Heart Disease: What You Need to Know





Just Say Know

1 OUT OF EVERY 3 DEATHS

is related to cardiovascular disease.

When it comes to taking care of your heart, knowledge is power. It's as easy as four simple steps.

- KNOW the risk factors for heart disease.
- 02 KNOW when to talk to your doctor.
- (NOW how to lower your risk.
- (1)4 KNOW when to call 9-1-1.



Risk factors make you more likely to develop a disease. They can also increase the chances that a disease will get worse. The good news is that 80 percent of heart attacks and strokes can be prevented and treated by learning about your risks and taking action to control them.

Risk Factors You Can't Control

Age 55 or older (women), age 45 or older (men)

Family history of early heart disease. If your father or brother had a heart attack before age 45, or if your mother or sister had a heart attack before age 55, you are more likely to develop heart disease.

History of preeclampsia during pregnancy

Risk Factors You Can Control

High blood pressure

High blood cholesterol

Diabetes and prediabetes

Smoking

Being overweight or obese

Being physically inactive

Eating an unhealthy diet

Other Risk Factors

Sleep apnea

Stress

Depression

Too much alcohol

Birth control pills (especially for women over 35 who smoke)

Anemia





Don't be afraid to have an honest conversation with your doctor about heart disease. You will also need to have certain screenings or tests to learn if you're at risk. Getting these screenings and knowing their results are the first steps in taking control of your heart health.

Tests to help you lead a healthy lifestyle

- Blood pressure—Get yours checked every time you visit a doctor, starting at age 20.
- Cholesterol—Get yours checked every five years, starting at age 20. Get your cholesterol checked more often if you meet these criteria:
 - if your total cholesterol is greater than 200
 - if your HDL is less than 50
 - if you have other risk factors for heart disease
- Weight/Body Mass Index (BMI)—Get yours checked every time you visit a doctor, starting at age 20.
- Waist circumference—Get yours measured as needed

KNOW YOUR NUMBERS

Your Goals Should Be:

BLOOD PRESSURE: Optimal at 120/80

and no higher than 140/90

TOTAL CHOLESTEROL: Less than 200

LDL CHOLESTEROL: Less than 100 or Less than 70

if you have other risk factors

HDL CHOLESTEROL:
More than 60 optimal
Less than 50 a risk for women
Less than 40 a risk for men

TRIGLYCERIDES:
Less than 150
(more important for women)

BLOOD GLUCOSE:

Less than 100 for fasting value

BODY MASS INDEX (BMI):

Less than 25 for women & men

WAIST CIRCUMFERENCE:
Less than 35" for women

Less than 40" for men

DAILY EXERCISE:

More than 30 minutes is ideal, but you should strive for at least 20 min.

DAILY RELAXATION EXERCISE:

More than 30 minutes

CIGARETTES PER DAY:

Zero and no secondhand smoke

Need a physician?

For a listing of physicians available in the Lexington Medical Center network of care, visit **LexMed.com**.



1. Stop smoking.

Know the Benefits of Quitting

Tobacco use speeds up the development of atherosclerosis in the coronary arteries, in the peripheral arteries of the arms, legs and kidneys, and in the arteries of the brain. Smoking makes the heart work harder than it should.

With each puff:

- heart rate increases:
- blood vessels tighten;
- inflammation increases;
- blood pressure rises;
- carbon monoxide moves into the bloodstream and robs its oxygen supply.

Tobacco use increases the likelihood of coronary blood clots since it makes the platelets in the blood stick together more and the blood clot faster. Tobacco also lowers "good" cholesterol (HDL) in your bloodstream and increases overall bad cholesterol levels.

If you already have heart disease and smoke, your risks are even greater:

- Smokers are two to three times more likely to die of heart disease.
- Smokers who have bypass surgery are more likely to die in the time during and after surgery.
- Smokers have an increased risk of aneurysm rupture as heart patients and a greater chance that a bypass graft will become blocked.

Need a speaker?

You can schedule a speaker to talk to your church group or organization about heart disease by visiting **LexMed.com/Know** or calling Community Outreach at (803) 936-8850.

^{*}Centers for Disease Control and Prevention

^{**}World Health Organization

THE FACTS ABOUT SMOKING

EVERY DAY

TOBACCO KILLS AN ESTIMATED

1,200*

PEOPLÉ IN THE UNITED STATES & 14,000** WORLDWIDE.

Tobacco use is the single most preventable cause of death and illness in the U.S.

ON AVERAGE, SMOKERS DIE 13 TO 14 YEARS EARLIER THAN NONSMOKERS.



If those aren't enough reasons to quit, not only does smoking rob you of your own health, it also harms the health of those around you.

If you use tobacco, one of the best things you can do for your health is to stop.

No matter how long you've been using tobacco, or the amount you use, quitting will greatly improve your health and decrease your risk of heart disease, lung disease and cancer. In addition to improving your physical health, when you stop using tobacco you will have more energy, a better sense of smell and taste, healthier-looking skin and more money in your pocket!

Sources: American Cancer Society, Centers for Disease Control and Prevention

HELPFUL RESOURCES

Lexington Medical Center Smoking Cessation Classes (803) 358-6180, option 1

> South Carolina Department of Health and Environmental Control "Quit for Keeps"

> scdhec.gov/quitforkeeps
> Toll free at 1-800-784-8669 or 1-800-QUIT-NOW

P.A.D. Coalition • padCoalition.org

Toll free at 1-866-723-4636 or 1-866-PAD-INFO

U.S. Department of Health and Human Services

SmokeFree.gov

2. Control your blood pressure.

Get yours checked every time you visit a doctor, starting at age 20.

High blood pressure not only increases your risk for heart disease, it's also the most important risk factor for stroke. Because high

blood pressure doesn't usually cause symptoms, many people don't pay attention to it or try to control it. You can control your blood pressure by making lifestyle changes and, if necessary, by taking medication.



KNOW YOUR BLOOD PRESSURE VALUES			
CATEGORY	SYSTOLIC BP (Top Number)		DIASTOLIC BP (Bottom Number)
Normal	Less than 120	and	Less than 80
Elevated	120–129	and	Less than 80
High Blood Pressure (Hypertension) Stage 1	130–139	or	80–89
High Blood Pressure (Hypertension) Stage 2	140 or higher	or	90 or higher
Hypertensive Crisis (Consult your doctor immediately)	Higher than 180	and/or	Higher than 120

WHAT YOU CAN DO ABOUT BLOOD PRESSURE VALUES

- 1. See your doctor regularly and do what the doctor recommends.
- 2. Take your medication exactly as prescribed and don't stop taking it on your own.
- Eat more fruit and vegetables, substitute olive oil for vegetable or saturated oils and fats, increase low-fat (or nonfat) dairy products, substitute soy or fatty fish for other proteins and increase fiber.
- 4 Reduce or eliminate alcohol
- 5. Lose weight. Even a 10-pound reduction will lower your blood pressure.
- 6. Further reduce salt in your diet.
- 7. Exercise at least 30 minutes, 5–7 days per week.
- 8. Develop a relaxation strategy for 30 minutes per day, 5–7 days a week.

3. Control your cholesterol level.

Get yours checked every five years, starting at age 20.

The higher your blood cholesterol level, the greater your chances of developing heart disease. Lifestyle changes such as maintaining a healthy weight and exercising regularly can help you control your cholesterol. Sometimes doctors prescribe cholesterol-lowering medication to get your cholesterol level under control.

Cholesterol is a waxy fat-like substance that circulates through your body in the blood. It is present in every cell of the body and is used to make essential substances such as cell membranes, hormones, vitamin D and bile acids.

Most of the cholesterol in the body is made by the liver, but cholesterol also comes from food. Cholesterol is carried throughout the body in particles known as lipoproteins — LDL and HDL.

Low-density lipoproteins (LDL)

LDL travels through the bloodstream to be used by the cells. If not used by the body, LDL particles can build up inside artery walls. LDL is known as the "bad" or lousy cholesterol. The lower your LDL level, the better for your heart.

High-density lipoproteins (HDL)

HDL is known as the "good" or healthy cholesterol. It is responsible for transporting LDL from the bloodstream to the liver, where the LDL particles are removed from the body. Low levels of HDL can increase your risk for heart disease. The higher your HDL level, the better for your heart.

Cholesterol

Excess cholesterol in the bloodstream can build up inside the walls of arteries in the form of plaque. This can contribute to the development of cardiovascular disease.



The higher your level of LDL, the more likely you are to have blockages in your arteries. A low level of HDL also increases your risk of cardiovascular disease. Lifestyle changes and medications can help improve LDL and HDL levels in the blood.

4. Control or prevent diabetes.

Diabetes is a major risk factor for heart disease and stroke. Type 2 diabetes is the most common form and usually develops in adulthood, and the risk rises after age 45. This type of diabetes develops gradually and often shows no symptoms. If you have prediabetes, defined as higher than normal glucose levels, you're more likely to develop type 2 diabetes. Talk to your doctor about ways to keep your diabetes under control and how you can prevent diabetes.

Learn to control your diabetes so it doesn't control you!

Lexington Medical Centers offers several programs to help adults with diabetes learn how to effectively take control of their lives.

D2 & Me Support Group

D2 & Me is a free support and wellness group for people with type 2 diabetes and their caregivers. At each meeting,



you'll learn how to improve the quality of life for those with type 2 diabetes.

Hear from guest speakers and participate in question-and-answer sessions/open discussions, exercises, tastings, recipe exchanges, food makeovers and dinners at local restaurants. For more information, call (803) 936-4175 or (803) 361-8435.

Other Programs:

- **Diabetes Counseling:** Individualized diabetes counseling with a certified diabetes educator and/ or registered dietitian ordered by your doctor.
- **Carolina Pumpers** (Insulin Support Group): Meets four times each year.

5. Maintain a healthy weight.

More than 70 percent of American adults over age 20 are either overweight or obese. The more overweight you are, the greater your risk of heart disease. Talk to your doctor about whether or not you need to lose weight. And know that even losing a few pounds — just 5 to 10 percent of your current weight — will lower your risk of heart disease.

Changing the way you eat is an important step to reduce your risk of heart disease.

Eating a healthy diet can contribute to heart health by:

- providing you with energy;
- reducing high blood lipid levels;
- controlling high blood pressure;
- reducing inflammation in the coronary arteries;
- taking off extra pounds.

A heart-healthy diet includes a variety of:

- Carbohydrates—eat plenty of vegetables and fruit, and moderate portions of whole-grain products; avoid refined carbohydrates such as white breads, white pasta and most baked goods.
- Protein—choose lower fat protein sources such as skinless chicken breast, fish, legumes and soy products.

If you are trying to lose weight,

DO SO SLOWLY AND STEADILY. A GENERALLY SAFE RATE IS

1 to **3**

POUNDS PER WEEK

UNTIL YOU REACH YOUR GOAL.

The principle behind weight control is simple. Calories provide the energy to run our bodies. Any extra calories beyond our needs will result in weight gain. So to lose weight, we must use up more calories than we take in.

- Fats—the healthier fats are those found in olive oil, canola, soybean oil, avocado and nuts. Refer to chart for recommended fat grams per day.
- Fiber—include plenty of high-fiber fruit and vegetables in your diet. This is a great way to fill up without adding too many calories!
- Water—drink plenty of water (unless your doctor has recommended a fluid restriction)!

EASY CALORIE REFERENCE FOR WEIGHT LOSS			
Gender	Calorie Range for Weight Loss		
Most women	1,500–1,800 calories		
Most men	1,800–2,200 calories		

Diet for a Healthy Heart

The Mediterranean Diet Pyramid can effectively manage coronary artery disease and improve your overall health.

The majority of this pyramid is made up of plant products in order to increase fiber and decrease dietary cholesterol and saturated fat.

Vegetables, whole grains and fruit contribute fiber and provide a variety of phytochemicals (plant nutrients), vitamins and minerals.

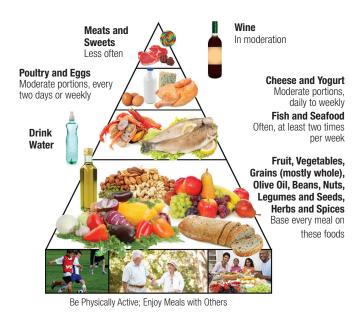
Legumes (beans, lentils, peas) are a major source of soluble fiber and also contain protein. Soy products are another major contributor of plant protein.

Animal products are limited because they are the only source of dietary cholesterol and the main source of saturated fat. Healthy animal products include fish, skinless poultry, egg whites, low-nonfat dairy and lean meats.

The pyramid recommends incorporating fats that would be liquid at room temperature, especially olive oil, along with nuts, seeds and avocado. These provide beneficial fats.

The pyramid also recommends decreasing the use of sugar, salt and refined white-flour products.

There is an emphasis on omitting fats that are solid at room temperature. Solid fats contain the undesirable saturated and trans fats, which contribute to the progression of coronary artery disease.





6. Get Moving

Regular cardiovascular exercise can decrease your risk of cardiac-related problems and issues related to other chronic diseases.

Furthermore, regular cardiovascular exercise for those with a previous cardiac history decreases the likelihood of a second event or intervention.

Exercise Recommendations

- Strive for 30 minutes or more of moderate-intensity physical activity on most days of the week. Examples of moderate exercise are brisk walking, jogging, cycling or other aerobic activity. If you have joint pain, choose low-impact exercises such as walking, bicycling and swimming.
- Include activity in your social plans with family and friends. Burn 210 to 625 calories with
 - an hour of physical activity, depending on the activity.
- As weight loss occurs, the body becomes more efficient at using energy and the rate of weight loss may decrease. Increasing physical activity may be helpful.

Exercise for at least 30 minutes, 5 to 6 days each week. Start slowly and progress carefully. If the exercise becomes painful, slow down or stop and proceed more slowly or seek proper instruction.

Calorie-Counter Activ	ity Guide			
ActivityCalories Used Po	er Hour*			
Walking Slowly (2½ mph)	210–230			
Brisk Walking (4 mph)	250–345			
Jogging (6 mph)	315–480			
Cycling (9 mph)	315–480			
Gardening (heavy)	450–525			
Basketball	480–625			
Aerobic Dancing	480–625			
Swimming	480–625			
Cross-country Skiing	480–625			
*Expenditures in calories by a 150-pound person				

Benefits of Regular Cardiovascular Exercise

- Increased energy
- Increased muscular strength and endurance
- Increased lean body mass (muscle)
- Decreased stress on the heart during regular Activities of Daily Living (ADLs)
- Increased metabolism
- · Decreased body fat
- Decreased insulin resistance for diabetics (improves blood sugars)

- May help increase your good cholesterol (HDL), which lowers your bad cholesterol (LDL)
- Improved blood pressure
- Improves mood and selfesteem while reducing or preventing depression or anxiety
- Builds bone density and counteracts osteoporosis
- Increased balance control
- Decreased fall risk

YOUR EXERCISE PRESCRIPTION

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If exercise could be packed in a pill, it would be the most widely prescribed and beneficial medicine in the country.

Exercise is prescribed in the prevention, treatment and/or management of a variety of diseases and ailments, such as:

- Heart disease
- Obesity
- Aging/disability
- Diabetes
- Arthritis
- ---
- Fibromyalgia

- Poor cholesterol
- Osteoporosis
- Depression
- Stress/anxiety
- ou coor anniety
- High blood pressure
- Cancer

- Stroke
 - Back pain
 - Chronic fatigue
 - Erectile dysfunction

Caution: You should speak with your physician before starting a moderate or vigorous exercise program if you:

- are more than 40 years old;
- have a personal or family history of cardiovascular disease;
- are diabetic:
- are a smoker;
- have high blood pressure;
- experience unusual symptoms while exercising, such as shortness of breath, chest/arm/neck discomfort, nausea or dizziness.





Women and Heart Disease

Heart disease is the number one killer of women. It claims the lives of more women than all forms of cancer combined.

One challenge is that the heart disease symptoms in women can be different from symptoms in men. Fortunately, women can take steps to understand their unique symptoms and reduce their risk for heart disease.

Women's Cardiac Symptoms

Symptoms in women are more subtle than the obvious crushing chest pain often associated with men's heart attacks. This may be because women tend to have blockages not only in their main arteries, but also in their smaller arteries that supply blood to the heart.



The most common heart attack symptom is some type of pressure, pain or discomfort in the chest.

Women are more likely than men to have heart attack symptoms unrelated to chest pain, such as:

- Neck, shoulder, upper back or abdominal discomfort
- Shortness of breath
- Nausea or vomiting
- Sweating
- Lightheadedness or dizziness
- Unusual fatigue
- Jaw pain

Female Risk Factors

Although the traditional risk factors for heart disease, such as lack of exercise, age, family history, high cholesterol, high blood pressure or obesity, affect both women and men, other factors may play a bigger role in the development of heart disease in women.

- **Triglycerides**—a high triglyceride level is twice as deadly for women as it is for men.
- Mental Stress and Depression—affect women's hearts more than men's. Talk to your doctor if you're having symptoms of depression.
- **Smoking**—more deadly for women than for men. Women smokers have more heart disease, cancer and lung disease than men smokers.
- Diabetes—also more deadly for women than for men. In general, women live longer than men; however, diabetic women die earlier than diabetic men.

Women Often Delay Seeking Treatment

- They do not want to bother their husband or family.
- They do not want to bother their doctor.
- They think their pain is due to heartburn or a back muscle.
- They do not want an ambulance coming into their neighborhood at night, with lights and sirens on, waking up their neighbors.

ANY WOMAN EXPERIENCING HEART ATTACK SYMPTOMS SHOULD CALL 9-1-1 IMMEDIATELY

and be taken to a hospital. Quick treatment can limit damage to the heart and increase the chance for a full recovery.



Every second counts.

When it comes to heart attack and stroke, calling 9-1-1 instead of driving yourself or a loved one to a nearby emergency department can be the difference between life and death.

Early Signs of a Heart Attack

- Chest pain
- Nausea
- Back pain
- Anxiety
- Weakness
- Sweating
- Pain in one or both arms

- Jaw pain
- Dizziness
- Shortness of breath

Stroke Warning Signs

- **ace** Look for an uneven smile
- rm Check if one arm is weak
- **Speech** Speech difficulty
- ime ——Call 9-1-1 right away



Stroke Risk Factors

- Heart disease
- Diabetes
- Smoking
- Heavy alcohol use
- High blood pressure

- High cholesterol
- Physical inactivity and obesity
- Atrial fibrillation (irregular heartbeat)
- Family history of stroke



Know CPR.

Push hard and push fast. When you push on the chest, you pump blood to the brain and heart.

People often don't push hard enough because they're afraid of hurting someone, but it's better to push too hard than not hard enough. Your actions can only help.

Conventional CPR also involves giving breaths; however, if someone needs CPR, you can do a lot of good by just pushing hard and pushing fast.

FOLLOW THESE STEPS TO PERFORM CPR

- 1. Make sure the person is lying on his/her back on a firm, flat surface.
- 2. Move clothes out of the way.
- 3. Put the heel of one hand on the lower half of the breastbone. Put the heel of your other hand on top of the first hand.
- 4. Push straight down at least **2 inches** at a rate of **at least 100 pushes a minute.**
- 5. After each push, let the chest come back up to its normal position.

Put the heel of one hand on the lower half of the breastbone.



Put the other hand on top of the first hand.



Pushing is important, and doing it right is tiring.

The more tired you are, the less effective your pushes. If someone else knows CPR, take turns pushing. Switch about every 2 minutes, moving quickly to keep the pause in pushing as short as possible. Remind each other to push down at least 2 inches, push at a rate of at least 100 pushes a minute and let the chest come back up to its normal position after each push.

Do not stop performing chest compressions, unless you are in one of these situations:

- You see an obvious sign of life (breathing or movement).
- EMS personnel arrive and take over.
- Another trained responder arrives and takes over.
- You are too exhausted to continue.
- An AED (Automated External Defibrillator) is ready to use.
- The scene becomes unsafe.

To sign up for CPR certification classes, visit RedCross.org.

ZI STEPS to a Healthy Heart



Green tea is one of the healthiest drinks in the world because it reduces the risk of heart attack and stroke.



Thirty-six percent of Americans and 75 percent of heart patients are deficient in vitamin D, which strengthens bone, boosts

immunity, and reduces heart disease and stroke.



The simplest way to control stress and relax is by taking slow, deep breaths and exhaling significantly longer than inhaling.

Go Mediterranean

The Mediterranean Diet is the healthiest diet in the world for heart disease, cancer, arthritis and other chronic diseases.

Keep the Faith

People who have a strong faith or spiritual belief live longer and healthier lives.

Forget Low Fat The Mediterranean Diet is not low in fat. Olive oil, one of its basics, is the healthiest oil. Reduce vegetable oils, and eliminate saturated and





and walk 10,000 steps a day.



Stay Away From the Clouds (of Smoke)

Smoking is the largest single cause of death in America.

Happy Is as **Happy Does** Having an optimistic outlook on life helps to prevent heart disease, boost immunity and strengthen people's ability

to cope with life's difficulties.

Don't Be Too Sweet Sweet tea is just regular

tea with lots of added sugar. Excessive sugar equals excessive weight and diabetes.



Quiet Time = Quiet Mind

Find 30 minutes a day to practice relaxation techniques such as deep breathing, guided imagery or meditation.



More Muscle = Less Fat

Extra muscle helps burn more calories, even when you are sleeping.



Picture Your Way to Health

A special way to relax is using guided imagery. When you picture yourself in a beautiful place, your body responds as if it was actually there.



Love Your Pet, Love Your Heart

Having a pet can reduce blood pressure, cholesterol, triglycerides and loneliness.



The omega-3 fatty acids found in fish oil can lower cholesterol and triglycerides, prevent blood clots, and reduce

inflammation and depression.

An Apple a Day...
Fruit and vegetables are great sources of antioxidants, vitamins, minerals and other healthy nutrients.



16 Portion Distortion

The increase in portion size over the last 30 years may be the single biggest cause of the obesity epidemic.



20 I Could Have Danced All Night

Dancing is a great exercise.

Put Out the Flame
Inflammation causes

Inflammation causes relatively small plaques in your arteries to rupture and result in a heart attack. Smoking, diabetes, obesity, lack of exercise, a high saturated- or trans-fat diet, high sugar intake, depression and anger all increase inflammation. Avoiding these and learning healthy ways to cope with stress, depression, anger and anxiety will reduce inflammation.



Take a Load Off Your Heart

Losing just 5 percent of excess body weight can significantly lower blood pressure, lower cholesterol, improve heart function and reduce arthritis pain.



Read for Your Life!
Researchers have found that people who read books about being healthy are healthier!



