

The Road to Recovery:

Life After a Heart Attack



Dear Patient,

The Cardiovascular Team at Somerset Medical Center is here for you in your time of need.

Unfortunately, your cardiac condition has warranted hospitalization. We hope to make your stay as pleasant as possible and have created this handbook to help answer any questions that you may have. We hope you find this information helpful and encourage your questions at all times.

We wish you a speedy recovery.

Sincerely,

*The Cardiovascular Team
at Somerset Medical Center*

The follow information is reprinted with permission from the American Heart Association's "Answers by Heart" stroke education series.

What Is a Heart Attack?

Every 36 seconds, someone dies from heart and blood vessel diseases, America's No. 1 killer. Since most of those deaths are from coronary heart disease — about 452,000 each year — it's important to learn all you can about heart attack. Don't ignore heart problems. It's a matter of life and death!

For example, you should know the warning signs so you can get help right away, either for yourself or someone close to you. Acting quickly can save many, many lives!

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

- Uncomfortable pressure, squeezing, fullness or pain in the center of your chest. It lasts more than a few minutes, or goes away and comes back.
- Pain or discomfort in one or both arms, your back, neck, jaw or stomach.
- Shortness of breath with or without chest discomfort.
- Other signs such as breaking out in a cold sweat, nausea or lightheadedness.

If you or someone you're with has chest discomfort, especially with one or more of the other signs, don't wait more than five minutes before calling for help. Call 9-1-1 or the emergency medical services (EMS) in your area (fire department or ambulance). Get to a hospital right away.

What causes heart attack

A coronary attack (heart attack) occurs when the blood flow to a part of the heart is blocked (often by a blood clot). This happens because coronary arteries that supply the heart with blood slowly become thicker and harder from a buildup of fat, cholesterol and other substances, called plaque.

If the plaque breaks open and a blood clot forms that blocks

the blood flow, a heart attack occurs. Then the heart muscle supplied by that artery begins to die. Damage increases the longer an artery stays blocked.

Once that muscle dies, the result is permanent heart damage.

How can I recover?

Depending on the extent of your heart attack, you may only be in the hospital a few days. But your recovery is just beginning.

- Start making changes in your life now to reduce your risk of having another heart attack. Eat healthful meals, be more physically active, and if you smoke, quit.
- Talk with your doctor and nurses about how you can live as normal a life as possible. Ask how soon you can go back to work, drive a car, have sex, and what to do if you have chest discomfort. They can answer your questions about other matters, too.
- Join a cardiac rehabilitation program in your area.

How can I avoid a heart attack?

Even if you have heart disease, there's a lot you can do to improve your heart's health.

Ask your doctor or nurse for help. Together, you can set goals to reduce the things that raise your risk of heart attack.

- Don't smoke, and avoid other people's tobacco smoke.
- Treat high blood pressure, if you have it.
- Eat a healthy diet that's low in saturated fat, trans fat, cholesterol and salt.
- Exercise at least 30 minutes on most or all days of the week.
- Keep your weight in the normal range.
- See your doctor for regular check-ups.
- Take your medicines exactly as prescribed.
- Control your blood sugar if you have diabetes.

Many people who experience heart attacks will be recommended to get certain tests. Often, a cardiac angiogram will be performed to identify where your coronary arteries are blocked. Your coronary arteries are the arteries feeding your heart muscle. If significant blockages are identified, you may be recommended to have angioplasty or even possibly open-heart surgery. Here is more information related to these procedures that we hope you find helpful.

What Is a Coronary Angiogram?

Why do I need this test?

The coronary arteries supply your heart muscle with blood. They can become clogged from a buildup of cholesterol, cells or other substances. This can reduce the flow of blood to your heart. If a blood clot forms and completely blocks blood flow through that artery, a heart attack may occur.

A coronary angiogram is a special X-ray test. It's done to find out if your coronary arteries are clogged, where and by how much. An angiogram can help your doctor see if you need treatment such as angioplasty, coronary artery bypass surgery or medical therapy.

Angioplasty isn't necessary for all blockages. Sometimes all you need to do is take medicines and:

- Lower your blood pressure.
- Stop smoking.
- Reduce the cholesterol in your blood.
- Eat a healthy diet.
- Stay physically active.

What happens during an angiogram?

- You may be given medicine to relax you, but you will stay awake.
- You go to the hospital's heart catheterization laboratory ("cath lab").
- You lie on a hard table near a camera and other equipment.
- Your doctor numbs a spot on your groin or arm and inserts a thin tube (catheter) into an artery and up to the heart. This

will hurt no more than a blood test.

- Special fluid goes through the catheter so arteries show up well on the X-ray.
- Many X-rays are taken as the fluid goes through the artery.
- You may be asked to hold your breath or cough.
- By studying the X-ray images, the doctor can see any problems with your coronary arteries.
- If you wish, you can see the X-ray pictures on the screen during or after the test.

What might I feel?

- Slight pressure as the catheter is put in
- Rarely, some chest discomfort as the fluid goes in
- An urge to urinate
- Rarely, nausea
- If a picture of the heart's main pumping chamber is taken (and it's taken during about 2/3 of angiograms), you'll feel a hot flash sensation from head to toe that will last for 20 seconds as the special fluid is injected.

What happens after the test?

- The catheter will be taken out.
- A nurse or doctor will apply direct pressure for 15 minutes or longer where the catheter was inserted to make sure there is no internal bleeding.
- You will be asked to lie quietly on your back for several hours. You won't have to lie on your back if the catheterization was performed from an arm artery.
- You will go back to your hospital room or Cardiac Care Unit (CCU).
- You may feel sore where the catheter was inserted or from lying on your back.
- Your doctor will talk to you about the results.

What Is Coronary Angioplasty?

Your heart's arteries can become clogged from a buildup of cholesterol, cells or other substances. This can reduce blood flow to your heart and cause chest discomfort. Sometimes a blood clot can suddenly form or get worse and completely block blood flow, leading to a heart attack. Angioplasty opens blocked

arteries and restores normal blood flow to your heart muscle.

Angioplasty, a type of percutaneous coronary intervention (PCI), is not major surgery. It is done through a small puncture in a leg or arm artery and opens a clogged heart artery by inflating a tiny balloon in it.

Why do I need it?

People with blockages in their heart arteries may need angioplasty if they are having lots of discomfort in their chest, or if their blockages put them at risk of a heart attack or of dying. Each year more than a million people have angioplasty procedures.

How is it done?

1. A doctor numbs a spot on your groin or arm and inserts a small tube into an artery. This hurts no more than a blood test.
2. This thin plastic tube (catheter) is threaded through the arterial system until it gets into a coronary (heart) artery.
3. By watching on a special X-ray screen, the doctor can move the catheter into the artery. Next, a very thin wire is threaded across the blockage. Over this wire, a catheter with a thin, expandable balloon on the end is passed to the blockage.
4. The balloon is inflated. It pushes plaque to the side and stretches the artery open, so blood can flow more easily. This may be done more than once.
5. In many patients a collapsed wire mesh tube called a stent, tightly mounted on a special balloon, is moved over the wire to the blocked area.
6. As the balloon is inflated, it opens the stent against the artery walls. The stent locks in this position and helps keep the artery open.
7. The balloon and catheters are taken out. Now the artery has been opened, and your heart will get the blood it needs.

Does angioplasty hurt?

- No, angioplasty causes very little pain. The doctor will numb the place where the catheter will be inserted. You may feel

some pressure as the catheter is put in.

- You'll be awake and alert but may be given medicine to help you relax. Angioplasty can last from 30 minutes to several hours, depending on the type of blockage and how many blockages there are.
- The place where the catheter was put in may be sore afterwards, and bruising is common. If you notice any bleeding or increasing pain or swelling, tell your doctor.

What about afterwards?

- When the tube is removed from your leg or arm, a nurse or doctor will usually apply direct pressure for 15 minutes or longer to the place where the catheter was inserted to ensure there's no internal bleeding.
- If angioplasty is done through the leg, for several hours you'll lie quietly on your back and the doctors and nurses will check for any signs of bleeding or chest discomfort. If the procedure is done through the arm, you won't need to remain in bed.
- You'll almost always have to stay in the hospital for a night to rest. Occasionally a longer stay is required.
- There's a small risk that a blood clot will form inside the stent, blocking blood flow in the artery. Your doctor will prescribe aspirin or other medicine to help prevent this. It's important to keep taking these medicines for as long as the doctor indicates!
- Avoid heavy lifting or vigorous physical activity for 1-2 days after the procedure so the hole in your leg or arm artery can heal.
- Learn about the risk factors you need to change to keep your heart healthy.

What Is a Stent?

A stent is a tiny wire mesh tube. It props open an artery and is left there permanently.

Why are stents used?

When a coronary artery (an artery feeding the heart muscle) is narrowed by a buildup of fatty deposits called plaque, it can reduce blood flow. If blood flow is reduced to the heart muscle,

chest pain can result. If a clot forms and completely blocks the blood flow to part of the heart muscle, a heart attack results.

Stents help keep coronary arteries open and reduce the chance of a heart attack.

How are arteries opened?

To open a narrowed artery, a doctor may do a procedure called a percutaneous coronary intervention (PCI) or angioplasty. In it, a balloon-tipped tube called a catheter is inserted into an artery and advanced to the point of blockage. Then the balloon is inflated. This compresses the plaque and opens the narrowed spot. When the opening in the vessel has been widened, the balloon is deflated and the catheter is withdrawn.

How are stents used?

When a stent is used, it's collapsed to a small diameter and put over the balloon catheter. It's then moved into the area of the blockage. When the balloon is inflated, the stent expands, locks in place and forms a scaffold. This holds the artery open. The stent stays in the artery permanently and holds it open. This improves blood flow to the heart muscle and relieves symptoms (usually chest pain).

Stents are used depending on certain features of the artery blockage. Factors that affect whether a stent can be used include the size of the artery and where the blockage is.

Stenting has become fairly common. The majority of angioplasty procedures are done using stents.

What are the advantages of using a stent?

In certain patients, stents reduce the renarrowing that occurs after balloon angioplasty or other procedures that use catheters.

Patients who have angioplasty and stents recover from these procedures much faster than patients who have coronary artery bypass surgery. They have much less discomfort, too.

Can stented arteries reclose?

In about a third of patients who've had angioplasty without a stent, the artery that was opened begins to become narrowed again within months of the procedure. This renarrowing is called restenosis.

Stents help prevent this, and in recent years doctors have used new types of stents called drug-eluting stents. These stents are covered with drugs that help keep the blood vessel from reclosing. Stents that are not coated with drugs are called bare metal stents. It is very important that patients with either type of stent take their anti-clotting medicines as directed.

If stents don't work and arteries reclose, you may need coronary artery bypass surgery.

What precautions should be taken after a stent procedure?

Patients who've had a stent procedure must take one or more blood-thinning agents. Examples are aspirin and clopidogrel. These medications help reduce the risk of a blood clot developing in the stent and blocking the artery.

- Aspirin is used indefinitely.
- Clopidogrel is used for one to 12 months (or perhaps even longer) after the procedure (depending on the type of stent).
- Clopidogrel can cause side effects, so blood tests will be done periodically. It's important that you don't stop taking this medication for any reason without consulting your cardiologist who has been treating your coronary artery disease.

For the next four weeks a magnetic resonance imaging (MRI) scan should not be done without a cardiologist's approval. But metal detectors don't affect the stent.

What Is Coronary Bypass Surgery?

Coronary artery bypass surgery is a heart operation. It uses blood vessels to go around or "bypass" clogged coronary (heart) arteries. Now blood can flow through the new vessels to the heart muscle the way it should.

How do the arteries of your heart become clogged? Over time,

fats, cholesterol and other substances can build up in the walls of your arteries to form a plaque. When the plaque breaks open and a blood clot forms, blood flow to your heart is blocked and can lead to chest discomfort called angina and to a heart attack.

About 427,000 coronary bypass operations are performed each year.

How is it done?

- Your doctor will take a blood vessel from your chest or from your leg.
- One end is attached to your aorta (the large artery that comes out of the heart), and the other end is attached to the coronary artery below the point where it's clogged.
- Blood can now flow through the new channel to the heart.

What is surgery like?

- You will be asleep during the operation. It can take 3 to 6 hours.
- After surgery, you go to an intensive care unit (ICU) for a few days.
- Your family can visit you briefly in the ICU.

What about after surgery?

- You'll wake up in the ICU and may feel confused at first.
- It's busy in the ICU and the lights are always on. It's normal to lose track of time.
- You'll have a tube in your mouth and throat to help you breathe. It's uncomfortable and you can't talk with it, but nurses will help you communicate.
- The breathing tube will stay in until you can breathe on your own — a few hours.
- You'll be hooked up to many tubes and wires.

What happens when I leave ICU?

- You'll move to a hospital room.
- You'll be sore.
- You may have night sweats.
- You may be given medicine.

- You must breathe deeply and cough hard to clear the fluids in your lungs.
- You'll start to move and walk around right away.
- You can eat normally and should feel better each day.

How Will I Recover From My Heart Attack?

There's good news for people who have had a heart attack. The worst is over, and soon you can do most of the things you used to do!

Now is a good time to make healthy changes in your lifestyle. Heart disease can get worse unless you take steps to get your heart in good shape.

After a heart attack, it's common to worry a lot. Getting better and feeling good about yourself will take time. It helps to do as your doctor says and to learn about keeping your heart healthy. You may have many active years left to enjoy!

Are my feelings normal?

Most patients say they have bad feelings after a heart attack. These are normal and easy to understand. It's a good idea to talk to someone about your feelings — don't keep them inside. In time, these bad feelings should go away

Fear:

- of dying
- of chest pains
- that you can't have sex
- that you can't work

Anger:

- that it happened to you
- at family and friends

Depression, such as thinking...

- "Life is over."
- You might not be the same again.
- Others might think you are weak.

How will my family feel?

People who are close to you will also “feel” your heart attack. Instead of keeping bad feelings in, you should all talk about them.

Family members may feel...

- Frightened to see you in the hospital.
- Angry that the heart attack came at a bad time.
- Guilty because they think they “caused” it, even if they know it’s not possible.

What changes should I make?

- Get help to quit if you smoke.
- Control high blood pressure.
- Eat healthful meals low in saturated fat, trans fat, cholesterol and salt.
- Get involved in regular physical activities
- Lose weight if you need to.
- Take your medicine exactly as prescribed.

What about sex?

- Check with your doctor first, but you should be able to have sex the way you did before. You should be ready when you’re able to walk around easily.
- If you have chest pain during sex, have lost interest, or are worried about having sex, talk with your doctor.

When can I go back to work?

- Most people go back to work in two weeks to three months.
- Your doctor may have you take tests to find out if you can do the kind of work you did before.
- Some people change jobs to make it easier on their heart.
- Ask your doctor about cardiac rehabilitation programs in your area.

There are many risk factors for heart disease. The main risk factors are high blood pressure, high cholesterol, diabetes, tobacco use and a family history of heart attacks at young ages.

We hope the following information related to cardiac risk factors is helpful as a guide for future lifestyle changes.

What Is High Blood Pressure?

Another name for high blood pressure (HBP) is hypertension (hi-per-TEN-shun).

High blood pressure means the pressure in your arteries is elevated. Blood pressure is the force of blood pushing against blood vessel walls. It’s written as two numbers, such as 112/78 mm Hg. The top, systolic, number is the pressure when the heart beats. The bottom, diastolic, number is the pressure when the heart rests between beats. Normal blood pressure is below 120/80 mm Hg. If you’re an adult and your systolic pressure is 120 to 139, or your diastolic pressure is 80 to 89 (or both), then you have “prehypertension.” High blood pressure is a pressure of 140 systolic or higher and/or 90 diastolic or higher that stays high over time.

No one knows exactly what causes most cases of high blood pressure. It usually can’t be cured, but it can be controlled. High blood pressure usually has no symptoms. It is truly a “Silent Killer.”

About 72 million Americans and 1 in 3 adults have it, and many don’t even know they have it. Not treating high blood pressure is dangerous. High blood pressure increases the risk of heart attack and stroke. You can live a healthier life if you treat and control it!

Who is at higher risk?

- People with close blood relatives who have HBP
- African Americans
- People over age 35
- Overweight people
- People who aren’t physically active

- People who consume too much salt
- People who drink too much alcohol
- People with diabetes, gout or kidney disease
- Pregnant women
- Women who take birth control pills, who are overweight, had HBP during pregnancy, have a family history of HBP or have mild kidney disease

How can I tell I have it?

You usually can't tell! Many people have it and don't know it. The only way to know if your blood pressure is high is to get it checked regularly by your doctor.

What can untreated high blood pressure lead to?

- Stroke
- Heart attack, angina or both
- Heart failure
- Kidney failure
- Peripheral arterial disease (PAD)

What can I do about it?

- Lose weight if you're overweight.
- Eat healthy meals low in saturated fat, trans fat, cholesterol and salt.
- Limit alcohol to no more than one drink per day for women or two drinks a day for men.
- Be more physically active. Exercise at least 30 minutes on most or all days of the week.
- Take medicine the way your doctor tells you.
- Know what your blood pressure should be and work to keep it at that level.

How can medicine help?

Some medicines, such as vasodilators, help relax and open up your blood vessels so blood can flow through better. A diuretic (di-uh-RET-ik) can help keep your body from holding too much water and salt. Other medicines help your heart beat more slowly and with less force.

How Can I Reduce High Blood Pressure?

By treating high blood pressure, you can help prevent a stroke, heart attack, heart failure or kidney failure. Here are steps you can take now:

- Lose weight if you're overweight.
- Eat a healthy diet low in total fat, saturated fat, trans fat, cholesterol and salt. Emphasize fruits, vegetables and low-fat dairy products.
- Be more physically active.
- Limit alcohol to no more than one drink per day for women or two drinks a day for men.
- Take medicine the way your doctor tells you.
- Know what your blood pressure should be and work to keep it at that level.

How can I lose weight?

If you're overweight, you're putting too much strain on your heart. Talk with your healthcare professional about a healthy eating plan. When you lose weight, your blood pressure often goes down! By eating a low-saturated-fat, low-cholesterol diet, you'll help avoid heart attack and stroke.

How do I limit salt?

Eating a lot of salt (sodium) adds to high blood pressure in some people. It holds excess fluid in your body and puts an added burden on your heart. Your doctor may tell you to cut down on the salt you use in cooking and not add salt to foods. He or she may also tell you to avoid salt completely.

Try to read food labels so you'll know which foods are high in sodium. And learn to use herbs or salt substitutes instead!

How do I limit alcohol?

Ask your doctor if you're allowed to drink alcohol, and if so, how much. Drinking more than two drinks a day if you're male or more than one drink a day if you're female may lead to high blood pressure. One drink is equal to 12 ounces of beer, 4 ounces of wine, 1.5 ounces of 80-proof distilled spirits or 1 ounce of 100-proof spirits. If cutting back on alcohol is hard for you to do on your own, ask about community groups that can

help.

How can I be more active?

An inactive lifestyle is a risk factor for heart disease and stroke. It also tends to add to obesity, which is a risk factor for high blood pressure. Regular physical activity helps to reduce blood pressure, control weight and reduce stress. It's best to start slowly and do something you enjoy, like taking walks or riding a bicycle. Talk to your healthcare professional about a good plan for you.

What should I know about medicine?

Your doctors may prescribe different types of medicine for you. Don't be discouraged if you need to take blood pressure medicine from now on. Sometimes you can take smaller doses after your blood pressure is under control, but you may always need some treatment. What's most important is that you take your medicine exactly the way your doctor tells you to. Never stop treatment on your own. If you have problems or side effects with your medicine, talk to your doctor.

What Do My Cholesterol Levels Mean?

High blood cholesterol signals a higher risk of heart attack and stroke. That's why it's important to have your cholesterol levels checked regularly and discuss them with your doctor. A "lipoprotein profile" is a test to find out your blood cholesterol numbers. It gives information about total cholesterol, LDL ("bad") cholesterol and HDL ("good") cholesterol, as well as triglycerides (blood fats).

What should my total cholesterol level be?

Total Blood Cholesterol Levels:

Less than 200 mg/dL = Desirable (lower risk)
200 to 239 mg/dL = Borderline high (higher risk)
240 mg/dL and above = High blood cholesterol (more than twice the risk as desirable level)

What should my HDL cholesterol level be?

HDL stands for high-density lipoprotein. HDL is "good" cholesterol because it seems to lower your risk of heart attack

and stroke. That means that — unlike other cholesterol levels — the higher your HDL cholesterol, the better. You can raise your HDL cholesterol by quitting smoking, losing excess weight and being more active.

HDL Cholesterol Levels:

Less than 40 mg/dL for men = Low HDL (higher risk)
Less than 50 mg/dL for women = Low HDL (higher risk)
40 to 59 mg/dL = The higher, the better
60 mg/dL and above = High HDL (lower risk)

LDL stands for low-density lipoprotein. This is the main carrier of harmful cholesterol in your blood. A high level of LDL cholesterol means there's a higher risk of heart disease and stroke.

LDL Cholesterol Levels:

Less than 70 mg/dL = Optional goal if you're at very high risk of a heart attack or death from heart attack.
Less than 100 mg/dL = Optimal for people with heart disease or diabetes
100 to 129 mg/dL = Near or above optimal
130 to 159 mg/dL = Borderline high
160 to 189 mg/dL = High
190 mg/dL and above = Very High

What should my triglyceride level be?

Triglycerides are the most common type of fat in your body. They're also a major energy source. They come from food, and your body also makes them. As people get older, gain excess weight or both, their triglyceride and cholesterol levels tend to rise. Many people who have heart disease or diabetes have high fasting triglyceride levels. Some studies have shown that people with above-normal fasting triglyceride levels (150 mg/dL or higher) have a higher risk of heart disease and stroke.

Triglyceride Levels:

Less than 150 mg/dL = Normal
150 to 199 mg/dL = Borderline High
200 to 499 mg/dL = High
500 mg/dL and above = Very High

My Cholesterol and Triglyceride Levels

Use the chart below to keep track of your cholesterol and triglyceride levels each time you have a test. Make sure you discuss these numbers with your doctor.

How Can I Lower High Cholesterol?

	My Goal	1st Visit	2nd Visit	3rd Visit
Total blood cholesterol level				
HDL-cholesterol level				
LDL-cholesterol level				
Triglyceride level				

Too much cholesterol in the blood can lead to heart disease and stroke — America's No. 1 and No. 3 killers. Even though there's much you can do to lower your cholesterol levels and protect yourself, half of American adults still have levels that are too high (over 200 mg/dL).

You can reduce cholesterol in your blood by eating healthful foods, losing weight if you need to and being physically active. Some people also need to take medicine because changing their diet isn't enough. Your doctor and nurses will help you set up a plan for reducing your cholesterol — and keeping yourself healthy!

What should I eat?

Focus on low-saturated-fat, trans fat-free, low-cholesterol foods such as these:

- A variety of fruits and vegetables (choose 8 to 10 servings per day)
- A variety of grain products like bread, cereal, rice and pasta, including whole grains (choose 6 or more servings per day)
- Fat-free and low-fat milk products (2 to 3 servings per day)

- Lean meats and poultry without skin (choose up to 5 to 6 total ounces per day)
- Fatty fish (enjoy at least 2 servings baked or grilled each week)
- Beans and peas
- Nuts and seeds in limited amounts (4 to 5 servings per week)
- Unsaturated vegetable oils like canola, corn, olive, safflower and soybean oils (but a limited amount of margarines and spreads made from them)

What should I limit?

- Whole milk, cream and ice cream
- Butter, egg yolks and cheese — and foods made with them
- Organ meats like liver, sweetbreads, kidney and brain
- High-fat processed meats like sausage, bologna, salami and hot dogs
- Fatty meats that aren't trimmed
- Duck and goose meat (raised for market)
- Bakery goods made with egg yolks and saturated fats
- Saturated oils like coconut oil, palm oil and palm kernel oil
- Solid fats like shortening, partially hydrogenated margarine and lard
- Fried foods

Somerset Medical Center's community nutritionist provides personalized nutrition counseling. For more information, call 908-704-3765.

What are some cooking tips?

- Use a rack to drain off fat when you broil, roast or bake.
- Don't baste with drippings; use wine, fruit juice or marinade.
- Broil or grill instead of pan-frying.
- Cut off all visible fat from meat before cooking, and take all the skin off poultry pieces. (If you're roasting a whole chicken or turkey, remove the skin after cooking.)
- Use a vegetable oil spray to brown or sauté foods.
- Serve smaller portions of higher-fat dishes, and serve bigger portions of lower-fat dishes like pasta, rice, beans and vegetables.

- Make recipes or egg dishes with egg whites or egg substitutes, not yolks.
- Instead of regular cheese, use low-fat cottage cheese, part-skim milk mozzarella and other fat-free or low-fat cheeses.

What Is Cholesterol-Lowering Medicine?

If your doctor has decided that you need to take medicine to reduce high cholesterol, it's because you're at high risk for heart disease or stroke. Usually the treatment combines diet and medicine.

Most heart disease and many strokes are caused by a buildup of fat, cholesterol and other substances called plaque in the inner walls of your arteries. The arteries can become clogged and narrow, and blood flow is reduced. If a blood clot forms and blocks blood flow to your heart, it causes a heart attack. If a blood clot blocks an artery leading to or in the brain, a stroke results.

By following your doctor's advice, you can help prevent these diseases.

What should I know about the medicine?

Your doctor will decide which medicine is best for you. Often you'll be asked to take more than one. Always follow your doctor's orders carefully, and let the doctor know if you have any side effects. Never stop taking your medicine on your own!

Bile acid binders (resins) help rid the body of cholesterol. Some names are cholestyramine, cholestipol and colestevlam.

- These often come in a powder that you mix with water or juice. They are not absorbed from the gastrointestinal tract where they bind cholesterol.
- Side effects may include constipation, bloating, nausea and gas. To reduce these effects, eat more fiber and drink more fluids.

Nicotinic acid or niacin is a B vitamin. Take this only if your doctor has prescribed it.

- It can lower total cholesterol, LDL "bad" cholesterol and

triglyceride (blood fat) levels. It can also raise HDL "good" cholesterol levels.

- It may cause flushing and itching. It could also upset your stomach and cause other side effects your doctor can describe.

HMG-CoA reductase inhibitors (statins) stimulate the body to process and remove cholesterol from the body. Their major effect is to lower LDL cholesterol. Some names are lovastatin, pravastatin, simvastatin, fluvastatin and atorvastatin.

- Possible side effects include constipation, stomach pain or cramps, and gas.
- A few patients experience muscle pain, weakness or brown urine.

Fibric acids are especially good for lowering triglyceride (blood fat) levels and, to a lesser extent, raising HDL cholesterol levels. Some names are gemfibrozil, clofibrate and fenofibrate.

- A few patients have stomach problems when they take this.
- Fibric acids can increase the effect of medications that thin the blood. This should be monitored closely.

How do I remember to take my medicine?

Sometimes it's hard to keep track of your medicine. To be safe, you must take it properly.

- Take your medicine at the same time each day along with meals or other daily events, like brushing your teeth.
- Use a weekly pill box with separate compartments for each day or time of day.
- Computerized pill boxes can alert you when it's time to take a pill or order refills.
- Ask family and friends to help remind you.
- Use a pill calendar or drug reminder chart.
- Leave notes to remind yourself.
- Try an e-mail reminder or beeper service.
- Wear a wristwatch with an alarm.

How do I know if it's working?

Your doctor will test your blood cholesterol level when needed. Together with your doctor, set a goal and ask how long it may take to reach that goal. Follow up with your doctor after

reaching your goal. Don't stop medication unless your doctor tells you to.

What Is Diabetes and How Can I Control It?

When you have diabetes, your body either doesn't make enough insulin or can't use its own insulin as well as it should, or both. This causes sugars to build up too high in your blood. Most of the food you eat is turned into glucose, or sugar, for your body to use for energy. Insulin is a hormone needed to convert sugar and other food into energy and to help glucose get into your body's cells.

What types of diabetes are there?

This disease has two main forms: type 1 and type 2.

Type 2 is the most common. About 90 percent to 95 percent of Americans diagnosed with diabetes have type 2 diabetes. It most often develops in middle-aged and older adults. It's often linked with obesity and physical inactivity.

Type 2 diabetes develops when the body doesn't make enough insulin and doesn't efficiently use the insulin it makes (insulin resistance).

Type 1, or juvenile diabetes, usually starts early in life. It results from the body's failure to produce insulin. People with it must take insulin each day to regulate levels of blood glucose (sugar).

Am I at risk?

Diabetes is increasing. This is because more people are obese, don't get enough physical activity and are getting older. However, younger people are developing diabetes at an alarming rate. This is probably because obesity and lack of physical activity are increasing problems for this group, too.

People in several ethnic groups seem to be more likely to develop type 2 diabetes:

- Hispanics
- African Americans

- Native Americans
- Asians (especially South Asians)

How can I control my risk for heart disease and stroke?

Diabetes is a major risk factor for stroke and heart disease. That means it can be as serious as smoking, high blood cholesterol, high blood pressure, physical inactivity or obesity.

If you have diabetes, it's very important to have regular check-ups. Work closely with your healthcare provider to manage your diabetes and reduce any other risk factors:

- Control your weight and blood cholesterol with a low-saturated-fat, low-cholesterol diet.
- Be physically active for at least 30 minutes on most or all days of the week.
- If you drink alcohol, don't have more than one drink per day for women or two per day for men.
- Lower your blood pressure, if it's too high. People with diabetes should keep blood pressure under 130/80 mm Hg.
- Don't smoke, and avoid other people's tobacco smoke.
- Specific medicines may help you control your blood pressure, cholesterol and blood glucose. Your doctor will advise you if one is right for you. If you take medicine, take it exactly as directed. If you have questions about the dosage or side effects, ask your doctor or pharmacist.

Somerset Medical Center's Diabetes Center provides personalized diabetes counseling. For more information, call 908-685-2846.

How Can I Quit Smoking?

What if I go back to old habits?

Smoking cigarettes tops the list as the most important preventable major risk factor of our No. 1 killer — heart and blood vessel disease. The long list of diseases and deaths due to smoking is frightening. Smoking also harms thousands of nonsmokers, including infants and children, who are exposed to cigarette smoke.

If you smoke, you have good reason to worry about its effect on your health, your loved ones and others. You could become one of the more than 440,000 smoking-related deaths every year. When you quit, you reduce that risk tremendously!

Is it too late to quit?

No matter how much or how long you've smoked, when you quit smoking, your risk of heart disease and stroke starts to drop. In time your risk will be about the same as if you'd never smoked!

How do I quit?

Step One

- List your reasons to quit and read them several times a day.
- Wrap your cigarette pack with paper and rubber bands. Each time you smoke, write down the time of day, how you feel, and how important that cigarette is to you on a scale of 1 to 5.
- Rewrap the pack.

Step Two

- Keep reading your list of reasons and add to it if you can.
- Don't carry matches, and keep your cigarettes out of easy reach.
- Each day, try to smoke fewer cigarettes, and try not to smoke the ones that aren't most important.

Step Three

- Continue with Step Two. Set a target date to quit.
- Don't buy a new pack until you finish the one you're smoking.
- Try to stop for 48 hours at one time.

Step Four

- Quit smoking completely. Throw out all cigarettes and matches. Hide lighters and ashtrays.
- Stay busy! Go to the movies, exercise, take long walks, go bike riding.
- Avoid situations and "triggers" you relate with smoking.
- Find healthy substitutes for smoking.

- Carry sugarless gum or artificially sweetened mints. Munch carrots or celery sticks. Try doing crafts or other things with your hands.
- Do deep breathing exercises when you get the urge.

What if I smoke after quitting?

It's hard to stay a nonsmoker once you've had a cigarette, so do everything you can to avoid that "one." The urge to smoke will pass. The first 2 to 5 minutes will be the toughest. If you do smoke after quitting:

- This doesn't mean you're a smoker again — do something now to get back on track.
- Don't punish or blame yourself — tell yourself you're still a nonsmoker.
- Think about why you smoked and decide what to do differently the next time.
- Sign a contract to stay a nonsmoker.

What happens after I quit?

- Your senses of smell and taste come back.
- Your smoker's cough goes away.
- Your digestive system returns to normal.
- You feel alive and full of energy.
- You breathe much easier.
- It's easier to climb stairs.
- You're free from the mess, smell and burns in clothing.
- You feel free of "needing" cigarettes.
- You'll live longer and have less chance of heart disease, stroke, lung disease and cancer.

Somerset Medical Center's Tobacco Quitcenter can help you kick the habit. For more information, call 908-685-2442 or visit somersetmedicalcenter.com/quit.

How Can I Monitor My Cholesterol, Blood Pressure and Weight?

High cholesterol, high blood pressure and being overweight or obese are major risk factors for heart disease and stroke. You should be tested regularly to know if you have high blood cholesterol or high blood pressure. That's because elevated

cholesterol and blood pressure have no warning signs.

And you should talk to your doctor about a healthy weight for you.

You can manage your blood pressure, blood cholesterol levels and weight with the tracker on the next page. Work with a healthcare professional to determine your "goal" levels. Then ask how often to measure your levels. Record your levels and the date they were taken to track your progress.

	Goal	Today's Date	Today's Date	Today's Date	Today's Date	Today's Date
Blood Pressure (mm Hg)						
Total Cholesterol (mg/dL)						
LDL Cholesterol (mg/dL)						
HDL Cholesterol (mg/dL)						
Weight						

What can I do to lower my cholesterol and blood pressure?

- Eat a nutritious, well-balanced diet low in saturated fats, trans fats and cholesterol that includes lots of fruits, vegetables and fat-free dairy products.
- Eat no more than 6 ounces per day of cooked meat, seafood or poultry.
- Choose lean cuts of meat, trim all visible fat and throw away the fat that cooks out of the meat.
- Substitute meatless or "low-meat" main dishes for regular entrees.
- Use a minimal amount of fats and oils, usually no more than 2 to 3 servings a day depending on your caloric needs.
- Use less salt. Limit the amount of salty foods you eat.
- Limit the amount of alcohol you drink. If you're a woman, don't drink more than one drink a day. If you're a man, have no more than two drinks a day.

- Do at least 30 minutes of physical activity on most or all days of the week.
- Take your medicines as prescribed.

How can I manage my weight?

Even modest weight loss (5 to 10 percent of your body weight) can help lower your risk for heart disease and stroke. Check with your doctor before starting a program.

- Reduce the number of calories you eat. Excess calories add excess weight.
- Do at least 30 minutes of moderate-intensity physical activity on most (preferably all) days of the week. Building up to one hour or more of daily moderate-intensity physical activity can have a significant effect on weight control.

Somerset Medical Center's Community Health Department sponsors quarterly blood pressure and cholesterol checks. For more information, call 908-203-6234 or visit somersetmedicalcenter.com/events.

How Can I Make My Lifestyle Healthier?

Heart and blood vessel diseases are our nation's No. 1 killer. Nearly 2,400 Americans die each day from them! Meanwhile, over 79 million adult Americans are living with them. Many are struggling to recover from heart attack or stroke, while others at high risk are getting the care and making the changes necessary to lower their risk.

You can do plenty to get your heart in shape, even if you've had a bad experience. Healthy changes will help you feel and look better! Death rates from heart attack, stroke and other cardiovascular diseases are going down. Healthy lifestyles play a big part! Now's the time to make up your mind to take some control over your future. You'll find that once you make one change, the next comes more easily. Here are some simple steps to take:

- Don't smoke.
- Have your blood pressure checked regularly.
- Improve your eating habits.
- Be more physically active.

- Maintain a healthy weight.
- Have regular medical check-ups.
- Take your medicine, if needed, to control high blood pressure, high cholesterol or diabetes.

How do I stop smoking?

- Make an agreement with yourself to quit.
- Ask your healthcare professional for information and programs that may help.
- Fight the urge by going where smoking isn't allowed, and avoid being around people who smoke.
- Reward yourself when you quit.
- Keep busy doing things that make it hard to smoke, like working in the yard, washing dishes and being more active.
- Remind yourself that smoking causes many diseases, and can harm or kill you and others.
- Ask your family and friends to support you.

How do I change my eating habits?

- Ask your doctor, nurse or licensed nutritionist for help.
- Choose less often foods like egg yolks, fatty meats, skin-on chicken, butter and cream.
- Cut down on saturated fat, trans fat, sugar and salt.
- Substitute fat-free or low-fat milk for whole milk.
- Bake, broil, grill, roast and poach — don't fry foods in oil.
- Eat fruits, vegetables, cereals, dried peas and beans, pasta, fish, skinless poultry and lean meats.
- Limit alcohol to one drink a day for women and two for men, and if you don't drink, don't start.

What about physical activity?

- Regular physical activity reduces your risk of heart attack and stroke and makes your heart stronger.
- It helps control your weight and blood pressure, helps you relax, and can improve your mood!
- Check with your doctor before you start if you've been inactive a long time.
- Start slow and build up to a total of 30 to 60 minutes on most or all days of the week.
- Look for chances to be more active. Take 10 to 15-minute

walking breaks during the day or after meals.

How can I be more relaxed?

- Take 15 to 20 minutes a day to sit quietly, breathe deeply and think of a peaceful picture.
- Be more active every day.
- Limit the amount of alcohol you drink.
- Try to avoid things that upset you, such as rush-hour traffic.
- Change how you respond to difficult situations. Be positive, not negative.

How can I remember to take my medicine?

- Take it at the same time every day.
- Use a weekly pill box with separate compartments for each day or time of day.
- Leave notes to remind yourself.
- Ask family and friends to help remind you.
- Wear a wristwatch with an alarm.
- Try an e-mail reminder or beeper service.

What Is Cardiac Rehabilitation?

A cardiac rehabilitation program takes place in a hospital or in the community. "Rehab" is for patients who are getting better after heart problems or surgery.

One of the best things you can do for yourself is to get in a rehab program. Everything you need to get and stay healthy is in one place, and medical staff is on hand at all times.

Rehabilitation can do a lot to speed your recovery and reduce your chances of future heart problems.

What happens in a rehabilitation program?

- Rehabilitation programs can help you change your lifestyle habits. These programs often take place at a hospital with a rehabilitation team or with the help of your doctor, nurse or other healthcare professionals.
- Many people find that rehab programs are very helpful after getting out of a hospital. They allow people to join a group to exercise and to get special help in making lifestyle changes.

During your rehabilitation program you'll...

- Exercise using a treadmill, bike, rowing machine or walking/jogging track.
- Be monitored for a change in symptoms by a nurse or another healthcare professional.
- Start slowly, following a safe physical activity program that gradually helps you become stronger.
- Gradually move into a more intensive program that lets you work longer and harder.
- Possibly begin strength training, if your doctor says you can.
- Have your heart rate, blood pressure and EKG monitored.

After you've completed the program, you may feel better than ever. Make these lifestyle changes a part of your everyday life!

How else does it help me?

- You may go to classes or get personal help to quit smoking and stay smoke-free.
- A nutritionist will help you create a healthy eating plan so you'll eat less of foods high in saturated fat, trans fat and cholesterol.
- You'll improve your cardiovascular fitness.
- You'll be weighed and taught ways to lose weight if you need to.
- You can learn relaxation skills to help manage and reduce your stress.
- You may meet others who've just been through a similar event.

Somerset Medical Center offers a 3-phase Cardiac Rehabilitation Program. For more information, call call 908-685-2453 or visit somersetmedicalcenter.com/heart.

How Do I Manage My Medicines?

Taking medicine may be new to you, and there may be a lot to remember. For example, why are you taking it? What time should you take it? How often do you take it, and how many pills do you take?

It's very important to take medicine the right way — just as your

doctor tells you.

If you don't follow your doctor's directions, what could happen? First of all, if medicine isn't taken the right way, it may not work. It could also cause side effects that may be mild — or very harmful. Without knowing it, you could counteract one medicine by taking it with another. Not taken properly, medicine can also make you feel sick or dizzy.

How can I remember to take my medicine?

- Take it at the same time every day.
- Take it along with meals or other daily events, like brushing your teeth.
- Use special pill boxes that help you keep track, like the day-of-the-week divided ones found at drugstores.
- Ask the people who are close to you to help remind you.
- Keep a "medicine calendar" near your medicine and note every time you take your dose.
- Put a sticker or reminder note on your medicine cabinet or refrigerator.

What else should I know?

- Store your medicine the way your doctor or pharmacist tells you. Keep medicine in original containers, or label new containers.
- Keep track of what pills you can and can't take together, including over-the-counter medicines.
- Always get your prescription filled on time, so you don't run out.
- Try to see the same pharmacist each time.
- Don't take more of your medicine than the prescribed dose.
- Ask your doctor or pharmacist before buying a new over-the-counter medicine, such as an antihistamine or "cold tablets," to be sure they won't interfere with your prescribed medicine.
- Always check with your doctor before you stop taking a medicine.
- If you have any questions about your pills, make a note to remind yourself to ask your doctor or pharmacist.
- Tell your doctor if you have any side effects.

- Write down the names and doses of medicines you are taking. If you go to more than one doctor, take your updated medication list with you to each visit.
- Keep all medicines out of the reach of children.

My medicine

Ask your healthcare professional to help you fill in the blanks in the table on the following page.

Doctor	When to take it	What it's For	Dose	What it looks like	Name of Medicine

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Support Groups

Heart Smart & Healthy Cardiac Support Group	Hamilton, NJ	609-584-5900
It's My Heart	Bloomington, NJ	973-291-4676
Sudden Cardiac Arrest Association Online Support Group	suddencardiacarrest.org	
American Heart Association	North Brunswick, NJ	732-821-2610
Heart 2 Heart Support Group	Toms River, NJ	888-SBHS-123

Other Resources

Senior Advantage in Life (SAIL) Program: SAIL is a free program for adults age 60 and above that offers senior-specific, medically focused seminars and discounted services to enhance your health and well-being. SAIL provides a variety of cardiac programs, fitness classes and screenings for your heart health. For more information, call 908-595-2345 or visit www.somersetmedicalcenter.com/senior.

My Health Online: Register to receive free personalized, health information by e-mail, including reminders to get health screenings and exams, a customized monthly newsletter with information on the health topics important to you, and interactive health risk assessments. Visit www.somersetmedicalcenter.com to register.

