Heart & Stroke Glossary

A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z

A

Abdominal Aortic Aneurysm
An abdominal aortic aneurysm, also called aortic aneurysm, occurs when the large blood vessel (the aorta) that supplies blood to the abdomen, pelvis and legs becomes abnormally large or balloons outward. This type of aneurysm is most often found in men over age 60 who have at least one or more risk factor, including emphysema, family history, high blood pressure, high cholesterol, obesity and smoking.

Ablation
Ablation, or cardiac ablation, is a therapeutic method used to destroy a small section of heart tissue causing abnormal electrical activity or irregular heartbeat. Ablation is done using electrodes that help identify the site of abnormal activity, then deliver either radiofrequency energy (RF ablation) or intense cold (cryoablation) to destroy the tissue.

Abnormal Glucose Tolerance
Abnormal glucose tolerance is when the body is unable to break down, or metabolize, sugar adequately. The body uses a type of sugar called glucose for energy. People with abnormal glucose tolerance, also called impaired glucose tolerance, are considered prediabetics. They are at increased risk for developing type 2 diabetes, which is an important risk factor for heart disease and stroke.

ACE Inhibitors
ACE inhibitors, also called angiotensin-converting enzyme inhibitors, are drugs used to treat high blood pressure and heart failure. ACE inhibitors s alters the body's ability to produce angiotensin II, a hormone that causes the arteries to narrow. By blocking the making of angiotensin, these drugs help the blood vessels relax and widen, which lowers blood pressure, increases blood flow to the heart and reduces the heart's workload.

Actin
Actin is a protein that helps make up the structure of muscles in the heart. As muscle cells die during a heart attack, actin is released into the blood. A blood test to measure actin can help confirm a heart attack and determine the extent of heart damage.

Acute Coronary Syndrome
Acute coronary syndrome is an umbrella term for when blood supplied to the heart muscle is

decreased or blocked, leading to a heart attack. The common signs of acute coronary syndrome are chest pain or discomfort, which may involve pressure, tightness or fullness; pain or discomfort in one or both arms, the jaw, neck, back or stomach; shortness of breath; feeling dizzy or lightheaded; nausea; or sweating.

Adams-Stokes Disease

Adams-Stokes disease, also called Stokes-Adams disease, is a condition that leads to fainting (syncope) and sometimes convulsions. It happens when the electrical signals traveling from the upper to lower chambers of the heart are interrupted. This results in inadequate blood flow to the brain because the heart is beating too slowly (an arrhythmia called bradycardia).

Added Sugar

Added sugar doesn't contribute any nutrients to the diet and can lead to extra pounds and obesity, which hurts your heart health. Added sugar can be found in soft drinks, candy and a variety of other processed foods.

Adenosine

Adenosine is a substance produced by the body that plays a role in important biochemical processes. It causes increased blood flow to the heart muscle by relaxing the coronary arteries and other blood vessels in the body and regulates heart rhythm. Adenosine is also s a drug used to treat some types of arrhythmias (irregular heartbeats), specifically those that cause a fast heartbeat.

AED

An automated external defibrillator is a computerized medical device that can check a person's heart as well as shock it back to a normal rhythm. It can help save the life of someone who has suffered sudden cardiac arrest, the abrupt loss of heart function. The AED uses voice prompts, lights and text messages to tell the rescuer the steps to take. AEDs are very accurate and easy to use. With a few hours of training, anyone can learn to operate an AED safely.

Air Pollution and Cardiovascular Diseases

Air pollution increases the risk for heart attack, stroke, heart failure, irregular heartbeats (arrhythmias) and cardiovascular death. Once inhaled, particulate matter can cause inflammation and irritate nerves in the lungs, starting a cascade of changes that adversely affect the rest of the body, including the heart. The elderly and people with existing heart diseases may be at higher risk from short-term exposure (hours or weeks). Long-term exposure further increases cardiovascular risk and reduces life expectancy, probably by several months to a few years. The American Heart Association recommends people, particularly those at high cardiovascular risk, limit their air pollution exposure.

Alcohol and Heart Disease

Drinking large amounts of alcohol can increase the levels of some fats in the blood known as triglycerides and can lead to high blood pressure, heart failure and obesity. Excessive drinking and binge drinking can lead to stroke and sudden cardiac arrest. For those who consume alcohol, the American Heart Association recommends no more than two drinks per day for men and no more than one a day for women.

Alcohol and Stroke
Alcohol abuse can lead to multiple medical complications, including stroke. Based on research examining alcohol and stroke risk, the American Heart Association recommends no more than two drinks per day for men and no more than one drink per day for non-pregnant women.

Aldosterone
Aldosterone is a hormone produced by the adrenal glands. It regulates the balance of salt and water in the body by helping the kidneys retain sodium and excrete potassium. Aldosterone also acts on the central nervous system to increase a person's appetite for salt and to make them thirsty. These effects directly control blood pressure and the balance of fluids in the blood.

Aldosterone Antagonists
Also called aldosterone receptor blockers, aldosterone antagonists block the body's response to the hormone aldosterone, which normally causes the body to retain sodium and get rid of potassium. Aldosterone antagonists increase urination, thus reducing water and salt while retaining potassium. They help lower blood pressure, increase the heart's pumping ability and help protect the heart in heart failure.

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Alpha Adrenergic Antagonists
Alpha-adrenergic antagonists are drugs used to lower blood pressure. They work by relaxing the muscles in the walls of blood vessels. With blood vessels open and relaxed, blood flow improves and blood pressure lowers. Alpha-adrenergic antagonists also lower blood pressure and reduce stress on the heart by slowing the heart rhythm and lessening the force of the heartbeat. These drugs are also called alpha blockers, alpha-adrenergic blocking agents and alpha-adrenergic blockers.

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Ambulatory ECG
Ambulatory ECG, also called ambulatory electrocardiography, ambulatory EKG, or a Holter monitor, is a battery-operated, portable device that measures and tape-records the heart's electrical activity (ECG) continuously, usually for a period of 24 to 48 hours so that any irregular heart activity can be correlated with a person's activity. The device uses electrodes or small conducting patches placed on the chest and attached to a small recording monitor that is carried in a pocket or in a small pouch worn around the neck.

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Ambulatory Electrocardiography
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Amiodarone
Amiodarone is a drug used to slow the heart rate and help keep it in a regular rhythm. It is used to treat fast or other irregular heartbeats, called arrhythmias, including atrial fibrillation, ventricular tachycardia and ventricular fibrillation. Amiodarone belongs to a class of drugs called antiarrhythmics. Side effects are usually dose-related and regular follow-up is necessary to evaluate kidney, liver and lung function.

Aneurysm
An aneurysm is an abnormal weakening or ballooning-out of a vessel wall of an artery. Weakening of the blood vessel wall may be due to disease, injury or an abnormality present at birth. Some common locations for aneurysms include the aorta (the major artery leading away from the heart), the brain (called a cerebral aneurysm), leg, intestine and splenic artery (which supplies blood to the spleen).

Angina

Angina is chest pain or discomfort due to coronary heart disease. It occurs when the heart muscle doesn't get as much blood as it needs. This usually happens because one or more of the heart's arteries is narrowed or blocked, also called ischemia. Stable angina refers to "predictable" chest discomfort associated with exertion or stress. Unstable angina refers to unexpected chest pain and usually occurs at rest. It is typically more severe and prolonged. Unstable angina should be treated as an emergency.

Angina Inversa

Prinzmetal angina can also be called, variant angina, Prinzmetal's variant angina, angina inversa. Unlike typical angina – which is often triggered by exertion or emotional stress - Prinzmetal's angina almost always occurs when a person is at rest, usually between midnight and early morning. These attacks can be very painful. The pain from variant angina is caused by a spasm in the coronary arteries (which supply blood to the heart muscle). The spasms tend to come in cycles – appearing for a time, then going away. After six to 12 months of treatment, doctors may gradually reduce the medication.

Angina Pectoris

Also called angina, angina pectoris is the medical term for chest pain or discomfort due to coronary heart disease. Angina pectoris occurs when the heart muscle doesn't get as much blood as it needs. This usually happens because one or more of the heart's arteries is narrowed or blocked, also called ischemia. Stable angina refers to "predictable" chest discomfort associated with physical exertion or mental or emotional stress. Unstable angina refers to unexpected chest pain and usually occurs at rest. It is typically more severe and prolonged. Unstable angina should be treated as an emergency.

Angiogenesis

Angiogenesis is the creation of new blood vessels. The body creates small blood vessels called "collaterals" to help compensate for reduced blood flow.

Angioplasty

Angioplasty, also known as percutaneous intervention, is a procedure in which a thin tube called a catheter is threaded into the heart with a deflated balloon at the tip. The balloon is then inflated to open spots where blood flow has been reduced or blocked. While doing an angioplasty, doctors may also implant a mesh tube called a stent to help prop open the artery, reducing the chance of another blockage. Another type of angioplasty is a laser angioplasty; instead of a balloon, the catheter carries a laser tip that sends pulsating beams of light to clear blockages.

Angiotensin

Angiotensin is a hormone produced by the body that causes the blood vessels to narrow. Angiotensin acts as a vasoconstrictor, causing the smooth muscle cells within the blood vessels to constrict, thereby causing the blood pressure to go up.

Angiotensin Converting Enzyme Inhibitors

Angiotensin-converting enzyme inhibitors, also called ACE inhibitors, are drugs used to treat high blood pressure and heart failure. ACE inhibitors s alters the body's ability to produce angiotensin II, a hormone that causes the arteries to narrow. By blocking the making of angiotensin, these drugs help the blood vessels relax and widen, which lowers blood pressure, increases blood flow to the heart and reduces the heart's workload.

Angiotensin II Receptor Blockers

Angiotensin II receptor blockers, also known as ARB blockers or angiotensin 2 receptor blockers, are drugs used to treat high blood pressure and heart failure. They do not interfere with the body's production of angiotensin. Instead, they block the effects of angiotensin, preventing the hormone from narrowing the blood vessels. By relaxing the coronary arteries, blood flow to the heart increases, blood pressure goes down and the heart's workload is reduced. Angiotensin II receptor blockers are often used in patients who cannot tolerate a common type of drugs known as ACE inhibitors.

Ankle Brachial Index Test

The ankle-brachial index test is a painless exam that compares the blood pressure in the feet to the blood pressure in the arms to determine how well blood is flowing. This test is used to diagnose peripheral artery disease, or PAD, a condition that most often affects blood flow to the legs. The ankle-brachial index test takes only a few minutes and can be performed by a healthcare professional as part of a routine exam.

Antiarrhythmic Medication

Antiarrhythmic medication helps control and slow the heart rate. Antiarrhythmics work by either slowing the activity of tissue that is initiating electrical impulses too quickly in the heart's natural pacemaker or by slowing the transmission of fast electrical impulses that cause the heart to beat. Antiarrhythmics include several classes of drugs, such as sodium channel blockers, beta-blockers, potassium channel blockers and calcium channel blockers. Other medications used to control heart rate include adenosine and digitalis (also called digoxin and digitoxin). The type of arrhythmia you have determines which medication is prescribed.

Antibiotic Prophylaxis

Antibiotic prophylaxis refers to the use of antibiotics before certain dental and medical procedures to prevent endocarditis, an infection caused by bacteria that enters the bloodstream and settles in the heart lining, a heart valve or a blood vessel. The American Heart Association recommends antibiotic prophylaxis only for patients at the highest risk for endocarditis.

Anticoagulants

Anticoagulants are drugs that decrease the ability of the blood to clot, or coagulate. Also called blood thinners, they are used to treat certain blood vessel, and heart and lung conditions. They are also given to some people at high risk for blood clots, including those with atrial fibrillation or artificial heart valves. Anticoagulants do not dissolve clots but may prevent existing clots from becoming larger and causing more serious problems. They are often prescribed to prevent first or recurrent heart attack or stroke. Common anticoagulant drugs are heparin and warfarin.

Antihypertensive Drugs
Antihypertensive drugs are commonly prescribed to help lower blood pressure in conjunction with a heart-healthy diet and regular physical activity. Blood pressure-lowering drugs include diuretics, angiotensin-converting enzyme (ACE) inhibitors, angiotensin II receptor blockers, vasodilators, alpha blockers, beta-blockers, calcium channel blockers and central agonists. Many patients may require more than one drug to control high blood pressure. Some drugs used in hypertensive people may also be prescribed for heart failure and arrhythmia patients.

Antioxidants
Antioxidants are natural substances found vitamins and minerals that are believed to help prevent disease by fighting free radicals, which are substances that can harm the body. Examples of free radicals are environmental contaminants such as cigarette smoke. Without adequate amounts of antioxidants, these free radicals can damage cells which can lead to the development of heart disease.

Antiplatelet Agents
Antiplatelet agents are drugs used to prevent blood platelets from sticking together and forming blood clots. The drugs prevent clotting in patients who have had a heart attack, unstable angina, ischemic stroke, transient ischemic attack (also known as a warning stroke) or other form of cardiovascular disease. Common antiplatelet agents include aspirin, ticlopidine and clopidogrel.

Aorta
The aorta is a large artery that receives blood from the heart's left ventricle and distributes it to the body.

Aortic Aneurysm
An aortic aneurysm, also called abdominal aortic aneurysm, occurs when the large blood vessel (the aorta) that supplies blood to the abdomen, pelvis and legs becomes abnormally large or balloons outward. This type of aneurysm is most often found in men over age 60 who have at least one or more risk factor, including emphysema, family history, high blood pressure, high cholesterol, obesity and smoking.

Aortic Dissection
Aortic dissection is a life-threatening condition that occurs when blood leaks from the aorta, the major artery that carries blood from the heart to the body. The leak is often caused by a tear in the inside wall of the aorta. The most common symptom of aortic dissection is sudden and severe chest pain or upper back pain.

Aortic Regurgitation
Also called aortic valve regurgitation, aortic regurgitation is a condition in which the aortic valve does not close properly between each heartbeat. This causes some of the blood that was being pumped out of the heart to leak back into the heart. It typically takes a prolonged period of time for a person to develop symptoms, which may include fatigue and shortness of breath.

Aortic Valve
The aortic valve is located between the heart chamber known as the left ventricle and the aorta, a large artery. The valve has three flaps, or cusps.

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Aortic Valve Stenosis
Aortic stenosis, also known as aortic valve stenosis, occurs when the aortic valve inside the heart develops a narrow opening that impedes blood flow to the entire body. Symptoms of aortic stenosis can include shortness of breath and fainting.

Aphasia
Aphasia is the total or partial loss of the ability to use words. It may be caused by brain injury or disease, but most often it’s caused by a stroke that injures the brain's language center. Sometimes recovery is quick and complete after a stroke, but in other cases there may be permanent speech and language problems.

ARB
Angiotensin II receptor blockers, also known as ARB blockers or angiotensin 2 receptor blockers, are drugs used to treat high blood pressure and heart failure. They do not interfere with the body's production of angiotensin. Instead, they block the effects of angiotensin, preventing the hormone from narrowing the blood vessels. By relaxing the coronary arteries, blood flow to the heart increases, blood pressure goes down and the heart's workload is reduced. Angiotensin II receptor blockers are often used in patients who cannot tolerate a common type of drugs known as ACE inhibitors.

Arrhythmia
An arrhythmia is an abnormal heart rhythm that, when severe or long-lasting, can prevent the heart from pumping enough blood to the body. Damage to the heart muscle from a heart attack can make someone prone to arrhythmias, as can some congenital heart conditions. A variety of minerals, such as potassium, magnesium and calcium, with high or low concentrations in the blood and tissue can cause arrhythmias. So can alcohol, cigarettes and recreational drugs.

Arterial Switch Operation
An arterial switch operation is an open-heart procedure. It is used to correct many forms of transposition of the great arteries, a congenital heart defect in which the aorta and the pulmonary artery are reversed. The surgery switches the two arteries back to their normal positions so the aorta is connected to the left ventricle and the pulmonary artery is connected to the right ventricle. The coronary arteries that carry oxygen-rich blood to nourish the heart muscle also must be re-attached to the new aorta.

Arteriography
Arteriography is a test in which a dye visible to X-rays is injected into the bloodstream. X-ray pictures then are studied to see if the arteries are damaged, narrowed or blocked. Arteriography is done during cardiac catheterization. It's also known as angiocardiography, angiogram and angiography.

Arterioles
Arterioles are small, muscular branches of arteries. When they contract, they increase resistance to blood flow, and blood pressure in the arteries goes up.

Arteriosclerosis
Commonly called hardening of the arteries, arteriosclerosis includes a variety of conditions that cause artery walls to thicken and lose elasticity. It can occur because of fatty deposits on the inner lining of arteries, calcification of the wall of the arteries or thickening of the muscular wall of the arteries from chronically elevated blood pressure. It is also associated with aging.

Artery
An artery is one of a series of vessels that carry oxygenated blood from the heart to the various parts of the body. The thick elastic walls expand as blood flows through the arteries.

Artificial Heart
An artificial heart is a prosthetic, experimental device implanted into the body to replace the original biological heart.

Aspirin and Heart Disease
Aspirin can help prevent blood clots from forming and is often used to prevent recurrent heart attacks and strokes. The American Heart Association recommends that people at high risk of heart attack take a daily low dose of aspirin, as instructed by their healthcare provider. Heart attack survivors often take a regular low dose of aspirin. Taking an aspirin can also help when a heart attack is in progress, greatly improving chances of survival.

Asymmetric Septal Hypertrophy
Also called hypertrophic cardiomyopathy, asymmetric septal hypertrophy is a condition that occurs when heart muscles cells enlarge, causing the walls of the lower heart chambers (typically the left ventricle) to become thick and stiff. This makes it difficult for the heart to relax and for a sufficient amount of blood to fill the heart chambers. While the heart squeezes normally, the limited filling prevents the heart from pumping enough blood, especially during physical activity. Children with asymmetric septal hypertrophy are not allowed to play competitive sports because of the possibility of a sudden collapse or increased heart failure.

Asystole
Asystole is a life-threatening heart rhythm characterized by an absence of electrical activity. Because there is no electrical activity, there is no heartbeat. This condition can lead to death if it's not treated and reversed immediately.

Atherectomy
An atherectomy is a procedure to remove plaque from arteries. An ultra-thin wire is threaded through a special catheter into the blocked artery. Several devices may then be used: a high-speed rotating "burr" that grinds the plaque into tiny pieces; a small rotating cutter that "shaves off" pieces of the blockage; or a laser catheter that vaporizes the plaque.

Atherosclerosis
Atherosclerosis is a form of arteriosclerosis in which the inner layers of artery walls become thick and irregular because of deposits of fat, cholesterol and other substances. This buildup is called plaque and can cause arteries to narrow, reducing the blood flow through them. Eventually plaque can erode the wall of the artery and diminish its elasticity. Plaque deposits can rupture, causing blood clots to form at the rupture that can block blood flow or break off and travel to another part of the body. This is a common cause of heart attack or ischemic stroke.

Atria
The atria are the heart's two upper chambers that receive and pump blood into the ventricles, the lower chambers of the heart. There are two atria, one on the right side of the heart and one on the left.

Atrial Fibrillation
Atrial fibrillation is a disorder of heart rate and rhythm. Also commonly abbreviated as AF or AFib, it occurs when the heart's two small, upper chambers (atria) quiver rapidly and empty blood into the heart's lower chambers (ventricles) in a disorganized manner instead of beating effectively. Blood that isn't pumped completely out of the atria when the heart beats may pool and clot. If a piece of a clot enters the bloodstream, it may lodge in the brain causing a stroke. Causes of atrial fibrillation include dysfunction of the sinus node (the heart's pacemaking area in the right atrium), coronary artery disease, rheumatic heart disease, hypertension and hyperthyroidism.

Atrial Flutter
An atrial flutter is a very rapid beating of the heart's upper chambers, or atria. It typically is not a stable rhythm and may lead to atrial fibrillation. Atrial flutter occurs most often in people with heart diseases such as pericarditis, coronary artery disease and cardiomyopathy.

Atrioventricular Block
An atrioventricular or AV block, also called a heart block, occurs when electrical signals between the heart’s chambers are impaired or don’t transmit, disrupting the heart’s ability to beat properly.

Atrioventricular Node
The atrioventricular node, or AV node, is one of the major parts of the cardiac electrical conduction system, which controls heart rate and rhythm. This system generates electrical impulses and conducts them throughout the heart, stimulating the heart to contract and pump blood. Electrical impulses begin in the sinoatrial node and move down until reaching the AV node, a cluster of cells at the bottom of the heart’s right upper chamber. The AV node serves as a sort of electrical relay station that slows the current before the signal passes to the lower chambers.

Atrium
Atrium refers to either of the heart's two upper chambers in which blood collects before being passed to the ventricles, or the heart's lower chambers.

Automated External Defibrillator
An automated external defibrillator (AED) is a computerized medical device that can check a person's heart as well as shock it back to a normal rhythm. It can help save the life of someone who has suffered sudden cardiac arrest, the abrupt loss of heart function. The AED uses voice prompts, lights and text messages to tell the rescuer the steps to take. AEDs are very accurate and easy to use. With a few hours of training, anyone can learn to operate an AED safely.

Automated Internal Defibrillator
Also called an implantable cardioverter defibrillator, an automated internal defibrillator is a small battery-powered device that treats life-threatening irregular heartbeats (arrhythmias), including those that cause sudden cardiac arrest. The device is implanted under the skin of the chest with wires that connect to the heart. If the device detects an irregular heart rhythm, it sends electrical impulses to restore a normal rhythm.

Autonomic Failure
Autonomic failure is a condition that occurs when the autonomic nervous system fails to function properly. Because the autonomic nervous system controls blood pressure and heart rate, autonomic failure can cause a rapid drop in blood pressure when standing. It can affect people with diabetes, degenerative neurological diseases and other conditions.

AV Block
An AV or atrioventricular, also called a heart block, occurs when electrical signals between the heart's chambers are impaired or don't transmit, disrupting the heart's ability to beat properly.

B

Bacterial Endocarditis
Bacterial endocarditis is referred to as infective endocarditis. It's an infection of the heart's inner lining (endocardium) or heart valves. It can damage or destroy your heart valves.

Balloon Angioplasty
A balloon angioplasty is a medical procedure in which a balloon is used to open narrowed or blocked blood vessels of the heart, known as coronary arteries. A long, slender tube called a catheter with a deflated balloon on its tip is passed into the narrowed artery segment. Then the balloon is inflated and the narrowed segment widened. Then the balloon is deflated and the catheter is removed.

Balloon Valvuloplasty
A balloon valvuloplasty is a non-surgical procedure to treat a narrowing of the mitral valve. Long, slender tubes called catheters are placed into blood vessels in the groin and guided into the chambers of the heart. A tiny hole is created in the wall between the heart's upper two chambers to

provide an opening to access the left atrium with a special catheter that has a balloon at the tip. The catheter is positioned so the balloon tip is directly inside the narrowed valve. The balloon is inflated and deflated several times to widen the valve opening. Once the opening of the valve has been widened enough, the balloon is deflated and removed.

Beta Adrenergic Blocking Agents

Beta Adrenergic Blocking Agents, also called beta blockers, are drugs that slow the heartbeat, lessen the force with which the heart muscle contracts and reduce blood vessel contraction in the heart, brain and throughout the body. This relieves stress on the heart. They may be used to treat abnormal heart rhythms and to prevent abnormally fast heart rates or irregular rhythms. Since they reduce the demand of the heart muscle for oxygen, they may be useful in treating angina, or chest pain, which occurs when the oxygen demand of the heart exceeds the supply. Beta blockers improve survival after a heart attack and also are used to treat high blood pressure and other heart conditions.

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Bicuspid Aortic Valve

Bicuspid aortic valve is most commonly a congenital heart defect in which the aortic valve (valve between the left ventricle and the aorta) has only two flaps (cusps or leaflets) instead of the normal three. Because of this, patients with a bicuspid valve may develop a narrowed or leaking aortic valve. Narrowing or leakage do not necessarily develop in childhood, but may occur in adulthood. This sometimes requires surgical repair.

Birth Control Pills

Medical researchers have found that some oral contraceptives, such as birth control pills, increase blood pressure in some women. It’s more likely to occur if you’re overweight, have had high blood pressure during pregnancy, have a family history of high blood pressure or have mild kidney disease. The combination of birth control pills and cigarette smoking may be especially dangerous for some women. Before you begin taking oral contraceptives, talk to your healthcare provider about the risks.

Biventricular Pacing

Biventricular pacing, or cardiac resynchronization, is a treatment for heart failure that uses a pacemaker implanted in the chest. The pacemaker sends tiny electrical impulses to the heart muscle to coordinate the pumping of the chambers of the heart, improving pumping efficiency and reducing the symptoms of heart failure.

Blood Clot
A blood clot is a jelly-like mass of blood tissue formed by coagulating factors in the blood. Clots are a normal reaction to stop the bleeding if a blood vessel is injured. Blood clots can also form when plaque deposits in the blood vessel walls rupture. Clots can become dangerous if they get into the bloodstream, because they can block the flow of blood to the heart or brain and cause a heart attack or stroke. A blood clot in an artery is called an arterial thrombosis. A blood clot in the vein is called a venous thrombosis.

Blood Glucose
Blood glucose, also called blood sugar, is one of the simplest forms of sugar. It is the main sugar found in the blood and the body's main source of energy.

Blood Pressure
Blood pressure is the force of the blood against the walls of the arteries. It is measured by a ratio of two numbers:

- Systolic – registered during a heartbeat (when the heart muscle contracts)
- Diastolic – registered between heartbeats (when the heart rests and refills with blood)

Blood pressure is measured in a numerical reading of millimeter of mercury, abbreviated as mm Hg. Optimal blood pressure is less than 120/80 mm Hg. In general, the lower your blood pressure is, the better.

- 120–139 / 80–89 is considered prehypertension
- 140/90 or higher is hypertension, or high blood pressure. This puts a person at a greater risk for heart attack, angina, stroke, kidney failure and peripheral artery disease.

Blood Pressure Monitor
A blood pressure monitor, also called a sphygmomanometer, is an instrument used to measure blood pressure.

Blood Sugar
Blood sugar, also called blood glucose, is one of the simplest forms of sugar. It is the main sugar found in the blood and the body's main source of energy.

Blood Test for Heart Attack
A heart attack blood test can confirm or refute suspicions that a person has suffered a heart attack. These tests can detect abnormal levels of certain enzymes released into the bloodstream when heart muscle cells die.

Blood Thinner
Also called anticoagulants, blood thinners are drugs that decrease the ability of the blood to clot, or coagulate. They are used to treat certain blood vessel and heart and lung conditions. They are also given to some people at high risk for blood clots, including those with atrial fibrillation or artificial heart valves. Blood thinners do not dissolve clots but may prevent existing clots from becoming larger and causing more serious problems. They are often prescribed to prevent first or recurrent heart attack or stroke. Common anticoagulant drugs are heparin and warfarin.

Blood Vessel Dilators
Blood vessel dilators, also called vasodilators, are drugs that cause the blood vessels (especially the arterioles) to expand in an effort to lower blood pressure and reduce the work of the heart in pumping blood. ACE inhibitors and nitroglycerine are examples of vasodilators.

Blood Vessels
Blood vessels are tubes that carry blood from the heart and lungs to every cell in the body, and back to the heart and lungs. These flexible vessels can change in diameter in response to the blood flow needs of the body by becoming larger or smaller. Arteries are blood vessels that carry blood from the heart. Veins are blood vessels that carry blood back to the heart.

BMI
BMI is short for body mass index, a numerical value of weight relative to height. BMIs are good indicators of healthy or unhealthy weights for adults, regardless of body frame size. A BMI of less than 25 indicates a healthy weight. A BMI between 25 and 29.9 is considered overweight. A BMI of 30 or higher indicates obesity. People with a BMI in the overweight or obese range are at increased risk for diabetes, high blood pressure, heart disease and stroke. Calculate your BMI using the American Heart Association's online BMI calculator.

Body Composition Tests
Body composition tests assess your body composition such as waist circumference and body mass index. Your body is made up of water, fat, protein, carbohydrate and various vitamins and minerals. If you have too much fat — especially if a lot of it is at your waist — you're at higher risk for such health problems as high blood pressure, high blood cholesterol and diabetes.

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BMI is short for body mass index, a numerical value of weight relative to height. BMIs are good indicators of healthy or unhealthy weights for adults, regardless of body frame size. A BMI of less than 25 indicates a healthy weight. A BMI between 25 and 29.9 is considered overweight. A BMI of 30 or higher indicates obesity. People with a BMI in the overweight or obese range are at increased risk for diabetes, high blood pressure, heart disease and stroke. Calculate your BMI using the American Heart Association's online BMI calculator.

Bradycardia
Bradycardia is a heart rate of less than 60 beats per minute. It can be caused by a problem with the heart's pacemaker, problems in the conduction pathways of the heart, metabolic problems such as hypothermia, or damage from heart disease. Symptoms of bradycardia can include fatigue, dizziness, lightheadedness, fainting or near-fainting spells, or, in extreme cases, cardiac arrest.

Brain Hemorrhage
A brain or cerebral hemorrhage, also called a hemorrhagic stroke, occurs when a blood vessel or an aneurysm bursts in the brain, causing bleeding inside the brain. A brain hemorrhagic can also be caused by a head injury. It is different from a subarachnoid hemorrhage, which occurs when a blood vessel on the brain's surface ruptures and bleeds into the space between the brain and the skull.

B-type Natriuretic Peptide
B-type Natriuretic Peptide, also known as BNP, is a chemical that's gaining attention as a possible marker for heart failure. Higher levels seem to correlate with worse heart failure.

Bundle Branch Block
A bundle branch block is a disorder with the heart's rhythm. Normally, the electrical impulse travels down both the right and left branches of the heart at the same speed so that both ventricles contract at the same time. A bundle branch block is when there's a block in one of the branches, so one ventricle contracts a fraction of a second slower than the other. A bundle branch block shows up as an abnormality in an electrocardiogram, but usually no treatment is required unless other symptoms are present. Your healthcare provider will want to see you regularly to be sure no other changes occur.

Bypass Surgery
Bypass surgery, also called coronary artery bypass graft, reroutes blood around clogged coronary arteries to improve the supply of blood and oxygen to the heart.

C

Caffeine and Cardiovascular Disease
Caffeine is in coffee, tea, soft drinks, chocolate and some nuts. Many studies have been done to see if there's a direct link between caffeine, coffee drinking and heart disease. The results are conflicting. This may be due to the way the studies were done and other dietary factors. However, moderate coffee drinking (12 cups per day) doesn't seem to be harmful.

Calcium Antagonists
Calcium antagonists, also called calcium channel blockers, are drugs that lower blood pressure for people with hypertension. They block the movement of calcium into the heart and blood vessel muscle cells, causing the muscles to relax. This lowers blood pressure, slows the heart rate and decreases oxygen demands of the heart. These drugs also are used to treat other heart conditions, such as chest pain (angina) and abnormal heart rhythms (arrhythmias).

Calcium Channel Blockers
Calcium channel blockers, also called calcium antagonists, are drugs that lower blood pressure for people with hypertension. They block the movement of calcium into the heart and blood vessel muscle cells, causing the muscles to relax. This lowers blood pressure, slows the heart rate and decreases oxygen demands of the heart. These drugs also are used to treat other heart conditions, such as chest pain (angina) and abnormal heart rhythms (arrhythmias).

Capillaries
Capillaries are microscopically small blood vessels between arteries and veins that distribute oxygenated blood to tissue in the body.

Carbohydrates
A carbohydrate is a nutrient in food that is converted into glucose, or sugar, to provide the cells of the body with energy. Carbohydrates include foods with naturally occurring sugars such as whole grains, beans, vegetables and fruits, as well as less healthy foods with added sugars such as cakes, soda and candy.

Cardiac
Cardiac is a medical term that refers to something pertaining to the heart.

Cardiac Ablation
Cardiac ablation, also sometimes just called ablation, is a therapeutic method used to destroy a small section of heart tissue causing abnormal electrical activity or irregular heartbeat. Ablation is done using electrodes that help identify the site of abnormal activity, then deliver either radiofrequency energy (RF ablation) or intense cold (cryoablation) to destroy the tissue.

Cardiac Amyloidosis
Amyloidosis is a group of diseases in which abnormal proteins are deposited in the body's tissues where they accumulate and replace normal tissue over time. This disease can cause the kidney, heart, liver and gastrointestinal tract or nerves to function poorly and organs to fail. Symptoms include fatigue, shortness of breath, difficulty breathing when lying down, swelling in the ankles and legs, and palpitations.

Cardiac Arrest
Cardiac arrest, also known as sudden cardiac arrest, occurs when the heart's electrical system malfunctions and the heart suddenly stops beating often without warning. While the terms "sudden cardiac arrest" and "heart attack" are often used as if they are synonyms, they aren't. Sudden cardiac arrest can occur after a heart attack, or during recovery. Heart attacks increase the risk for sudden cardiac arrest, but most heart attacks do not lead to sudden cardiac arrest. Immediate CPR can double or triple the chances of survival from sudden cardiac arrest.

Cardiac Catheterization
Cardiac catheterization is way of examining the inside of the heart to see how well it is working, identify problems and possibly open blocked arteries. A thin tube called a catheter is inserted into a blood vessel (vein or artery) and threaded into the heart and into the coronary arteries. During cardiac catheterization, doctors can perform an angioplasty and/or insert a stent, which is a tube-like device that props open a previously blocked artery. Cardiac catheterization is used in procedures such as coronary arteriography (also known as angiography) and angioplasty.

Cardiac Computed Tomography
Cardiac-computed tomography is an X-ray imaging technique that uses a computer to produce cross-sectional images. Also referred to as computerized axial tomography, or CT, CAT scan, multidetector CT or MDCT, it can be used to examine the heart and blood vessels for problems. It is also used to identify the blood vessels in the brain affected by stroke.

Cardiac Endarterectomy
Endarterectomy is the surgical removal of plaque deposits or blood clots in an artery.

Cardiac Enzymes
Cardiac enzymes are sometimes called heart damage markers because they are released into the bloodstream when heart muscle cells are damaged.

Cardiac Event Recorder
Also called an event recorder. A cardiac event recorder is a battery-powered portable device that you control to tape-record your heart's electrical activity (ECG) when you have fast or slow heartbeats, or feel dizzy or like you want to faint. It can also be used to see how you respond to medicines.

Cardiac Positron Emission Tomography
Cardiac positron emission tomography, also known as a PET scan, is a non-invasive nuclear imaging technique. It uses cross-sectional images and radioactive tracers to evaluate for adequate blood flow to the heart muscle during rest and when the body's metabolism is activated by the use of the drug dipyridamole. The scans are used to diagnose the extent of coronary artery disease in impacting adequate blood flow.

Cardiac Rehabilitation
Cardiac rehabilitation (rehab) is a professionally supervised program to help people recover from heart attacks or surgery to the heart. Cardiac rehab programs usually provide education and counseling services to help survivors increase physical fitness, reduce cardiac symptoms, improve health and reduce the risk of future heart problems.

Cardiac Resynchronization
Cardiac resynchronization, or biventricular pacing, is a treatment for heart failure that uses a pacemaker implanted in the chest. The pacemaker sends tiny electrical impulses to the heart muscle to coordinate the pumping of the chambers of the heart, improving pumping efficiency and reducing the symptoms of heart failure.

Cardiologist
A cardiologist is a doctor who diagnoses and treats heart problems.

Cardiology
Cardiology is the study of the heart and its functions in health and disease.

Cardiomyopathy
Cardiomyopathy is a serious disease in which the heart muscle becomes inflamed and weakened. It may be caused by viral infections, coronary heart disease or diseases involving other organs. Sometimes, the cause of cardiomyopathy is unknown. As the disease worsens, it can lead to heart failure, arrhythmias and heart valve problems.

Cardiomyoplasty
Cardiomyoplasty is a procedure in which skeletal muscles are taken from a patient's back or abdomen and wrapped around an ailing heart. This added muscle, aided by ongoing stimulation from a device similar to a pacemaker, may boost the heart's pumping motion.

Cardiopulmonary Bypass
Cardiopulmonary bypass is a procedure to circulate and oxygenate the blood while surgery is performed on the heart. It involves diverting blood from the heart and lungs through a heart/lung machine and returning oxygenated blood to the aorta.

Cardiopulmonary Resuscitation
CPR is an emergency lifesaving procedure performed when a person stops breathing or the heart stops beating. It can be performed as Hands-Only" CPR, with rapid compressions on the chest; or it can be performed as chest compressions and mouth-to-mouth breathing. Immediate CPR can double or triple chances of survival after sudden cardiac arrest. The American Heart Association develops CPR guidelines and techniques, and is a leader in CPR training.

Cardiovascular
Cardiovascular is a medical term that means pertaining to the heart and blood vessels. The circulatory system of the heart and blood vessels is the cardiovascular system.

Cardiovascular Disease
Cardiovascular disease is a term that refers to the entire group of heart and blood vessel diseases. Cardiovascular diseases include heart attack, arrhythmias, atrial fibrillation, and several other conditions.

Cardioversion
Cardioversion is the delivery of an electrical shock to a person’s heart to rapidly restore an abnormal heart rhythm (arrhythmia) back to normal. External cardioversion is performed with a defibrillator, either in an emergency situation or as a scheduled treatment for arrhythmia. Internal cardioversion is delivered by a device similar to a pacemaker, called an implantable cardioverter defibrillator.

Caregiver
A caregiver is a person who helps a chronically ill patient cope with an illness. Caregivers can be home healthcare workers, family members or friends. Their responsibilities may range from making sure patients take their medications properly to helping out with day-to-day activities.

Carotid Artery
A carotid artery is one type of major artery in the neck. It carries blood from the heart to the brain. The other type of major artery in the neck is the vertebral artery.

Carotid Artery Disease
Carotid artery disease, also called carotid artery stenosis, is a carotid artery narrowed by a buildup of plaque. Carotid artery disease is a type of atherosclerosis – or hardening of the arteries – is a major risk factor for stroke.

Carotid Artery Stenosis
Carotid artery stenosis, also called carotid artery disease, is a carotid artery narrowed by a buildup of plaque. Carotid artery stenosis is a type of atherosclerosis – or hardening of the arteries – is a major risk factor for stroke.

Carotid Artery Stent
A carotid artery stent is a wire mesh tube used to prop open carotid arteries that becomes narrowed – a condition that can lead to stroke. The carotid artery is a major artery that carries blood from the heart to the brain. After the stent is inserted, it stays in the artery permanently to improve blood flow.

Carotid Bruit
Carotid bruit is an abnormal sound in the neck of a person with carotid artery disease. The sound is created by blood flowing through the diseased artery.

Carotid Phonoangiography
Carotid phonoangiography is a test using a sensitive microphone placed on the neck, very close to the carotid artery. It records sounds and detects blockages, such as those caused by carotid artery disease.

CAT Scan
A CAT scan is an X-ray imaging technique that uses a computer to produce cross-sectional images. Also referred to as cardiac-computed tomography, computerized axial tomography, or CT scan, it can be used to examine the heart and blood vessels for problems. It is also used to identify the blood vessels in the brain affected by stroke.

Central Agonists
Central agonists are drugs that lower heart rate and reduce blood pressure. They work by preventing the brain from sending signals to the nervous system to speed up the heart rate and narrow the blood vessels. As a result, the heart doesn't pump as hard and blood flows more easily through blood vessels.

Central Alpha Agonists
Central alpha agonists are drugs that lower heart rate and reduce blood pressure. They work by preventing the brain from sending signals to the nervous system to speed up the heart rate and narrow the blood vessels. As a result, the heart doesn't pump as hard and blood flows more easily through blood vessels.

Cerebral
The term cerebral refers to the brain.

Cerebral Aneurysm
Cerebral aneurysms, which affect about 5 percent of the population, occur when the wall of a blood vessel in the brain becomes weakened and bulges or balloons out.

Cerebral Angiography
Cerebral angiography is a procedure to determine if there is an abnormality of any blood vessels supplying blood circulation to the brain. This test can visualize the arteries or veins of the head and the neck. It determines the part of a blood vessel that has ruptured from an aneurysm or determines the area of abnormality caused by an arteriovenous malformation, or AVM.

Cerebral Embolism
An embolism occurs when a blood clot or piece of fatty plaque breaks loose and travels through the bloodstream and becomes lodged in a blood vessel and blocks blood flow. When an embolism blocks the flow of blood to the brain, it is called a cerebral embolism, a type of stroke.

Cerebral Hemorrhage
A cerebral or brain hemorrhage, also called a hemorrhagic stroke, occurs when a blood vessel or an aneurysm bursts in the brain, causing bleeding inside the brain. A brain hemorrhagic can also be caused by a head injury. It is different from a subarachnoid hemorrhage, which occurs when a blood vessel on the brain's surface ruptures and bleeds into the space between the brain and the skull.

Cerebral Thrombosis
Cerebral thrombosis is a blood clot inside a blood vessel or artery that supplies part of the brain, blocking the flow of blood. It is a type of stroke.

Cerebrovascular
The term cerebrovascular refers to the brain and its major blood vessels.

Chain of Survival
The Chain of Survival refers to the links critical to improving the chances of survival and recovery for heart attack, stroke and other emergencies. The links are:

- Recognizing a heart attack or other emergency and activating the emergency response system, such as dialing 9-1-1
- Early CPR
- Rapid defibrillation
- Effective advanced life support
- Integrated post-cardiac arrest care

Chest Pain
Chest pain can be a warning sign of a heart attack. It can feel like uncomfortable pressure, squeezing or fullness. If you feel this kind of chest pain or other heart attack warning signs, call 9-1-1. Another type of chest pain that occurs during physical activity and subsides with rest is called stable angina. Stable angina can usually be managed with medication, but a heart attack is a medical emergency.

Childhood High Blood Pressure
Childhood high blood pressure is hypertension present in teens, children and even babies. As with adults, early diagnosis and treatment can reduce or prevent the harmful consequences. When it comes to blood pressure in children, "normal" is relative and depends on three factors: gender, age

and height. Your child's doctor can tell you what's right for your child. High blood pressure is typically managed with a heart-healthy diet, regular physical activity and weight management.

Childhood Obesity
About one in three American children is overweight or obese. Obesity in children is determined using age- and sex-specific charts to see how a youngster ranks in percentile compared with others. Childhood obesity can lead to health problems such as high blood pressure, type-2 diabetes and elevated blood cholesterol levels. Obesity in children has also been linked to earlier death in adulthood.

Cholesterol
Cholesterol is a soft, waxy substance found among the lipids (fats) in the bloodstream and in all the body's cells. There are several kinds, but the most important are low-density lipoprotein (LDL or "bad") and high-density lipoprotein (HDL or "good"). Too much LDL cholesterol can increase risk for heart disease, stroke and other cardiovascular diseases.

Cholesterol Lowering Drugs
Cholesterol-lowering drugs reduce LDL cholesterol (known as the "bad cholesterol) and increase HDL cholesterol (the "good" kind). These drugs also reduce triglycerides (a blood fat). Several drugs are used to treat cholesterol, including statins. Cholesterol-lowering drugs have been proven to reduce risks for heart disease. Due to potential side effects, patients taking most cholesterol-lowering drugs may need to have periodic liver function tests.

Cholesterol Ratio
Cholesterol ratio is obtained by dividing the high-density lipoprotein (HDL or "good") cholesterol level into the total cholesterol. For example, if a person has a total cholesterol of 200 and an HDL cholesterol level of 50, the ratio would be 4:1. The goal is to keep the ratio below 5:1. The optimum ratio is 3.5:1.

Chronic Obtrusive Pulmonary Disease
Chronic obtrusive pulmonary disease is one of the most common lung diseases. There are two main forms of COPD: chronic bronchitis, which involves a long-term cough with mucus, and emphysema, which involves destruction of the lungs over time. Most people with COPD have a combination of both conditions.

Cigarette Smoking
Cigarette smoking is the No. 1 preventable cause of death in the United States and greatly increases the risk of heart disease and stroke. Smokers are likely to have increased blood pressure and decreased ability to exercise, and are more likely to have blood clots.

Circulation
Circulation is the pumping of blood from the heart throughout the body through a system of blood vessels composed of arteries and veins.

Circulatory System
The circulatory system pertains to the heart, blood vessels and the blood's circulation.

Classes of Heart Failure
The stages of heart failure is a rating system to evaluate the development and progression of heart failure symptoms. Developed by the American Heart Association and American College of Cardiology in 2001, the system includes four stages.

- Stages A and B represent people who have not yet developed heart failure but are at high risk because of coronary artery disease, high blood pressure, diabetes or other predisposing conditions.
- Stage C includes patients with past or current symptoms of heart failure who have a condition called structural heart disease.
- Stage D includes patients who have advanced heart failure that is difficult to manage with standard treatment.

Clinical Nurse Specialist
A clinical nurse specialist is an advanced-practice nurse with special expertise in patient care, family education and staff support.

Closed Heart Surgery
Closed-heart surgery is an operation that does not involve a cardiopulmonary bypass procedure. During cardiopulmonary bypass, blood is diverted from the heart and lungs through a heart/lung machine.

Coarctation of the Aorta
Coarctation of the aorta is a congenital heart defect in which the major artery from the heart (aorta) is narrowed somewhere along its length. This obstructs blood flow to the body and increases blood pressure above the constriction.

Cold Weather and Cardiovascular Disease
People who are outdoors in cold weather should avoid sudden exertion. Shoveling snow and even walking through heavy, wet snow or snow drifts can strain your heart. People with coronary heart disease often suffer angina pectoris (chest pain or discomfort) in cold weather. Some studies suggest that harsh winter weather may increase risk of heart attack due to overexertion.

Collateral Circulation
Collateral circulation is the process in which a system of small, normally closed arteries opens up and starts to carry blood to part of the heart when a coronary artery is blocked, or to part of the brain when a cerebral artery is blocked.

Compressions
Chest compressions are used to manually pump blood through the heart of someone who has suffered sudden cardiac arrest. Compressions are part of Hands-Only CPR®, which is recommended for an adult who suddenly collapses outside the hospital. If someone collapses: (1) Call 9-1-1; and (2) Pump hard and fast in the center of the chest at the rate of at least 100 compressions per minute.

You may dramatically increase the victim's survival chances. You can sing "Stayin' Alive" to help you keep the right beat.

Computerized Axial Tomography Scan
A computerized axial tomography scan is an X-ray imaging technique that uses a computer to produce cross-sectional images. Also referred to as cardiac-computed tomography, or CT or CAT scan, it can be used to examine the heart and blood vessels for problems. It is also used to identify the blood vessels in the brain affected by stroke.

Congenital Heart Defects
A congenital heart defect simply means a heart problem that was present at birth. Symptoms can appear immediately or many years later. Congenital heart defects also commonly called congenital heart disease cause more deaths in the first year of life than any other birth defect.

Congestive Heart Failure
Also called heart failure, congestive heart failure is when the heart can't pump enough blood to the organs. The heart works, but not as well as it should. Heart failure is almost always a chronic, long-term condition. The older you are, the more common congestive heart failure becomes. Your risk also rises if you are overweight, diabetic, smoke, abuse alcohol or use cocaine. When a heart begins to fail, fluid can pool in the body; this manifests as swelling (edema), usually in the lower legs and ankles. Fluid also may collect in the lungs, causing shortness of breath.

Cooking Oils
The American Heart Association recommends cooking oils lowest in saturated fats, *trans* fats and cholesterol – such as canola oil, corn oil, olive oil, safflower oil, sesame oil, soybean oil and sunflower oil. Use them sparingly, though, because they contain 120 calories per tablespoon. Use liquid vegetable oils or nonfat cooking sprays whenever possible. Stay away from coconut oil, palm oil and palm kernel oil. Even though they are vegetable oils and have no cholesterol, they are high in saturated fats.

Coronary Angiography
Also called coronary angiogram, coronary angiography is an X-ray test to diagnose diseases of the arteries that supply blood to the heart. Coronary angiography can detect weakened blood vessel walls and narrowed or blocked vessels. X-rays are taken after a special dye has been injected into the bloodstream, making the vessels and blood flow through the vessels visible on X-rays.

Coronary Arteries
The coronary arteries are the two arteries arising from the aorta. They arch down over the top of the heart and branch out in additional arteries that provide blood to the heart muscle.

Coronary Artery Bypass Graft (CABG)
A coronary artery bypass graft is surgery that reroutes blood around clogged coronary arteries and improves the supply of blood and oxygen to the heart muscle.

Coronary Artery Bypass Surgery
Coronary artery bypass surgery, also called bypass graft, reroutes blood around clogged coronary arteries to improve the supply of blood and oxygen to the heart.

Coronary Artery Disease
Also called coronary heart disease, coronary artery disease is the most common type of heart disease. It is when plaque builds up in the heart's arteries, a condition called atherosclerosis. As plaque builds up, the arteries narrow, making it more difficult for blood to flow to the heart. If blood flow becomes reduced or blocked, angina (chest pain) or a heart attack may occur. Over time, coronary artery disease can also lead to heart failure and arrhythmias.

Coronary Artery Spasm
Coronary artery spasm is a temporary, sudden narrowing of one of the coronary arteries (the arteries that supply blood to the heart). The spasm slows or stops blood flow through the artery and starves part of the heart of oxygen-rich blood.

Coronary Care Unit
A coronary care unit is a specialized area within a medical facility that is equipped with monitoring devices and personnel who are specifically to treat heart patients.

Coronary Heart Disease
Also called coronary artery disease, coronary artery disease is the most common type of heart disease. It is when plaque builds up in the heart's arteries, a condition called atherosclerosis. As plaque builds up, the arteries narrow, making it more difficult for blood to flow to the heart. If blood flow becomes reduced or blocked, angina (chest pain) or a heart attack may occur. Over time, coronary artery disease can also lead to heart failure and arrhythmias.

Coronary Microvascular Disease (MVD)
Coronary microvascular disease (MVD) is heart disease that affects the walls and inner lining of tiny coronary artery blood vessels that branch off from the larger coronary arteries. In coronary MVD, the heart's tiny coronary artery blood vessels do not have plaque, but damage to the inner walls of the blood vessels that can lead to spasms and decrease blood flow to the heart muscle.

Coronary Occlusion
Coronary occlusion, also called coronary thrombosis, is an obstruction of a coronary artery that hinders blood flow to some part of the heart. It can cause a heart attack.

Coronary Thrombosis
Coronary thrombosis, also called coronary occlusion, is an obstruction of a coronary artery that hinders blood flow to some part of the heart. It can cause a heart attack.

CPR
CPR (cardiopulmonary resuscitation) is an emergency lifesaving procedure performed when a person stops breathing or the heart stops beating. It can be performed as Hands-Only™ CPR, with rapid compressions on the chest; or it can be performed as chest compressions and mouth-to-mouth

breathing. Immediate CPR can double or triple chances of survival after sudden cardiac arrest. The American Heart Association develops CPR guidelines and techniques, and is a leader in CPR training.

Creatinine
Creatinine is created by muscle metabolism breaking down creatine phosphate. Creatinine buildup in the blood can be a warning sign of poor kidney function and cardiovascular disease. This is because the kidneys normally filter it, and kidney problems can be a complication of heart failure. In heart failure the kidneys are less able to dispose of sodium and water, causing fluid retention in the tissues.

CRT
Cardiac resynchronization, or biventricular pacing, is a treatment for heart failure that uses a pacemaker implanted in the chest. The pacemaker sends tiny electrical impulses to the heart muscle to coordinate the pumping of the chambers of the heart, improving pumping efficiency and reducing the symptoms of heart failure.

CT Scan
A CT scan is an X-ray imaging technique that uses a computer to produce cross-sectional images. Also referred to as cardiac computed tomography, computerized axial tomography or CAT scan, it can be used to examine the heart and blood vessels for problems. It is also used to identify the blood vessels in the brain affected by stroke.

Cyanosis
Cyanosis is a bluish discoloration of the skin or mucous membranes caused by lack of oxygen in the blood. Its root is a Greek word for "blue." Cyanosis is caused when much of the blood circulating through the body is "blue," or oxygen-poor, rather than "red," or oxygen-rich.

D

DASH Diet
The DASH diet is a popular eating plan proven to lower blood pressure. Promoted by the National Heart, Lung, and Blood Institute, the DASH diet is rich in fruits, vegetables, whole grains, fish, poultry, beans, seeds and nuts. It includes fat-free or low-fat milk and milk products, and is low in saturated fat, cholesterol, sodium, sweets and red meats.

Defibrillation
Defibrillation involves the use of an electrical device to give an electric shock and help restore a normal heartbeat. It is used in cardiac arrest and for dangerous arrhythmias, or abnormal rhythms.

Defibrillator
A defibrillator is a device that delivers electric shock to the heart when it has an abnormal rhythm (arrhythmia). External defibrillators include pads placed on the chest to deliver electric shock. Internal defibrillators (implantable cardioverter defibrillators, or ICDs) look similar to a pacemaker; they

continuously monitor the heart rhythm to detect overly rapid arrhythmias such as ventricular tachycardia or ventricular fibrillation. The ICD corrects the heart rhythm by delivering precisely calibrated and timed electrical shocks to restore a normal heartbeat when one of these dangerous arrhythmias has occurred.

Diabetes
Diabetes is a condition that causes blood sugar to rise to dangerous levels. There are two main types of diabetes: type 1 and type 2. Both may be inherited, so a family history of diabetes can significantly increase a person's risk of developing the condition. If left untreated, diabetes can lead to blindness, kidney disease, nerve damage, heart disease and stroke.

Diabetes Educator
A diabetes educator is a healthcare provider who specializes in providing care and education to people with diabetes.

Diabetic Ketoacidosis
Diabetic ketoacidosis is an emergency condition in which extremely high glucose levels and a severe lack of insulin result in the breakdown of body fat for energy and an accumulation of ketones in the blood and urine. Symptoms of diabetic ketoacidosis are nausea and vomiting, stomach pain, fruity breath odor and rapid breathing. If untreated, diabetic ketoacidosis can lead to coma and death.

Diastolic Blood Pressure
Diastolic blood pressure measures the lowest blood pressure in the arteries. The lowest blood pressure occurs when the heart muscle relaxes between beats. In a typical blood pressure reading, such as 120/78, the lower number is diastolic blood pressure and is measured in millimeters of mercury (mmHg).

Diastolic Dysfunction
Diastolic dysfunction is an abnormal function of the heart during its relaxation phase that compromises the heart’s ability to relax and fill. Filling of the heart’s lower chambers (ventricles) is impaired because the chamber is stiff due to thickening or cardiomyopathy. It may also be due to stiffening of the sac around the heart. Even though the ability to contract may be preserved, diastolic pressure is elevated and cardiac output reduced.

Diastolic Heart Failure
Diastolic heart failure is a condition in which the heart’s pumping chambers (ventricles) become thickened, grow stiff and cannot relax enough to adequately fill the ventricles with blood. The fluid then backs up into organs and causes swelling or edema, especially in feet and ankles. It also causes congestion, even though the heart's pumping function is normal. Diastolic heart failure is caused by conditions such as acute ischemia, systolic hypertension with enlargement of the left ventricular muscle, restrictive cardiomyopathy and hypertrophic cardiomyopathy

Diet
Although the term diet is commonly used to describe a weight-loss plan, the primary definition is what a person eats and drinks. Diet plays a major factor in lowering your risk for heart disease and stroke.

To keep your heart healthy and avoid those risks, the American Heart Association recommends a balanced diet low in added sugars, sodium and cholesterol.

Dilated Cardiomyopathy
Dilated or congestive cardiomyopathy is a condition in which the heart becomes weakened and enlarged and the pumping chambers contract poorly. Dilated cardiomyopathy is the most common form of cardiomyopathy. It occurs more frequently in men than in women, and most common between the ages of 20 and 60. The decreased heart function can affect the delivery of blood to the lungs, liver and other body systems.

Diuretic
A diuretic is a drug that increases the rate at which urine forms by promoting the excretion of water and salts. This helps to relieve the heart's workload and decreases the buildup of fluid in the lungs and other parts of the body. Different diuretics remove fluid at varied rates and through different methods. They can be used to treat high blood pressure, heart failure and some congenital heart defects.

Drug Interaction
A drug interaction occurs when there is a change in the effect of a drug when taken with another drug, a supplement or food. Its effect may increase or decrease, or side effects may occur.

Dysarthria
Dysarthria is a condition in which speech is slowed, slurred or distorted due to muscular problems caused by damage to the brain or nervous system.

Dysphagia
Dysphagia is difficulty chewing and swallowing because one side of the mouth is weak due to stroke or other brain injury. One or both sides of the mouth can lack feeling, increasing the risk of choking.

Dyspnea
Dyspnea is a condition that causes difficult or labored breathing, often caused by heart conditions. Two types of dyspnea are significant in cardiac illness. Dyspnea on exertion is the shortness of breath that occurs with increasing activity. Paroxysmal nocturnal dyspnea is a shortness of breath that awakens a person from sleep. Both are significant symptoms in cardiac disease.

E

EBCT
EBCT is the acronym for electron-beam computed tomography, the high-speed form of X-ray imaging technology. It's used to evaluate various structures and functions in the heart and to measure calcium deposits in the coronary arteries.

Ebstein's Anomaly
Ebstein's anomaly, also called Ebstein's malformation, is a congenital heart defect in which the tricuspid valve is abnormally formed. The tricuspid valve is one of the heart's four valves. It normally swings open to allow the smooth passage of blood from the right atrium to the right ventricle, and then closes. Blood should flow in one direction and only at the right time. The tricuspid valve normally has three "flaps," or leaflets. In Ebstein's anomaly, one or two flaps are stuck to the wall of the heart and don't move normally. Ebstein's anomaly is mild in most adults who have it, but sometimes the tricuspid valve leaks severely enough to result in heart failure or cyanosis. Then surgery may be required.

Ebstein's Malformation
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ECG
An electrocardiogram (ECG or EKG) is a quick, painless test that records the electrical activity of the heart including the timing and duration of each electrical phase in a heartbeat. An ECG is the standard clinical tool for diagnosing arrhythmias (abnormal rhythms) and to check if the heart is getting enough blood or if areas of the heart are abnormally thick.

Echocardiogram
An echocardiogram, also called an **echo**, is a test that uses high frequency sound waves (ultrasound) to make pictures of your heart. Your doctor may use an echo test to look at your heart’s structure and check how well your heart functions. An “echo” provides valuable information about the health of the heart and abnormal rhythms (arrhythmias).

Echocardiography
An echocardiography is a diagnostic method in which a handheld device is placed on the chest and high-frequency sound waves produce images of the heart’s size, structure and motion. An “echo” provides valuable information about the health of the heart and abnormal rhythms (arrhythmias).

ECST
ECST is the acronym for exercise cardiac stress test, which is also called an exercise stress test, or exercise test, is a test that shows whether the heart's blood supply is sufficient and if the heart rhythm is normal while he or she walks on a treadmill or pedals a stationary bicycle. The test monitors the person's level of tiredness, heart rate, breathing, blood pressure and heart activity while exercising.

Edema
Edema is swelling due to an abnormally large amount of fluid in the intracellular body tissue spaces. Edema is common in the legs, ankles and lungs of people with heart failure.

EEG
EEG is the acronym for electroencephalogram, a graphic record of the electrical impulses produced by the brain.

Eggs
Animal products, including eggs, contain cholesterol. Too much bad (LDL) cholesterol in the blood can contribute to formation of plaque and the narrowing of the arteries that feed the heart. A medium-size egg has about 185 milligrams of cholesterol, and a large egg has about 215 milligrams. All the cholesterol in eggs is in the yolks. Egg whites without the yolks are a heart-healthy source of protein.

Ejection Fraction
Ejection fraction is the percentage of blood that is pumped out with each heartbeat. During each heartbeat, the heart contracts and relaxes. The heart never empties all of the blood from the lower chambers, called ventricles. Ejection fraction is usually measured in the left ventricle because it is the heart's main pumping chamber. A normal ejection fraction in a person at rest is typically between 55 and 70 percent. If the heart muscle has been damaged by heart attack, heart muscle disease or heart valve problems, the ejection fraction may be below normal.

EKG
An electrocardiogram (ECG or EKG) is a quick, painless test that records the electrical activity of the heart including the timing and duration of each electrical phase in a heartbeat. An ECG is the standard clinical tool for diagnosing arrhythmias (abnormal rhythms) and to check if the heart is getting enough blood or if areas of the heart are abnormally thick.

Electrode Catheter
An electrode catheter is thin, flexible tubing tipped with electrodes that may be threaded through the blood vessels to different locations in the body. It is sometimes used to pace the heart or deliver high-energy shocks.

Electroencephalogram
An electroencephalogram, or EEG, is a graphic record of the electrical impulses produced by the brain.

Electron Beam Computed Tomography
Electron beam computed tomography is the high-speed form of X-ray imaging technology. It's used to evaluate various structures and functions in the heart and to measure calcium deposits in the coronary arteries

Electrophysiological Testing
Electrophysiological testing is a procedure used to provoke known, but infrequent, arrhythmias and to unmask suspected arrhythmias. Using local anesthesia, temporary electrode catheters are positioned

in the heart's atria and/or ventricles and at strategic locations to record cardiac electrical signals and "map" the spread of electrical impulses during each heartbeat.

Embolus
An embolus is a blood clot or other particle that forms in one part of the body, then moves through the bloodstream until it lodges in a narrowed vessel and blocks the flow of blood, causing a heart attack or stroke.

Emergency Cardiovascular Care
Emergency cardiovascular care is the term used to describe urgent diagnosis and treatment of cardiovascular emergencies such as cardiac arrest, respiratory arrest, near-drowning, choking and heart attack. These emergencies require immediate attention from bystanders, emergency medical services personnel and/or other healthcare providers. The American Heart Association develops resuscitation and first aid guidelines and training materials through its CPR & First Aid department.

Emotional Lability
Emotional lability is an effect of stroke in which a survivor cries or laughs or has sudden mood swings for no apparent reason.

Endarterectomy
Endarterectomy is the surgical removal of plaque deposits or blood clots in an artery.

Endocarditis
Endocarditis refers to inflammation of the heart lining or valves, usually caused by a bacterial infection. Risk for developing endocarditis includes those having had placement of a prosthetic heart valve, previous endocarditis, previous heart valve surgery, abnormal heart valves or certain congenital heart defects. Common symptoms include fever and other flu-like symptoms.

Endocarditis Prophylaxis
Endocarditis prophylaxis is using antibiotics to prevent endocarditis, which is an infection of the inside lining of the heart (the endocardial lining). Endocarditis, which can involve heart valves and the lining of the heart muscle, is usually caused by a bacterial infection.

Endocrinologist
An endocrinologist is a doctor who specializes in treating people with disorders of the endocrine gland, such as diabetes, and other problems such as thyroid diseases and hormonal disorders.

Endomyocardial Biopsy
An endomyocardial biopsy, also referred to as a myocardial biopsy, is when a small amount of tissue is removed from the internal lining of the heart for testing. An endomyocardial biopsy is used to help diagnose and treat heart muscle disorders and can also detect rejection of the new heart after a transplant.

Endothelium
Endothelium is the smooth inner lining of some body structures, including the heart and blood vessels.

Enlarged Heart
Enlarged heart has no scientific name because it is not a specific condition – rather, a problem caused by another problem. In someone born with an enlarged heart, a congenital birth defect may have caused the change in size. The abnormal size may affect the ability of the heart to function normally. An enlarged heart also can be caused by other conditions, such as heart attack, high blood pressure, abnormal heartbeat and cardiomyopathy (thickening and stiffening of heart muscle). You are at great risk for developing an enlarged heart if you have a family history of heart disease, heart attack or high blood pressure.

Enzyme
An enzyme is a complex chemical that can speed up specific biochemical processes in the body.

EPS
Electrophysiology Studies, also called EP Study. Electrophysiological testing is a procedure used to provoke known, but infrequent, arrhythmias and to unmask suspected arrhythmias. Using local anesthesia, temporary electrode catheters are positioned in the heart's atria and/or ventricles and at strategic locations to record cardiac electrical signals and "map" the spread of electrical impulses during each heartbeat.

EP Study
Electrophysiological testing is a procedure used to provoke known, but infrequent, arrhythmias and to unmask suspected arrhythmias. Using local anesthesia, temporary electrode catheters are positioned in the heart's atria and/or ventricles and at strategic locations to record cardiac electrical signals and "map" the spread of electrical impulses during each heartbeat.

Estrogen
Estrogen is a hormone produced in a woman's body and tends to raise HDL cholesterol, helping women to have higher levels of "good" cholesterol levels than men. Estrogen production is highest during the childbearing years, which helps explain why premenopausal women are usually protected from developing heart disease.

Event Recorder
Also called cardiac event recorder. A cardiac event recorder is a battery-powered portable device that you control to tape-record your heart's electrical activity (ECG) when you have fast or slow heartbeats, or feel dizzy or like you want to faint. It can also be used to see how you respond to medicines.

Exercise
The American Heart Association recommends at least 2½ hours of moderate-intensity exercise or an hour and 15 minutes of vigorous-intensity exercise a week or a combination of the two. Physical activity is anything that makes you move your body, increase your heart rate and use up energy or

calories. Regular physical activity can lower your risk of developing heart disease and stroke. Aerobic exercises such as walking, jogging, swimming or biking benefit y our heart and fitness level as compared to people who are less active.

Exercise Cardiac Stress Test

An exercise cardiac stress test, also called an ECST, exercise test or exercise stress test, is a test that shows whether the heart's blood supply is sufficient and if the heart rhythm is normal while he or she walks on a treadmill or pedals a stationary bicycle. The test monitors the person's level of tiredness, heart rate, breathing, blood pressure and heart activity while exercising.

Exercise Stress Test

An exercise stress test requires walking on a treadmill or pedaling a stationary bicycle while connected to equipment to monitor heart rate, breathing, blood pressure, electrical activity of the heart or heart rhythm and how long the physical activity is tolerated without getting too tired. The exercise stress test also called a cardiac stress test, treadmill stress test or just stress test is used to assess how well the heart responds to physical activity based on observing an electrocardiogram.

F

Fats

Dietary fats give your body energy and support cell growth, helping to protect your organs, keep your body warm and help your body absorb nutrients. There are four major dietary fats in food: saturated fats, *trans* fats, monounsaturated and polyunsaturated fats. While eating too much fat can contribute to high cholesterol levels and being overweight or obese, moderate intake of healthier monounsaturated and polyunsaturated fat can part of a healthy diet.

Fats and Oils

The American Heart Association recommends eating 25-35 percent of your total daily calories as fats, limiting the amount of saturated fats you eat to 5 to 6 percent of total calories. Use vegetable oils and margarines with liquid vegetable oil as the first listed ingredient. Examples are canola, corn, olive, peanut, safflower, sesame, soybean and sunflower oils. When using soft spreads, choose those low in saturated fats and *trans* fats. Try reduced-fat and no-fat salad dressings and mayonnaise. And pick oily fish (such as salmon, mackerel, herring and trout), avocados, peanut butter, and many nuts and seeds.

Fiber

Dietary fiber describes several materials that make up the parts of plants your body can't digest. When eaten regularly as part of a diet low in saturated fat, *trans* fats and cholesterol, soluble fiber can help decrease your risk of heart disease. Whole grains and fruits and vegetables include dietary fiber, while most refined (processed) grains contain little fiber.

Fibrillation

Fibrillation refers to fast, uncoordinated contractions of individual heart muscle fibers. When fibrillation occurs, the heart chamber involved can't contract all at once and pumps blood ineffectively, if at all.

Fish
Fish is a good source of protein and, unlike fatty meat products, is not high in saturated fat. The American Heart Association recommends eating fish (particularly oily fish) at least two times a week. Fish can be an excellent source of omega-3 fatty acids, essential fats that your body doesn't make but needs to function properly. A serving is 3.5 ounce cooked, or about ¾ cup of flaked fish. Oily fish like salmon, mackerel, herring, lake trout, sardines and albacore tuna are high in omega-3 fatty acids.

Fish Oil
Fish oil is produced in the tissues of oily fish. It's an excellent source of omega-3 fatty acids, essential fats that your body doesn't make but needs to function properly. People with heart disease are advised to consume about 1 gram per day of the fish oils EPA and DHA (eicosapentaenoic and docosahexaenoic acids), preferably from oily fish. You may want to talk to your healthcare provider about supplements.

Folic Acid and Cardiovascular Disease
Folic acid is one of the B vitamins that helps break down an amino acid in the blood called homocysteine – which in excess is related to a higher risk of coronary heart disease, stroke and peripheral vascular disease, also called peripheral artery disease or PAD. The American Heart Association does not recommend widespread use of B vitamin supplements to reduce the risk of heart disease and stroke. Instead, a healthy, balanced diet rich in fruits and vegetables, whole grains and fat-free or low-fat dairy products is advised. For folic acid, the recommended daily value is 400 micrograms. Citrus fruits, tomatoes, vegetables and grain products are good sources.

Fruits and Vegetables
Vegetables and fruits are an important part of a healthy eating plan. They are high in vitamins, minerals and fiber and low in fat and calories. Eating a variety of vegetables and fruits may help you control your weight and blood pressure. The American Heart Association recommends eating eight or more fruit and vegetable servings every day. An average adult consuming 2,000 calories daily should aim for 4.5 cups of fruits and vegetables a day.

G

GDM
GDM is the acronym for gestational diabetes mellitus, also called simply gestational diabetes, a diabetes mellitus that develops only during pregnancy and usually disappears upon delivery, but increases the risk that the mother will develop diabetes later. The condition is managed with meal planning, activity and sometimes insulin.

Gender and Cardiovascular Disease
Cardiovascular diseases are the leading cause of death in America, for both men and women. More women die of cardiovascular disease each year than all forms of cancer combined. However, the warning signs of a heart attack can differ for men and women.

Gestational Diabetes
Gestational diabetes, also called gestational diabetes mellitus or GDM, is a type of diabetes mellitus that develops only during pregnancy and usually disappears upon delivery, but increases the risk that the mother will develop diabetes later. The condition is managed with meal planning, activity and sometimes insulin.

Gestational Diabetes Mellitus
Gestational diabetes mellitus, often referred to by its initials as gestational diabetes, develops only during pregnancy and usually disappears upon delivery. It increases the risk that the mother will develop diabetes later. The condition is managed with meal planning, activity and sometimes insulin.

Guidelines
Guidelines are statements designed to help doctors and patients decide appropriate treatment, such as a recommendation to stop smoking.

H

Hands-Only CPR
Hands-Only" CPR focuses on providing chest compressions, not rescue breaths. Hands-Only CPR is recommended for an adult who suddenly collapses outside the hospital. If someone collapses: (1) Call 9-1-1; and (2) Pump hard and fast in the center of the chest at the rate of at least 100 compressions per minute. You may dramatically increase the victim's survival chances. You can sing "Stayin' Alive" to help you keep the right beat.

HbA1c Test
An HbA1c test, which is also called hemoglobin A1C, measures a person's average blood glucose level over two or three months. It is used to screen for diabetes and to monitor how well the condition is being managed.

HDL
High-density lipoprotein cholesterol is known as "good" cholesterol because high levels of HDL seem to protect against heart attacks. Low levels of HDL seem to increase the risk of heart disease. Medical experts think HDL tends to carry cholesterol away from the arteries and back to the liver, where it's passed from the body. Some experts believe HDL removes excess cholesterol from arterial plaque, slowing its buildup.

Heart/Lung Machine
A heart/lung machine is used during heart surgery to keep blood pumping through a patient's body. It's used during many types of open-chest surgeries in which blood is diverted from the heart and lungs through a heart/lung machine and oxygenated blood is returned to the aorta.

Heart Attack
A heart attack occurs when a blocked coronary artery prevents oxygen-rich blood from reaching a section of the heart muscle. If the blocked artery is not reopened quickly, the part of the heart

normally nourished by that artery begins to die. Symptoms can come on suddenly but may start slowly and persist over time. Warning signs include discomfort in the chest (pressure, squeezing, fullness), discomfort in other upper-body areas (arms, back, neck, jaw or stomach), shortness of breath, a cold sweat, nausea or lightheadedness. As with men, women's most common heart attack symptom is chest pain or discomfort. But women are somewhat more likely than men to experience some of the other common symptoms, particularly shortness of breath, nausea, vomiting and back or jaw pain. Call 9-1-1 if you think you or someone else is having a heart attack.

Heart Attack Blood Test

A heart attack blood test can confirm or refute suspicions that a person has suffered a heart attack. These tests can detect abnormal levels of certain enzymes released into the bloodstream when heart muscle cells die.

Heart Attack Symptoms

Some heart attacks are sudden and intense but most start slowly, with mild pain or discomfort. Here are signs that can mean a heart attack is happening:

- Chest discomfort. Most heart attacks involve discomfort in the center of the chest that lasts more than a few minutes, or that goes away and comes back. It can feel like uncomfortable pressure, squeezing, fullness or pain.
- Discomfort in other areas of the upper body. Symptoms can include pain or discomfort in one or both arms, the back, neck, jaw or stomach.
- Shortness of breath with or without chest discomfort.
- Other signs may include breaking out in a cold sweat, nausea or lightheadedness.

If you experience any of these heart attack symptoms, immediately call 9-1-1.

Heart Attack Treatments

If you've had a heart attack, you will most likely take medications for the rest of your life. There are many types and combinations of drugs used to help prevent having another heart attack. You and your doctor need to discuss the best treatment for you. You may receive one of the following types of medication: Anticoagulants, Antiplatelet Agents, Angiotensin-Converting Enzyme (ACE) Inhibitors, Angiotensin II Receptor Blockers (or Inhibitors), Beta Blockers, Calcium Channel Blockers, Diuretics, Vasodilators or Statins

Heart Attack Warning Signs

Signs of a heart attack include discomfort in the chest (pressure, squeezing, fullness), discomfort in other upper-body areas (arms, back, neck, jaw or stomach), shortness of breath, a cold sweat, nausea or lightheadedness. As with men, women's most common heart attack symptom is chest pain or discomfort. But women are somewhat more likely than men to experience some of the other common symptoms, particularly shortness of breath, nausea, vomiting and back or jaw pain. Call 9-1-1 if you think you or someone else is having a heart attack.

Heart Block

A heart block, also called an atrioventricular or AV block, occurs when electrical signals between the heart's chambers are impaired or don't transmit, disrupting the heart's ability to beat properly.

Heart Disease

Heart disease is the No. 1 cause of death in the United States. Heart disease is a collective term for various problems. Many types of heart disease are related to plaque buildup in the walls of the arteries, or atherosclerosis. As the plaque builds up, the arteries narrow, making it more difficult for blood to flow and creating a risk for heart attack and stroke. Other types of heart disease include heart failure, an irregular heartbeat – or arrhythmia – and heart valve problems.

Heart Failure

Also called congestive heart failure, heart failure is when the heart can't pump enough blood to the organs. The heart works, but not as well as it should. Heart failure is almost always a chronic, long-term condition. The older you are, the more common heart failure becomes. Your risk also rises if you are overweight, diabetic, smoke, abuse alcohol or use cocaine. When a heart begins to fail, fluid can pool in the body; this manifests as swelling (edema), usually in the lower legs and ankles. Fluid also may collect in the lungs, causing shortness of breath.

Heart Failure Stages

The stages of heart failure is a rating system to evaluate the development and progression of heart failure symptoms. Developed by the American Heart Association and American College of Cardiology in 2001, the system includes four stages.

- Stages A and B represent people who have not yet developed heart failure but are at high risk because of coronary artery disease, high blood pressure, diabetes or other predisposing conditions.
- Stage C includes patients with past or current symptoms of heart failure who have a condition called structural heart disease.
- Stage D includes patients who have advanced heart failure that is difficult to manage with standard treatment.

Heart Healthy Diet

A heart-healthy diet is an important tool in preventing heart disease and stroke. The American Heart Association recommends a balanced diet that includes plenty of fruits and vegetables, lean meats and low-fat dairy, whole grains, and fish rich in omega fatty acids. A heart-healthy diet should limit saturated fat, sugar-sweetened beverages and keep sodium to less than 1,500 milligrams a day.

Heart Murmur

A heart murmur may be an abnormal, extra sound during the heartbeat cycle made by blood moving through the heart and its valves. Heart murmurs may be caused by defective heart valves. Murmurs also can be caused by conditions such as pregnancy, fever, anemia or thyrotoxicosis (a diseased condition resulting from an overactive thyroid gland). Innocent heart murmurs are sounds made by the blood circulating through the heart's chambers and valves or through blood vessels near the heart. Sometimes called functional or physiologic murmurs, Innocent murmurs are common in children and are harmless.

Heart Rate

Heart rate (or pulse) is the number of times your heart beats per minute. Normal heart rate varies from person to person and is normally 60 to 100 times a minute. The best places to find your pulse

are the wrists, the inside of your elbow, the side of your neck and the top of the foot. To get the most accurate reading, put your finger over your pulse and count the number of beats in 60 seconds.

Heart Scan
Often referred to as a coronary calcium scan, a heart scan is a test used in the critical care setting to diagnose cardiac abnormalities. A heart scan provides a score to determine the risk of a coronary event and to diagnose coronary artery disease. Two machines can be used, an electron beam computed tomography and multidetector computed tomography, to make precise pictures of the heart using an X-ray.

Heart Transplant
A heart transplant is a surgery that replaces a damaged heart with a healthy heart taken from a donor who has been declared brain dead.

Heart Valve
A heart valve controls the direction of blood flow through the heart by opening and closing with each heartbeat. The four valves in the heart are the tricuspid valve, pulmonary valve, mitral valve and aortic valve.

Heart Valve Replacement Surgery
Heart valve replacement surgery is an open-heart surgery to replace a defective or diseased heart valve. Natural replacement heart valves come from human donors and artificial ones are made of metal. In some cases, the procedure may use modified natural valves from animal donors.

Hemoglobin A1C Test
A hemoglobin A1C test, or HbA1c, measures a person's average blood glucose level over two or three months and is used to screen for diabetes and to monitor how the condition is being managed.

Hemorrhage
A hemorrhage is severe bleeding that leads to excessive blood loss.

Hemorrhagic Stroke
A hemorrhagic stroke, also called a brain or cerebral hemorrhage, occurs when a blood vessel or an aneurysm bursts in the brain, causing bleeding inside the brain. Hemorrhagic stroke can also be caused by a head injury. It is different from a subarachnoid hemorrhage, which occurs when a blood vessel on the brain's surface ruptures and bleeds into the space between the brain and the skull.

Heredity
Heredity is the passing of a genetic quality or trait from parent to offspring.

High Blood Pressure
Blood pressure is the force of the blood against the walls of the arteries. It is measured by a ratio of two numbers:

- Systolic – registered during a heartbeat (when the heart muscle contracts)
- Diastolic – registered between heartbeats (when the heart rests and refills with blood)

Blood pressure is measured in a numerical reading of millimeter of mercury, abbreviated as mm Hg. Optimal blood pressure is less than 120/80 mm Hg. In general, the lower your blood pressure is, the better.

- 120–139 / 80–89 is considered prehypertension
- 140/90 or higher is hypertension, or high blood pressure. This puts a person at a greater risk for heart attack, angina, stroke, kidney failure and peripheral artery disease.

High Cholesterol

High cholesterol is a condition where there is too much cholesterol in the blood. High cholesterol levels can be reduced through diet and lifestyle changes as well as lipid-lowering medication if necessary. Left untreated, high cholesterol can lead to heart disease, stroke and other cardiovascular diseases.

Holter Monitor

A Holter monitor, also called ambulatory electrocardiography, ambulatory ECG or ambulatory EKG, is a battery-operated, portable device that measures and tape-records the heart's electrical activity continuously, usually for a period of 24 to 48 hours so that any irregular heart activity can be correlated with a person's activity. The device uses electrodes or small conducting patches placed on the chest and attached to a small recording monitor that is carried in a pocket or in a small pouch worn around the neck.

Homocysteine

Homocysteine is an amino acid naturally found in the blood that may serve as a marker for higher risk of coronary artery disease, stroke and peripheral vascular disease.

Homograft

A homograft is donated from a cadaver to be used during complex reconstructive surgery. It typically includes human heart valves and arteries.

Hypercholesterolemia

Hypercholesterolemia refers to high levels of blood cholesterol, a major risk factor for coronary heart disease, heart attack and stroke.

Hyperglycemia

Hyperglycemia is a condition when a person has increased levels of blood sugar and is usually the first sign of diabetes. It can result in diabetic ketoacidosis and coma if not treated on time and adequately.

Hyperlipidemia

Hyperlipidemia is a condition in which there are too many lipids (fats) in the blood. Hyperlipidemia is commonly associated with high cholesterol and may be reduced through regular physical activity and healthy eating.

Hypertension
Blood pressure is the pressure of the blood against the walls of the arteries. When that pressure is consistently above the normal range, it is considered hypertension, or high blood pressure. This increases the heart's workload, putting a person at a greater risk for heart attack, angina, stroke, kidney failure and peripheral artery disease.

Hyperthyroidism
Hyperthyroidism is an overly active thyroid gland. This can lead to an overload of thyroid hormones, which can then speed up the body's metabolism. Symptoms of hyperthyroidism include weight loss and a rapid heart rate.

Hypertriglyceridemia
Hypertriglyceridemia is a high level of triglycerides in the blood. A high triglyceride level combined with low HDL ("good") cholesterol or high LDL ("bad") cholesterol seems to speed up the gathering of plaque in the arteries. A normal triglyceride level is less than 150 mg/dL. Hypertriglyceridemia has been linked to coronary artery disease.

Hypertrophic Cardiomyopathy
Hypertrophic cardiomyopathy is a condition in which the heart muscle becomes thick. This thickening decreases the amount of blood that can be pumped from the heart to the rest of the body. Hypertrophic cardiomyopathy is the most common genetic cardiovascular disease, affecting about 500,000 people in the United States.

Hypoglycemia
Hypoglycemia is a low level of blood sugar. It can be dangerous because blood sugar is the major source of energy for the brain. Low blood sugar can cause brain damage, or even death in prolonged instances. Hypoglycemia is common among those having diabetes if they receive too much insulin or if they don't eat enough.

Hypoplastic Left Heart Syndrome
Hypoplastic left heart syndrome is a birth defect in which the left side of the heart is underdeveloped. If not treated within days or months of birth, it can be fatal. Hypoplastic left heart syndrome can be treated with a series of operations, or may require a heart transplant.

Hypotension
Hypotension is the medical term for low blood pressure. Optimal blood pressure is less than 120/80 (systolic pressure is 120 AND diastolic pressure is less than 80). Within certain limits, the lower your blood pressure reading is, the better. There is no specific number at which day-to-day blood pressure is considered too low as long as you are not experiencing symptoms of low blood pressure such as dizziness, fatigue and nausea. If you are experiencing these symptoms, you should contact your doctor to determine the cause.

I

ICD
An implantable cardioverter defibrillator, or ICD, also called an automated internal defibrillator, is a device similar to a pacemaker that is implanted to detect and treat overly rapid abnormal heartbeats known as arrhythmias. When the ICD detects a dangerous arrhythmia, it delivers electrical shocks to restore a normal heartbeat.

Impaired Fasting Glucose
Impaired fasting glucose is a form of prediabetes. It means that while fasting for eight hours, a person's blood sugar level is 100 to 125 mg/dL. People with impaired fasting glucose are at increased risk for developing type 2 diabetes, heart disease and stroke.

Impaired Glucose Tolerance
Impaired glucose tolerance is when the body is unable to break down, or metabolize, sugar adequately. The body uses a type of sugar called glucose for energy. People with impaired glucose tolerance, also called abnormal glucose tolerance, are considered prediabetics. They are at increased risk for developing type 2 diabetes, which is an important risk factor for heart disease and stroke.

Implantable Cardioverter Defibrillator
An implantable cardioverter defibrillator, or ICD, is a device similar to a pacemaker that is implanted to detect and treat overly rapid abnormal heartbeats known as arrhythmias. When the ICD detects a dangerous arrhythmia, it delivers electrical shocks to restore a normal heartbeat.

Incidence
Incidence is an estimate of how many new cases of a disease develop in a population over a specific time period, such as the incidence of cardiovascular disease in the United States.

Infant CPR
Infant cardiopulmonary resuscitation is an emergency lifesaving procedure performed on a child under the age of 12 months who is not breathing. CPR procedures for infants are similar to CPR for adults but there are several important differences.

Infective Endocarditis
Endocarditis refers to inflammation of the heart lining or valves, usually caused by a bacterial infection. Risk for developing endocarditis includes those having had placement of a prosthetic heart valve, previous endocarditis, previous heart valve surgery, abnormal heart valves or certain congenital heart defects. Common symptoms include fever and other flu-like symptoms.

Inferior Vena Cava
The inferior vena cava is a major vein that carries blood from the legs and abdomen to the heart. The inferior vena cava connects to the heart's right atrium.

Insulin
Insulin is a hormone produced in the pancreas that turns sugar and other food into energy. When you have diabetes, your body doesn't make enough insulin, can't use its own insulin efficiently or both.

Insulin Resistance
Insulin resistance is when a patient's body can't use insulin efficiently. The pancreas responds by releasing more insulin to try controlling blood sugar levels. Over time, the cells in the pancreas that produce insulin break down and even go away. That causes blood sugar levels to rise and diabetes to develop. Insulin resistance may be linked to obesity, hypertension and high levels of fat in the blood.

Intermittent Claudication
Intermittent claudication is poor circulation in leg arteries due to buildup of plaque. It is marked by pain, cramping or fatigue in the legs and buttocks during activity that diminishes or goes away when standing still. It is a common, early symptom of peripheral artery disease. Intermittent claudication may occur in both legs, and the symptoms often get worse over time. Smokers are especially at risk.

Intra-aortic Balloon Pump
An intra-aortic balloon pump is a device implanted to assist an ailing left ventricle to pump blood through the heart. An intra-aortic balloon pump increases cardiac output and relieves pulmonary congestion.

Invasive Procedure
An invasive procedure is when a healthcare provider uses a needle, tube, scope or other device that goes inside a patient’s body – thus, “invading” it. Examples of an invasive procedure range from a needle prick for a blood test to major surgeries.

Ischemia
Ischemia is reduced blood flow to an organ. Ischemia is usually caused by a constricted or blocked artery.

Ischemic Heart Disease
Ischemic heart disease is a heart problem caused by heart arteries that are narrowed. When there are blockages in arteries, they become narrowed, which means less blood and oxygen reaches the heart muscle. When more oxygen is needed, such as while exercising, the heart cannot meet the demands. The lack of oxygen caused by ischemic heart disease can product chest pain, discomfort known as angina pectoris or even a heart attack.

Ischemic Stroke
Ischemic stroke occurs when a blood clot or other particle blocks an artery in the brain or an artery leading to the brain. This causes brain cells to die or be injured. Cerebral thrombosis and cerebral embolism are ischemic strokes.

J

K

Kawasaki Disease
Kawasaki Disease is an acute children's illness characterized by fever, rash, swelling of the hands and feet, irritation and redness of the whites of the eyes, swollen lymph glands in the neck, and irritation and inflammation of the mouth, lips and throat. Most children fully recover, but some experience long-term heart complications that may include inflammation of the blood vessels, particularly the coronary arteries, and the heart muscle or the sac surrounding the heart. The coronary arteries or other parts of the heart are affected in up to 20 percent of children with this disease.

L

Laser Angioplasty
Laser angioplasty is a technique used to open coronary arteries blocked by plaque. In a laser angioplasty procedure, a tube known as a catheter is inserted into an artery, then moved to the blockage; once there, a laser at the tip of the tube sends pulsating beams of light to vaporize the plaque.

LDL
Low-density lipoprotein is known as "bad" cholesterol. When too much LDL circulates in the blood, it can slowly build up in the inner walls of the arteries that feed the heart and brain. Together with other substances, it can form plaque, a thick, hard deposit that can narrow the arteries and make them less flexible. This condition is known as atherosclerosis. If a clot forms from the rupture of plaque in the wall of a blood vessel, the clot can blocks or narrow blood flow in the artery and cause heart attack or stroke.

Left Sided Heart Failure
Left-sided heart failure is when the left side of the heart must work harder to pump its usual amount of blood. Left-sided heart failure usually causes breathing difficulties.

Left Ventricular Heart Failure
Left ventricular heart failure is when the left side of the heart must work harder to pump its usual amount of blood. Left ventricular heart failure usually causes breathing difficulties.

Limited Access Coronary Artery Surgery
Limited access coronary artery surgery, also referred to as minimally invasive heart surgery, is an alternative to open-chest coronary artery bypass surgery. With limited access coronary artery surgery, small incisions (ports) are made in the chest. Chest arteries or veins from the leg are attached to the heart to bypass the clogged coronary artery or arteries. In some cases the surgeon views these operations on video monitors rather than directly.

Lipid
A lipid is a fatty substance that can't dissolve in blood. Cholesterol, cholesterol compounds and triglycerides are all lipids. They are transported in the blood as part of large molecules called lipoproteins. Abnormalities in lipids can contribute to heart disease.

Lipid Testing
Lipid testing is done to evaluate cholesterol levels in the blood. Lipid testing can help evaluate a patient's cardiovascular health.

Lipoprotein
Lipoprotein is a combination of a lipid surrounded by a protein; the protein allows the lipid to travel in the blood. Cholesterol is transported through the blood by lipoproteins.

Long QT Syndrome
Long QT syndrome may be due to a heart condition someone is born with or from taking certain medications resulting in delayed electrical activity when the heart beats, causing fast, chaotic heartbeats that can be life-threatening. Long QT syndrome can cause fainting and, in some cases, cardiac arrest.

Low Blood Pressure
Optimal blood pressure is less than 120/80 (systolic pressure is 120 AND diastolic pressure is less than 80). Within certain limits, the lower your blood pressure, the better. There is no specific number at which day-to-day blood pressure is considered too low, as long as no symptoms of trouble are present. Most doctors consider chronically low blood pressure dangerous only if it causes noticeable signs and symptoms, such as dizziness or lightheadedness, fainting, dehydration, lack of concentration and blurred vision. Severely low blood pressure can be an indication of a serious heart, endocrine or neurological disorder.

Low-cholesterol Diet
A low-cholesterol diet is low in saturated and trans fats but rich in vegetables, fruits, whole grains, high-fiber foods, lean meats, poultry and fish, and fat-free or 1 percent dairy products. The American Heart Association recommends limiting cholesterol as part of a balanced, heart-healthy diet.

Lumen
Lumen is the open space within a tube-shaped body part, such as a blood vessel. Blood flows through the lumen.

M

Maze Procedure
Maze procedure is a surgical procedure for atrial fibrillation and/or atrial flutter. A number of incisions are made in the atria to block the path of the arrhythmia.

Meat, Poultry and Fish
The American Heart Association recommends less than 6 ounces of meat, poultry and fish per day. You should choose trimmed lean meats and poultry without the skin and have at least two servings of baked or grilled fish each week. “Oily fish” like salmon, mackerel, herring, lake trout, sardines and albacore tuna are high in omega-3 fatty acids, which are essential fats that your body doesn’t make but needs to function properly.

Medication Interactions
A drug or medication interaction occurs when there is a change in the effect of a drug when taken with another drug, a supplement or food. Its effect may increase or decrease, or side effects may occur.

Mediterranean Diet
Mediterranean diet is a generic term based on the typical eating habits in the countries that border the Mediterranean Sea. Elements include dairy products, fish and poultry being more common than red meat; fruits, vegetables, bread and other cereals, potatoes, beans, nuts and seeds; use of olive oil; wine consumed in low to moderate amounts. These diets have similarities to the American Heart Association's dietary recommendations, except a relatively high percentage of calories in Mediterranean-style diets come from fat.

Metabolic Syndrome
Metabolic syndrome is when several conditions occur together, including abdominal obesity, insulin resistance, elevated blood pressure and low HDL (good) or high LDL (bad) cholesterol. People with metabolic syndrome have a higher risk of developing heart disease, stroke and diabetes.

Microvascular Angina
Microvascular angina may be a symptom of coronary microvascular disease (MVD). Coronary MVD is heart disease that affects the heart’s smallest coronary artery blood vessels. Angina that occurs in coronary MVD may differ from the typical angina that occurs in heart disease in that the chest pain usually lasts longer than 10 minutes, and it can last longer than 30 minutes. If you have been diagnosed with MVD, follow the directions from your healthcare provider regarding how to treat your symptoms and when to seek emergency assistance

Milk Products
The American Heart Association recommends two to three daily servings of milk products. Fat-free, ½ percent fat and 1 percent fat milk all provide slightly more nutrients than whole milk and 2 percent fat milk, and are much lower in fat, saturated fat, cholesterol and calories. For dessert or snacks, choose ice milk, frozen or fruited low-fat or nonfat yogurt, sherbet, sorbet or low-fat puddings.

Minimally Invasive Heart Surgery
Minimally invasive heart surgery, also referred to as limited access coronary surgery, is an alternative to open-chest coronary artery bypass surgery. With minimally invasive heart surgery, small incisions (ports) are made in the chest. Chest arteries or veins from the leg are attached to the heart to bypass the clogged coronary artery or arteries. In some cases the surgeon views these operations on video monitors rather than directly.

Mitral Valve
The mitral valve is located between two of the heart's four chambers: the left upper atrium and the left lower ventricle. Similar to a swinging double door, the valve has two flaps that open and close as the heart pumps.

Mitral Valve Prolapse
Mitral valve prolapse occurs when the mitral valve's flaps don't close smoothly because one or both flaps are enlarged or their supporting muscles and tendons known as "strings" are too long. When the heart pumps, this problem can allow a small amount of blood to leak backward through the valve, causing a heart murmur.

Mitral Valve Stenosis
Mitral valve stenosis is a condition in which the mitral valve, located between the heart's left upper chamber (an atrium) and left lower chamber (a ventricle), has narrowed. The decrease in the amount of forward blood flow through the heart causes the right side of the heart to work harder. Mitral valve stenosis is most commonly caused from having had rheumatic fever.

Mortality
Mortality is the total number of deaths from a given disease in a population during an interval of time, usually a year.

Mucocutaneous Lymph Node Syndrome
Mucocutaneous lymph node syndrome, or Kawasaki Disease, is an acute children's illness characterized by fever, rash, swelling of the hands and feet, irritation and redness of the whites of the eyes, swollen lymph glands in the neck, and irritation and inflammation of the mouth, lips and throat. Most children fully recover, but some experience long-term heart complications that may include inflammation of the blood vessels, particularly the coronary arteries, and the heart muscle or the sac surrounding the heart. The coronary arteries or other parts of the heart are affected in up to 20 percent of children with this disease.

MUGA
Radionuclide ventriculography (RVG, RNV) or radionuclide angiography (RNA) is often referred to as a MUGA (multiple-gated acquisition) scan. It is a type of nuclear imaging test. This scan shows how well your heart is pumping.

Myocardial Biopsy
A myocardial biopsy, also referred to as an endomyocardial biopsy, is when a small amount of tissue is removed from the internal lining of the heart for testing. A myocardial biopsy is used to help diagnose and treat heart muscle disorders and can also detect rejection of the new heart after a transplant.

Myocardial Infarction
Myocardial infarction is the medical term for heart attack. It is the damaging or death of an area of the heart muscle resulting from a blockage in the blood supply to that area.

Myocardial Ischemia
Myocardial ischemia is a condition in which there is not enough blood flow (and thus oxygen and nutrient supply) to the heart muscle.

Myocardial Perfusion Imaging (MPI)
Myocardial perfusion imaging, also referred to as the thallium stress test, is a type of nuclear scanning test similar to a routine exercise stress test but with images. Myocardial perfusion imaging shows how well the heart muscle is supplied (perfused) with blood using a radioactive substance called thallium that's injected into the bloodstream when the patient is at maximum level of exercise. Pictures are taken of the heart's muscle cells using a special (gamma) camera.

Myocarditis
Myocarditis is the inflammation of the heart muscle.

Myocardium
Myocardium is the muscular center layer of the heart between the outer layer (epicardium) and the inner layer (endocardium). The myocardium is responsible for the heart's pumping action and contracts to pump blood out of the heart and then relaxes as the heart refills with returning blood. The myocardium is the layer that has the largest oxygen needs and is most affected by decreased blood flow (ischemia).

N

Neonatal Resuscitation
While most babies at birth do not require assistance breathing, neonatal resuscitation may be required in a small percentage of births. This may involve clearing the airways, providing oxygen, intubating with a tube to allow for ventilation, performing neonatal CPR, providing medication or any combination. The most common reasons for neonatal resuscitation involve premature delivery or a reduction in oxygen supply during labor and delivery.

Nitroglycerin
Nitroglycerin is a type of drug that relaxes (dilates) blood vessels and increases the supply of blood and oxygen to the heart while reducing its workload. "Nitro" is used to treat acute chest pain (angina), in which case it is prescribed as quick-dissolving pills to be placed under the tongue when needed. When the blood vessels dilate, blood flow to the tissues increases. This can relieve chest pain.

Normal Blood Pressure
Blood pressure is the force of pressure exerted against the walls of the arteries during contraction and relaxation phases of the beating heart. According to the American Heart Association, ideal blood pressure is less than 120/80.

Norwood Procedure
The Norwood procedure is the reconstruction of the pulmonary artery to allow for adequate blood flow to the body in heart conditions in which there is only one ventricle.

Nurse Practitioner
A nurse practitioner is an advanced practice nurse with a master's degree in nursing. Nurse practitioners perform physical examinations, order medications and diagnostic procedures, educate healthcare staff and families, and provide continuity of care between inpatient and outpatient settings.

Nutrition and Cardiovascular Disease
A healthy diet is one of the keys to reducing risk for heart disease and stroke. Heart-healthy nutrition includes fruits and vegetables, fish and fiber-rich whole grains and low levels of sodium, sugar-sweetened beverages, processed meats and saturated fat.

O

Obesity
Obesity is an excess of body fat. Obesity is defined as a body mass index (BMI) of 30 or greater, or about 30 pounds or move over ideal body weight. Extreme obesity is defined as a BMI of 40 or more. People who have too much fat, especially in the waist area, are at a higher risk for high blood pressure, high blood cholesterol, diabetes, heart disease and stroke.

Occluded Artery
An occluded artery is an artery in which blood flow has been impaired (occluded) by a blockage.

Omega 3 Fatty Acids
Omega-3 fatty acids are essential fats that your body doesn't make but needs to function properly. Omega-3 fatty acids, particularly EPA and DHA, have been shown to benefit the heart. They can decrease the risk of arrhythmias (abnormal heartbeats), decrease triglyceride levels, slow the growth rate of atherosclerotic plaque and lower blood pressure. Good sources are seafood such as salmon, tuna, sardines, mackerel or shellfish, as well as walnuts, flaxseed, and canola and soybean oils.

Oral Contraceptives
Medical researchers have found that some oral contraceptives, such as birth control pills, increase blood pressure in some women. It’s more likely to occur if you’re overweight, have had high blood pressure during pregnancy, have a family history of high blood pressure or have mild kidney disease. The combination of birth control pills and cigarette smoking may be especially dangerous for some women. Before you begin taking oral contraceptives, talk to your healthcare provider about the risks.

Oral Glucose Tolerance Test
An oral glucose tolerance test helps determine how well the body handles glucose. An oral glucose tolerance test measures the amount of glucose in a person's blood stream before and two hours after drinking a premeasured beverage (typically 75 grams of glucose). A comparison of glucose levels before and after allows for assessing how well the body processed the sugars.

Overweight
A person with a body mass index between 25 and 29.9 is considered overweight. A BMI of 25 corresponds to about 10 percent over ideal body weight.

P

Pacemaker
An artificial pacemaker is an electrical device implanted to keep a heart beating at the right speed and rhythm. It is needed when a person's natural pacemaker either doesn't work properly or the impulse is not transmitted adequately to the ventricles for the heart to contract. Pacemakers are typically used for hearts that beat too slowly or irregularly.

Palpitations
Palpitations are the sensation of the heart beating rapidly or irregularly.

Patent Ductus Arteriosis
Patent ductus arteriosis is a congenital heart defect that allows blood to mix between the pulmonary artery and the aorta. Before birth an open passageway (the ductus arteriosus) exists between these two blood vessels, but it closes within a few hours of birth. When this doesn't happen, some blood that should flow through the aorta and out to the body returns to the blood vessels of the lungs. Patent ductus arteriosis is more common in premature infants than full-term babies.

PCI
PCI, an abbreviation for percutaneous coronary intervention that is also known as an angioplasty, is a medical procedure in which a balloon is used to open narrowed or blocked blood vessels of the heart (coronary arteries). With a PCI, a catheter with a deflated balloon on its tip is passed into the narrowed artery segment, the balloon is inflated and the narrowed segment widened. Then the balloon is deflated and the catheter is removed.

Percutaneous Coronary Intervention
Percutaneous coronary intervention, or PCI, also known as an angioplasty, is a medical procedure in which a balloon is used to open narrowed or blocked blood vessels of the heart (coronary arteries). With a percutaneous coronary intervention, a catheter with a deflated balloon on its tip is passed into the narrowed artery segment, the balloon is inflated and the narrowed segment widened. Then the balloon is deflated and the catheter is removed.

Perfusion
Perfusion is defined as blood flow.

Pericarditis
Pericarditis is a condition in which there is inflammation of the sac-like covering of the heart (the pericardium). Pericarditis usually is caused by an infection, although it also can be caused by a heart attack, cancer, injury or surgery.

Pericardium
Pericardium is the outer fibrous "sac" that surrounds the heart.

Peripheral Angiogram
A peripheral angiogram is a test that uses X-rays to help your doctor find narrowed or blocked areas in one or more of the arteries that supply blood to your legs (View an animation of an angiogram). The test is also called a peripheral arteriogram.

Peripheral Artery Disease
Peripheral artery disease occurs when narrow arteries reduce blood flow to the limbs, mainly in the legs and feet. Symptoms can include pain in the legs or buttocks when exercising that goes away when the activity is stopped. Peripheral artery disease, often referred to as PAD, can be diagnosed with a quick, painless test called an ankle-brachial index test. Since it often goes undiagnosed, it's important to ask a healthcare professional to administer the test if you have symptoms.

Peripheral Neuropathy
Peripheral neuropathy causes sensations of tingling, burning or painful discomfort in the hands and feet due to nerve damage as is often associated with diabetes.

Peripheral Vascular Disease
Peripheral vascular disease is a narrowing and hardening of blood vessels carrying blood to the legs, feet and arms due to atherosclerosis. Peripheral artery disease, known as PAD, is a common form of peripheral vascular disease.

PET (Positron Emission Tomography)
A PET scan of the heart is a noninvasive nuclear imaging test. It uses radioactive tracers (called radionuclides) to produce pictures of your heart. Doctors use cardiac PET scans to diagnose coronary artery disease (CAD) and damage due to a heart attack. PET scans can show healthy and damaged heart muscle. Doctors also use PET scans to help find out if you will benefit from a percutaneous coronary intervention (PCI) such as angioplasty and stenting, coronary artery bypass surgery (CABG) or another procedure.

Phlebotomy
Phlebotomy is removing blood from the vein. A phlebotomy applies to routine laboratory blood tests.

Phospholipid
A phospholipid is a type of fat that contains phosphorous. If you add water, phospholipid splits into fatty acids, glycerin and a nitrogen compound.

Physical Activity
Physical activity is anything that makes you move your body and burn calories. The American Heart Association recommends at least 150 minutes of moderate physical activity or 75 minutes of vigorous exercise a week. Physical activity lowers your risk of heart disease and stroke. Aerobic exercises such as walking, jogging, swimming or biking, benefit your heart.

Plaque
Plaque is a buildup of cholesterol inside the wall of blood vessels. After years, plaque can become calcified and hard. It may also rupture. If this happens, a blood clot may form on the plaque and block blood flow, potentially causing a heart attack or stroke. The building up of plaque and hardening of the arteries is known as atherosclerosis.

Plasma Lipid
A plasma lipid is a fatty particle carried in blood.

Platelet
A platelet is an element in blood that aids in blood clotting.

Podiatrist
A podiatrist is a doctor certified and trained to prevent, diagnose and treat conditions associated with the foot and ankle. Over time, people with diabetes tend to develop nerve damage in their feet and lower legs.

Polycythemia
Polycythemia is an elevated number of red blood cells. It's also referred to as a high hematocrit or thick blood. Polycythemia is often seen in patients with lower-than-normal levels of oxygen in their blood.

Polyunsaturated Fats
Polyunsaturated fats may help lower blood cholesterol level when used in place of saturated fats. Polyunsaturated fat is mainly in vegetable oils such as corn, safflower, sunflower and soybean oils. It's usually liquid at room temperature. It is also found in seeds and fish.

Positron Emission Tomography
A PET scan of the heart is a noninvasive nuclear imaging test. It uses radioactive tracers (called radionuclides) to produce pictures of your heart. Doctors use cardiac PET scans to diagnose coronary artery disease (CAD) and damage due to a heart attack. PET scans can show healthy and damaged heart muscle. Doctors also use PET scans to help find out if you will benefit from a percutaneous coronary intervention (PCI) such as angioplasty and stenting, coronary artery bypass surgery (CABG) or another procedure.

Potassium
Potassium is an electrolyte found naturally in the body that works with sodium and calcium to regulate the body's water balance and maintain normal heart rhythm. It is responsible for nerve impulse conduction and muscle contraction. Found in many colorful fruits and vegetables, as well as low-fat dairy and certain types of seafood, natural sources of potassium play an important role in controlling blood pressure because potassium blunts the effects of sodium. The recommended daily intake of potassium for an average adult is about 4,700 milligrams per day.

Pre-diabetes
Pre-diabetes is when your blood glucose (or sugar) levels are higher than normal, but not high enough to be diagnosed as diabetes. Blood testing may reveal impaired fasting glucose or impaired glucose tolerance. People with pre-diabetes are at increased risk for developing type 2 diabetes, heart disease and stroke.

Prehypertension
Prehypertension is when blood pressure (the pressure of the blood against the walls of the arteries) is consistently ranging 120-139/80-89. People with pre-hypertension are likely to develop high blood pressure unless steps are taken to control it. Blood pressure is optimal at less than 120/80 and is considered high if it is above 140/90. High blood pressure increases the risk for heart attack, angina, stroke, kidney failure and peripheral artery disease.

Premature Atrial Contraction
Premature atrial contraction is an early beat of the heart's upper chamber (atrium). It may feel like the heart "skipped" a beat. (See also palpitations.)

Premature Ventricular Contraction
Premature ventricular contraction is an early beat of the heart's lower chamber (ventricle). It may feel like the heart "skipped" a beat. (See also palpitations.)

Prevalence
Prevalence is the total number of cases of a given disease in a population at a specific time. Prevalence is sometimes expressed as a percentage of population.

Prevention
The American Heart Association urges prevention to reduce your chances for heart disease or stroke. The American Heart Association has identified Life's Simple Seven as areas of emphasis: getting active, eating better, losing weight, quitting smoking, controlling cholesterol, managing blood pressure and reducing blood sugar. Prevention is especially important for anyone considered at high risk for heart disease or stroke.

Primary Care Doctor
A primary care doctor is a general internist or family physician who provides routine preventive health care and is a patient's first contact when medical problems arise.

Prinzmetal Angina
Prinzmetal angina can also be called, variant angina, Prinzmetal's variant angina, angina inversa. Unlike typical angina – which is often triggered by exertion or emotional stress - Prinzmetal’s angina almost always occurs when a person is at rest, usually between midnight and early morning. These attacks can be very painful. The pain from variant angina is caused by a spasm in the coronary arteries (which supply blood to the heart muscle). The spasms tend to come in cycles – appearing for a time, then going away. After six to 12 months of treatment, doctors may gradually reduce the medication.

Progestin
Progestin is any of a group of steroid hormones that have the effect of the female hormone progesterone. It's used in oral contraceptives and hormone replacement therapy. There is also a natural form of progestin.

Prophylaxis
Prophylaxis is preventive treatment.

Prostaglandin
A prostaglandin is one of several hormone-like substances that participate in a wide range of body functions. For example, it's involved in contracting and relaxing smooth muscle; dilating and constricting blood vessels; control of blood pressure; and modulation of inflammation. Prostaglandins are derived from a chemical called arachidonic acid.

Pulmonary
Pulmonary pertains to the lungs.

Pulmonary Artery Catheterization
Pulmonary artery catheterization is used to evaluate primary pulmonary hypertension. In the procedure, a thin, flexible tube called a Swan-Ganz catheter is usually inserted in one of the veins in the neck and threaded into the right ventricle and pulmonary artery. This is a common way to measure the pressure in the pulmonary artery and find out what treatment is appropriate. It's also used in critically ill patients to provide continuous monitoring of heart function. It is sometimes called Swan-Ganz catheterization.

Pulmonary Artresia
A pulmonary atresia is a congenital heart defect in which no pulmonary valve exists. Blood can't flow from the right ventricle into the pulmonary artery and on to the lungs. This results in a blue discoloration of the skin (called cyanosis).

Pulmonary Edema
Pulmonary edema is fluid buildup in the lung. It's usually due to mitral stenosis or left ventricular failure. Symptoms of pulmonary edema include difficulty breathing, coughing up blood-tinged sputum, excessive sweating, anxiety and pale skin.

Pulmonary Hypertension
Pulmonary hypertension is high blood pressure in the arteries, capillaries and veins within the lungs. This condition is different from hypertension, or high blood pressure, measured by a traditional test with a cuff around your arm. Pulmonary hypertension causes the right side of the heart to work harder due to higher pressures. This increased pressure may be detected by heart sounds heard via a stethoscope or bulging neck veins. Warning signs for pulmonary hypertension include fatigue, dizziness and shortness of breath.

Pulmonary Valve
The pulmonary valve is the heart valve between the right ventricle and the pulmonary artery. It has three flaps (cusps).

Pulmonary Valve Regurgitation
Pulmonary regurgitation (PR, also called pulmonic regurgitation) is a leaky pulmonary valve. This valve helps control the flow of blood passing from the heart to the lungs. A leaky pulmonary valve allows blood to flow back into the heart chamber before it gets to lungs for oxygen.

Pulmonary Valve Stenosis
Pulmonary stenosis is a congenital heart defect in which the pulmonary valve doesn't open properly. The pulmonary valve is between the right ventricle and the pulmonary artery. It opens to allow blood to flow from the right ventricle through the pulmonary artery to the lungs. This forces the right ventricle to pump harder than normal to overcome the obstruction. In most children, the obstruction can be relieved by a procedure called balloon valvuloplasty. Others may need open-heart surgery.

Pulmonary Veins
Pulmonary veins are the four veins that return blood from the lungs to the heart. They empty into the left upper chamber (atrium) of the heart.

Pulse
Pulse is also called heart rate. It's the number of times your heart beats per minute. Normal heart rate varies from person to person and is normally 60 to 100 times a minute. The best places to find your pulse are the wrists, the inside of your elbow, the side of your neck and the top of the foot. To get the most accurate reading, put your finger over your pulse and count the number of beats in 60 seconds.

Q

R

Radionuclide Ventriculography or Radionuclide Angiography (MUGA scan)
Radionuclide ventriculography (RVG, RNV) or radionuclide angiography (RNA) is often referred to as a MUGA (multiple-gated acquisition) scan. It is a type of nuclear imaging test. This scan shows how well your heart is pumping.

Re-entry
A re-entry is a type of abnormal conduction in which electrical impulses get caught in a merry-go-round-like sequence. This is a common cause of tachycardias.

Regurgitation
Regurgitation, in cardiovascular terms, is when blood leaks back into the heart chamber from which it was pumped because a valve doesn't close properly.

Reperfusion Therapy
Reperfusion therapy are techniques that restore blood flow to part of the heart muscle damaged during a heart attack, or part of the brain injured during a stroke. It may include clot-dissolving drugs (thrombolysis), balloon angioplasty or surgery.

Resident
A resident is a licensed physician completing training in a primary specialty (e.g., pediatrics, surgery, internal medicine, obstetrics/gynecology, etc.).

Restenosis
Restenosis is a re-narrowing of an artery after a procedure to open it up. (These procedures are known as percutaneous coronary intervention, angioplasty, or stent placement or bypass-grafting surgery.)

Resting Heart Rate
Your resting heart rate is the number of times your heart beats per minute while it's at rest. Best taken after a good night's sleep, before getting out of bed, the average resting heart rate is 60-80 beats per minute, but it's usually lower for physically fit people. It also rises with age. The best places to find your pulse are the wrists, the inside of your elbow, the side of your neck and the top of the foot. To get the most accurate reading, put your finger over your pulse and count the number of beats in 60 seconds.

Retinopathy
Retinopathy is damage to the blood vessels in the retina

Rheumatic Fever
Rheumatic fever is an inflammatory reaction that can occur after a streptococcal infection of the throat (strep throat). Most of the time strep throat doesn't lead to rheumatic fever, but when it does it typically develops two to four weeks later. Symptoms can include sudden onset of a sore throat, especially with painful swallowing, fever, and tender, swollen glands under the jaw. Rheumatic fever is not contagious and can almost always be prevented if strep throat is treated.

Rheumatic Heart Disease
Rheumatic heart disease is damage to the heart, particularly the heart valves, after having one or more attacks of rheumatic fever.

Right Heart Catheterization
Pulmonary artery catheterization is used to evaluate primary pulmonary hypertension. In the procedure, a thin, flexible tube called a Swan-Ganz catheter is usually inserted in one of the veins in the neck and threaded into the right ventricle and pulmonary artery. This is a common way to measure the pressure in the pulmonary artery and find out what treatment is appropriate. It's also used in critically ill patients to provide continuous monitoring of heart function. It is sometimes called Swan-Ganz catheterization.

Right Heart Ventriculography
A right heart ventriculography is a study of the right chambers of the heart (the right atrium and right ventricle). The test helps physicians measure pressure, oxygen and cardiac output through a thin flexible tube called a catheter. Occasionally, visualizing the right chambers is also necessary. This is done by injecting contrast media (dye) through the catheter into the heart's right side with a rapid succession of X-rays taken to capture images of blood flow.

Right Sided Heart Failure
A right-sided heart failure is heart failure caused by damage to the heart's right-sided chambers. This can occur as a result of pulmonary hypertension or left-sided heart failure. When the left ventricle fails, increased fluid pressure is in effect transferred back through the lungs, ultimately damaging the heart's right side. When the right side loses pumping power, blood backs up in the body's veins. This usually causes increase pressure in the neck veins and swelling in the legs and ankles.

Right Ventricular Heart Failure
A right-ventricular heart failure is heart failure caused by damage to the heart's right-sided chambers. This can occur as a result of pulmonary hypertension or left-sided heart failure. When the left ventricle fails, increased fluid pressure is in effect transferred back through the lungs, ultimately damaging the heart's right side. When the right side loses pumping power, blood backs up in the body's veins. This usually causes increase pressure in the neck veins and swelling in the legs and ankles.

Risk Factors
Risk factors are habits or conditions that increase the chances of developing a disease. For cardiovascular diseases, there are seven major modifiable risk factors: smoking, physical inactivity, unhealthy diet, unhealthy body weight, high blood cholesterol, high blood pressure and high blood sugar. The American Heart Association's Life's Simple 7 can help you check your risk factors and make improvements.

S

Salt
Salt is a crystalline compound that contains sodium, but the two are not synonymous. Many people eat too much salt, putting them at greater risk for cardiovascular diseases as they get older. Eating less salt can help lower your blood pressure or prevent it from developing in the first place.

1/4 teaspoon salt = 575 milligrams of sodium
1/2 teaspoon salt = 1,150 mg sodium
3/4 teaspoon salt = 1,725 mg sodium
1 teaspoon salt = 2,300 mg sodium

Saturated Fat
Saturated fats are found in meat and dairy products, and they can raise cholesterol levels in the blood. They should be limited to less than 5-6 percent of your total daily calories, or about 140 calories on a 2,000-calorie diet. While certain plant foods, such as palm or coconut oils, also contain saturated fats, they do not contain cholesterol.

SCAD
Spontaneous Coronary Artery Dissection (SCAD) is a rare but potentially fatal disease that usually affects young women with no risk factors for heart disease. The coronary arteries that arise from the aorta and supply blood to the heart consist of three layers. Dissection occurs when two of these layers separate, enabling blood to flow into the space between the layers. As blood accumulates, it can obstruct the heart's normal blood flow, leading to chest pain, heart attack and even sudden death.

Septum
The septum is the muscular wall dividing the chambers on the heart's left side from the chambers on the right.

Sex and Cardiovascular Disease
Survivors of heart attacks and other heart patients can typically have sex without worrying about further damaging their hearts, providing their healthcare providers have cleared them for routine physical activity. Patients should ask their healthcare providers whether they are healthy enough for sex.

Shunt
A shunt can be an abnormal flow pattern of blood through the chambers of the heart or the large arteries leaving the heart. The term is also used for surgically created passages used in bypass grafting surgery, to drain fluids from the body or to increase the delivery of blood to the lungs.

Sickle Cell Anemia
Sickle cell anemia is a genetic blood disorder in which the body produces sickle- or crescent-shaped red blood cells. This abnormal shape makes it difficult for blood to flow through blood vessels and impairs the cells' ability to efficiently carry oxygen to the body's tissues and organs. Affected cells often stick to blood vessel walls, increasing the risk for blocked arteries to the brain that can cause stroke. Blockages in the coronary arteries of the heart can lead to heart attack. This disorder mainly affects African-Americans.

Side Effect
A side effect is a reaction that results from a medication or therapy. For example, heart failure medications can cause side effects such as headaches, nausea, dizziness, kidney complications and low blood pressure.

Signs of a Heart Attack
Signs of a heart attack include discomfort in the chest (pressure, squeezing, fullness), discomfort in other upper-body areas (arms, back, neck, jaw or stomach), shortness of breath, a cold sweat, nausea or lightheadedness. As with men, women's most common heart attack symptom is chest pain or discomfort. But women are somewhat more likely than men to experience some of the other common symptoms, particularly shortness of breath, nausea, vomiting and back or jaw pain.
Call 9-1-1 if you think you or someone else is having a heart attack.

Silent Ischemia
Silent ischemia refers to episodes in which blood flow is restricted or reduced in part of the body a condition called ischemia that aren't accompanied by pain.

Single Photon Emission Computed Tomography
A SPECT scan of the heart is a noninvasive nuclear imaging test. It uses radioactive tracers that are injected into the blood to produce pictures of your heart. Doctors use SPECT to diagnose coronary artery disease and find out if a heart attack has occurred. SPECT can show how well blood is flowing to the heart and how well the heart is working.

Sinoatrial
The sinoatrial, also called the sinus node, is the heart's natural pacemaker. Located in the right atrium, it initiates the heart's electrical activity stimulating muscle contraction so the heart can pump blood to the body.

Sinus Node
The sinus node, also called the sinoatrial, is the heart's natural pacemaker, Located in the right atrium, it initiates the heart's electrical activity stimulating muscle contraction so the heart can pump blood to the body.

Sinus Rhythm
Sinus rhythm is the normal heart rate and rhythm of the heart, typically 60 to 100 beats per minute.

Smoking and Cardiovascular Disease
Cigarette smoking is the No. 1 preventable cause of death in the United States and greatly increases the risk of heart disease and stroke. Smokers are likely to have increased blood pressure and decreased ability to exercise, and are more likely to have blood clots.

Sodium
Sodium is a mineral that helps regulates the body’s water balance, maintains normal heart rhythm and is responsible for nerve impulse conduction and muscle contraction. Getting too much sodium from food and beverages contributes to high blood pressure in some people because it holds excess fluid in the body, creating an added burden on the heart. Processed food is the source for 77 percent of sodium in the diet for most Americans. Excess sodium can also increase your risk for stroke and heart failure. The American Heart Association recommends choosing and preparing foods with little or no salt. To lower blood pressure, aim to eat no more than 2,400 milligrams of sodium per day. Reducing daily intake to 1,500 mg is desirable because it can lower blood pressure even further. It is estimated that an average intake of 1,500 milligrams a day would reduce high blood pressure in America by about 25 percent and save more than $26 billion in annual healthcare costs.

Spasm
A spasm is the sudden, temporary or prolonged contraction of a muscle or artery.

SPECT (Single Photon Emission Computed Tomography)
A SPECT scan of the heart is a noninvasive nuclear imaging test. It uses radioactive tracers that are injected into the blood to produce pictures of your heart. Doctors use SPECT to diagnose coronary artery disease and find out if a heart attack has occurred. SPECT can show how well blood is flowing to the heart and how well the heart is working.

Sphygmomanometer
A sphygmomanometer, also called a blood pressure monitor, is an instrument used to measure blood pressure.

Spontaneous Coronary Artery Dissection (SCAD)
Spontaneous Coronary Artery Dissection, SCAD, is a rare but potentially fatal disease that usually affects young women with no risk factors for heart disease. The coronary arteries that arise from the aorta and supply blood to the heart consist of three layers. Dissection occurs when two of these layers separate, enabling blood to flow into the space between the layers. As blood accumulates, it can obstruct the heart's normal blood flow, leading to chest pain, heart attack and even sudden death.

Stable Angina
Stable angina is predictable chest discomfort that occurs during physical exertion or under mental or emotional stress. It can be relieved with rest, nitroglycerin or a combination of the two.

Stages of Heart Failure
The stages of heart failure is a rating system to evaluate the development and progression of heart failure symptoms. Developed by the American Heart Association and American College of Cardiology in 2001, the system includes four stages.

- Stages A and B represent people who have not yet developed heart failure but are at high risk because of coronary artery disease, high blood pressure, diabetes or other predisposing conditions.
- Stage C includes patients with past or current symptoms of heart failure who have a condition called structural heart disease.
- Stage D includes patients who have advanced heart failure that is difficult to manage with standard treatment.

Statins
Statins are lipid-lowering drugs used to reduce elevated cholesterol levels. High cholesterol is associated with increased risk of cardiovascular disease. Statins work in the liver to prevent cholesterol from forming. They are also known as HMG CoA reductase inhibitors.

ST-elevation Myocardial Infarction
ST-elevation myocardial infarction, also known as STEMI, which is a more precise definition for a type of heart attack. It's caused by a prolonged period of blocked blood supply that affects a large area of the heart. STEMI has a substantial risk of death and disability and calls for a quick response.

STEMI
STEMI is a common name for ST-elevation myocardial infarction, which is a more precise definition for a type of heart attack. It's caused by a prolonged period of blocked blood supply that affects a large area of the heart. STEMI has a substantial risk of death and disability and calls for a quick response.

Stenosis
Stenosis is the narrowing or constriction of an opening, such as a blood vessel or heart valve.

Stent
A stent is a wire mesh tube that's inserted into a narrowed coronary artery to prop it open, prevent re-blockage and allow the heart muscle to get the blood flow and oxygen it needs. A stent can also be placed in narrowed carotid arteries (the vessels in the front of the neck that supply blood to the brain) to treat patients at high risk for stroke.

Stent Procedure
A stent procedure uses a wire mesh tube called a stent to prop open an artery that's recently been cleared using angioplasty.

Stethoscope
A stethoscope is an instrument for listening to sounds within the body.

Strep Infection
A strep infection, or streptococcal infection, is caused by streptococcus bacteria, and usually occurs in the throat. In rare cases, it can cause damage to otherwise normal heart valves in children, resulting in heart failure.

Streptococcal
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Stress
Stress is bodily or mental tension in response to physical, chemical or emotional factors. The link between stress and heart disease is not clear. However, chronic stress that causes an increase in heart rate and blood pressure may damage the artery walls.

Stroke
A stroke is an interruption of blood flow to the brain causing paralysis, slurred speech and/or altered brain function. About nine of every 10 strokes are caused by a blockage in a blood vessel that carries blood to the brain; this is known as an ischemic stroke. The other type of stroke is known as hemorrhagic, caused by a blood vessel bursting. Warning signs include sudden numbness or weakness of the face, arm or leg (especially on one side); sudden confusion, trouble speaking or understanding; sudden trouble seeing in one or both eyes; sudden trouble walking, dizziness, loss of

balance or coordination; sudden, severe headache with no known cause. Call 9-1-1 if you think you or someone else is having a stroke.

Stroke Scale
The National Institute of Health stroke scale is a standardized method used by healthcare professionals to measure the level of impairment caused by a stroke. The Stroke Scale assesses motor, sensory and visual impairments, on a scale of 0-42 through a physical exam and a series of questions. By using this scale, health professionals can get an idea of what part of the brain has been affected and where a clot might be located in the brain.

Structural Heart Disease
Structural heart disease most often refers to cardiac defects present at birth, but may also include abnormalities of the valves and vessels of the heart wall that develop due to aging, injury or infection.

Subaortic Stenosis
Subaortic stenosis is a congenital heart defect in which the left ventricle is narrowed just below the aortic valve, limiting the flow of blood. The defect can also be due to a form of cardiomyopathy. Treatment depends on the cause and severity of the narrowing and includes drugs and surgery. People with subaortic stenosis are at risk for endocarditis, an infection within the aorta or the heart valves before and after treatment and are often advised to take antibiotics before certain dental and surgical procedures to prevent it.

Sudden Cardiac Arrest
Sudden cardiac arrest occurs when the heart's electrical system malfunctions, and the heart suddenly stops beating often without warning. While the terms "sudden cardiac arrest" and "heart attack" are often used as if they are synonyms, they aren't. Sudden cardiac arrest can occur after a heart attack, or during recovery. Heart attacks increase the risk for sudden cardiac arrest, but most heart attacks do not lead to sudden cardiac arrest. Immediate CPR can double or triple the chances of survival from sudden cardiac arrest.

Sudden Cardiac Death
Sudden cardiac death can occur when someone in sudden cardiac arrest is not treated promptly. Sudden cardiac arrest occurs when the heart's electrical system malfunctions and the heart suddenly stops beating -- often without warning. While the terms "sudden cardiac arrest" and "heart attack" are often used as if they are synonyms, they aren't. Sudden cardiac arrest can occur after a heart attack, or during recovery. Heart attacks increase the risk for sudden cardiac arrest, but most heart attacks do not lead to sudden cardiac arrest. Immediate CPR can double or triple the chances of survival from sudden cardiac arrest.

Sugar
Sugar in food can be naturally occurring or added. Naturally occurring sugars are better nutritionally and are found in foods such as fruit (fructose) and milk (lactose).

Sugar Intake
The American Heart Association recommends no more than half of your daily discretionary calorie allowance come from added sugars. (Your daily discretionary calorie allowance consists of calories available after meeting nutrient needs.) This is no more than 100 calories per day for most American women and no more than 150 per day for men (or about 6 teaspoons a day for women and 9 teaspoons a day for men).

Superior Vena Cava
The superior vena cava is a major vein that carries blood from the upper body to the heart.

Supraventricular Tachycardia
A supraventricular tachycardia is a condition in which heart tissue in either the upper chambers or the region above the ventricles develops pacemaker activity, resulting in an abnormally fast heartbeat.

Swan-Ganz Catheter
A Swan-Ganz catheter is thin, flexible tubing with an expandable balloon tip used for measuring pressure in the pulmonary artery. It is named for its inventors, Jeremy Swan and William Ganz.

Sympathetic Nerve Inhibitors
Sympathetic nerve inhibitors are drugs that reduce blood pressure by inhibiting the sympathetic nerves from constricting blood vessels.

Syncope
Syncope is a temporary loss of consciousness, also described as passing out or fainting, due to the sudden decline of blood flow to the brain.

Systole
Systole is the contraction phase of the normal heart cycle during which blood is driven into the aorta and pulmonary artery.

Systolic Blood Pressure
Systolic blood pressure refers to the highest blood pressure measured in the arteries and occurs during the pumping phase of the heartbeat. It is measured in millimeters of mercury (mmHg) and is the upper number in the standard blood pressure reading. For example, in a blood pressure reading of 120/80, 120 refers to the systolic blood pressure.

Systolic Heart Failure
Systolic heart failure is a condition in which the heart pumps with decreased strength and the pumping chambers become thin, large and floppy. Because blood cannot be pumped out efficiently, it backs up into organs, causing swelling in the body and congestion in the lungs. As the disease progresses, the heart is unable to pump enough blood for the body to meet its needs. This type of heart failure is caused by conditions such as coronary artery disease, high blood pressure, valvular heart disease and idiopathic cardiomyopathy.

T

Tachycardia
Tachycardia is a heart rate that's too fast. Tachycardia is often defined as a heart rate that's more than 100 beats per minute in adults.

Target Heart Rate
The target heart rate is your ideal heart rate, or pulse, during physical activity. Your target heart rate is within 50 to 85 percent of the maximum heart rate, which is the highest heart rate you should have during exercise. Determine your maximum heart rate by subtracting your age from 220. You can monitor your heart rate periodically during exercise by checking your pulse are the wrists, the inside of your elbow, the side of your neck and the top of the foot. To get the most accurate reading, put your finger over your pulse and count the number of beats in 60 seconds.

Tetralogy of Fallot
Tetralogy of Fallot is a complex heart defect in which blood pumped to the body is lacking in oxygen, sometimes resulting in the skin taking a blue tone. There are four components to the condition involving various parts of the heart. People are born with this condition, or develop it soon after birth. Most children diagnosed with this condition have open-heart surgery before school age. Some infants with tetralogy of Fallot may need an operation to allow for increased circulation of oxygenated blood. Lifelong medical follow-up is needed.

Therapeutic Hypothermia
Therapeutic hypothermia is a medical treatment that intentionally lowers the body temperature to protect the body following a period of insufficient blood flow due to such events as a cardiac arrest, embolism or stroke. Studies have shown that therapeutic hypothermia can improve survival as well as neurological function.

Thoracic Aortic Aneurysm
A thoracic aortic aneurysm is an abnormal bulging or ballooning of the portion of the aorta the passes through the chest.

Thrombolysis
Thrombolysis is the breaking up of a blood clot.

Thrombosis
Thrombosis is the formation or presence of a blood clot inside a blood vessel or chamber of the heart.

Thrombus
Thrombus is a blood clot that forms inside a blood vessel or chamber of the heart.

Tilt-table Test
If you often feel faint or lightheaded, your doctor may use a tilt-table test to find out why. During the test, you lie on a table that is slowly tilted upward. The test measures how your blood pressure and

heart rate respond to the force of gravity. A nurse or technician keeps track of your blood pressure and your heart rate (pulse) to see how they change during the test.

Trans Fat
When liquid vegetable oil undergoes a chemical process called hydrogenation to create a solid, *trans* fat is formed. *Trans* fat is sometimes used in processed foods to prolong shelf life and to give food a desirable taste and texture. Research suggests that consuming *trans* fat can raise LDL (bad) cholesterol and lower HDL (good) cholesterol.

Tricuspid Valve Regurgitation
Tricuspid regurgitation is leakage of blood backwards through the tricuspid valve each time the right ventricle contracts.

Tricuspid Valve Stenosis
Tricuspid stenosis is a narrowing of the tricuspid valve opening. Tricuspid stenosis restricts blood flow between the upper and lower part of the right side of the heart, or from the right atrium to the right ventricle.

Triglycerides
Triglycerides are the chemical form in which most fat exists in food as well as in the body. They circulate in the blood plasma and, in association with cholesterol, form the plasma lipids. Triglycerides come from fats eaten in foods or made in the body from other energy sources like carbohydrates. Calories eaten that are not used immediately by tissues, are then converted to triglycerides and transported to fat cells to be stored and used by the body as an energy source between meals. Hormones regulate the release of triglycerides from fat tissue so they meet the body's needs for energy.

U

Unsaturated Fats
There are two types of unsaturated fats, polyunsaturated and monounsaturated. These are often referred to as the "better fats" and are found mainly in many fish, nuts, seeds and oils from plants. Polyunsaturated and monounsaturated fats may help lower your blood cholesterol level when used in place of saturated and *tran*s fats. It's ideal to keep total fat intake between 25 and 35 percent of calories, with most fats coming from unsaturated fats.

Unstable Angina
Unstable angina or sometimes referred to as acute coronary syndrome causes unexpected chest pain, and usually occurs while resting. The most common cause is reduced blood flow to the heart muscle because the coronary arteries are narrowed by fatty buildups (atherosclerosis) which can rupture causing injury to the coronary blood vessel resulting in blood clotting which blocks the flow of blood to the heart muscle. Unstable angina should be treated as an emergency.

V

Variant Angina
Variant angina can also be called, Prinzmetal angina, Prinzmetal's variant angina, angina inversa. Unlike typical angina – which is often triggered by exertion or emotional stress - Prinzmetal's angina almost always occurs when a person is at rest, usually between midnight and early morning. These attacks can be very painful. The pain from variant angina is caused by a spasm in the coronary arteries (which supply blood to the heart muscle). The spasms tend to come in cycles – appearing for a time, then going away. After six to 12 months of treatment, doctors may gradually reduce the medication.

Vasodilators
Vasodilators, also called blood vessel dilators, are drugs that cause the blood vessels (especially the arterioles) to expand in an effort to lower blood pressure and reduce the heart's workload. ACE inhibitors and nitrates are types of vasodilators.

Vegetables and Fruits
Vegetables and fruits are an important part of a healthy eating plan. They are high in vitamins, minerals and fiber and low in fat and calories. Eating a variety of vegetables and fruits may help you control your weight and blood pressure. The American Heart Association recommends eating eight or more fruit and vegetable servings every day. An average adult consuming 2,000 calories daily should aim for 4.5 cups of fruits and vegetables a day.

Vegetarian Diets
Most vegetarian diets are low in or devoid of animal products and are usually lower than non-vegetarian diets in total fat, saturated fat and cholesterol. Studies have shown that vegetarians seem to have a lower risk of obesity, coronary heart disease, high blood pressure, diabetes mellitus and some forms of cancer. The American Heart Association recommends a vegetarian diet should include a wide variety of foods and enough calories to meet energy needs. Choose whole or unrefined grain products. Use a variety of fruits and vegetables, including foods that are good sources of vitamins A and C. If you use dairy products, choose fat-free/nonfat and low-fat varieties. Keep intake of sweets and fatty foods to a minimum.

W

Walking and Cardiovascular Disease
Walking is an easy way to reduce your risk of cardiovascular disease. The American Heart Association recommends at least 150 minutes of moderate exercise or 75 minutes of vigorous exercise each week. Thirty minutes a day, five times a week is an easy goal to remember. However, you will also experience benefits even if you divide your time into two or three segments of 10-15 minutes per day. Walking has the lowest dropout rate among other choices for physical activity, and it's free.

Warfarin
Warfarin is medication used to prevent blood clots from forming or growing larger in blood and blood vessels. Warfarin is in a class of medications called anticoagulants (blood thinners) that works by decreasing the clotting ability of the blood. It is prescribed for people with certain types of irregular heartbeat, prosthetic heart valves, and for those who have had a heart attack. Warfarin is also used to treat or prevent venous thrombosis (blood clot in a vein) and pulmonary embolism (a blood clot in the lung).

Warning Signs
Call 9-1-1 if you think you or someone else is having a heart attack or stroke.
Signs of a heart attack include discomfort in the chest (pressure, squeezing, fullness), discomfort in other upper-body areas (arms, back, neck, jaw or stomach), shortness of breath, a cold sweat, nausea or lightheadedness. Women are more likely to have shortness of breath, nausea and back or jaw pain.

Signs of a stroke include sudden numbness or weakness of the face, arm or leg, especially on one side of the body; confusion, trouble speaking or understanding; trouble seeing in one or both eyes; trouble walking, dizziness, loss of balance or coordination and/or severe headache with no known cause.

Water Pill
A water pill, also called a diuretic, is a drug that increases the rate at which urine forms by promoting the excretion of water and salts. This helps to relieve the heart's workload and decreases the buildup of fluid in the lungs and other parts of the body. Different diuretics remove fluid at varied rates and through different methods. They can be used to treat high blood pressure, congestive heart failure and some congenital heart defects.

Weight Loss
Weight loss is the result of burning more calories than you eat. Weight loss can be achieved through wise food choices and increased physical activity. The American Heart Association recommends maintaining a healthy body weight to help decrease your risk for heart disease and stroke.

Whole Grains
Any food made from wheat, rice, oats, corn or another cereal is a grain product. Bread, pasta, oatmeal and grits are all grain products. Whole grains contain the entire grain – the bran, germ and endosperm. Whole grains are generally good sources of dietary fiber. Examples include whole-wheat flour, oatmeal, whole cornmeal, brown rice and bulgur. Dietary fiber from whole grains, as part of an overall healthy diet, helps reduce blood cholesterol levels and may lower risk of heart disease. Fiber-containing foods such as whole grains help provide a feeling of fullness with fewer calories and so may help with weight management.

Wine and Cardiovascular Diseases
Moderate wine consumption has been associated with a reduced risk of death from cardiovascular diseases in some people, according to scientific studies. How wine affects cardiovascular risk merits further research, but the American Heart Association does not recommend drinking wine for these

potential benefits. To reduce your risk, talk with your doctor about lowering your cholesterol and blood pressure, controlling your weight, getting regular physical activity and following a healthy dietary pattern that is right for your level of activity. The American Heart Association recommends no more than two drinks per day for men and no more than one drink per day for non-pregnant women.

Women and Heart Disease

Heart disease is the No. 1 cause of death in American women. Cardiovascular disease kills more women than all forms of cancer. Heart disease is largely preventable through healthy lifestyle choices such as a diet that includes fruit and vegetables, lean meats and fish while limiting added sugars and sodium; regular physical activity; and not smoking.

X

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