

February  
2022  
Heart  
Health  
Education

# American Heart Month

- Traditionally the month for lovers and all things heart related, February also reminds us to take care of our heart.
- The annual celebration began in 1963 to encourage Americans to join the battle against heart disease.
- It's a great time for the people who work in hospitals and health systems and live in your communities to commit to a healthy lifestyle and make small changes that can lead to a lifetime of heart health. If your not doing so already, get involved in American Heart Month. Spread the word about strategies for preventing heart disease and living heart healthy lives.

# How the Heart Works

- ◆ The heart is a bag made out of muscle, which has blood vessel leading in and out.
- ◆ It works like a large pump, pushing blood out through the vessels that run throughout the body. The blood carries oxygen, nutrients, and waste products.
- ◆ Blood is pumped from the heart to the lungs, where it picks up oxygen. The blood then returns to the heart, where it is pumped out to the rest of the body. The blood delivers oxygen to the tissues and picks up and distributes nutrients and waste products and then returns to the heart and gets pumped back into the lungs.

# What can go wrong?

- ◆ We will look at two different unhealthy heart conditions: Heart Failure and Heart Attacks.

# Heart Failure

- ◆ Heart failure is a condition in which the heart doesn't pump as well as it should. The heart has not actually “failed,” but it is not pumping enough blood to meet the requirements of the body's tissues and organs. The blood flow slows down, causing a backup of fluid and waste products and depriving the tissues of oxygen and nutrients.

# Heart Failure cont.

- ◆ Heart failure is not a disease in itself but is caused by underlying problems like high blood pressure or clogged arteries. It is often called congestive heart failure or CHF because the excess fluid or congestion that tends to build up in the lungs and in tissues throughout the body. This excess fluid creates symptoms like swollen ankles and shortness of breath.

# Heart Failure cont.

- ◆ Heart failure is usually a long-term condition that gradually becomes worse. The heart tries to make up for its loss of power by enlarging its chambers, developing more muscle mass, and pumping faster. The body tries to compensate in other ways. Blood vessels narrow, and blood is diverted away from less important tissues and organs to maintain flow to the heart and brain.

# Most Common Signs and Symptoms of Heart Failure

- ◆ Fatigue, weakness, feeling tired
- ◆ Shortness of breath during activities
- ◆ Unable to breathe well when lying flat
- ◆ Edema: swelling in feet, ankles, legs, and abdomen
- ◆ Rapid weight gain
- ◆ Persistent coughing or wheezing, possibly with white or pink blood-tinged foamy phlegm.
- ◆ Lack of appetite, nausea
- ◆ Memory loss, disorientation, confusion
- ◆ Heart palpitations, heart racing
- ◆ Irregular heart beat
- ◆ Anxiety, restlessness
- ◆ Decreased urine output
- ◆ Cold, sweaty skin that might look gray or bluish in color



# Heart Attack

- ◆ A heart attack is an injury to the heart muscle caused by a loss of blood supply. It occurs when an artery that feeds blood to the heart becomes blocked. The blockage is usually due to a blood clot that forms where one of these arteries has been narrowed by a build-up of cholesterol and fat.

# Heart Attack cont.

- ◆ A heart attack is also called a myocardial infarction, or MI. Myo means muscle, cardio means heart, and infarct means that some heart tissue has died from lack of oxygen.

# Heart Attack cont.

- ◆ A heart attack usually occurs over a period of four to six hours. With each minute, more heart tissue is deprived of oxygen and is damaged or dies. The only way to help an individual suffering a heart attack is to restore blood flow before too much damage is done.

# Heart Attack cont.

- ◆ Heart attack symptoms in women, the elderly, and people with diabetes tend to be less pronounced. Some people have no symptoms at all. While heart attacks usually occur suddenly, about half of all victims have warning signs in advance.

# Heart Attack cont.

- ◆ All heart attacks are emergencies. Early treatment, including cardiopulmonary resuscitation (CPR) if the heart stops, is essential to survival. Everyone should learn CPR and be able to use it. Recognizing symptoms of a heart attack and helping the person get emergency care can save a life.

# Warning Signs of a Heart Attack

- ◆ Pressure, fullness, uncomfortable squeezing or pain in the middle of the chest that lasts beyond a few minutes.
- ◆ Pain spreading beyond the chest to the shoulders, neck, arms, or back, and sometimes to the teeth and jaw.
- ◆ Pain in the upper abdomen that lasts for more than a few minutes (sometimes people think they are having indigestion or heartburn)
- ◆ Shortness of breath, difficulty breathing
- ◆ Intense sweating

# Warning Signs of a Heart Attack

- ◆ Fainting, unsteadiness, lightheadedness
- ◆ Nausea and vomiting
- ◆ Confusion
- ◆ Sense of anxiety or impending doom
- ◆ Angina: a type of chest pain caused by the heart temporarily not getting enough blood flow; angina of increasing frequency may be a warning sign of a heart attack

# Heart Attack Fact

- ◆ People that die from heart attacks usually die within the first hour after symptoms start. If you suspect that someone might be having a heart attack, call emergency medical personnel immediately.



# Causes and Risk Factors for Heart Failure and Heart Attacks

- ◆ The main causes of heart failure are the same things that can cause heart attacks, such as smoking, eating fatty foods, not exercising, and being overweight. Other causes include birth defects and viruses that damage the heart valves or muscles. Someone who experiences a heart attack will often develop heart failure because part of the heart muscle has been damaged, making the heart work harder.

# Risk Factors for Heart Disease

- ◆ High Blood Pressure
- ◆ High blood pressure
- ◆ Smoking
- ◆ Lack of exercise
- ◆ Obesity
- ◆ Diabetes
- ◆ Stress
- ◆ Alcohol
- ◆ Family history
- ◆ Abnormal heart valves
- ◆ Coronary artery disease
- ◆ Heart muscle disease
- ◆ Congenital heart disease
- ◆ Severe lung disease.

# Preventing Heart Disease

- ◆ Some of the things that cause heart disease can't be easily changed, such as disease caused by viruses or birth defects. Many of the causes and risk factors, however, can be improved with diet and activity changes. Everyone can benefit from following the “guidelines for a healthy heart.”

# Guidelines for a Healthy Heart

- ◆ Eat a variety of foods
- ◆ Engage in regular physical activity
- ◆ Achieve and maintain a healthy body weight by controlling caloric intake
- ◆ Limit total salt (sodium) consumption to less than one teaspoon per day
- ◆ Eat foods low in fat and cholesterol
- ◆ Limit sugar intake
- ◆ Eat plenty of vegetables, fruits, and whole grains
- ◆ Consume no more than one alcoholic drink per day
- ◆ Do not smoke
- ◆ Monitor blood pressure and keep it within healthy limits ( less than 140 systolic and 90 diastolic for most people, or 140/90)

# Fat and Cholesterol

- ◆ Cholesterol is a waxy substance made in the body (mostly in the liver). Our bodies use it to make some of our hormones and tissues. Foods that come from animals also contain cholesterol, so we add cholesterol to our body's supply when we eat things like eggs and meats. A high level of cholesterol in the blood is a major risk factor for heart disease.

# Fat and Cholesterol cont.

- ◆ A high intake of fatty foods is another risk factor for heart disease. There are three different kinds of fat: saturated, polyunsaturated, and monounsaturated. Saturated fat is the chief culprit in raising blood cholesterol and increasing the risk of heart disease. The main source of saturated fat is animal foods such as meat, eggs, cream, cheese, and butter. Some plant oils, such as coconut oils and cocoa butter, are also high in saturated fats. Foods that are high in saturated fats are normally high in cholesterol as well.

# Fat and Cholesterol cont.

- ◆ The two unsaturated fats (poly and mono) may help lower blood cholesterol when used in place of saturated fats. Unsaturated fats are found in certain plant oils, such as corn, safflower, olive, and peanut oils. Total intake of all three kinds of fats should be less than 30% of your total calories

# Fat and Cholesterol cont.

- ◆ Two other substances connected with cholesterol are of concern in heart health. Low-density (LDL) and high-density (HDL) lipoproteins carry cholesterol through the blood. LDL is the main cholesterol carrier, and if too much of it circulates in the blood, it can slowly build up in the arteries that feed the heart and brain, causing the arteries to clog.



# Fat and Cholesterol cont.

- ◆ HDL is the other cholesterol carrier, and it takes cholesterol away from the arteries and back to the liver, where it is taken out of the body. To maintain a healthy heart, you want to have a low level of LDL and a high level of HDL.

# Exercise Guidelines

- ◆ Physical activity does not have to be strenuous to bring health benefits. The important thing is to do a moderate amount of physical activity every day. Regular exercise helps control weight, raises HDL levels in some people, strengthens the heart muscle and promotes good circulation.

# Exercise Guidelines cont.

- ◆ Older adults and people with disabilities should talk to their doctors before beginning a new physical activity
- ◆ Choose an activity that is rhythmic and repetitive and improves circulation, like walking
- ◆ Find an activity that is enjoyable and can be done year round
- ◆ Wear comfortable clothes and shoes
- ◆ Exercise with a friend or group
- ◆ When walking, choose a smooth, soft surface that is well lit
- ◆ Take time to warm up and cool down
- ◆ Stretch muscles slowly and gently before and after
- ◆ Start exercising slowly and progress gradually
- ◆ Drink water at least every 15 minutes while exercising

# Dietary Guidelines

- ◆ Get two to four servings of fat-free or low-fat milk or dairy products (yogurt, cheese) daily.
- ◆ Eat no more than six ounces (cooked) of lean meat, poultry, and seafood a day. Include fish in your diet several times a week.
- ◆ Get five or more servings of vegetables and fruits daily.
- ◆ Eat six servings of grains (breads, cereals) and starchy vegetables (beans, potatoes) daily.
- ◆ Limit your intake of saturated fats like shortening, fried foods, whole milk, ice cream, and butter.