The heart – technical terms explained

Heart Information Series Number 18

British Heart Foundation

BEATING HEART DISEASE TOGETHER

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About this booklet

This booklet is for people with heart disease, and for their family and friends. It explains:

- how the heart works, and
- the medical terms you might hear while talking to doctors and nurses.

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

The heart and circulatory system

Your heart is a pump. It keeps blood moving around your body. The blood delivers oxygen and nutrients to all parts of your body, and carries away unwanted carbon dioxide and other waste products.

The heart has four chambers – two on the left side and two on the right. The two upper chambers are called the **atria**, and the two lower chambers are called the **ventricles**. The two sides of the heart are divided by a muscular wall called the **septum**.

Each side of the heart has a 'one-way valve system', which means that the blood travels only in one direction through the two chambers on each side.

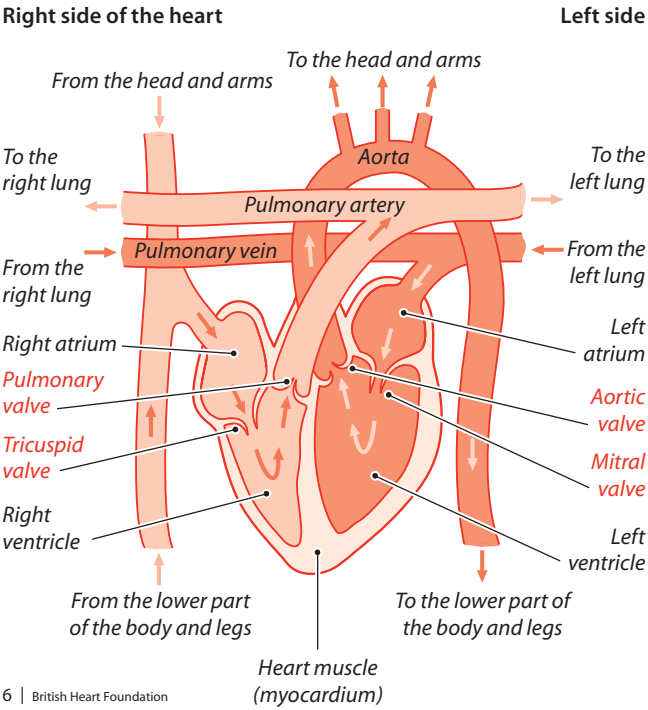
The illustration on the next page shows the direction that the blood flows in through your heart, and the names of all the different parts of the heart.

Your heart and how it works

The right side of the heart receives blood from the veins in the body and pumps it through the pulmonary artery to the lungs. There it picks up fresh oxygen and releases carbon dioxide and then passes through to the left side of the heart.

The left side of the heart receives oxygen-rich blood from the arteries in the lungs, and pumps it through the aorta to the body.

The illustration below shows the direction the blood flows in. We explain this in more detail on the next page.



With each contraction, or heartbeat, the heart pumps blood forward from the left side of the heart through the aorta and into the arteries. The arteries divide off into smaller and smaller branches to supply a microscopic network of capillaries, taking the blood to every part of your body.

The blood then travels back to the heart. First it goes from the capillaries into the veins. The branches of the veins join to form larger veins, which deliver the blood back to the right side of your heart.

As the heart relaxes in between each heartbeat or contraction, blood from your veins fills the right side of your heart, and blood from the lungs fills the left side of your heart.

The two sides of the heart are separate but they work together. The right side of the heart receives dark, de-oxygenated blood which has circulated around your body. It pumps this to your lungs, where it picks up a fresh supply of oxygen and becomes bright red again.

Each side of the heart has a thin-walled 'collecting chamber' (the **atrium**) which helps to fill the thick-walled main pump (the **ventricle**).

The heart wall is made up of special muscle called **myocardium**. Like every other living tissue, the

myocardium itself needs a continuous supply of fresh blood. This supply of blood comes from the **coronary arteries** which start from the main artery (the aorta) as it leaves the left ventricle. The coronary arteries spread across the outside of the myocardium, feeding it with a supply of blood.

This circulatory system is called the **cardiovascular system**. It contains about 5 litres (8 pints) of blood which your heart is continuously recirculating. Each day, your heart beats about 100,000 times and pumps about 23,000 litres (5,000 gallons) of blood.

Technical terms

For more information about individual drugs, see our booklet *Medicines for the heart*. For more information about tests, see our booklet *Tests for heart conditions*.

ablation	A procedure used to correct certain types of heart-rhythm disorders. The doctor finds out where the abnormal heart rhythm causing the palpitation is coming from, and uses radio frequency energy to destroy the abnormal electrical pathways.
ACE inhibitor	A drug used to treat people with high blood pressure, heart failure or coronary heart disease. ACE stands for 'angiotensin converting enzyme'.
acute coronary syndrome	A pattern of symptoms of chest pain including both **unstable angina** (see page 49) and **heart attack** (see page 28).

aerobic exercise	Repetitive, rhythmic exercise involving the large muscle groups. Examples include brisk walking, cycling and swimming.
alpha-blocker	A drug used for treating high blood pressure.
anaesthetist	The doctor who gives an anaesthetic to make you sleep during an operation.
aneurysm	A balloon-like swelling in an artery or in the wall of the heart.
angina	Heaviness or tightness in the centre of the chest, which may spread to the arms, neck, jaw, back or stomach. Or it may affect just the neck, jaw, arms or stomach. Angina is caused when the arteries to the heart become so narrow due to atheroma or spasm (see pages 14 and 44) that not enough oxygen-rich blood can reach the heart muscle when the body is making high demands on it – such as during exercise. The pain can also happen when a person is resting. For more information, see our booklet *Angina*.

angiogram	An X-ray picture of the blood vessels which shows whether the arteries are narrowed and, if so, how narrow they have become. An angiogram can be used to examine the coronary arteries (a **coronary angiogram**) or other arteries in your body. For more on this, see our booklet *Tests for heart conditions*. See also **MRA**, on page 36.
angiography	A test to show whether your arteries are narrowed and how narrow they have become. See also **angiogram** above.
angioplasty with stenting	A treatment to widen a narrowed artery. A catheter (a fine, flexible, hollow tube) with a small inflatable balloon at its tip is passed into an artery in either your groin or your arm. It goes as far as the point in the coronary artery where a blockage has been detected. The balloon is inflated and it flattens the blockage. The balloon is then deflated and a stent made of

	stainless-steel mesh (see **stent** on page 45) is left in place in the artery to strengthen the artery wall. For more on this, see our booklet *Coronary angioplasty and coronary bypass surgery*.
angioseal	A device which is sometimes used to close the puncture site in the groin after angioplasty. The device will dissolve once the puncture site has healed.
angiotensin receptor antagonist	A drug used to control blood pressure or to treat heart failure.
anti-arrhythmic drug	A drug used to control a disorder of the heart rhythm.
anticoagulant	A drug used to reduce the risk of blood clots forming. Clots are made up of platelets (small blood cells) clumped together, and a protein called fibrin. Anticoagulants act by helping to prevent fibrin from forming.
antioxidants	Vitamins and other substances found mainly in vegetables and fruit.

anti-platelet drug	A drug to prevent the blood from clotting. Anti-platelet drugs act by reducing the 'stickiness' of platelets – the small blood cells that can clump together to form a clot which could lead to a heart attack or stroke.
aorta	The large artery (blood vessel) leading out of the left side of your heart and supplying the whole body with blood. See the illustration on page 6.
aortic aneurysm	A balloon-like swelling of part of the wall of the aorta.
aortic root	The base of the aorta immediately after it leaves the left ventricle of the heart. The aortic root is where the coronary arteries start from.
aortic valve	The valve which regulates the flow of blood from the left ventricle into the aorta. See the illustration on page 6.
arrhythmia	A disorder of the normal heart rhythm.

artery	A blood vessel carrying blood from your heart to the rest of your body.
aspirin	An anti-platelet drug used to help prevent blood clots forming.
atheroma	Fatty material that can build up within the walls of the arteries. When atheroma affects the coronary arteries, it can cause angina, heart attack or sudden death. When it affects the arteries to the brain, it may cause a stroke. When it affects the leg arteries, it causes peripheral arterial disease. Atheroma can build up for many years before it causes problems.
atherosclerosis	The build-up of fatty material within the walls of the arteries.
atria	The two upper chambers of your heart. (See the illustration on page 6.) They act as collecting chambers to fill the ventricles (the two lower chambers of the heart).

atrial fibrillation	A type of arrhythmia (abnormal heart rhythm) in which the atria (the upper two chambers of the heart) beat very rapidly. Atrial fibrillation can cause quite unpleasant palpitation and sometimes breathlessness.
atrio-ventricular node	The part of the heart through which the electrical impulses pass from the atria to the ventricles, to stimulate a heartbeat.
atrium	One of the two upper chambers of your heart. See also **atria** on page 14.
AV node	See **atrio-ventricular** node above.
balloon angioplasty	See **angioplasty with stenting** on page 11.
balloon treatment	A procedure to stretch a narrowed valve or artery.
beating heart surgery	Surgery that is carried out on the beating heart. This can be done through a wound along the chest bone or using **minimally invasive surgery** (see page 35). A heart-lung machine is not needed for this type of surgery.

beta-blocker	A drug that blocks the actions of the hormone adrenaline that makes the heart beat faster and more vigorously. For more information, see our booklet *Medicines for the heart*.
BHF nurse	BHF stands for 'British Heart Foundation'. BHF funds and supports specialist cardiac nurses in the UK – nurses who specialise in caring for people with heart disease.
bile acid binding drug	A drug used to lower blood cholesterol levels.
biopsy	A procedure in which a small specimen of tissue is taken for examination.
blood cholesterol	See **cholesterol** on page 20.
blood lipids	Fatty material found in the blood. See **lipids** on page 34.
blood pressure	The pressure of blood in the arteries. The heart is a pump that beats by contracting and then relaxing. The pressure of the blood flowing through your arteries

	varies at different times in the heartbeat cycle. The highest pressure (called systolic pressure) is when the beat or contraction of the heart forces your blood around the circulation. The lowest pressure (diastolic pressure) is between heartbeats. For more on this, see our booklet *Blood pressure*.
BMI	BMI stands for 'body mass index'. This is a formula to work out whether a person is a healthy weight.
bradycardia	A slow heart rate – usually less than 60 beats a minute.
bypass surgery or **CABG**	See **coronary artery bypass surgery** on page 22. CABG stands for 'coronary artery bypass graft'.
calcium channel blocker or **calcium antagonist**	A drug that is used to increase the length of time during which the heart receives its blood supply with each heartbeat. For more on this, see our booklet *Medicines for the heart*.
capillaries	The smallest of the blood vessels. They join the small arteries to the small veins.

cardiac	To do with the heart.
cardiac arrest	When the heart stops. This usually happens suddenly, either as a result of a heart attack or if someone has a severe injury and loses a large amount of blood.
cardiac catheterisation	When a long, flexible, hollow, plastic tube called a 'catheter' is passed into a vein or artery either in the groin or the arm and is gently guided through the blood vessels. This technique is used to take **angiograms** (see page 11), or to carry out an **angioplasty** (see page 11).
cardiac enzyme tests	Blood tests to measure the level of certain enzymes in the blood. When the heart muscle is damaged after a heart attack, certain enzymes are released into the blood. The amount of enzymes released depends on how severe the damage is.

cardiac rehabilitation or **cardiac rehabilitation programme**	**Cardiac rehabilitation** is the process which helps people with heart disease to regain and, if possible, improve their health. A **cardiac rehabilitation programme** is a programme – for people who have had a heart attack or heart surgery – which covers exercise, relaxation, support and education to encourage long-term lifestyle changes. It usually lasts between 6 and 12 weeks. For more information, see our booklet *Cardiac rehabilitation*.
cardiac surgical ward	A hospital ward for patients who are going to have, or who have had, heart surgery.
cardiologist	A doctor specialising in heart disease.
cardiology ward	A hospital ward for patients having tests for heart disease, or who are recovering from a heart attack.
cardiomyopathy	A disease of the heart muscle causing the heart to get bigger.

cardiopulmonary resuscitation	Actions to restore breathing or circulation, or both.
cardiovascular	To do with the heart and blood vessels.
cardioversion	A procedure to restore a regular heart rhythm. For more on this, see our booklet *Palpitation*.
catheter	A fine, hollow, plastic tube.
catheterisation	See **cardiac catheterisation** on page 18.
CCU	Coronary care unit – a specialist unit in a hospital. The unit is just for people with serious heart conditions – for example, people who have had a heart attack – and who need special care, rather than for people who have just had heart surgery.
chest drain	A tube which allows blood or fluid which builds up in the chest to be removed safely.
cholesterol	A fatty material mainly made in the body by the liver. Too much cholesterol in the blood can increase the risk of atheroma

	(fatty material) building up in the coronary arteries, leading to coronary heart disease. For more on this, see our booklet *Reducing your blood cholesterol*.
cholesterol-lowering drug	A drug to lower the blood cholesterol level.
clot-buster	A drug given directly into a vein when there is an urgent need to dissolve a clot – for example, during a heart attack.
congenital heart disease	Heart conditions in which there are abnormalities of the structure of the heart or major blood vessels. These abnormalities are present at birth and some may be hereditary.
contrast medium	A substance that is injected into a vein so that the blood vessels can be seen more easily during tests such as an X-ray or CT scan.
coronary arteries	The arteries that branch off the aortic root and which supply blood to the heart muscle. (See **aortic root** on page 13.)

coronary artery bypass surgery or **coronary bypass surgery**	An operation to bypass a narrowed section or sections of coronary arteries and improve the blood supply to the heart. For more on this, see our booklet *Coronary angioplasty and coronary bypass surgery*.
coronary heart disease	When the walls of the coronary arteries (the arteries that supply blood to the heart muscle) become narrowed by a gradual build-up of fatty material called atheroma. When atheroma affects the coronary arteries, it can cause angina, heart attack or sudden death.
coronary thrombosis	When a blood clot forms in a coronary artery. This may lead to a heart attack.
CPR	See **cardiopulmonary resuscitation** on page 20.
CT scan	A type of X-ray used for looking at organs in the body. For more on CT scans, see our booklet *Tests for heart conditions*. See also **multi-slice CT scan** on page 37.

defibrillation	A procedure to restore a regular heart rhythm. A controlled electric shock is delivered through the chest wall to the heart, using a **defibrillator** (see below).
defibrillator	A device which delivers a controlled electric shock through the chest wall to the heart, in order to restore a normal heart rhythm. See also **ICD** on page 31.
diabetes	A disease caused when the body does not produce enough insulin, or when the cells of the body can no longer use the insulin. Type 1 diabetes is present from birth. Type 2 diabetes develops later.
diastolic blood pressure	When measuring blood pressure, the diastolic blood pressure is the lowest pressure, which happens in between heartbeats while the heart is resting.
dietitian	A health professional who can advise on healthy eating and special diets.

digoxin	A drug used to treat heart failure and certain abnormal heart rhythms such as atrial fibrillation.
discharge (from a wound)	Leaking or oozing.
discharge rate (of a pacemaker)	The rate at which electrical impulses are generated by a pacemaker.
diuretic	Also known as 'water tablets'. Diuretics increase the output of water and salt in the urine. For more information, see our booklet *Medicines for the heart*.
drug-eluting stent	A stent is a short tube of expandable mesh, like a scaffold, which is inserted at the part of the artery which is to be widened by coronary angioplasty (see **angioplasty with stenting** on page 11). A drug-eluting stent is a stent which has been coated with medication to help prevent the artery closing off again.

dual chamber pacemaker	A pacemaker with two electrical leads. One is attached to the right atrium and one to the right ventricle.
ECG	A test to record the rhythm and electrical activity of the heart. ECG stands for 'electrocardiogram'. For more information, see our booklet *Tests for heart conditions*.
24-hour ECG	Continuous recording of an **ECG** (see above) over 24 hours to look at the heart rhythm. The recorder produces an ECG which can be analysed later.
echocardiogram	An ultrasound picture of the heart which shows the structure of your heart and how it is working. For more on this, see our booklet *Tests for heart conditions*.
echocardiography	The procedure of taking an **echocardiogram**. See above.
ectopic beat	An extra heartbeat.
electro-cardiogram	See **ECG** above.

electro-physiological testing	A technique for detecting and analysing abnormal heart rhythms. For more information, see our booklet *Tests for heart conditions*.
embolus	A clot of blood which starts in one part of the body, breaks off into the circulation and ends up lodged somewhere else.
emphysema	A condition causing permanent destruction of part of the lungs.
endocarditis	An infection of the inner lining of the heart, usually affecting the valves.
endocarditis card	A warning card, available from the BHF, letting dentists and doctors know that you may need antibiotics before treatment takes place. There are two types of card – one for those who are able to take penicillin, and one for those who are allergic to it.
enzymes	Proteins that help stimulate chemical reactions in your body.
epicardial implantation (of a pacemaker)	When the electrode lead of a pacemaker device is attached directly onto the outer surface of the heart (the epicardium).

epicardium	The outer surface of your heart.
exercise ECG or **exercise electro-cardiogram**	When the rhythm and electrical activity of your heart are recorded while you are pedalling an exercise bicycle or walking on a treadmill. See also **ECG** on page 25.
familial hyper-cholesterolaemia	An inherited condition in which the blood cholesterol level is very high.
fibrates	A drug used to reduce cholesterol and triglyceride levels in the blood.
fibrillation	See **ventricular fibrillation** on page 50 and **atrial fibrillation** on page 15.
fibrin	A protein formed by clotting factors in the blood. It acts as part of the clotting process.
gastro-intestinal	To do with the stomach or intestine.
generic name	The official name (for example of a drug).
genetic	Relating to genes or heredity – the characteristics that parents pass on to their children through their genes.

glyceryl trinitrate	See **GTN** below.
GP	General practitioner, or family doctor.
GTN	Stands for 'glyceryl trinitrate'. A drug used as a spray or tablet under the tongue to relieve, or to help prevent, angina attacks. It can also be given as an infusion (through a vein) in hospital.
HDL	Stands for 'high-density lipoprotein'. This is the 'protective' cholesterol. High-density lipoproteins return excess cholesterol to the liver.
heart attack	When one of the coronary arteries becomes blocked by a blood clot and part of the heart muscle is starved of oxygen, causing damage to the heart. For more information on heart attacks, see our booklet *Heart attack*.
heart block	When the electrical impulses of the heart are slowed down or delayed by an interruption in the heart's normal electrical activity.

heart failure	When the pumping action of the heart is inadequate. For more on this, see our booklet *Living with heart failure*.
heart-lung machine	Blood is diverted through this machine during heart surgery, to keep the brain and other organs working while the heart is being operated on.
heart rate	The number of heartbeats each minute.
heart sounds	The normal sounds of the heart, heard through a stethoscope. The sounds are made by the heart valves opening and closing.
heart support group	A group which can offer heart patients and their families the chance to meet and talk to people who have gone through similar experiences. Some groups hold exercise classes. To find out if there is a heart support group near you, contact Cardiac Care at the British Heart Foundation on 020 7487 7110.

hereditary	Passed on from one generation to another.
high blood pressure	See **blood pressure** on page 16. High blood pressure happens if the smaller blood vessels in the body become narrow and cause the pressure to build up. High blood pressure is also known as **hypertension**.
high-density lipoprotein	See **HDL** on page 28.
Holter monitoring	A 24-hour recording of an ECG (electrocardiogram). See **24-hour ECG** on page 25.
homograft	A graft of tissue – for example, a heart valve – taken from one body and put into another of the same species.
HRT	Hormone replacement therapy.
hyper-cholesterolaemia or **hyperlipidaemia**	When there is too much cholesterol in the blood.
hypertension	**High blood pressure**. See above.

ICD	Stands for 'implantable cardioverter defibrillator'. A device which is implanted within the chest wall. It monitors the heart rhythm, senses if there is a severe disturbance in heart rhythm and if necessary delivers an electrical impulse or an electrical shock, to stop the abnormal rhythm. For more information, see our booklet *Implantable cardioverter defibrillators (ICDs)*.
ICU	Intensive care unit.
immune system	The cells and proteins in the blood and tissues that help protect your body against attack from bacteria and viruses.
immuno-suppressant drugs	Drugs which suppress the body's immune system.
implantable cardioverter defibrillator	See **ICD** above.

implantable loop recorder	A recording device used for finding out about the cause of infrequent symptoms such as dizzy spells or blackouts. It is implanted just under the skin on the chest. It continuously monitors the heartbeat for up to 14 months, and can record any abnormal events that it is programmed to detect.
incision	A surgical cut.
incompetence	See **valve incompetence** on page 49.
intermittent claudication	A cramp-like pain mostly in the calf and leg muscles, brought on by walking and relieved by rest.
intramuscular	Into a muscle.
intravascular ultrasound	A technique for taking ultrasound pictures of the wall of an artery from inside the artery itself. For more on this, see our booklet *Tests for heart conditions*.
intravenous	Into a vein.
introducer sheath	The device through which a catheter is inserted into an artery.

ischaemia	When not enough blood is being supplied to the tissues or muscle. Cardiac ischaemia causes the pain known as **angina** (see page 10).
ischaemic heart disease	When not enough blood is flowing through the coronary arteries to the heart.
isometric exercise	Exercises in which muscle tension is produced without moving a joint. Examples include pushing against a wall or stationary object with straight arms, or holding dumb-bells still at shoulder height.
isosorbide dinitrate or **isosorbide mononitrate**	Forms of nitrate (a drug) used to help prevent angina attacks.
ITU	Intensive therapy unit.
LDL	Stands for 'low-density lipoprotein'. This is the more 'harmful' cholesterol. Low-density lipoproteins (LDL) carry cholesterol from your liver to the cells of your body.

left heart failure	Heart failure caused by an inefficient pumping action of the left side of the heart.
left ventricular hypertrophy	When the heart muscle of the left ventricle becomes thickened.
lipid-lowering drug	A drug to lower the level of cholesterol or triglycerides in the blood.
lipids	Fatty material in the blood, including HDL cholesterol, LDL cholesterol and triglycerides.
lipoproteins	Combinations of cholesterol and proteins made in the body. The two common types are **LDL** and **HDL**. See pages 33 and 28.
low blood pressure	When the blood pressure is below about 90/60.
low-density lipoprotein	See **LDL** on page 33.
magnetic resonance angiogram	See **MRA** on page 36.
magnetic resonance imaging	See **MRI** on page 36.

mechanical valve	An artificial, manufactured valve.
MIDCAB	Stands for 'minimally invasive direct access coronary artery bypass' surgery. This is surgery on the coronary arteries carried out while the heart is beating (instead of using a heart-lung machine).
minimally invasive surgery	Surgery which is carried out using a smaller wound than usual.
mitral valve	The valve which regulates the flow of blood from your left atrium to your left ventricle. See the illustration on page 6.
mitral valve prolapse	When a mitral valve bulges backwards into the left upper chamber (atrium) of the heart. See the illustration on page 6.
mitral valve stenosis	Obstruction of the mitral valve caused by narrowing or thickening of the valve.
mitral valvuloplasty	A procedure to stretch a narrowed mitral valve.
mmHg	Millimetres of mercury. Unit used for measuring blood pressure.

mmol/l	Millimols per litre. Unit used for measuring the level of various substances in the blood, such as cholesterol or potassium.
24-hour monitoring (of blood pressure)	When blood pressure measurements are recorded at pre-set intervals over a 24-hour period. For more on this, see our booklet *Tests for heart conditions*.
mono-unsaturated fat	A type of fat found in foods such as olive oil, rapeseed oil and avocado, and in some margarines and spreads.
MRA	Stands for 'magnetic resonance angiogram'. A type of angiogram which provides pictures of the arteries, using a magnetic field and radio impulses.
MRI	Stands for 'magnetic resonance imaging'. A technique which produces detailed pictures of internal organs of the body. You cannot have this test if you have a pacemaker, an implantable cardiac defibrillator, a cardiac stent or a mechanical valve. For more information, see our booklet *Tests for heart conditions*.

multi-slice CT scan	A type of X-ray that looks at the arteries in very small cross-sections, to assess how much atherosclerosis there is. (See **atherosclerosis** on page 14.) A contrast medium is used (see page 21). For more information on this type of scan, see our booklet *Tests for heart conditions*.
murmur	An unusual sound from the heart, heard while listening with a stethoscope. It is different from the normal sound of the heart.
myocardial infarction	A heart attack.
myocardial perfusion scan	A test to assess the level of function of the heart muscle. It also assesses the blood flow to the heart. For more on this test, see our booklet *Tests for heart conditions*.
myocardium	The heart muscle.
negative exercise ECG	A negative exercise ECG (electrocardiogram) is when there are no unusual or obvious changes on the ECG while you are exercising.

nicotine	A chemical found in tobacco smoke.
nicotine-replacement products	Aids to help you stop smoking, which contain nicotine. They include patches, gum, nasal spray and inhalator.
nitrate	A drug used to relieve angina.
non-nicotine replacement products	Aids to help you stop smoking, which do not contain nicotine.
NRT	Stands for 'nicotine-replacement therapy'. See **nicotine-replacement products** above.
obesity	Being very overweight, or carrying too much body fat.
oedema	Swelling caused by fluid.
omega-3	A type of fatty acid found in fish oils. It is found in oily fish such as herring, mackerel, pilchards, sardines, salmon, trout and fresh tuna.
osteoporosis	Thinning of the bones.
pacemaker	A device which is implanted in the chest, to stimulate contractions of the heart. For more information, see our booklet *Pacemakers*.

pacemaker registration card	A card which has details of the make and model of your pacemaker.
PAD	See **peripheral arterial disease** on page 40.
palpitation	When you become aware of your heartbeat, for example when it feels as if it is beating abnormally fast or slowly, or irregularly or heavily. For more information, see our booklet *Palpitation*.
paroxysmal	Intermittent. Stops for a while and then starts again.
passive smoking	When someone inhales another person's smoke.
patient-held record	A booklet, card or folder which you can use to keep a record of any visits made to the hospital, GP or practice nurse, and the results of tests. You can also record your progress. For information about the patient-held record produced by the BHF, see *My progress record* on page 53.

peripheral arterial disease	Disease of the arteries that supply the blood to the limbs. For more on this, see our booklet *Peripheral arterial disease*.
PET scan	A test used for investigating coronary heart disease. PET stands for 'positron emission tomography'. The test allows doctors to examine the flow of blood and see how the heart muscle is working. For more on this, see our booklet *Tests for heart conditions*.
physiotherapist	A specialist who teaches breathing and coughing techniques, and encourages people to get moving again safely, for example after an operation.
platelets	Small blood cells which are essential for clotting.
pneumothorax	When the air leaks from the lungs into the chest cavity.
polyunsaturated fat	A type of fat found in foods which come from plants and fish – such as cornflower oil, sunflower oil, fish oil, and some margarines and spreads.

positive exercise ECG	A positive exercise ECG (electrocardiogram) is when significant changes are seen on the ECG when the patient is exercising.
post-operative	After an operation.
pre-admission clinic	A clinic where you can meet the hospital staff, and where all the medical tests and investigations that need to be done before an operation are carried out.
pre-eclamptic toxaemia	A condition of pregnancy that includes high blood pressure.
pre-med or **pre-medication**	Drugs to make you sleepy before you are given an anaesthetic for an operation.
pre-operative	Before an operation.
prognosis	Outlook. Forecast of the course of a disease.
prophylaxis	Prevention.
proprietary name	Trade name (for example of a drug).
pseudoaneurysm	A balloon-like swelling in the wall of an artery or wall of the heart.

PTCA	Stands for 'percutaneous transluminal coronary angioplasty'. This is another name for coronary angioplasty. See **angioplasty with stenting** on page 11.
pulmonary	To do with the lungs.
pulmonary artery	The artery that carries blood from the heart to your lungs. See the illustration on page 6.
pulmonary valve	The valve which regulates the flow of blood from your right ventricle to your pulmonary artery. See the illustration on page 6.
pulse generator	The part of a pacemaker that contains the electrical circuitry and the battery.
Purkinje system	The fibres in the heart which act like 'wires' to send electrical impulses through the lower chambers or ventricles of the heart.
radionuclide test	A test which provides information about the blood flow to the heart and heart muscle. For more on this, see our booklet *Tests for heart conditions*.

regurgitation	When a valve does not close properly, allowing blood to leak backwards.
rehabilitation and **rehabilitation programme**	A way of helping a person to regain his or her independence. See also **cardiac rehabilitation** and **cardiac rehabilitation programme** on page 19.
resuscitation	Actions to restore the breathing or circulation, or both.
revascularisation	Any procedure that restores blood flow to a part of the body.
right heart failure	Inefficient pumping action of the right side of the heart.
risk factor for coronary heart disease	Something that can increase the risk of getting coronary heart disease.
saturated fat	A type of fat found mainly in food from animal sources – particularly dairy and meat products.
sick sinus syndrome	A condition affecting the heart's natural pacemaker. It changes the normal rhythm of the heart.

single chamber pacemaker	A pacemaker with one electrical lead, either to the right ventricle or right atrium of the heart.
sino-atrial node	See **sinus node** below.
sinus bradycardia	A regular but slow heart rhythm – usually less than 60 beats a minute.
sinus node	Also known as the heart's natural pacemaker. This is a group of cells in the right atrium of the heart which produces the electrical impulses that control the heart's pumping action.
sinus tachycardia	A regular but fast heart rhythm – usually more than 100 beats a minute.
sodium	A chemical element found in salt. It can contribute to high blood pressure.
spasm	An action in the wall of a blood vessel that causes it to narrow and reduce the blood supply to the muscle it is supplying. If the spasm happens in the coronary arteries, it can lead to pain such as angina.
sphygmo-manometer	An instrument used to measure blood pressure.

stable angina	Angina that comes on with a particular amount of exercise and is well controlled with drugs.
statin	A drug used to reduce cholesterol levels.
stenosis	An abnormal narrowing of a blood vessel or valve, causing obstruction to the normal blood flow.
stent	A short tube of expandable mesh which is inserted at the part of the artery which is to be widened by coronary angioplasty. The stent helps to support the artery wall. See also **angioplasty with stenting** on page 11, and **drug-eluting stent** on page 24.
streptokinase	A drug used to help dissolve a blood clot which is blocking an artery.
stress echo-cardiography	When an **echocardiogram** (see page 25) is done after the heart has been put under stress – either with exercise or with a drug. For more on this, see our booklet *Tests for heart conditions*.

stroke	Damage to the brain caused by a lack of blood supply to the brain. The blood supply to the brain can be interrupted either by atheroma (see page 14), or by a blood clot or a blood vessel bursting.
sublingual	Under the tongue.
supraventricular tachycardia	A disturbance of heart rhythm caused by rapid electrical activity in the upper chambers of the heart.
suture	A surgical stitch.
systolic blood pressure	When measuring blood pressure, systolic blood pressure is the highest pressure, which occurs when the beat or contraction of your heart forces the blood around the circulation.
tachycardia	A fast heart rate – usually greater than 100 beats a minute.
technetium	A type of radioactive substance used in radionuclide tests to study the size and pumping activity of the heart chambers. See **radionuclide test** on page 42.

thallium	A type of radioactive substance used in radionuclide tests to study the blood flow to the heart muscle. See **radionuclide test** on page 42.
thrombolysis	Drug treatment to help dissolve a blood clot that is blocking an artery.
thrombolytic drug	A drug used to dissolve a clot blocking an artery.
thrombosis	When a blood clot forms in the blood vessels or heart.
thrombus	A blood clot.
tissue valve	Valve from an animal or human. Sometimes used to replace a diseased or damaged heart valve.
trans-oesophageal	Through the oesophagus (gullet).
trans-oesophageal echo-cardiography	A procedure which involves taking detailed pictures of the heart from the gullet (oesophagus) which lies behind the heart. For more on this, see our booklet *Tests for heart conditions*.

transplant (heart transplant)	An operation to replace the entire heart with one from someone else. For more on this, see our booklet *Heart transplantation*.
transvenous	Through a vein.
tricuspid valve	The valve which regulates the flow of blood from the right atrium to the right ventricle. See the illustration on page 6.
triglycerides	A fatty material found in the blood.
troponin test	A blood test to measure the level of a protein called troponin which is released into the bloodstream after a heart attack.
unit of alcohol	The amount of alcohol in a half pint of ordinary beer, or a small glass of wine, or a pub measure of spirits.
unsaturated fat	A type of fat found mainly in foods from plant and fish sources. Unsaturated fats include **polyunsaturated fats** (see page 40) and **monounsaturated fats** (see page 36).

unstable angina	Angina which has just developed for the first time, or which was previously stable but has recently got worse or changed in pattern. For example, it can come on even when the person is resting.
valve	A device to make sure that fluid flows in one direction only.
valve disease	See **valvular heart disease** below.
valve incompetence	When a valve does not close properly, allowing blood to leak backwards.
valve stenosis	Narrowing of the valve.
valvular heart disease	When one or more of the four valves in the heart are diseased or damaged, affecting the flow of blood in the heart. For more on this, see our booklet *Valvular heart disease*.
varicose veins	Veins that have become stretched and dilated (widened).
vascular	To do with the blood vessels.
vein	A vessel carrying blood back from various parts of the body to the heart.

ventilator	An artificial breathing machine.
ventricles	The two main pumping chambers of the heart. See the illustration on page 6.
ventricular fibrillation	A life-threatening disturbance in the heart rhythm which causes the heart to quiver or 'fibrillate' in a disordered way.
ventricular tachycardia	A condition where there is a fast heart rate in the ventricles (the two larger chambers of the heart).
waist circumference	The measurement around your waist. This measurement can be used to assess your risk of developing heart disease.
waist-hip ratio	A calculation, based on your waist and hip measurements, used to find out if you are a healthy weight.
warfarin	A type of anticoagulant drug, used to reduce the risk of blood clots forming.
xenograft	A graft using animal tissue.

For more information

British Heart Foundation website

bhf.org.uk

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

Booklets

To order any of our booklets:

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

You can also download many of our publications from our website.

For information on other BHF booklets, and on videos and DVDs, ask for a copy of the *Heart health catalogue*.

Our booklets are free of charge, but we would welcome a donation. (See page 2 for how to make a donation.)

Heart Information Series

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

1 Physical activity and your heart
2 Smoking and your heart
3 Reducing your blood cholesterol
4 Blood pressure
5 Eating for your heart
6 Angina
7 Heart attack
8 Living with heart failure
9 Tests for heart conditions
10 Coronary angioplasty and coronary bypass surgery
11 Valvular heart disease
12 Having heart surgery
13 Heart transplantation
14 Palpitation
15 Pacemakers
16 Peripheral arterial disease
17 Medicines for the heart
18 The heart – technical terms explained
19 Implantable cardioverter defibrillators (ICDs)
20 Caring for someone with a heart condition
21 Returning to work with a heart condition
22 Diabetes and your heart
23 Cardiac rehabilitation

My progress record

This is a personal health record for people with a heart condition. You can use it to keep a record of important information, and to chart the progress you are making in tackling your risk factors for coronary heart disease. For example, you can use it to see how you are getting on with giving up smoking, reducing your blood pressure, losing weight or reducing your cholesterol. It also contains information about coronary heart disease to help you make informed decisions about your health. Your nurse or doctor may be able to order a copy for you, or you can order a copy from the British Heart Foundation (see page 51), and work through it with your health professional.

Heart health magazine

Heart health is a free magazine, produced by the British Heart Foundation especially for people with heart conditions. The magazine, which comes out four times a year, includes updates on treatment, medicines and research and looks at issues related to living with heart conditions, like healthy eating and physical activity. It also features articles on topics such as travel, insurance and benefits. To subscribe to this **free** magazine, call **0870 850 5281** or go to **bhf.org.uk/hearthealthmag**.

Emergency life-support skills

Heartstart UK

For information about a free, two-hour course in emergency life-support skills, contact Heartstart UK at the British Heart Foundation. The course teaches you to:

- recognise the warning signs of a heart attack
- help someone who is choking or bleeding
- deal with someone who is unconscious
- know what to do if someone collapses, and
- perform cardiopulmonary resuscitation (CPR) if someone has stopped breathing and his or her heart has stopped pumping.

Have your say

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

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Heart Information Line

08450 70 80 70

(A local rate number)

An information service for the public and health professionals on issues relating to heart health.

British Heart Foundation
14 Fitzhardinge Street
London W1H 6DH
Phone: 020 7935 0185
Website: bhf.org.uk

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