

**RUH**

Information for Patients

## Angina and Angioplasty



*United in Excellence*

# This booklet is a guide for patients who have been diagnosed with angina and have had coronary angioplasty.

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](http://www.bhf.org.uk)

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## SECTION 1 : CORONARY HEART DISEASE

### ♥ The Heart

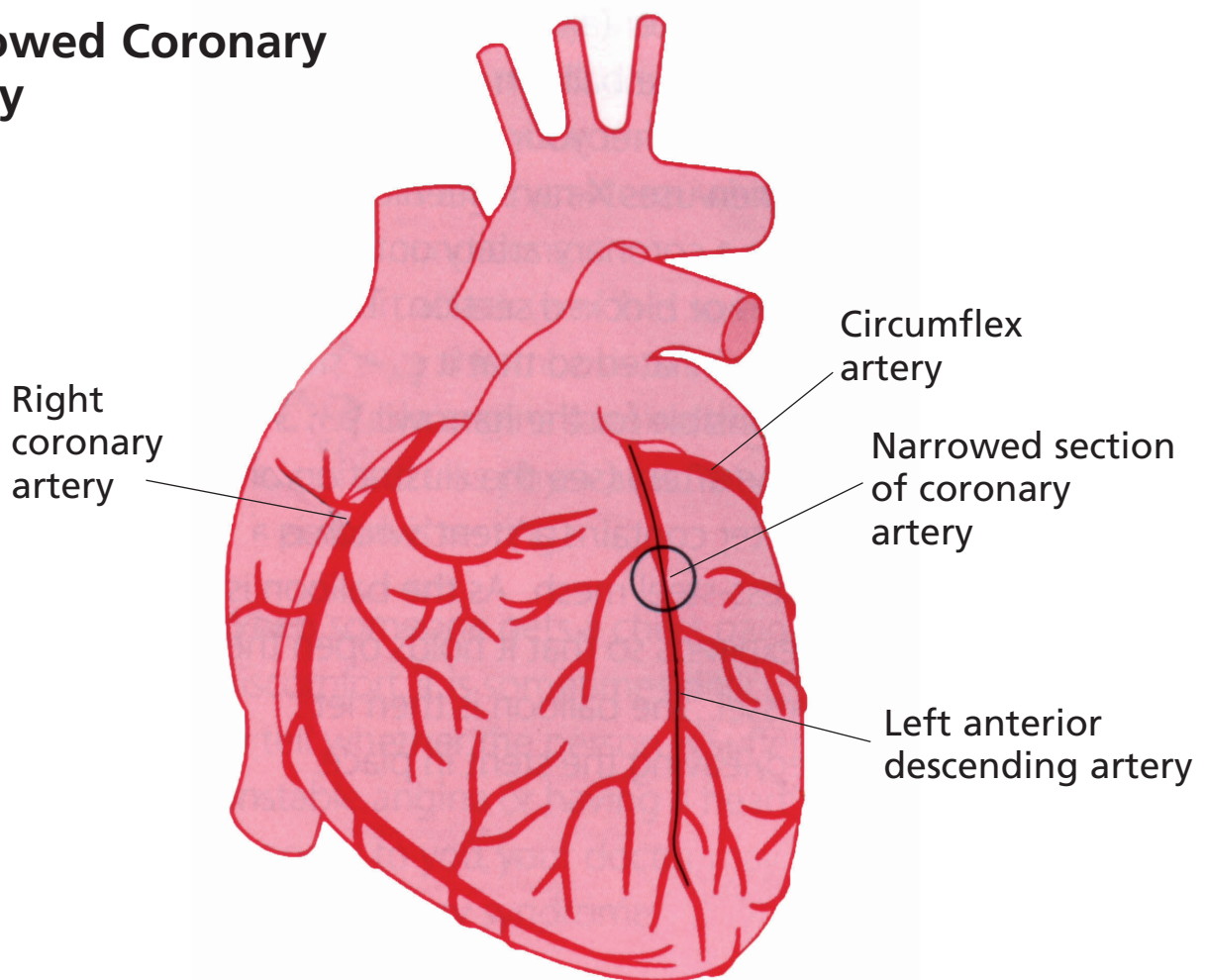
To understand coronary heart disease, it helps to know some basic facts about the heart. The heart is a muscle and works like a pump. It delivers oxygen and other nutrients to all of your cells. The heart muscle needs its own blood supply of oxygen and nutrients, so that it can pump blood around your body. The heart gets its blood supply from the coronary arteries.

There are three main coronary arteries that are on the surface of the heart:

- The left anterior descending artery
- The right coronary artery
- The circumflex artery

These divide many times so that the blood reaches all the parts of your heart's muscular wall. Please see diagram below, which also shows a narrowed artery caused by coronary heart disease.

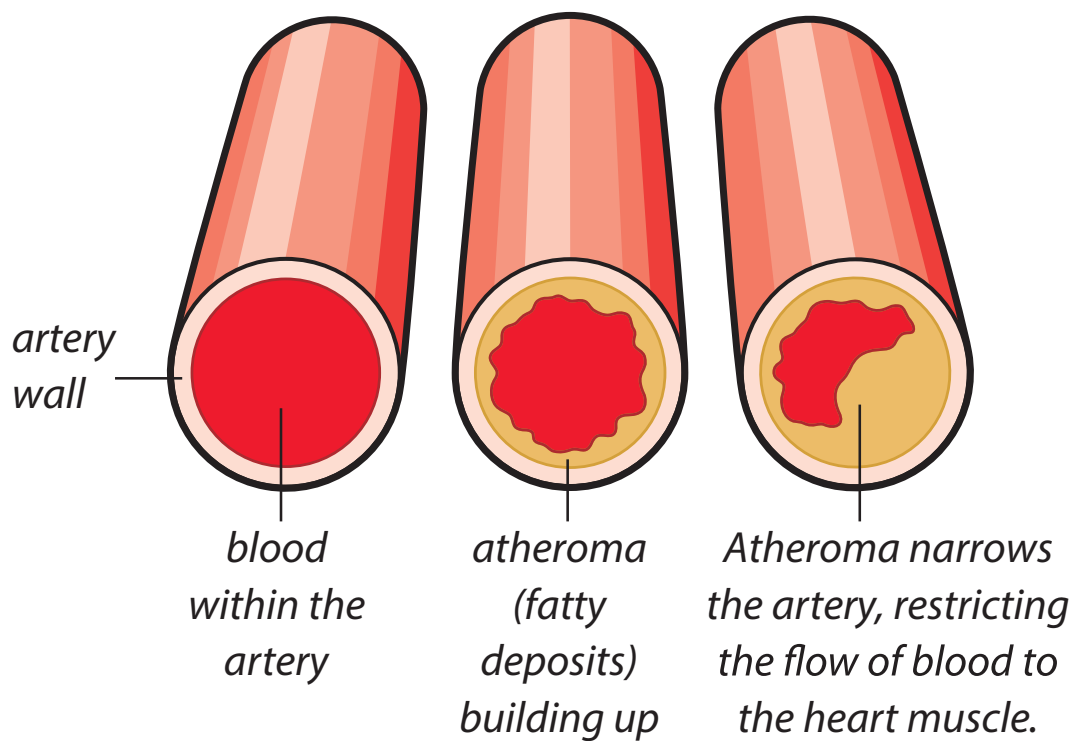
#### Narrowed Coronary Artery



# ♥ What causes Coronary Heart Disease?

Your coronary arteries play a vital role in keeping your heart healthy and pumping properly. The coronary arteries can become “furred up” and narrowed because of a gradual build up of fatty material over many years. This process is known as atherosclerosis and this is what causes coronary artery disease.

## How atheroma builds up



# ♥ What is angina, unstable angina and acute coronary syndrome?

## What is angina?

Angina is a symptom of coronary heart disease. It is the name given to describe symptoms that occur when there is a reduction in blood and oxygen getting to the heart muscle.

### Typical symptoms of angina are:-

Symptoms may include; uncomfortable feeling of heaviness, tightness or pain in your chest, which may spread to your arms, neck, throat, jaw, shoulders, back or stomach. People sometimes describe the feeling as a dull, persistent ache. Sometimes angina symptoms can be similar to indigestion, and occasionally may also include belching. Others may experience a shortness of breath, nausea or sweating. The symptoms for angina are broad and are not the same for everyone.

For some people the pain or tightness is severe, while others may feel nothing more than a mild discomfort or pressure. You might experience angina if it is a cold day, or if you are walking after a meal. Being very upset can sometimes trigger an angina episode too. Or you may get angina if you are exerting yourself, including during activities such as exercise or sexual intercourse. The symptoms of angina usually fade after a few minutes' rest, or after taking the medicines your doctor may have prescribed for you, such as GTN (glyceryl trinitrate). For more information on GTN and how to use it see page 12.

### Unstable angina

Unstable angina is when you have symptoms that you have just developed for the first time, or angina which was previously stable but has recently got worse or changed in pattern. For example, your angina symptoms may come on after doing much less activity or after less stress than usual, or they may even come on while you are resting. It is important to tell your doctor as soon as possible about any changes to your symptoms, as it may mean that you need to have further tests or treatment.

### Acute Coronary Syndrome (ACS)

Acute coronary syndrome is a term that covers unstable angina and a heart attack. These conditions are due to there being a reduced amount of blood flowing to a part of the heart. Different type's treatments are given and these usually depend on the type of ACS. Treatments help to ease the pain, improve the blood flow and to prevent any future complications. When you are admitted to hospital, your doctor will need to undertake certain tests and you will be treated according to a specific pathway of care in order to deliver the correct treatment for you. This will be explained to you by your medical team caring for you.

# ♥ Risk Factors

There is no single cause for arteries to become narrowed, but the more risk factors you can modify the less likely you are to have further heart problems. There may also be other causes such as spasm of the coronary arteries. Use of illegal drugs such as heroin, cocaine and ecstasy can cause this to happen.

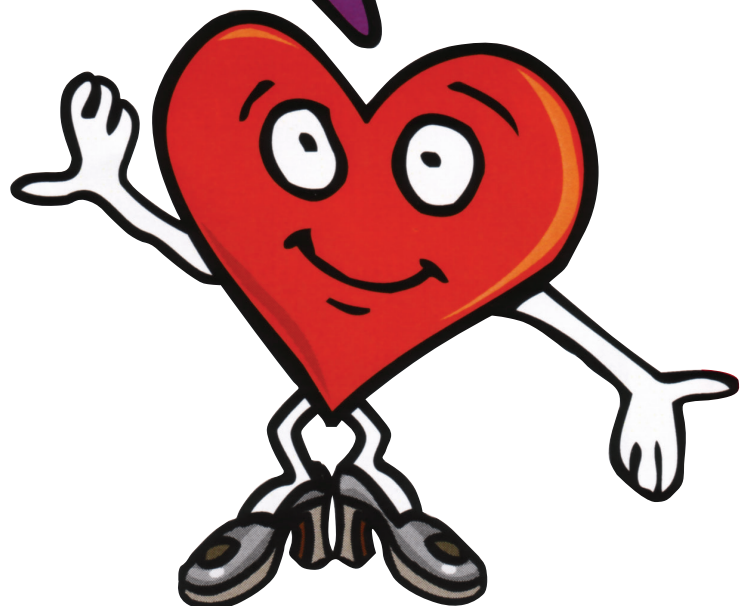
## Modifiable Risk Factors

- SMOKING
- HIGH CHOLESTEROL
- HIGH BLOOD PRESSURE
- LACK OF EXERCISE
- POOR DIET
- BEING OVERWEIGHT
- STRESS
- EXCESS ALCOHOL
- DIABETES

## Non Modifiable Risk Factors

- FAMILY HISTORY
- GETTING OLDER
- GENDER
- ETHNICITY

Further advice about risk factors will be covered later in this booklet.



## SECTION 2 : TESTS AND TREATMENTS

### ♥ Coronary angiography

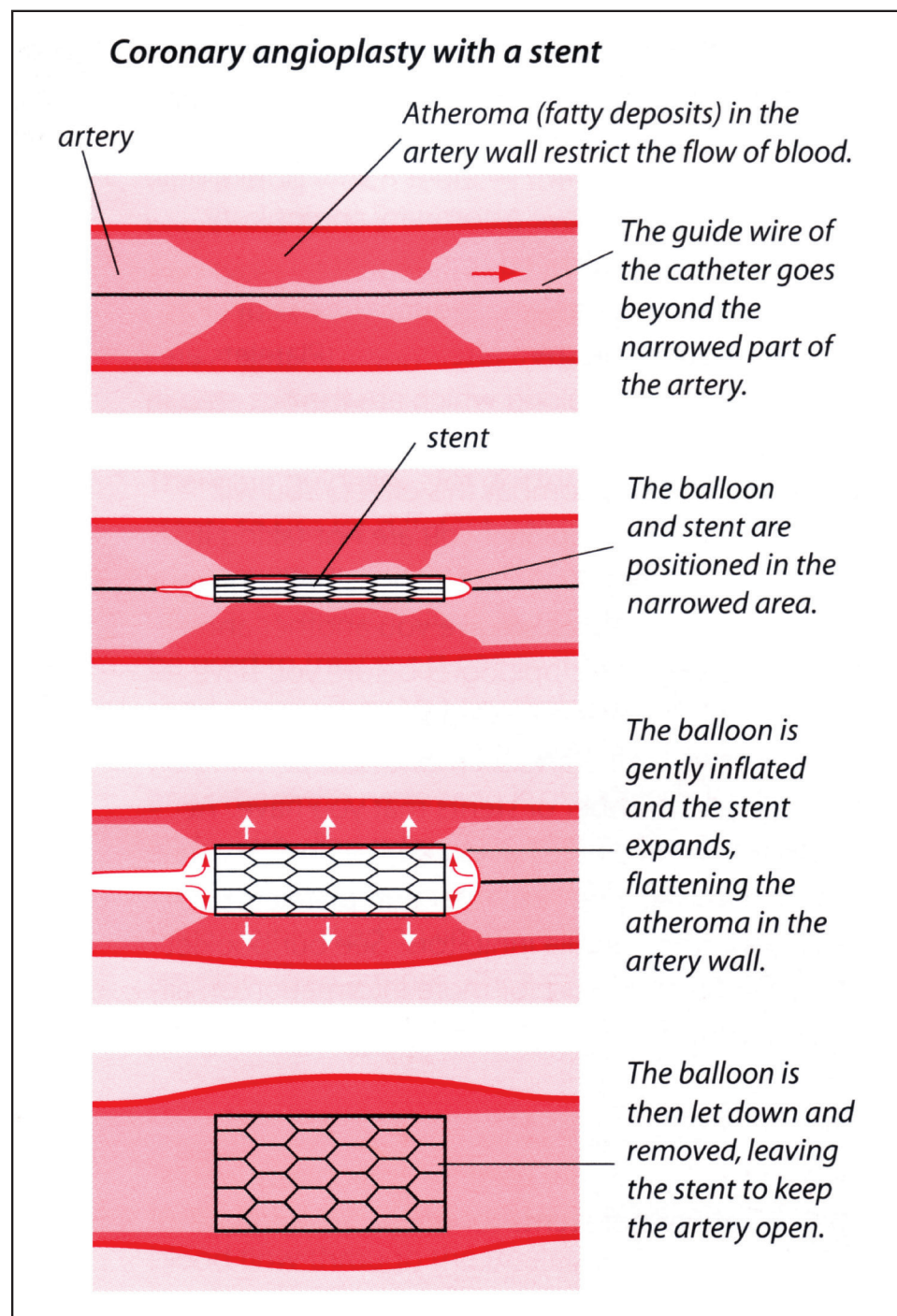
The majority of patients who have been admitted to hospital with angina or unstable angina will have their coronary arteries assessed either during the initial admission or at a later date.

A catheter (a fine hollow tube) is passed into your coronary arteries via an artery at 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.





A procedure to open the arteries called **PERCUTANEOUS CORONARY INTERVENTION (PCI)** may be carried out at the same time as the investigation or at a later date.

This is a treatment to open the narrowed coronary artery with a balloon and insert a stent to provide a framework to support its newly opened position.

A 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.

### **Exercise test / Treadmill test**

This test involves a patient walking on a treadmill whilst attached to an ECG machine to assess the heart's response to exercise. Occasionally this test can be carried out on an exercise bike.

### **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.

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

## **Who has Surgery?**

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.

# ♥ Medicines

All patients will be on certain medication 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

**e.g: Aspirin, Clopidogrel, Ticagrelor, Prasugrel**

These drugs 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. Used together these can also help prevent blood clots forming in newly inserted stents.

## 2) Nitrates

**e.g: Isosorbide Mononitrate, GTN spray or tablets**

Nitrates work by dilating the blood vessels. This reduces the work load of the heart. They also open up the coronary arteries allowing blood, oxygen and nutrients to the heart muscle more easily.

They can be taken in the form of a tablet or a patch allowing the drug to be released slowly throughout the day or night. The drug can also be taken as a spray or tablet under the tongue allowing an immediate effect on the arteries.

## 3) Ace Inhibitors

**e.g: Ramipril, Lisinopril, Perindopril**

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 loads pressure from the heart. They also reduce the chance of further cardiac events.

## 4) Betablockers

**e.g: Bisoprolol, Metoprolol, Atenolol**

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

## 5) Calcium channel blockers

e.g: Diltiazem, Verapamil

This group of drugs slow the heart rate and reduce the risk of angina by resting the heart. They may be used if you are unable to take a beta blocker e.g. because of asthma or other chronic lung disease. Amlodipine also belongs to this group of drugs but reduces angina and blood pressure by relaxing the arteries and veins.

## 6) Potassium channel activators

e.g: Nicorandil

These drugs work by relaxing the walls of the coronary arteries and improving blood flow to the muscle of the heart. They have similar properties to nitrates.

## 7) Cholesterol lowering drugs

e.g: Atorvastatin, Simvastatin, Pravastatin, Rosuvastatin

These drugs work by reducing 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.

Other cholesterol lowering drugs can be prescribed for people who do not tolerate statins or in addition to a statin. These include fibrates and Ezetimibe.

More details information about these and other medications can be found in the British Heart Foundation booklet series.

[You may wish to list your own medications here.](#)

# ♥ Cardiac Rehabilitation

Your cardiologist would strongly recommend that you attend a cardiac rehabilitation programme. Long term exercise is definitely beneficial. Patients who have had an Angioplasty or Coronary Bypass Surgery will be offered a place on the cardiac rehabilitation programme.

Cardiac Rehabilitation classes will involve the following elements:

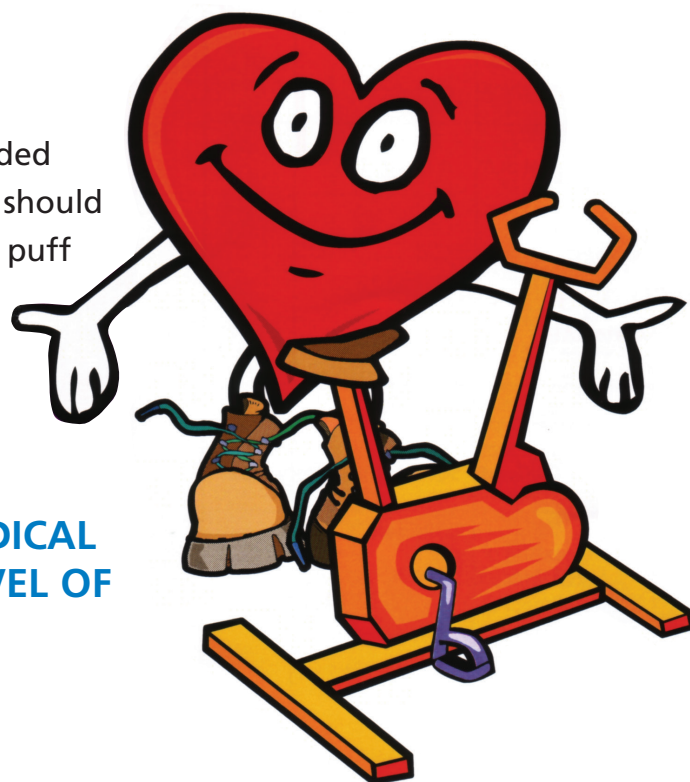
- A progressive exercise programme designed to restore confidence and improve fitness, strength, co-ordination and flexibility.
- An education programme designed to support you in making lifestyle changes and increasing understanding of your condition and related topics.
- Stress management training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

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 rehabilitation programme. Exercise is known to reduce symptoms of stable angina by improving the efficiency of the heart muscle.

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 sustainable exercise that makes you puff a bit, making you warm, such as brisk walking, cycling, golf, swimming or dancing.

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



# ♥ What 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.

## SECTION 3 : THE RECOVERY PHASE

### ♥ Walking

Walking is a good form of exercise and way of building up your fitness following a cardiac event. You may wish to use these guidelines in your recovery. If you have disease in your arteries we would recommend following a gradual walking programme for the first 4-6 weeks of your recovery.

- 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 of the nurses will see you before you leave the hospital to outline your walking programme.

Choose a walking distance that you know you can cover easily without getting angina. Make this your target.

Do this amount twice a day for the next 2 days. Each time assess whether the activity was easy or difficult. If it was easy, gradually increase the distance every couple of days. If it was difficult limit yourself to a shorter distance until you find it easier. Make sure that you are able to do the activity before increasing your target and keep your activity regular, frequent and within rather than beyond your limits.



## ♥ Driving

If you have an ordinary licence, you will be advised when you can return to driving. You should let your insurance company know about having an angioplasty to make sure your insurance is still valid.

If you hold a PSV or HGV licence you must report your illness to 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 pilot's 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

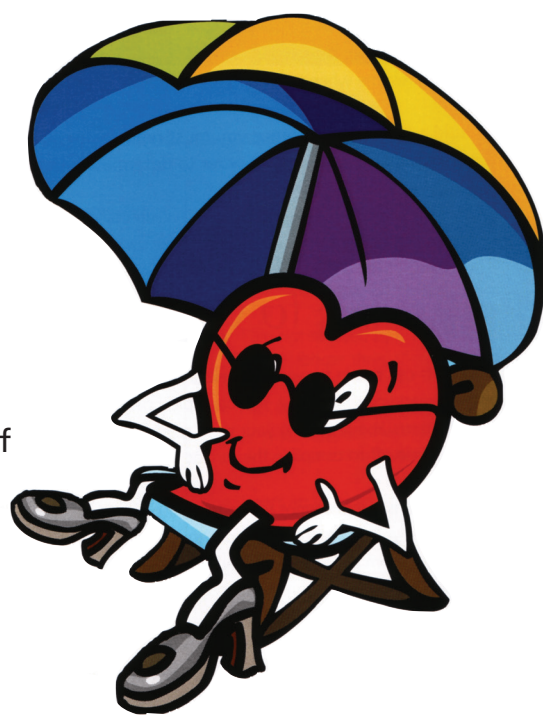
Some patients can return to work within a week of an angioplasty. It is recommended that you avoid heavy lifting for 1-2 weeks to enable the puncture site to heal. You may also need to negotiate time off to complete the cardiac rehabilitation programme.

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, the Disablement Employment Adviser at the local Job Centre or your Occupational Health Department if you have one.

## ♥ Holidays

General tips:

- Seek medical advice before you fly.
- Ensure you take a good supply of tablets (STORED IN HAND LUGGAGE)
- The stress of preparing for holidays can worsen existing angina.
- Ensure you have adequate travel insurance. For details of insurance companies that offer cover for heart patients contact the British Heart Foundation. [www.bhf.org.uk](http://www.bhf.org.uk)



## Sexual Activity

Having sex does not put any more strain on the heart than any other form of exercise. Research has shown that more energy can be used when arguing, driving, or watching exciting television than during sex. If you enjoyed a normal love life prior to your angioplasty, you should be able to return to it again.

There are no firm rules about this, but in general it is usually safe for you and your partner to resume sex when you are comfortably walking about 10 minutes on the flat at a normal pace, or when you can climb two flights of stairs without getting angina or undue breathlessness. It may be possible for you to resume sex about one week after leaving hospital as long as the puncture site has healed.

Some drugs that are prescribed for angina 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. (See page 12).
- 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

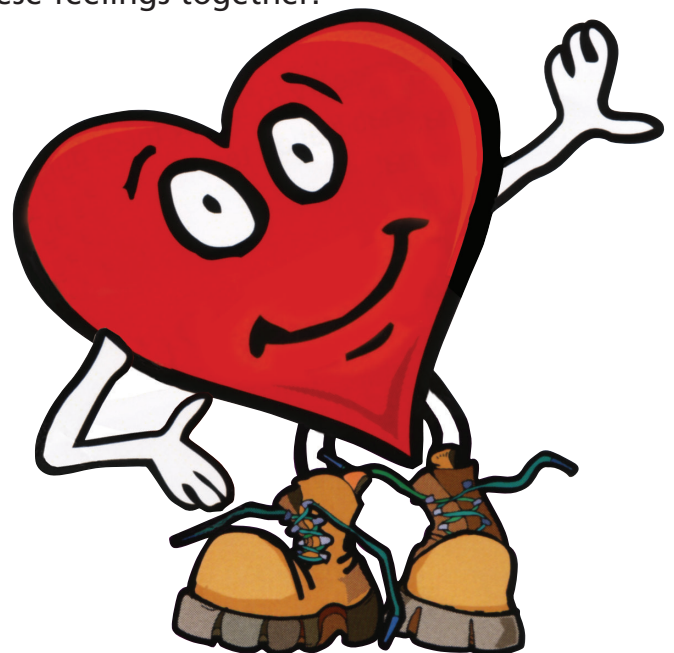
Some people will experience a wide range of emotions after being diagnosed with coronary artery disease. Some common feelings are:

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

These are very normal reactions as you come to terms with what you have been through. 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. However, if you are feeling low or anxious after being in hospital, 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.

Taking your medication and introducing lifestyle changes are some of the positive steps you can take to reduce your risk of further problems. Some of these ideas are discussed in the next section.



## SECTION 4 : LIFESTYLE CHANGES

### ♥ Smoking

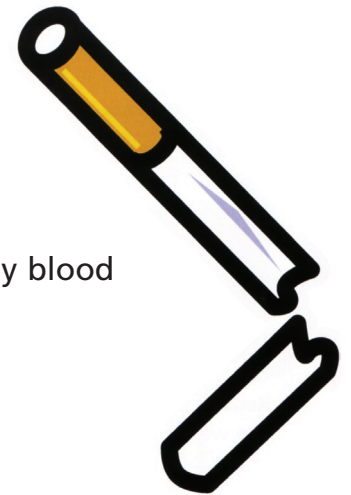
It is essential for you to try to stop smoking altogether. If you continue to smoke your risk of another angina attack is much greater - at least twice that of people who stop smoking. Changing to a pipe or cigars will not lower the risk. There is also a risk involved with smoking cannabis. We are aware 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](http://www.nhs.uk/smokefree).

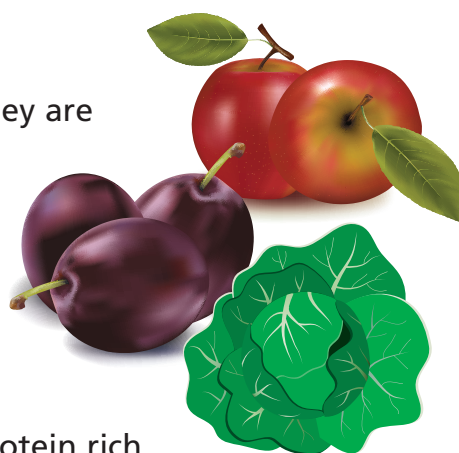
# ♥ Healthy Eating

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.

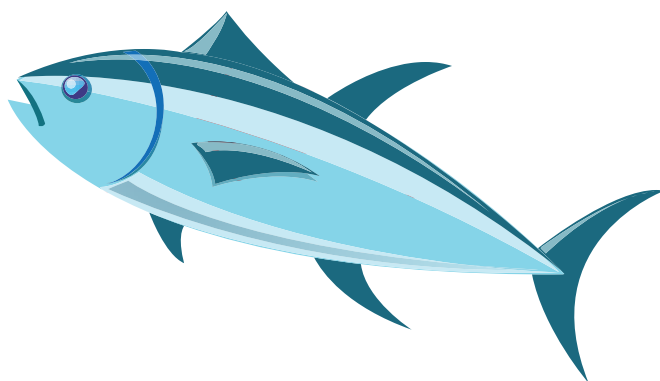
## Fruit and Vegetables

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.

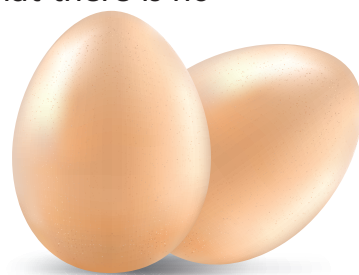


## Healthy protein

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 or poached. 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.



## 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 further information and advice please visit the British Heart Foundation website, [www.bhf.org.uk](http://www.bhf.org.uk) Or the British Dietetic Association, [www.bda.uk.com](http://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:

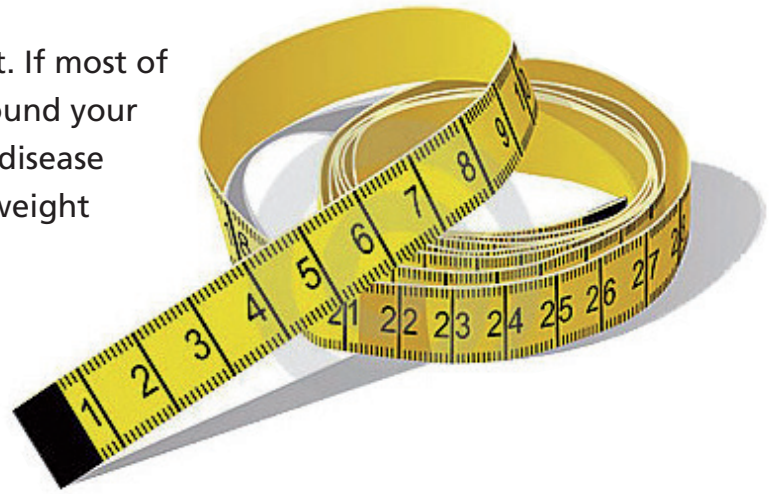
To calculate your BMI you will need to know your height and weight. Your cardiac rehabilitation nurse will measure your BMI and they will explain and discuss the result with you. A healthy BMI should be ideally between 18.5 and 25.



## 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 are at severe 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](http://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](http://www.bhf.org.uk/heartmatters)

# ♥ Alcohol

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](http://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.

### Beer, lager and cider

Regular (ABV 4%)



1.8  
units



2.3  
units

Strong



2.2  
units



3  
units

Extra strong (ABV 8%)



3.5  
units



4.5  
units

### Glass of red, white or rose wine (ABV 13%)

Small  
125ml



1.6  
units

Standard  
175ml



2.3  
unit

Large  
250ml



3.3  
units

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 coronary heart disease 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**

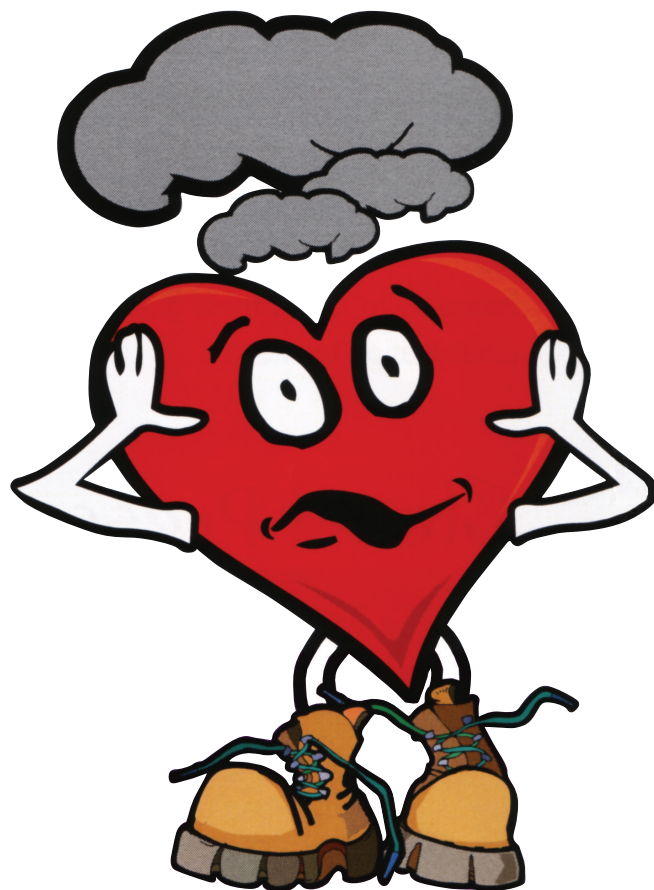
**Repeat the 2 or 3 slower deep breaths**

**Carry on more calmly.**

Or try:

**A sigh**

**A drop of the shoulders**



# ♥ 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

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 improve your cholesterol profile.
- It reduces the risk of developing stroke, 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.

It is advisable to attend a cardiac rehabilitation programme, 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 moderate intensity 'cardiovascular' or 'aerobic' exercise such as: **brisk walking, jogging, cycling, dancing, swimming**. (You should avoid any sport that brings on angina, exercise such as weight lifting and press ups or moving from floor to standing exercises too quickly).

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.

# ♥ 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 first week of recovery you may wish to stay within levels **1-3** on the scale and not participate in prolonged activities.

After this you can progress to more moderate exercise, ensuring that you gradually warm up and remain 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. If you are so short of breath that you cannot speak, you are working too hard.







Images on Pages 3, 4 and 7 are courtesy of the British Heart Foundation

This booklet is also available to download on the RUH website [www.ruh.nhs.uk](http://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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