light work in the house as soon as you feel able - for example, washing up and dusting. You can also do a bit of light gardening or cooking. Limit this initially to 15 minute spells.

In general you should avoid sudden bursts of activity or any activity that involves lifting, pulling or pushing. In particular, it is important that you **AVOID** the following activities for 6 weeks:

Washing the car Scrubbing floors Digging the garden Mowing the lawn Painting and decorating Vacuuming Ironing Brushing/sweeping Brushing/sweeping Carrying shopping bags Lifting heavy pans Washing windows Carrying laundry baskets Any sport (such as golf, cycling or swimming) Lifting children

It is also recommended that you avoid extremes of hot and cold, i.e. soaking in a very hot bath / saunas; or walking when it is very cold or windy.

CARDIAC REHABILITATION

Your cardiologist would strongly recommend that you attend a cardiac rehabilitation programme. Long term exercise is definitely beneficial. Cardiac Rehabilitation classes will involve the following elements:

- A progressive exercise programme designed to restore confidence and improve fitness, strength, co-ordination and flexibility.
- An education programme designed to support you in making lifestyle changes and increasing understanding of your condition and related topics.



• Relaxation and stress management training.

You are encouraged to attend this programme and to then continue to exercise afterwards. It is a great way to increase confidence and to receive ongoing support in all aspects of your recovery.

Evidence suggests that you are less likely to have a further cardiac related admission to hospital, and more likely to return to work if you take part in a rehab programme. Exercise is known to reduce symptoms of stable angina by improving the efficiency of the heart muscle.

At 6-8 weeks after the heart attack, if you are unable to attend this programme, it is recommended that you increase exercise in a graded way up to 6 periods of 30 minutes every week. It should be moderate exercise that makes you puff a bit and makes you warm such as brisk walking, cycling, golf, swimming or dancing. Please refer to page 26 for advice on how to progress with this.

WE RECOMMEND THAT YOU SEEK MEDICAL ADVICE BEFORE INCREASING YOUR LEVEL OF EXERCISE.



You will be unable to drive for a period of time after your heart attack. The rehabilitation staff will discuss your individual position with you, the period involved varies depending on treatment and test results.

You need to let your insurance company know about your heart attack to make sure your insurance is still valid.

It is important to start driving locally and with someone to accompany you in case of mechanical breakdown. Also, if you experience any angina whilst driving it is important to stop and then resume when symptoms are controlled. (See page 28).

The cardiac team has advised you not to drive for ______.

If you hold a PSV or HGV licence you must report your illness to the DVLA. You will need to undergo various tests in order to determine whether you can regain your licence after a period of time and this will be organised by your Cardiologist.

If you hold a pilots licence please seek advice from the Civil Aviation authority.

If you are a taxi driver you should contact your local licensing authority for advice.

RETURNING TO WORK

Most patients can return to work 4-6 weeks after their heart attack. This will be dependent on the nature of your heart attack and your occupation. You will be given the opportunity to discuss this with your rehabilitation nurse prior to discharge.

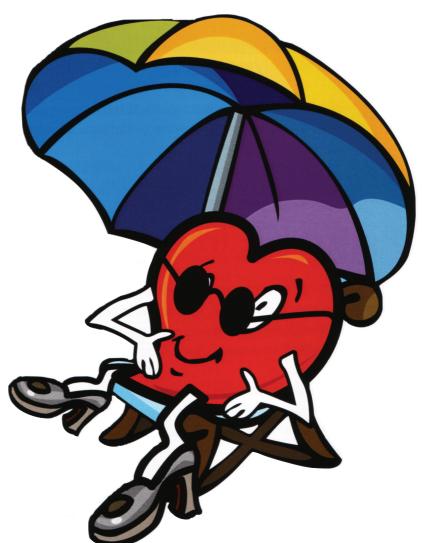
You may need to talk to your employers about starting your work gradually or even parttime. You may also need to negotiate time off to complete the cardiac rehabilitation programme.

It is unusual that patients cannot return to their previous occupation for medical reasons. Talk to your doctor if you are concerned about this. If you need advice on changing your job, this can be obtained from the Medical Social Worker or the Disablement Employment Adviser at the local Job Centre.



General tips:

- Your ability to safely fly will depend on your personal circumstances.
 Always check with your GP or Cardiac Specialist before you fly after a heart attack.
- Consider holidays in the UK rather than long haul flights to begin with. It is best to have allowed enough time to build up walking and general activities before venturing too far.
- Ensure you take a good supply of tablets which should be stored in your hand luggage. Having an up to date list of your current medication and any other paperwork relating to your hospital admission i.e. a copy of your discharge summary.



- Sometimes you may need a letter from your GP especially if some of your medications are liquids, creams or gels over l00mls.
- Check with your Airline prior to travel, regarding their policy on taking and using medication while in the aircraft cabin.
- If possible use travel luggage with wheels so that you are not carrying heavy bags.
- Ensure you have adequate travel insurance. For details of insurance companies that offer cover for heart patients contact the British Heart Foundation.
- See your GP if you have any new symptoms or concern before travelling.

For further information about travelling visit www.bhf.org.uk



According to the BHF you are usually able to start having sexual activity again once you feel well enough, usually about four weeks after a heart attack.

Some drugs that are prescribed after a heart attack can lessen the desire for sex and cause impotence. It is important not to stop taking them, but to discuss this with your doctor. Lack of desire can also be associated with feeling low or afraid or could be due to your partner's anxiety. These feelings should lessen with time, but there is help available if you are not able to resume your usual sex life. Please discuss this with your G.P or cardiac rehabilitation nurse.

Some couples find it useful to start taking moderate exercise together like walking briskly to restore confidence in their ability to resume sexual activity.

Some tips to help:

- Make sure the environment is warm.
- Start slowly and take a more passive role if necessary. Starting with intimacy before full intercourse may allow you both to calm any fears you may have.
- Communicate with your partner. Fear of being close can be interpreted as rejection. Discuss any fears or concerns together.
- As with any activity, if you develop any symptoms of angina; stop, rest and take appropriate action.
- Avoid sex within two hours of a meal. The digestive system uses a large blood supply in order to digest food.
- Avoid sex after drinking excessive alcohol. This can increase your heart rate and can also cause a degree of impotence.

N.B. VIAGRA/CIALIS (AND OTHER SIMILAR MEDICINES) ARE DANGEROUS WHEN USED WITH ANY FORM OF NITRATE SPRAY, TABLET OR PATCH. PLEASE DISCUSS ITS USE WITH YOUR GP.

YOUR MOODS / EMOTIONS

You will experience a wide range of emotions after a heart attack. Some common feelings are -

- Despair
- Denial
- Frustration
- Anger
- Tearfulness
- Lack of energy
- Anxiety
- Irritability

These are very normal reactions as you come to terms with what has happened. These feelings may begin in hospital, but may deepen a little at home when the reality of what has happened begins to sink in.

Most of these reactions will lessen with time and generally as you become physically stronger you will feel emotionally stronger. However, if you are feeling low or anxious it is important that you discuss this with your GP or cardiac nurse. It is also common that partners and family members may experience feelings of fear, anger, or guilt. It may be helpful to talk about these feelings together.

A commonly expressed fear is "Will it happen again?"

Most patients make a very good recovery. After the first month or so, another major heart problem occurs in less than about 5% of patients each year. Taking your medication and introducing lifestyle changes are some of the positive steps you can take to reduce your risks of further problems.

In the weeks following the heart attack, you will have the time to think about your lifestyle. As you start to come to terms with the heart attack, you may decide that you want to take some positive steps to reduce the risks of further heart problems. Some of these ideas are discussed in the next section.

SECTION 4 : LIFESTYLE CHANGES

SMOKING

It is essential for you to try to stop smoking altogether. If you continue to smoke your risk of another heart attack is much greater - at least twice that of people who stop smoking. Changing to a pipe or cigars will not lower the risk. There is also a risk involved with smoking cannabis. We are aware it can be particularly difficult to break a smoking habit, but there is plenty of help available.

What do cigarettes do?

Cigarette smoke contains around 4000 chemicals, many of which are known to cause harm to humans. Carbon monoxide and nicotine are particularly harmful to the heart.

Cigarettes:

- Are one of the main causes of heart disease.
- Are highly addictive.
- Decrease oxygen levels in the body.
- Increase the uptake of fats in the arteries causing narrowed arteries.
- Can affect the electrical activity of the heart.
- Increase the heart rate and blood pressure.
- Damage the blood cells causing platelets to stick together so that tiny blood clots are carried around in the blood stream.
- Can make arteries tear, causing blood clots and blockages.
- Can cause cancer.
- Quicken the ageing process.

How can I quit?

Will power is essential. We recommend that you obtain specialist advice as this will increase your chances of being successful.

- Your Cardiac Rehabilitation Nurse can refer you to your local smoking cessation programme.
- Contact your GP surgery for information on local smoking cessation groups.
- There are plenty of advice booklets and leaflets available ask while you are still in hospital.
- Receive NHS Stop Smoking Booklet.
- NHS smoking helpline 0300 123 1044. It provides advice and details of local information. You can also ask to speak to a specialist advisor who can advise you on all aspects of stopping smoking. Also you can visit- www.nhs.uk/smokefree.



Healthy eating is a major factor in reducing your risk of heart disease.

Research has shown that eating a 'Mediterranean style' diet can help keep your heart healthy. A typical Mediterranean diet has lot of vegetables, fruits, beans, cereals and wholegrain foods like wholegrain bread, pasta and rice. It contains a moderate amount of fish, but less meat. In a Mediterranean style diet choose oils made from vegetable and plant oils, such as olive oils.

Fruit and Vegetables

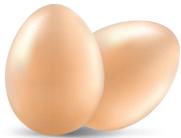
Most fruit and vegetables are part of a healthy diet. They are good sources of fibre, vitamins and minerals. Aim to eat a variety of fruit and vegetables, lots of different colours and eat at least 5 portions per day. As a guide, a portion is about a handful.

Healthy protein

Protein is important for your body to work properly. Protein rich foods also deliver vitamins and minerals. You should eat foods that provide you with

protein two or three times a day. Also choose plant based sources of protein; such as pulses and beans (legumes) and four to five portions of unsalted nuts per week, as well as meat and fish. By eating more fish, including oily fish (Typically, fresh tuna, herring, mackerel, kippers, salmon, trout, sardines and pilchards), you will be likely to reduce your intake of meat - and the saturated fat and salt that can come with it. Aim to eat two portions of fish each week and make one an oily fish.

The British Heart Foundation and the Department of Health says that there is no recommended limit on how many eggs people should eat, as long as you eat a varied diet. However people with familial hypercholesterolaemia should have no more than three or four eggs a week. Eat your eggs boiled, scrambled, poached or boiled. It is best to avoid fried eggs where possible.



Try and avoid high fat proteins such as duck and goose and prepackaged and processed meats such as sausages, hot dogs, pork pies and luncheon meats. Always remove any visible fats and rinds from meat and skin from chicken.

Fats

There are several different types of fat and choosing the right type is important for your health. The British Heart Foundation still advises you to choose unsaturated fats, instead of saturated fats.

Monounsaturated fats are unsaturated fats and can help to lower your LDL

(bad fat) cholesterol. It can be found in, olive and rapeseed oils and spreads made from these oils, avocados, nuts and seeds (typically, almonds and hazelnuts).

Polyunsaturated fats are unsaturated fats and can help lower harmful LDL cholesterol but can also lower beneficial HDL cholesterol. It can be found in sunflower, corn oil, spreads from these oils, soya products, nuts and seeds and oily fish.

Saturated fats can increase the harmful LDL cholesterol which increases the risk of fatty deposits developing in your arteries. Saturated fats are animal in origin, and are found in butter, lard, ghee, coconut oil, dripping, hard cheeses, cream and fatty meats.

Trans fats can increase LDL cholesterol and reduces the good fat HDL cholesterol. Avoid trans fats by avoiding hydrogenated and partially-hydrogenated fat. These can be found in many processed foods, fried foods, commercial baking, cakes, biscuits and pastries. Many food manufacturers are now removing trans fats from their products, however, always read the labels on food you are buying.

Wholegrains

About a third of your plate should be made up of starchy foods such as bread, pasta, rice, potatoes, cous cous. Choose wholegrain (brown) versions of these starchy foods.



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Sugar

It is recommended to avoid too much refined sugars in your diet, for example; cakes, white bread, sweets, chocolate and sugary fizzy drinks. If you add sugar to your tea or coffee try and gradually cut back. Start reducing by half a teaspoon until you get used to the taste and continue reducing until you have stopped completely.

Salt

Cut down on the amount of salt in your diet. Many processed foods contain 'hidden' salt. Always check the labels to see how much salt there is before buying individual products. Adults should have no more than 6g of salt a day. Don't add salt to food or when cooking, use spices and herbs to flavour your foods.

Healthier ways to cook

Avoid frying or roasting food in fat. It is best to prepare and cook your food by, baking, steaming, grilling, poaching, making a casserole, stir frying and microwaving. For futher informtion and advice please visit the British Heart Foundation website, www.bhf.org.uk Or the British Dietetic Association, www.bda.uk.com

Cholesterol

Cholesterol is a waxy substance which is made in the body. The liver makes it partly from saturated fats in food. Cholesterol plays a vital role in how every cell works throughout the body. However too much cholesterol in the blood will increase your risk of getting further heart problems.

Weight Management

It is important to manage your weight. It can make a real difference to your heart health. Your risk of heart disease can be cut by keeping to a healthy weight. This can help prevent and manage levels of cholesterol, high blood pressure and type 2 diabetes.

There are two main ways to tell whether you need to lose weight:

- Your Body Mass Index (BMI)
- Your waist measurement.

BMI:

To calculate your BMI you will need to know your height and weight. Your cardiac rehabilitation nurse will measure your BMI and they will explain and discuss the result with you. A healthy BMI should be ideally between 18.5 and 25.



Waist Measurements

It is important to know the size of your waist. If most of your fat is around your waist rather than around your hips you are at a higher risk of having heart disease and type 2 diabetes. Maintaining a healthy weight helps reduce your risk.

Your cardiac rehabilitation nurse will measure your waist and will discuss the results with you.

Men (white European) are at an increased risk with a waist measurement over 37 inches (94cm) and severe risk over 40 inches (102cm.)

Women (white European) are at an increased risk with a waist measurement over 32 inches (80cm) and an increased risk over 35 inches (88cm).

There are different measurements for people of different ethnicities.

Men (African-Caribbean, South Asian and some other minority ethnic groups) are at severe risk with a waist measurement over 90cm (35.5").

Women (African-Caribbean, South Asian and some other minority ethnic groups) are at severe risk with a waist measurement over 80cm (32").

This is because research shows that if you're South Asian, African-Caribbean, Black African, Chinese, Middle Eastern or have parents of two or more different ethnic groups, you may be at increased risk of some health conditions at a lower BMI than people from white European backgrounds. This means the measurements that indicate severe risk are lower for people from these groups.

For further information on weight management, please go the British Heart Foundation website, www.bhf.org.uk

Also you can sign up to receive the free bi-monthly Heart Matters magazine which provides advice on real life stories, the latest research and tips for healthy eating.

Visit www.bhf.org.uk/heartmatters



The Department of Health guidelines for alcohol consumption, for both men and women is that:

You are safest not to drink regularly more than 14 units per week. This is to keep health risks from drinking alcohol to a low level.

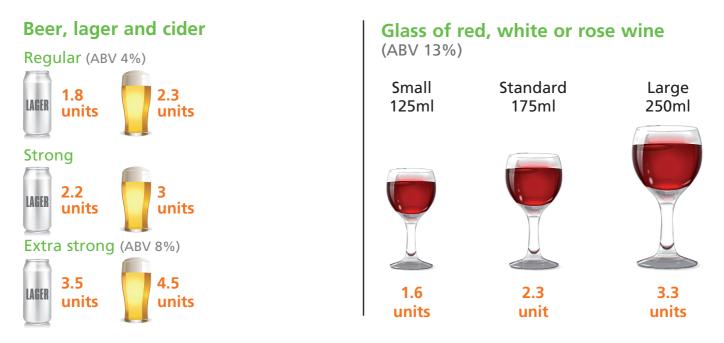
If you do drink as much as 14 units per week, it is best to spread this evenly over 3 days or more.

The British Heart Foundation states; 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. For further information on alcohol please go to www.bhf.org.uk.

Know your units

A unit is a measure of alcohol. The number of units is based on the size of the drink and its alcohol strength. The ABV (alcohol by volume) figure is the percentage of alcohol in the drink.



Remember you can't save up your units for the weekend, heavy drinking or binge drinking causes damage to your body.

BLOOD PRESSURE

It is important that you have your blood pressure monitored regularly by your GP or practice nurse.

If you are being treated for high blood pressure and you have had a heart attack the usual target is to reduce your blood pressure to below 130/80mmhg.

If you have high blood pressure, (hypertension) you can help yourself by ensuring that you:

- Take the prescribed medication.
- Avoid excessive alcohol.
- Cut down on salt in your diet
- Take regular exercise.
- Try to lose excess weight.
- Stop smoking
- Have regular blood pressure checks.
- Learn relaxation techniques.
- Eat at least five portions of fruit and vegetables a day.



STRESS AND RELAXATION

Most people at some point in their lives will experience a degree of stress or tension. Health can only be achieved by maintaining a good balance between mind, body and environment. It is important to recognise the physical signs of tension and begin to think of ways in which you can reduce your stress. A useful way to do this is through relaxation. Relaxation can be learnt by anyone and it can be applied in everyday living.

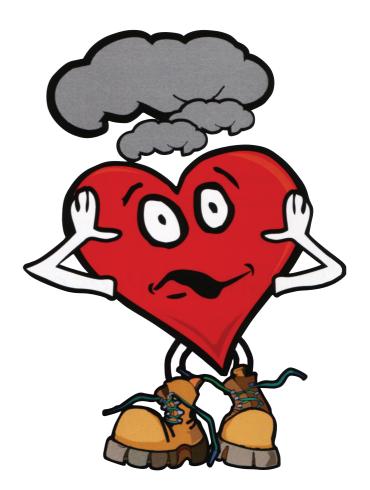
Relaxation has a number of beneficial effects.

- Reduction in heart rate
- Reduction in blood pressure
- Reduction in breathing rate
- Reduction in muscle tension

It can also:

- Help to reduce adrenaline flow
- Help to reduce pain
- Help to promote sleep
- Help to reduce fatigue

Relaxation can be learnt, but it needs practice. A body that has become used to living under stress will not respond immediately and you will need to teach yourself to get used to a more stress-free lifestyle over a period of time.



Try this simple technique:

For a quick release of tension:

Take 2 or 3 deep breaths, with a slower breath out. Notice your tummy rising as you breathe in and falling as you breathe out.

- Return to normal breathing
- Repeat the 2 or 3 slower deep breaths
- Carry on more calmly.

Or try:

A sigh A drop of the shoulders

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Relaxation

Find somewhere quiet where you will not be disturbed. Make sure you are warm and comfortable. Turn the light down.

- Loosen tight clothing
- Ease your shoulders down
- Rest your arms by your sides or across your body
- Be aware of the parts of your body that are touching the floor or the chair
- Slowly close your eyes
- Sigh to ease tension and let your body sink into the floor or the chair

Stage 1: BREATHING AWARENESS

Pay attention to the rhythm of your breathing, be aware of your tummy rising when you breathe in and falling when you breathe out.

Try to breathe more slowly, emphasise the breath out before breathing in again. Be aware of a slight pause after breathing out before you breathe in.

Stage 2: MUSCLE RELAXATION

In turn, concentrate on relaxing the groups of muscles listed below. You might need to tense the muscle a little first so that you can feel the difference between tension and relaxation.

- Relax your feet and your lower legs
- Relax your thighs
- Relax your tummy making sure that you are not pulling it in or pushing it out too far
- Relax your fingers and your forearms
- Relax the muscles in your back and chest
- Relax your upper arms and your shoulders
- Relax the muscles in your neck and the back of your head
- Relax your facial muscles smooth your forehead, relax the muscles around your eyes and mouth, and relax your jaw so your teeth fall slightly apart
- Let the chair or the floor take your whole body weight

Repeat the breathing awareness above.

Be aware now of the feeling of total body relaxation. Lie quietly for a short time.

Stage 3: RECOVERY

- Wriggle your fingers and your toes to bring back some tension to the muscles
- Stretch your arms and your legs
- Open your eyes
- If you are lying, bend your knees and roll over onto your side for at least a minute before slowly getting up



Exercise is beneficial and can address your risk factors in many ways:

- People who are inactive are twice as likely to have a heart attack, compared to somebody who is regularly active.
- It keeps your muscles, including your heart muscle, in good condition.
- It helps with blood pressure and diabetes control.
- It helps improves your cholesterol levels.
- It reduces the risk of developing stroke, heart disease, osteoporosis and diabetes.
- It is essential for weight management.
- Exercise also gives us more energy, a feeling of wellbeing and relief from stress.

It is recommended that all of us perform moderate exercise for at least 30 minutes, 6 days a week. You may need to see this as a long term aim and build up gradually to the recommended targets.

After a heart attack you are advised to follow your walking programme (see page 10) for the first 6 weeks or until you have your medical check up with either your GP or hospital doctor. The walking during this time should not be brisk or make you 'out of puff.' It is then recommended that you participate in a cardiac rehabilitation programme, but if you are unable to attend, it is important to seek advice from your GP or practice nurse about the best way to progress onto more moderate exercise.

For a healthy heart, it is recommended that you participate in 'cardiovascular' or 'aerobic' exercise as this strengthens the heart and lungs. This includes: brisk walking, jogging, cycling, dancing, swimming, or anything that makes you feel puffed. Remember you should always have enough breath to speak!

It is important to warm up for at least 20 minutes prior to any exercise to prepare the body and the heart for work. A cool down and stretch afterwards for another 10 minutes is also important to prevent muscle stiffness and to bring the heart rate down gradually.

SECTION 5: WHAT IS ANGINA?

Angina is a name given to describe symptoms that occur when not enough blood and oxygen are getting to the heart muscle.

This normally occurs because of "furred up" coronary arteries.

Angina is typically a tightness, pain or heaviness in the chest which may spread to the **arms, throat, jaw, teeth, stomach or upper back**. In some people the angina may only be experienced in one of these sites. It may make the arms feel heavy or numb. It may also feel like indigestion. Other symptoms which may be experienced at the same time include belching, nausea, sweating, shortness of breath, dizziness or palpitations.

Angina is different to a heart attack:

ANGINA	HEART ATTACK	
 Caused by narrowed coronary arteries. 	 Caused by completely blocked coronary arteries. 	
Causes no heart muscle damage.	Causes damage to the heart muscle.	
 Pain usually relieved by rest or GTN (spray or tablets) within minutes. 	 Pain not relieved by GTN. Pain lasts longer than 10 minutes. 	
 Pain may be less severe. 	 Pain may be more severe and can be associated with nausea, dizziness or sweating. 	
 Angina typically occurs during physical exertion, cold weather, periods of emotional stress or after a heavy meal. 	Heart attacks can occur at any time.	

Vhat to do if you get angina

Initially - you should stop what you are doing, sit down and rest. This in itself may relieve mild symptoms If your symptoms continue follow these guidelines:

 Take your GTN spray or tablets according to the instructions you were given by your doctor or nurse.

Rest for up to 5 minutes. The symptoms will often ease in this time

If the pain does not ease. Repeat the GTN

Rest for up to 5 minutes. If your symptoms continue for a total of up to 10 minutes then:

- Stay calm and rested
- Dial 999 for an ambulance
- You may be given an extra dose of aspirin by the ambulance crew when they arrive.





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Images on Pages 5 courtesy of the British Heart Foundation

This booklet is also available to download on the RUH website. www.ruh.nhs.uk

If you need this booklet in an alternative format such as large print then please contact us.

We hope the information contained in this booklet has been useful. Please do not hesitate to raise any specific questions you may have with any of the staff involved in your care. The guidelines are current practice at the time of publishing, but may change in light of new research.

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