

Heart Disease

Risk factors, screenings, changes

“Heart disease is the No. 1 worldwide killer of men and women.... [It] is responsible for 40 percent of all deaths in the United States, more than all forms of cancer combined.”¹ Heart disease is a broad term used to describe a range of diseases that affect your heart and blood vessels, such as coronary heart disease [CHD], heart rhythm problems (arrhythmias), heart defects you are born with (congenital heart defects), as well as infections of the heart muscle and valves.¹

The term *heart disease* is often used interchangeably with cardiovascular disease, which generally refers to conditions that involve narrowed or blocked blood vessels that can lead to [heart attack](#), [angina](#) (chest pain), [stroke](#), [congestive heart failure](#), [aneurysm](#),



[peripheral artery disease](#), and [sudden cardiac arrest](#).¹

[Coronary artery disease](#) (CAD) (also called coronary heart disease), in which the coronary arteries supplying blood to the heart muscle are narrowed or blocked by the buildup of plaque (cholesterol and other materials), is the most common type of heart disease and the leading cause of death in both men and women in the United States.^{2,3,4}

Don't Assume...

You have no signs; you're not at risk; it can be cured

Often, we don't worry about heart disease because we think we aren't at risk. Maybe it's because we feel generally healthy, we don't have any symptoms, we're not overweight, a woman assumes a man is much more likely to die of heart disease, or we think it can be cured with medicines, surgeries, or other procedures – so why be concerned? The truth is:

- Sometimes there are no symptoms until it is too late and you have a heart attack – that's why it is important to be screened early and regularly for heart disease risk factors. “Heart disease is easier to treat when it is detected early,”¹ and some of the problems, such as plaque build-up or tendencies toward overweight, can begin early in life, even in childhood.⁵

Sometimes there are no symptoms until it is too late and you have a heart attack – that's why it is important to be screened early and regularly for heart disease risk factors.

So it is important to find out if you are at risk now.

- Having multiple risk factors for heart disease is serious because they tend to “gang up” and worsen each other's effects, but *even one* risk factor greatly increases your chance of developing heart disease.⁶
- People who are at a normal body weight may think they are protected and can eat any diet they choose.⁷ However, even people of a normal body weight can have blocked arteries and need to eat a healthy diet and participate in regular physical activity. People of a normal body weight can also have high blood pressure and cholesterol, as well as diabetes. While individuals of an ideal weight are less likely to have these health issues, your genetic makeup can predispose you to abnormalities, such as high cholesterol or other heart-related issues.⁷ Heredity can play a part (having a father or

brother diagnosed with heart disease before age 55 or a mother or sister before age 65 puts you at greater risk).⁸

- While women tend to develop heart disease 7-10 years later than men,^{9,10} women are less likely to seek treatment for heart disease or to recognize the [symptoms of heart attack](#).¹⁰ Although more males have heart attacks, heart disease is the leading cause of death for American women¹¹ as well and also a leading cause of disability among women.¹²
- “Heart disease is a lifelong condition.”¹³ Medications, procedures, and surgeries do not *cure* coronary heart disease.¹⁴ “Even if you’ve had surgery or other procedures to help with blood flow in your heart, your arteries remain damaged, [and] their condition will worsen unless you make changes in your daily habits.”¹³

The good news is, heart disease can be prevented. And if you already have heart disease, you can manage your condition and keep it from worsening by changing your daily habits, as well as following therapies prescribed by your doctor. Learn the risk factors for heart disease; if you have risk factors, make appropriate changes. Ask your doctor to perform regular screenings for heart disease such as checking your blood pressure, cholesterol and other lipid levels, and your blood glucose. Knowing these factors can help put you in control of your heart and health.

Know Your Risk Factors What’s in your control?

“Risk factors are behaviors or conditions that increase the chance of disease.”⁸ While there are some risk factors that you cannot control, it is important to control those that can be modified.

Factors you *cannot* control:

- [Age](#). “Simply getting older increases your risk for damaged and narrowed arteries and weakened or thickened heart muscle, which contributes to heart disease.”¹ Coronary artery disease is more likely to occur as you get older, especially after 65.
- [Gender](#). For men, the risk for heart attack increases after 45. For women, the risk increases after age 55.⁸
- [Race](#). African Americans, Mexican Americans, American Indians, native Hawaiians, and some Asian Americans have a higher risk of heart disease.¹⁵
- [Family history](#). Family history of early heart disease – a father or brother diagnosed before age 55 or a mother or sister diagnosed before 65 – puts you at greater risk.⁸

Factors you *can* control (modifiable):

- [Tobacco](#). “Smoking and long-term exposure to secondhand smoke damage the interior walls of arteries ... allowing deposits of cholesterol and other substances to collect and slow blood flow,... and increases the risk of deadly blood clots forming and causing a heart attack.”¹⁶
- [Diabetes](#). “Diabetes can occur in childhood, but it appears more often in middle age and among overweight people. Diabetes greatly increases your risk of a heart attack.”¹⁶
- [High blood pressure](#). “Uncontrolled high blood pressure can result in hardening and thickening of your arteries, narrowing the vessels through which blood can flow,”¹ and thus, greatly increases your risk for heart disease.

- [High blood cholesterol or triglycerides](#) (i.e., abnormal blood lipid levels). “Cholesterol is a major part of the deposits that can narrow arteries throughout your body, including those that supply your heart. A high level of the wrong kind of cholesterol in your blood increases your risk of a heart attack A high level of triglycerides, a type of blood fat related to your diet, also is undesirable.”¹⁶
- [Physical inactivity](#). “An inactive lifestyle contributes to high blood cholesterol levels and obesity. People who get regular aerobic exercise have better cardiovascular fitness, which decreases their overall risk of heart attack. Exercise is also beneficial in lowering high blood pressure.”¹⁶
- [Overweight and obesity](#). “People who have excess body fat – especially if a lot of it is at the waist – are more likely to develop heart disease and stroke even if they have no other risk factors.”¹⁷



- [Poor diet](#). A poor diet, primarily one high in saturated fat and cholesterol, can contribute to heart disease risk.¹⁵
- [Uncontrolled stress or anger](#). Some scientists have noted a relationship between coronary heart disease risk and stress in a person’s life and their health behaviors.¹⁷

- **Alcohol.** “Drinking too much alcohol can raise blood pressure, cause heart failure, and lead to stroke. It can contribute to high triglycerides, cancer and other diseases, and produce irregular heartbeats.”¹⁷
- **Poor hygiene.** Keeping hands and teeth clean and getting enough sleep can help prevent viral or bacterial infections that can put you at risk of heart infections, especially if you already have an underlying heart condition.^{1, 14}

Get Screened

Know your numbers

So how do you know if you're at risk for heart disease? Some risks are obvious – you know your age, gender, race. You know if you are a smoker or if you're physically inactive. You might know your family history of heart disease; if you don't – ask. But, do you know if you have high blood pressure, high cholesterol, or normal blood glucose levels? There are some risk factors you must be screened for at your doctor's office.

The following are screening recommendations from the National Heart, Lung, and Blood Institute.¹⁸ Ask your doctor to give you the following tests. Each one will give you valuable information about your heart disease risk.

Lipoprotein Profile¹⁸

What: A blood test that measures total cholesterol, HDL or “good” cholesterol, LDL or “bad” cholesterol, and triglycerides, another form of fat in the blood. The test is given after a 9- to 12-hour fast.

Why: To find out if you have any of the following: high blood cholesterol (high total and LDL cholesterol), low HDL cholesterol, or high triglyceride levels. These levels affect your risk for heart disease.¹⁸

- **Total cholesterol level** – Lower is better when it comes to total cholesterol level. Less than 200 mg/dL is best (“desirable”); 200-239 mg/dL is considered “borderline high”; 240 mg/dL and above is “high.”¹⁹
- **LDL (bad) cholesterol** – Lower is better. Less than 100 mg/dL is best (“optimal”); 100-129 mg/dL is “near optimal;” 130-159 mg/dL is “borderline high;” 160-189 mg/dL is “high;” 190 mg/dL and above is “very high.”¹⁹
- **HDL (good) cholesterol** – Higher is better. More than 60 mg/dL is best.¹⁹
- **Triglyceride levels** – Lower is better. Less than 150mg/dL is best.¹⁹

When: All healthy adults should have their blood cholesterol levels checked at least once every five years. Depending on the results, your doctor may want to repeat the test more frequently.¹⁸

Blood Pressure¹⁸

What: A simple, painless test using an inflatable cuff on the arm.



Why: To find out if you have high blood pressure (also called hypertension) or prehypertension. Both are risk factors for heart disease.¹⁸

- **High blood pressure** – High blood pressure is a blood pressure reading of 140/90 or higher.¹⁹
- **Prehypertension** – A blood pressure reading of 120/80 to 139/89 is considered prehypertension, which means that you don't have high blood pressure now, but you are likely to develop it in the future.¹⁹

- **Normal blood pressure** – A blood pressure reading below 120/80 is usually considered normal.¹⁹
- **Very low blood pressure** – A very low blood pressure reading (lower than 90/60) can sometimes be a cause of concern and should be checked out by a doctor.¹⁹

When: At least every two years, or more often if you have high blood pressure or prehypertension.¹⁸

Fasting Plasma Glucose¹⁸

What: The preferred test for diagnosing diabetes. After you have fasted overnight, you will get a blood test the following morning.

Why: To find out if you have diabetes or are likely to develop the disease.

- **Diabetes** – Fasting plasma glucose levels of more than 126 mg/dL on two tests on different days mean that you have diabetes.
- **Prediabetes** – Levels between 100-125 mg/dL mean you have an increased risk for diabetes and may have prediabetes.¹⁸
- **Normal blood glucose** – A healthy fasting blood glucose number is under 100 mg/dL.²⁰

When: At least every three years, beginning at age 45. If you have risk factors for diabetes, you should be tested at a younger age and more often.¹⁸

Body Mass Index (BMI) and Waist Circumference¹⁸

What: BMI is a measure of your weight in relation to your height. Waist circumference is a measure of the fat around your middle.

Why: To find out whether your body type raises your risk of heart disease.

- **Overweight** – A BMI of 25 or higher means you are overweight.

Women & Hormone Replacement Therapy

- **Obese** – A BMI of 30 or higher means you are obese. Both overweight and obesity are risk factors for heart disease.
- **Women** – For women, a waist measurement of more than 35 inches increases the risk of heart disease and other serious health conditions.¹⁸
- **Men** – For men, a waist measurement of more than 40 inches increases the risk of heart disease and other serious health conditions.²¹

When: Every two years, or more often if your doctor recommends it.¹⁸

Note: The American Heart Association recommends blood pressure, lipid levels, and BMI and weight circumference tests beginning at age 20 for healthy adults and blood glucose tests beginning at age 45.²² If you have a family history of these risks, you may need to have these measures checked at an earlier age and/or more often than recommended for those without these risks.

Once you know your numbers, you can see where your risks lie and work with your doctor to set goals and achieve them by making healthy changes, along with any medication or other therapies recommended by your doctor. If you know your cholesterol and blood pressure numbers and are over 20 years old without known heart disease or diabetes, you can use this [risk assessment tool](#)²³ to estimate your 10-year risk of having a heart attack. You can also see the American Heart Association's [Numbers that Count for a Healthy Heart](#) chart for an overview of test result numbers and goals.

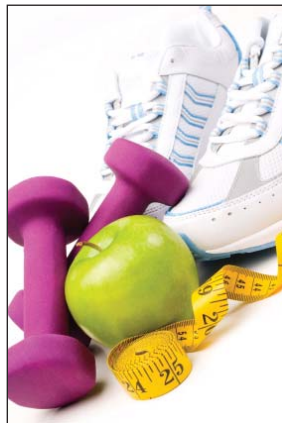
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“Menopausal hormone therapy was once thought to lower the risk of heart attack and stroke for women with heart disease. But research now shows that women with heart disease should not take it. Menopausal hormone therapy can involve the use of estrogen alone or estrogen plus progestin. For women with heart disease, estrogen alone will not prevent heart attacks, and estrogen plus progestin increases the risk for heart attack during the first few years of use. Estrogen plus progestin also increases the risk for blood clots, stroke, and breast cancer.”²⁵ If you are considering hormone therapy to prevent menopausal symptoms, such as hot flashes, mood swings, vaginal dryness, or bone loss, talk with your doctor about the benefits versus the risks of hormone therapy as well as what other alternatives are available to you.²⁵ “If you decide to use hormones, use them at the lowest dose that helps for the shortest time needed.”¹⁹

Make Changes

“Taking action to control risk factors can help prevent or delay heart disease.... The good news is that many lifestyle changes help

control multiple risk factors. For example, physical activity lowers your blood pressure, helps control diabetes, reduces stress, and helps control your weight.”²⁴ Losing weight with a healthy diet can help you control or reduce your risk for high blood pressure, high cholesterol, and diabetes.⁹



Concentrate on the “Big Four”:¹⁸

1. [Eat a nutritious diet.](#)
2. [Engage in regular physical activity.](#)
3. [Maintain a healthy weight.](#)
4. [Stop smoking.](#)

“Currently only 3 percent of U.S. adults practice these “Big Four” heart healthy habits. But it’s never too late to start. No matter what heart disease risk factors you have – or how many – you will greatly benefit from taking action in these four areas. If you already have heart disease, you can lessen its severity.... True, you may need to take other steps to prevent or control heart disease. For example, if you have diabetes, you also will need to keep your blood sugar levels under control. But following a heart healthy eating plan, controlling your weight, and engaging in more physical activity will help you keep your blood sugar at healthy levels. These steps will also help reduce your chances of developing high blood pressure or high blood cholesterol.”¹⁸

To view the references used in this newsletter, go to:
<http://fcs.tamu.edu/health/healthhints/2010/feb/ref.php>

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Complications of Heart Disease (An excerpt from the Mayo Clinic¹)

One of the most common complications of heart disease is heart failure.

- **Heart failure.** Heart failure occurs when your heart can't pump enough blood to meet your body's needs. Over time, the heart can no longer keep up with the normal demands placed on it. The ventricles may become stiff and don't fill properly between beats. Also, the heart muscle may weaken, and the ventricles stretch (dilate) to the point that the heart can't pump blood efficiently throughout your body. Heart failure can result from many forms of heart disease, including heart defects, cardiovascular disease, valvular heart disease, heart infections, or cardiomyopathy.



Other complications of heart disease include:

- **Heart attack.** Coronary artery disease can cause a heart attack. Heart attacks usually occur when a blood clot blocks the flow of blood through a coronary artery – a blood vessel that feeds blood to a part of the heart muscle. Interrupted blood flow to your heart can damage or destroy a part of the heart muscle.
- **Stroke.** Cardiovascular disease may cause an ischemic stroke, which happens when the arteries

to your brain are narrowed or blocked and too little blood reaches your brain. A stroke is a medical emergency – brain tissue begins to die within just a few minutes of a stroke.

- **Aneurysm.** Cardiovascular disease can also cause aneurysms, a serious complication that can occur anywhere in your body. An aneurysm is a bulge in the wall of your artery. If an aneurysm bursts, you may face life-threatening internal bleeding. Although this is usually a sudden, catastrophic event, a slow leak is possible. If a blood clot within an aneurysm dislodges, it may block an artery at another point.
- **Peripheral artery disease.** The same atherosclerosis that can lead to coronary artery disease can also lead to peripheral artery disease. When you develop peripheral artery disease (PAD), your extremities – usually your legs – don't receive enough blood flow to keep up with demand. This causes symptoms, most notably leg pain when walking (claudication).
- **Sudden cardiac arrest.** Sudden cardiac arrest is the sudden, unexpected loss of heart function, breathing, and consciousness. Sudden cardiac arrest usually results from an electrical disturbance in your heart that disrupts its pumping action and causes blood to stop flowing to the rest of your body. Sudden cardiac arrest almost always occurs in the context of other underlying heart problems, particularly coronary artery disease. Sudden cardiac arrest is a medical emergency. If not treated immediately, it is fatal, resulting in sudden cardiac death.

Source:

1. Mayo Clinic (2009). Heart disease [online]. Retrieved December 18, 2009. From <http://mayoclinic.com/health/heart-disease/DS01120>.

What is Angina?

“The most common symptom of coronary artery disease is angina (also called angina pectoris). Angina is often referred to as chest pain. It is also described as chest discomfort, heaviness, tightness, pressure, aching, burning, numbness, fullness, or squeezing. It can be mistaken for indigestion or heartburn. Angina is usually felt in the chest but may also be felt in the left shoulder, arms, neck, back or jaw.”¹ This “recurring chest pain or discomfort happens when some part of the heart does not receive enough blood.”²

“If you have angina or any of the symptoms listed below that lasts for more than 5 minutes, SEEK EMERGENCY TREATMENT (CALL 9-1-1) WITHOUT DELAY. These symptoms could be the signs of a heart attack, and immediate treatment is essential:

- pain or discomfort in other areas of the upper body including the arms, left shoulder, back, neck, jaw, or stomach;
- difficulty breathing or shortness of breath;
- sweating or “cold sweat”;
- fullness, indigestion, or choking feeling (may feel like “heartburn”);



- nausea or vomiting;
- light-headedness, dizziness, extreme weakness or anxiety;
- rapid or irregular heart beats.”¹

Call 9-1-1. You are more likely to get treated faster at a hospital if you arrive by ambulance. Follow any directions the emergency personnel give you, which may include chewing an aspirin if there is no medical reason for you to avoid aspirin. If you have been prescribed nitroglycerin and you experience angina, stop what you are doing and rest, taking one nitroglycerine tablet (or spray under your tongue if prescribed in this form). Wait 5 minutes. If you still have angina after 5 minutes, call 9-1-1 – do not delay – continue taking your nitroglycerine as prescribed.¹

Sources

1. Cleveland Clinic (2010). Coronary artery disease – symptoms [online]. Retrieved January 5, 2010. From <http://my.clevelandclinic.org/heart/disorders/cad/cadsymptoms.aspx>.
2. Ohio State University Medical Center (2010). Glossary – cardiovascular diseases [online]. Retrieved January 5, 2010. From http://medicalcenter.osu.edu/patientcare/healthcare/services/heart/heart_disease_resources/about_heart_disease/heart_disease_glossary/pages/index.aspx.

Risk Factors

“Risk factors are behaviors or conditions that increase the chance of disease.”¹ While there are some risk factors that you cannot control, it is important to control those that can be modified. Here are some details to help you understand why certain factors put you at higher risk for heart disease.

Factors you *cannot* control:

- **Age.** “Simply getting older increases your risk for damaged and narrowed arteries and weakened or thickened heart muscle, which contributes to heart disease.”² Coronary artery disease is more likely to occur as you get older, especially after 65.
- **Gender.** “Men are generally at greater risk of heart disease. However, the risk for a woman increases after menopause.”² In men, the risk for heart attack increases after 45. In women, the risk increases after age 55;¹ however, over the last 20 years, the rates of heart attack have been increasing for women aged 35-54.³
- **Race.** “African Americans have more severe high blood pressure than Caucasians and therefore have a higher risk of heart disease. Heart disease risk is also higher among Mexican Americans, American Indians, native Hawaiians, and some Asian Americans. This is partly due to higher rates of obesity and diabetes in these populations.”⁴
- **Family history.** Family history of early heart disease – a father or brother diagnosed before age 55 or a mother or sister diagnosed before 65 – puts you at greater risk.¹

Factors you *can* control (modifiable):

- **Tobacco.** “Nicotine constricts [tightens] your blood vessels, and carbon monoxide can damage their inner lining....”² “Smoking and long-term exposure to secondhand smoke damage the interior walls of



arteries – including arteries to your heart – allowing deposits of cholesterol and other substances to collect and slow blood flow. Smoking also increases the risk of deadly blood clots forming and causing a heart attack.”⁵

- **Diabetes.** “Diabetes is the inability of your body to adequately produce or respond to insulin properly. Insulin, a hormone secreted by your pancreas, allows your body to use glucose, which is a form of sugar from foods. Diabetes can occur in childhood, but it appears more often in middle age and among overweight people. Diabetes greatly increases your risk of a heart attack.”⁵
- **High blood pressure.** “Uncontrolled high blood pressure can result in hardening and thickening of your arteries, narrowing the vessels through which blood can flow.”² “The risk of high blood pressure increases as you age, but the main culprits for most people are eating a diet too high in salt and being overweight. High blood pressure can also be an inherited problem.”⁵
- **High blood cholesterol or triglycerides (i.e., abnormal blood lipid levels).** “Cholesterol is a major part of the deposits that can narrow arteries throughout your body, including those that supply your heart. A high level of the wrong kind of cholesterol in your blood increases your risk of a heart attack. Low-density lipoprotein (LDL) cholesterol (the “bad” cholesterol) is most likely to narrow arteries. A high LDL level is undesirable and is often a result of a diet high in saturated fats and cholesterol. A high level of triglycerides, a type of blood fat related to your diet, also is undesirable. However, a high level of high-density lipoprotein (HDL) cholesterol (the “good” cholesterol), which helps the body clean up excess cholesterol, is desirable and lowers your risk of heart attack.”⁵



- **Physical inactivity.** “An inactive lifestyle contributes to high blood cholesterol levels and obesity. People who get regular aerobic exercise have better cardiovascular fitness, which decreases their overall risk of heart attack. Exercise is also beneficial in lowering high blood pressure.”⁵

- **Overweight and obesity.** “People who have excess body fat – especially if a lot of it is at the waist – are more likely to develop heart disease and stroke even if they have no other risk factors. Excess weight increases the heart’s work. It also raises blood pressure and blood cholesterol and triglyceride levels, and lowers HDL (“good”) cholesterol levels. It can also make diabetes more likely to develop.”⁶



- **Poor diet.** A poor diet, primarily one high in saturated fat and cholesterol, can contribute to heart disease risk.⁴ A poor diet is also usually one low in fruit and vegetable consumption.
- **Uncontrolled stress or anger.** Some scientists have noted a relationship between coronary heart disease risk and stress in a person’s life and their health behaviors.⁶ A person may respond to stress in ways that can increase their risk of a heart attack. A person who is under stress may overeat or smoke from nervous tension. Too much stress, as well as anger, can also raise blood pressure.⁵
- **Alcohol.** “Drinking too much alcohol can raise blood pressure, cause heart failure and lead to stroke. It can contribute to high triglycerides, cancer and other diseases, and produce irregular heartbeats. It contributes to obesity, alcoholism, suicide, and accidents. The risk of heart disease in people who drink moderate amounts of alcohol (an average of one drink for women or two drinks for men per day) is lower than in nondrinkers. One drink is defined as 1-½ fluid ounces (fl oz) of 80-proof spirits (such as bourbon, Scotch, vodka, gin, etc.), 1 fl oz of 100-proof spirits, 4 fl oz of

wine, or 12 fl oz of beer. It’s not recommended that nondrinkers start using alcohol or that drinkers increase the amount they drink.”⁶

- **Poor hygiene.** Regularly washing your hands² and other habits like getting enough sleep⁷... can help prevent viral or bacterial infections [that] can put you at risk of heart infections, especially if you already have an underlying heart condition.² “Researchers also believe poor dental health may contribute to heart disease. Germs on your teeth and gums can travel from your mouth to your heart, potentially worsening coronary artery disease.”²

Sources

1. National Heart, Lung, and Blood Institute (2009). Who’s at risk? [online]. Retrieved December 18, 2009. From <http://www.nhlbi.nih.gov/actintime/aha/who.htm>.
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4. Cleveland Clinic (2009). Coronary artery disease treatment guide [online]. Retrieved January 5, 2010. From http://my.clevelandclinic.org/documents/heart/coronary_artery_disease_treatment_guide.pdf.
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7. U.S. National Library of Medicine (2006). X-plain heart attack reference summary [online]. Retrieved January 5, 2010. From <http://www.nlm.nih.gov/medlineplus/tutorials/heartattack/ct139103.pdf>.

Making Changes

Making lifestyle changes can go a long way in helping to reduce your risk for heart disease. Here are some tips to help get you started on the "Big Four":

1. Eat a nutritious diet.
2. Engage in regular physical activity.
3. Maintain a healthy weight.
4. Stop smoking.

Eat a Nutritious Diet

Diet is a factor in weight management as well as managing cholesterol and other blood lipid levels, blood pressure, and diabetes. Make sure you are eating a heart-healthy diet. "Meet with a registered dietitian to plan a diet that meets these goals:



- Include at least 14 grams of fiber daily for every 1,000 calories consumed. Foods high in fiber may help lower blood cholesterol. Oat bran, oatmeal, whole-grain breads and cereals, dried beans and peas (such as kidney beans, pinto beans, and black-eyed peas), fruits, and vegetables are all good sources of fiber. Increase the amount of fiber in your diet gradually to avoid digestive problems.
- Cut down on saturated fat. It raises your blood cholesterol level. Saturated fat is found in meats, poultry skin, butter, dairy products with fat, shortening, lard, and tropical oils such as palm and coconut oil. Your dietitian can figure out how many grams of saturated fat should be your daily maximum amount. (You can use the Figuring Out Fat chart to guide you. You should be keeping fat calories to 30 percent or less of your total calories.¹⁾)
- Keep the cholesterol in your diet to less than 300 milligrams a day. Cholesterol is found in meat, dairy products, and eggs.

- Keep the amount of trans fat in your diet to a minimum. It's a type of fat in foods that raises blood cholesterol. Limit your intake of crackers, cookies, snack foods, commercially prepared baked goods, cake mixes, microwave popcorn, fried foods, salad dressings, and other foods made with partially hydrogenated oil. In addition, some kinds of vegetable shortening and margarines have trans fat. Check for trans fat in the Nutrition Facts section on the food package."²⁾

Figuring Out Fat

The table below from the National Heart, Lung, and Blood Institute shows the maximum amount of saturated fat you should eat, depending on how many calories you take in each day. If you have high blood cholesterol or heart disease, the amount of saturated fat will be different, so discuss this with your doctor and consider using the [Therapeutic Lifestyle Changes \(TLC\)](#) diet. If you do not have high blood cholesterol or heart disease, the saturated fat in your diet should be less than 10 percent of your daily calories, and total fat should be 20 to 35 percent of calories. Check the Nutrition Facts panel on food labels to find out the number of fat grams – both saturated and total – in each serving.

Total Calorie Intake	Limit on Saturated Fat Intake
1,200	13 g or less
1,600	18 g or less
2,000*	20 g or less
2,200	24 g or less
2,500*	25 g or less
2,800	31 g or less

*Percent Daily Values on Nutrition Facts labels are based on a 2,000-calorie diet. Values for 2,000 and 2,500 calories are rounded to the nearest 5 gram to be consistent with the Nutrition Facts label.

Source: National Heart, Lung, and Blood Institute (2007). The healthy heart handbook for women [online]. Retrieved January 5, 2010. From http://www.nhlbi.nih.gov/health/public/heart/other/hhw/hdbk_wmn.pdf.

- In general, “eat more foods low in saturated fat and cholesterol and high in fiber. These include fruits and vegetables, whole grains and grain products, beans and peas, fat-free and low-fat milk products, lean meats and poultry without skin, fatty fish, and nuts and seeds in limited amounts.”³

Consider using the [Therapeutic Lifestyle Changes](#) (TLC) diet to decrease saturated and trans fats to lower blood cholesterol levels or the [Dietary Approaches to Stop Hypertension](#) (DASH) diet to reduce blood pressure. Even if you don’t have high cholesterol or high blood pressure, these eating plans are a good choice for anyone wanting a heart-healthy eating plan.

Engage in Regular Physical Activity

Physical activity can help control blood cholesterol, diabetes, obesity, and high blood pressure.^{4,5} “An inactive lifestyle is a risk factor for coronary heart disease. Regular, moderate-to-vigorous physical activity helps prevent heart and blood vessel disease. The more vigorous the activity, the greater your benefits. However, even moderate-intensity activities help if done regularly and long term.”⁴ In fact, “a recent study showed that moderate-intensity physical activity, such as brisk walking, helps people lose weight as effectively as more vigorous exercise.”⁶ (Note: A simple target for moderate-intensity physical activity is walking one mile in 15 minutes twice a day, working your way up to 2 miles in 30 minutes once a day.⁷ If you have been inactive, take this slowly, working your way to a 15-minute mile. Consult your doctor about the best exercise prescription for you.)

“Even if you have no other risk factors, being physically inactive greatly boosts your chances of developing heart-related problems. But nearly 40 percent of Americans do no spare-time physical activity at all. Try to do at least 30 minutes of moderate-intensity physical activity on most, if not all, days of the week. This includes brisk walking, light weightlifting, or even housecleaning or gardening. If you need to, divide the 30 minutes into shorter periods of at least 10 minutes each.”⁸ “If you’re trying to manage your weight and prevent gradual, unhealthy weight gain, try to boost that level [and make a goal of] approximately 60 minutes of moderate- to vigorous-intensity physical activity on most days of the week.”⁶

Maintain a Healthy Weight

“When it comes to weight loss, there are no quick fixes. Successful, lasting weight loss requires a change

of lifestyle, not a brief effort to drop pounds quickly. Otherwise, you will probably regain the weight. Aim to lose ½ pound to 2 pounds per week – no more.”⁶ “If you have a lot of weight to lose, ask your doctor, a registered dietitian, or a qualified nutritionist to help you develop a sensible plan for gradual weight loss.”⁶



“To take off pounds and keep them off, you will need to make changes in both your eating and physical activity habits. Weight control is a question of balance. You take in calories from the food you eat. You burn off calories by physical activity. Cutting down on calories, especially calories from fat, is key to losing weight.”⁶ “To lose weight, most overweight people will need to cut 500 to 1,000 calories per day from their current diet.”⁶

“Combining this change in diet with a regular physical activity program, such as walking or swimming, will help you both shed pounds and stay trim for the long term.”⁶ If you are overweight or obese, don’t become discouraged. A loss of just 5-10 percent of your current weight can lower heart disease risk.⁹ Losing even 10 pounds can help lower your heart disease risk.⁴

Stop Smoking

“Quitting smoking immediately reduces your risk of heart disease, cancer, and other serious disorders, with the benefits increasing over time.... Within several years, it will approach the heart disease risk of someone who has never smoked.... If you already have heart disease, giving up cigarettes will lower your risk of heart attack.”⁶

If you have tried to quit before and been unsuccessful, try again. Ask your doctor about the latest “quit-smoking” aids. “Some of these medications contain very small amounts of nicotine, which can help to lessen the urge to smoke. They include nicotine gum (available over the counter), the nicotine patch

(available over the counter and by prescription), a nicotine inhaler (by prescription only), and a nicotine nasal spray (by prescription only). Another quitting aid is bupropion sustained release (Zyban™), a medicine that contains no nicotine but reduces the craving for cigarettes. Varenicline tartrate (Chantix™) eases withdrawal symptoms and blocks the effects of nicotine if you slip and start smoking again. Both are available only by prescription. While all of these medications can help people to stop smoking, they are not safe for everyone. Talk with your doctor about whether you should try any of these aids.”⁶

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