

Your Guide to
Understanding and
Taking Control of
Your Angina

Get Tough on AnginaTM



PCNA
PREVENTIVE CARDIOVASCULAR
NURSES ASSOCIATION

An Educational Booklet for Patients and Families



Dear Patients,

This booklet was written by nurses who are members of the Board of Directors of the Preventive Cardiovascular Nurses Association (PCNA). PCNA's mission is to provide education that will help you have better heart health. We hope this booklet helps you understand more about your angina so that you can live a full and active life.

Nurses, nurse practitioners, physicians, physician assistants, nutritionists, pharmacists and other health care professionals are all members of PCNA. They work with patients in doctors' offices, clinics and hospitals, and have spent many hours helping patients understand and control their angina. It is our hope that this booklet will give you, your family and your friends the information you need to live a more comfortable life with angina.

Sincerely,

Kathy Berra, MSN, ANP-BC, FAHA, FPCNA, FAAN

Barbara Fletcher, RN, MN, FAHA, FPCNA, FAAN

Nancy Houston Miller, RN, BSN, FAHA, FPCNA

Directors, PCNA Get Tough on Angina Project



Get Tough on Angina™ is an educational program developed by the Preventive Cardiovascular Nurses Association (PCNA).

For more information about PCNA, visit www.pcna.net

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We value your feedback! Help improve PCNA educational tools and resources by sharing your comments about this resource at www.pcna.net/angina

Get Tough on Angina



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All About Angina

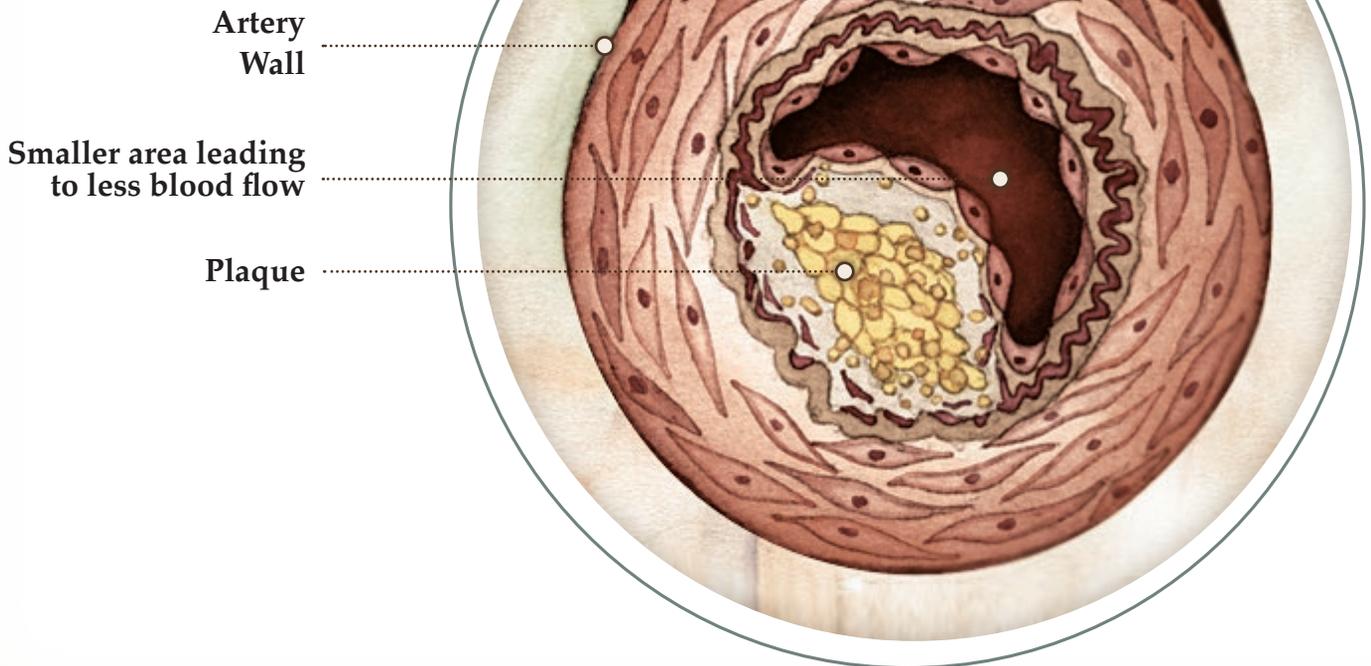
Nearly 10 million people in America have a heart condition called angina, and 500,000 more will develop angina each year. Living with angina is not easy. It can cause stress for you and your family. This booklet will help you understand and take control of your angina so you can live a full and active life.

What Is Angina?

Angina is the discomfort or pain you feel when your heart does not get enough oxygen. Angina usually occurs because the large arteries that carry blood and oxygen to your heart have become narrowed due to fatty deposits (called plaque or atherosclerosis). The fatty deposits build up over time on the inside walls of your arteries. This causes the inside of your arteries to become smaller. When this happens, your arteries are not able to send enough oxygen-rich blood to meet your heart's needs.

Coronary microvascular disease (MVD) is heart disease that affects the tiny coronary (heart) arteries. Coronary MVD damages the walls of the heart's tiny arteries and blood flow can be blocked, causing angina symptoms.

Heart Artery



All About Angina

What Does Angina Feel Like?

Angina does not feel the same to each person. It can feel like:

- A crushing, heavy, tight or squeezing discomfort in the center of your chest
- Chest pressure or pain
- Discomfort or pain in your jaw, teeth, shoulder or upper back
- Unusual shortness of breath
- Discomfort or pain down your arm that may make your arm feel numb
- A burning feeling under your breastbone (can feel like heartburn)
- Nausea or unusual tiredness

If you know how your angina feels, it will help you understand:

- What physical activities cause your angina
- If you get angina when you are stressed
- When to stop and rest
- When to take medicine like nitroglycerin (NTG) to treat your angina
- When your angina gets worse or happens more often
- When to call your doctor or nurse about new, different or worse symptoms



What to Do if Your Angina Changes

Angina usually goes away when you rest or take a medicine called nitroglycerin (NTG). There is more information about NTG on page 13. If your angina does not go away with rest and NTG, you may be having a heart attack. In this case, you should follow the “Signals for Action” below.

Signals for Action

1



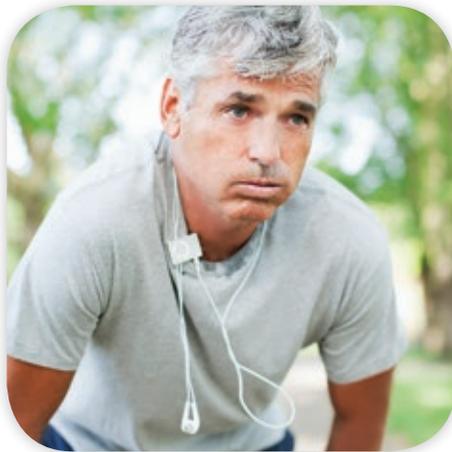
- Always carry NTG with you and use it as you are told.
- If you don't have a prescription for NTG, talk to your doctor or nurse.

2



- Know your angina. When do you get angina, what are you doing when you get it, and what makes it go away?
- If you think your angina is changing, call your doctor or nurse.

3



- When you get angina, stop what you are doing and rest. If your angina does not go away quickly with rest, take NTG.

4



- If your angina is not better after 5 minutes of rest and taking NTG, **Call 911** or go to the nearest emergency room. You may be having a heart attack!

Risk Factors You Can Control

Most people with angina have heart disease, which is caused by the build-up of fatty deposits in the arteries leading to the heart. Reducing your risk factors will help you control your angina and prevent a heart attack.

Risk Factors You Can Control Include:

- Cigarette smoking
- High blood pressure
 - Goal is less than 140/90 mmHg. Your doctor or nurse may set a lower number for you depending upon your heart health.
- High blood sugar (over 100 mg/dL)
- Being overweight (especially if you carry weight around your waistline)
- Blood fats:
 - High LDL (“bad”) cholesterol
 - Low HDL (“good”) cholesterol
 - High triglycerides
- High level of stress
- Unhealthy diet
- Not exercising

Cigarette Smoking

Smoking hurts the walls of your arteries and increases your heart’s need for oxygen. You may reduce your angina if you stop smoking, and you will reduce chances of future heart attacks. Your doctor or nurse can help you quit and tell you about programs to help you quit smoking. Medicines may also help you. You should also avoid chewing tobacco and e-cigarettes.

High Blood Pressure

High blood pressure makes your heart work harder. If your blood pressure is normal, this will help you have less angina. You can lower your blood pressure by losing weight, eating less salt (sodium), taking blood pressure medicines, getting regular exercise and managing stress.

Blood Fats (ALSO KNOWN AS LIPIDS OR CHOLESTEROL)

Blood fats like cholesterol and triglycerides are a major cause of narrowed arteries. You can improve blood fats by eating a healthy diet, maintaining a healthy weight and getting regular exercise. To treat your cholesterol, you will be prescribed a statin. If you cannot take a statin, you may be prescribed another cholesterol-lowering medication. Today there are many good medicines available to treat abnormal blood fats.

Risk Factors You Can Control

High Blood Sugar

High blood sugar (glucose) leads to diabetes and adds to fatty build-up in your arteries. You can prevent diabetes by eating healthy foods, keeping your weight down and getting regular exercise. Medicines also help control high blood sugar. Keeping blood sugar normal is very important for your heart and health.

Overweight

If you are overweight, your heart has to work harder to pump blood to all parts of the body. Losing weight can help you have less angina. If you are overweight, losing just 10 pounds may help your angina, as well as your blood pressure, blood fats and blood sugar. Eating less and exercising every day can help you lose weight.

How To Calculate Your BMI

Body Mass Index (BMI) is used to decide if you are overweight. BMI is based on your height and weight. For good health your BMI should be 25 or less. (See BMI chart)

EXAMPLE

If your height is 5'7" and your weight is 178 pounds, then your BMI is 28. A person with a BMI of 28 is overweight.

BMI ▶	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
WEIGHT (In Pounds)																
4'10"	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167
4'11"	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173
5'	102	107	112	118	123	128	133	138	143	148	153	158	164	169	174	179
5'1"	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185
5'2"	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191
5'3"	113	118	124	130	135	141	146	151	158	163	169	175	180	186	192	197
5'4"	116	122	128	134	140	145	151	157	163	169	174	180	186	192	198	203
5'5"	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210
5'6"	124	130	136	142	148	155	161	167	173	179	185	192	198	204	210	216
5'7"	127	134	140	146	153	159	166	172	178	185	191	198	204	210	217	223
5'8"	131	138	144	151	158	164	171	177	184	190	197	203	210	217	223	230
5'9"	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	237
5'10"	139	146	153	160	167	174	181	188	195	202	209	216	223	230	236	243
5'11"	143	150	157	165	172	179	186	193	200	207	215	222	229	236	243	250
6'	147	154	162	169	177	184	191	199	206	213	221	228	235	243	250	258
6'1"	151	159	166	174	182	189	197	204	212	219	227	234	242	250	257	265
6'2"	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272
6'3"	160	168	176	184	192	200	208	216	224	232	240	247	255	263	271	279
6'4"	164	172	180	189	197	205	213	221	230	238	246	254	262	271	279	287

Risk Factors You Can Control



Abdominal Obesity

Too much fat around your waist, known as abdominal obesity, increases your risk of diabetes and heart disease. To find out if you have abdominal obesity, measure your waist straight around your middle and just above your belly button.

You have abdominal obesity if your waist is:

- **Women: 35 inches or more**
- **Men: 40 inches or more**

NOTE: These measurements may be different for certain ethnic groups.

Eating healthy foods and fewer calories, regular exercise and weight loss will reduce the fat around your waist.

Exercise

Regular exercise, like taking a 30-minute walk every day, will help your heart and body stay strong. It can also help you have less angina. Regular exercise can help:

- Raise HDL (“good”) cholesterol
- Lower triglycerides
- Lower blood pressure
- Improve blood sugar
- Lower stress
- Control weight

Stress

Less stress can help you feel better and have less angina. (See page 21 for more about stress.)



Tests & Treatments for Angina

When you see your nurse or doctor to have a test for angina, you should explain:

- What your angina feels like
- What usually causes your angina
- How long it lasts
- How often you have angina
- What you do to make your angina go away

Along with this information, special tests will help your doctor or nurse decide the best treatment for you. Let them know if you have any questions about treatment options.

Tests You May Have:

Electrocardiogram (EKG or ECG)

A resting EKG is a “road map” of your heart and shows the heart’s electrical activity. An EKG can show if:

- You are having a heart attack or if you had a heart attack in the past
- Your heartbeat is regular or not regular
- Your heart is beating too fast or too slow
- The electrical activity is not normal

Exercise Test (STRESS TEST)

This test takes an EKG of your heart while you exercise, most often by walking on a treadmill. The treadmill slowly increases in speed and grade (like walking up a hill) to make your heart work harder. If your heart does not get enough oxygen during the test, you may have angina.

The exercise test tells you about:

- Changes in your heart rate and blood pressure
- Changes in your EKG while you exercise
- Any symptoms you may have with exercise

Your exercise test will help your doctor or nurse decide a safe level of exercise for you and if you will need other tests or treatments for your angina.



Tests & Treatments for Angina

Echocardiogram

(ECHO)

An “Echo” is an ultrasound procedure that measures how well your heart is working (pumping) and how well your heart valves are working. During the “Echo” a monitor (transducer) is held over your heart to measure if your heart is pumping normally and shows how your heart valves are working.



Cardiac Cath

(CORONARY ANGIOGRAM)

A cardiac cath is a very good way to see how blood flows to your heart. It usually requires you to be in the hospital for 12 to 24 hours. A cardiologist threads a small catheter (hollow tube) into your body through a large artery in your upper leg or arm. When the catheter reaches your heart, the doctor injects a small amount of dye into the heart’s arteries. X-rays are then taken to show the blood flow to your heart. This test allows your doctor to see if the arteries going to your heart are narrowed or blocked.

Nuclear Stress Test

This test uses X-rays and a nuclear tracer to create pictures of the blood flow to your heart during an exercise test. If the blood flow to your heart is good, the nuclear tracer shows up on the X-rays. If blood flow to certain areas of your heart is poor because of narrowed arteries, the nuclear tracer will not show up.

If you can’t walk on a treadmill to take an exercise test, your doctor can use another medicine to look at the blood flow to your heart.

New imaging tests for heart disease are being developed all the time. Your doctor may suggest a test not described here.

Medicines for Angina

Most of these medicines can be used alone or in combination to treat angina. You may be prescribed others if you have a stent. Make certain to take all medicines as you are told. Most medicines have few side effects. Talk to your doctor or nurse if you think you are having side effects.

Beta-Blockers

Beta-blockers are used to treat angina and other health problems like high blood pressure and abnormal heart rhythms. Beta-blockers cause your heart rate and blood pressure to go down and reduce how hard your heart works.

Calcium Channel Blockers

Calcium channel blockers help keep your arteries from getting tight or narrow. Some calcium channel blockers also lower blood pressure, which reduces how hard your heart works.

Late Sodium Channel Blocker

A late sodium channel blocker has been shown to be helpful in treating angina. This medicine does not affect heart rate or blood pressure. It helps the heart relax between heart beats, which improves blood flow to the heart.

Helpful hints for taking your medicine:

- Always take your medicines as you were told.
- Be sure to tell your doctor or nurse about any side effects from your medicine.
- Don't stop or change your medicines without first talking to your doctor or nurse.
- Do not share your medicines with others.



Medicines for Angina

Nitroglycerin (NTG)

Nitroglycerin (NTG) is medicine used to improve blood flow to the heart. There are two different forms of NTG. Fast-acting NTG acts very quickly while long-acting NTG lasts for a longer period of time.

Fast-acting NTG comes in two forms: a tablet or spray that goes under your tongue. Most people with angina should keep fast-acting NTG with them all the time. Fast-acting NTG quickly stops angina by causing blood vessels to relax and open up so more oxygen-rich blood flows to the heart.



When you begin to feel angina:

- 1** Stop what you are doing, sit down and rest. If your angina does not quickly go away with rest, put one NTG tablet under your tongue or spray NTG under your tongue.
- 2** Continue to rest until your angina goes away.
- 3** If your angina is not better after 5 minutes of rest and taking NTG, **Call 911** or go to the nearest emergency room. You may be having a heart attack!

Long-acting NTG provides a small amount of NTG into your bloodstream all day. Many people take long-acting NTG so they have less angina during the day. Long-acting NTG comes in pills and skin patches.

You can take fast-acting NTG for angina even if you take long-acting NTG.

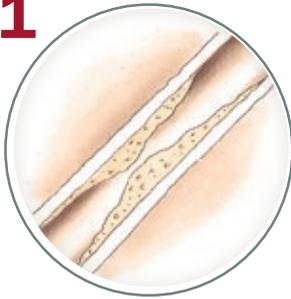
Nitroglycerin Tips

- Keep NTG in the original bottle it came in. Do not mix NTG in pill containers with your other medicines. If your bottle of NTG has cotton, throw the cotton away.
- Always have a fresh supply of NTG. Get a new bottle of NTG every 6 months. NTG spray will last 2-3 years.
- Keep NTG at room temperature; don't let it get too hot or too cold.
- Keep NTG with you at all times.
- When using a NTG skin patch or spray, follow your doctor or nurse's instructions carefully.
- Medications to improve sexual performance in men can cause an unsafe drop in blood pressure when taken with NTG. These two medicines should not be taken in the same 24-hour period. See more on this on page 19.

Other Treatments for Angina

Angioplasty and Stent

1



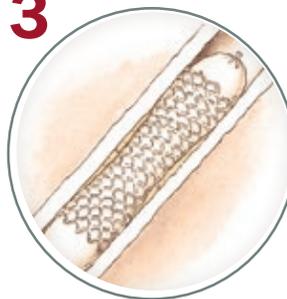
Blocked Artery

2



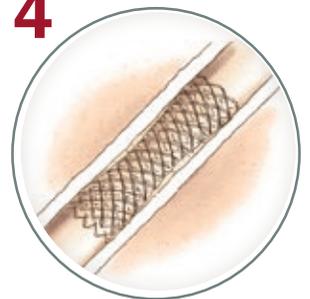
Angioplasty
balloon pushing
against the blockage
in the artery
makes the
blockage smaller

3



**Small Mesh Tube
(Stent)**
a mesh wire holds the
artery open after
the angioplasty balloon
has opened the artery

4



Opened Artery
shown with
stent in place,
which remains
in the artery

Heart Bypass Surgery

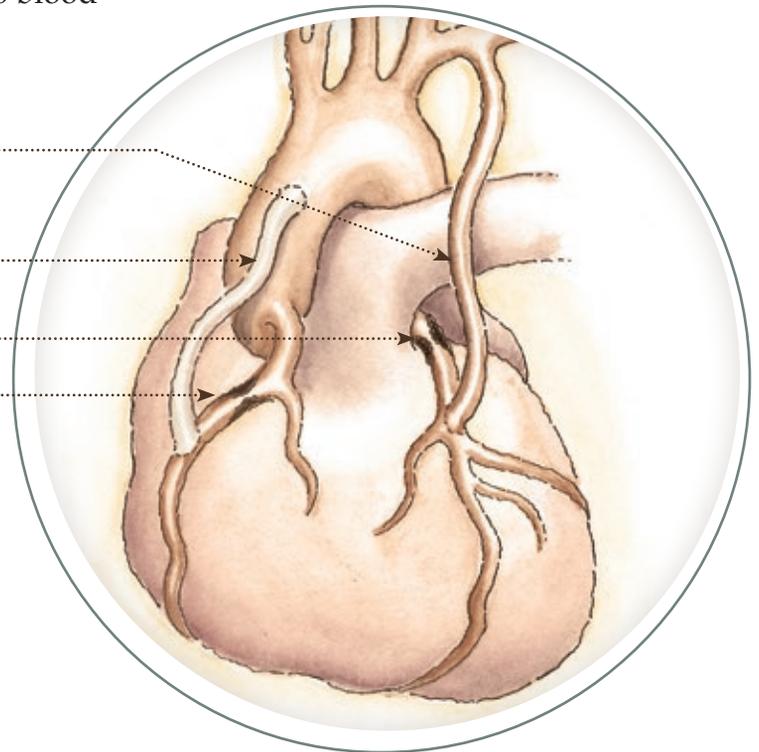
A bypass adds new blood vessels so blood goes around the blockage.

Artery bypass
from chest

Vein bypass
from leg

Blockage

Blockage



Enhanced External Counterpulsation or EECP

An EECP involves putting cuffs on the legs that repeatedly fill with air and then empty. This acts like a pump on the legs and helps fresh blood and oxygen get back to the heart. You will need a prescription for EECP. Talk to your doctor or nurse.

The 4 Es Can Cause Angina

What causes you to have angina? High blood pressure and smoking can cause angina, but many people have angina when they have the **the 4 Es**: **E**at a large meal, **E**xercise, get **E**motionally upset, or go outside in **E**xtrremely cold weather. All of these “triggers” increase your heart’s need for blood and can cause angina. Note: having two triggers at once, like eating a large meal and then going for a walk, may cause you to have angina more easily and more often.



Eating a large meal



Exercise & other physical activity



Emotions



Extreme cold weather

Take Control of Your Angina

This section will help you take control of your angina and stay as active and healthy as possible. Keeping a record of your angina will help you and your doctor or nurse know if your angina is changing. A good example of a daily record can be found below and should include:

- The day and time you had angina
- What you were doing when you had angina (See “The Four Es” on page 15)
- The grade (how bad your angina felt) (See “How to Grade Your Angina” chart below)
- How long your angina lasted
- What you did to make your angina go away

Daily Record for Angina

EXAMPLE

Date / Time	Trigger (exercise, emotions, eating, etc.)	Grade (1-4)	How Long Did It Last?	Action (nitroglycerin, rest, other)
8/16/16 8:00am	After eating	Grade 2	1 minute	Took NTG

How to Grade Your Angina

Grade	Angina
1	Mild (very little) angina that goes away when you slow down or rest.
2	A little worse than grade 1. The angina goes away quickly with rest and/or NTG.
3	Worse than grade 2. You may feel it in other parts of the body such as the neck, jaw, back, shoulders or arms. You may also have shortness of breath. This angina needs rest and NTG to go away.
4	The worst angina you have ever had.

Rating your angina on a scale of 1 (mild) to 4 (worst ever) helps you know when to take action. **If you have a grade 3 or 4 angina:**

- STOP what you are doing
- Take NTG if your doctor or nurse has prescribed it
- If your angina is not better after 5 minutes of rest and taking NTG, **Call 911** or go to the nearest emergency room. You may be having a heart attack!

You should report grade 3 or 4 angina to your doctor or nurse, even if rest and NTG help.

Take Control of Your Angina



How to Exercise Safely

Daily exercise is good for your heart and your overall health. Exercise “trains” your muscles to use oxygen more efficiently and trains your heart to work better. Before you begin to exercise, talk to your doctor or nurse about what type of exercise is best for you.

Try not to overdo when you exercise. A cardiac rehabilitation program can help you learn how to exercise safely. Your doctor or nurse can tell you if there is a cardiac rehabilitation program close to you. If so, ask your doctor or nurse for a referral to the program.

How Much Exercise Is Safe?

Everyone should get at least 30 minutes of moderate exercise every day, like walking, swimming or biking. You can do all of your exercise at one time or you can break it up into shorter exercise periods. You can exercise 3 times a day for 10 minutes or twice a day for 15-20 minutes. Remember to warm up (slow walking or slow bike pedaling) before you exercise. Always cool down (slow walking or slow bike pedaling) after you exercise. Doing a warm-up gets your body ready for exercise and helps prevent muscle aches and pains. Cooling down helps your heart rate and blood pressure return to normal.



Take Control of Your Angina

Strength Training

Your doctor or nurse may want you to include strength training in your exercise program. Strength training 2-3 times a week makes your muscles stronger. People with stable angina can begin strength training after 5-8 weeks of moderate exercise, like walking.

A good strength training program for angina patients has 12-15 sets of exercises that train the major muscle groups in your body — chest, back, shoulders, arms, legs and stomach. You can do these exercises at home with light hand weights (3-10 pounds) or in a gym with weight training equipment. It's better to repeat the exercise more times with lighter weights rather than repeating the exercise fewer times using heavier weights, so you do not overwork your heart.

(See Appendix A for examples of strength training exercises.)

NOTE: Check with your doctor or nurse before you begin a strength training program to be sure it is safe for you.

More Tips to Exercise Safely

- Dress for the weather. In hot weather, wear lightweight clothing — not sweatshirts or heavy clothes. In cold weather, dress in warm layers.
- In very cold weather, cover your mouth and nose with a scarf when you go outside. Breathing warm air helps prevent angina.
- To reduce how hard your heart works, plan your exercise based on the temperature and humidity. In hot weather, exercise early or late in the day. In cold weather, exercise during the warmest part of the day. You can always exercise indoors.
- Always drink water when you exercise. Drink more water when the weather is hot or humid or if you plan to exercise longer than normal.
- If it's windy, slow down or go with the wind.



Take Control of Your Angina

Your Daily Activities

Daily activities such as housework, shopping, and physical or mental effort can also cause angina. If you have angina with these activities, stop and rest until your angina goes away.

Tell your doctor or nurse if you get angina during daily activities. They can help you create a better daily activity plan. They may also want to talk to you about your medicines for angina.

Sexual Activity

Some people have angina when they have sex. Be sure to talk to your doctor or nurse if you have angina with sex, or other symptoms such as shortness of breath or skipped heartbeats.



For Men

If you have taken medicine to improve sex (like Viagra[®], Levitra[®], or Cialis[®]) and you have angina in the next 24 hours — **DO NOT TAKE NITROGLYCERIN!**

NTG plus Viagra[®], Levitra[®], or Cialis[®] can cause your blood pressure to fall.

If your angina does not go away after 5 minutes of rest, if you feel dizzy or like you may faint, **call 911** or go to the nearest emergency room right away. Tell the emergency workers in the ambulance, and the doctor or nurse in the emergency room, if you have taken NTG and a Viagra[®], Levitra[®], or Cialis[®] pill.

Travel Tips

Having angina should not prevent you from doing the things you enjoy, such as traveling. Many people are afraid to travel because they might have angina during their trip. Follow these tips when you travel:

- Take along all of your medicines and keep them with you at all times. Don't forget to pack NTG tablets or spray.
- Do not put your medicines in bags you plan to check.
- Pack extra medicine in case your travel plans change and you are away longer than you expected.
- Take a list of all your medicines with you.

Put Yourself, Your Family & Friends at Ease

Feelings and Concerns about Your Angina

When you have angina, you may feel afraid, frustrated, depressed or really upset. You may think, “When will I have my next angina attack?” or, “Will I have a heart attack or die?” Many people stop exercising so they do not have angina. These are all common feelings for people who live with angina.

To help you with your feelings about angina, follow this advice:

- Share your feelings with friends and family members.
- Do your daily activities a little more slowly.
- Learn and practice daily relaxation exercises such as yoga and deep breathing.
- Always take your angina medicines as told.
- Discuss any changes in your angina with your doctor or nurse as soon as possible.

Family Members and Friends Can Help by:

- Having a plan for getting medical help.
- Asking if your angina is changing.
- Encouraging you to follow a healthy diet and get regular exercise.
- Helping you to stop smoking. And if they smoke, they can also stop smoking.
- Being a good listener and talking to you about how you feel when you have angina.
- Learning cardiopulmonary resuscitation (CPR) so they can help in an emergency.



Put Yourself, Your Family & Friends at Ease

How to Lower Your Stress

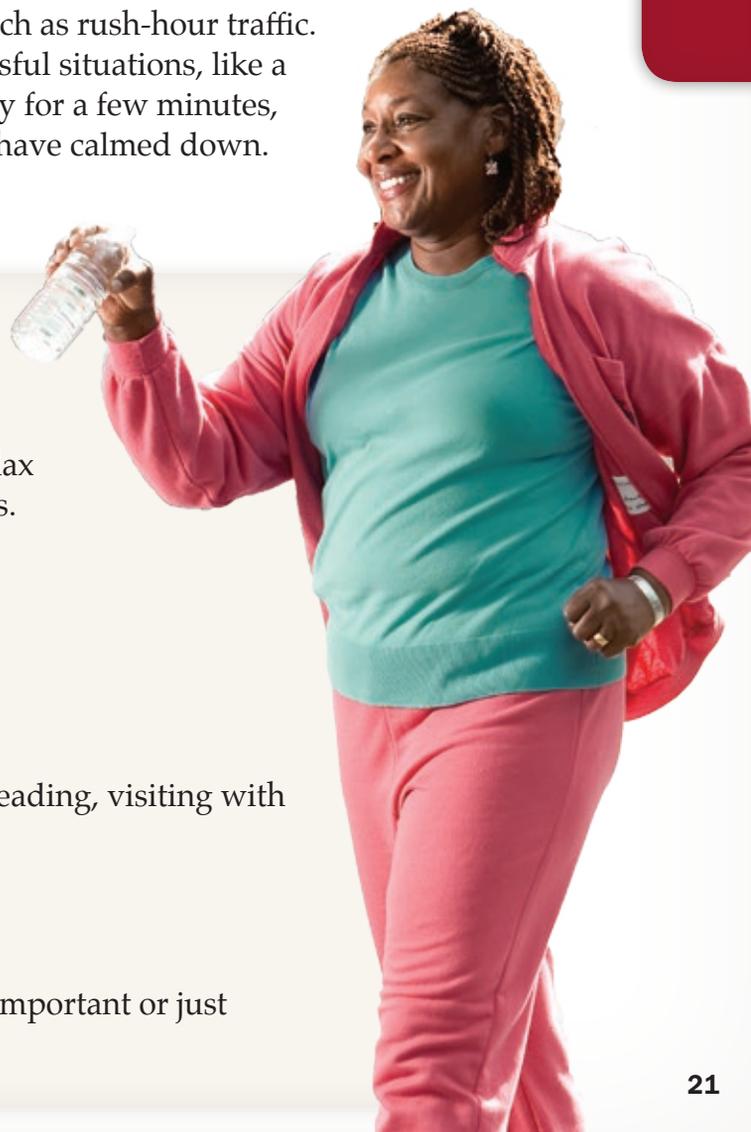
When you are under stress, your blood pressure and heart rate go up. This makes your heart work harder. Activities such as yoga, deep breathing, walking, listening to music and talking to friends can help lower your stress. Having less stress will help you have less angina.

Some Things You Can Do to Keep Stress Under Control

- You can change how you feel about things. For example, if being late to an appointment causes you stress, you can plan ahead by leaving earlier so you aren't rushed or late.
- Change how you think about stress. Ask yourself, "Does this really matter? How important will this seem a year from now?"
- Try to stay away from stressful situations such as rush-hour traffic. While you may not be able to avoid **all** stressful situations, like a family argument, you can usually walk away for a few minutes, take some deep breaths, and wait until you have calmed down.

Positive Habits That Lower Stress

- 1** Take a few minutes out of your schedule to relax each day. Simply take a few slow, deep breaths. See Appendix B for details.
- 2** Get regular exercise such as walking.
- 3** Try to get 7 to 8 hours of sleep.
- 4** Enjoy things that bring you pleasure such as reading, visiting with friends or starting a new hobby.
- 5** Try to manage your time better.
- 6** Learn to laugh at stressful things that are not important or just "put them behind you."



Put Yourself, Your Family & Friends at Ease

Manage Your Stress as You Learn to Relax

Some quick and easy exercises to help you relax are included in Appendix B. You can do them any time and anywhere. You may benefit from getting professional help to manage your stress.

Talk with Your Doctor or Nurse

Sharing your concerns with your doctor or nurse and having your questions answered will make you feel better about your angina. Ask your doctor or nurse about patient support groups in your area.

Get a Good Night's Sleep

Sleeping 7-8 hours per night is good for your overall health. The following actions may help you get a restful sleep:

- Avoid caffeinated drinks near bedtime
- Turn off the TV, cell phone and other electronic devices at least 30 minutes before bedtime
- Limit alcohol
- Find time to exercise during the day
- If you snore loudly or feel tired during the day, ask your doctor or nurse about sleep apnea

You may have other questions for your doctor or nurse, including questions about sex. **In between visits, write down any questions you have and bring them with you so you won't forget to ask them.** It's also helpful to take notes during the visit to help you remember what you and your doctor or nurse talked about.



Living a Healthy Life

Angina can change your life; at times in small ways, at times in big ways. But you can find ways to live a full, active and healthy life with LESS angina. We hope this booklet and the tips below will help you.

Top 10 Tips for Living with Angina from the Preventive Cardiovascular Nurses Association

- 1** Have a routine for your daily activities and for taking your medicines.
- 2** Pace yourself. If you have angina, slow down or rest before going back to your activity.
- 3** Get regular exercise. Find exercises that feel good and do them daily.
- 4** Control your risk factors. Make sure your blood pressure, cholesterol and blood sugar are under control. Stop smoking. Try to keep your body weight normal.
- 5** Learn ways to manage your stress. Getting a good night's sleep (about 7-8 hours) can help. If you snore or do not sleep well, talk to your doctor or nurse about a sleep study.
- 6** Tell your doctor or nurse how your angina feels and if your angina changes in any way. Your doctor or nurse can't help you if you don't let him or her know what's going on.
- 7** Keep a written list of every medicine and the dose you take. This means your prescribed medicines AND over-the-counter medicines (like aspirin or cold medicines). This also means all vitamins, minerals and herbal supplements you take.
- 8** Take your list of medicines to all your health visits and show it to every doctor, nurse or other health care professional you see.
- 9** Always keep fresh nitroglycerin (NTG) with you. Make sure family members know where you keep it.
- 10** Share your feelings with your family members and friends. They know you have angina and that it may bother you. If you try to hide your feelings, your family may feel shut out and worry more.

Strength Training Exercises

Start slowly. Do each exercise 12-15 times, rest for a few minutes and then repeat. Breathing patterns are important during strength training. Always exhale (breathe out) with an exercise and inhale (breathe in) as you relax. Don't strain, since this puts added work on the heart. Check with your doctor or nurse before you begin a strength training program to be sure it is safe for you.

1 Chest Press

Muscles used:

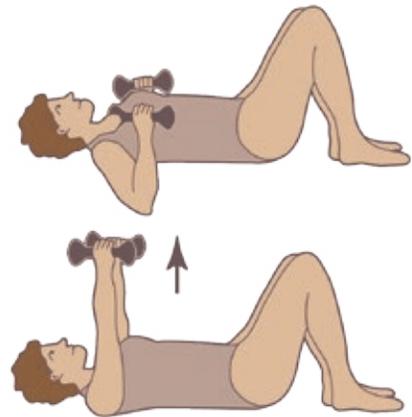
- Chest, front of shoulders, back of arms

Body position:

- Lie down with knees bent
- Hold weight in each hand at chest level

Movement:

- Press upward from shoulders, then slowly return to start position.



2 Shoulder Press

Muscles used:

- Shoulders, back of arms

Body position:

- Stand tall, stomach pulled in
- Hold weight in each hand at shoulder level

Movement:

- Raise weights above your head without letting your back arch, then slowly return to start position.



3 Biceps Curl

Muscles used:

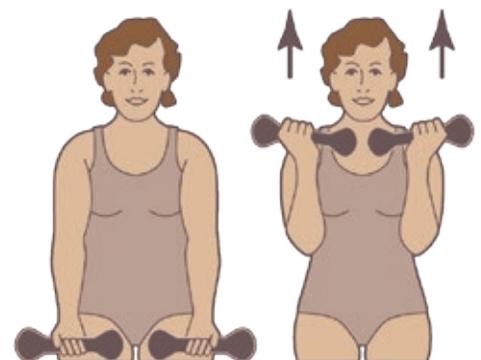
- Upper and lower arm muscles

Body position:

- May do while sitting or standing
- Hold weights with palms up
- Keep arms and back straight

Movement:

- Bend elbows and curl your arms up until the weights nearly touch your shoulders. Do not jerk the weights. Slowly lower weights back to start position.



Strength Training Exercises

4 Triceps Extension

Muscles used:

- Triceps

Body position:

- Stand tall. Hold weight in each hand with arms above your head.

Movement:

- Bend arms backward at your elbows to a 90-degree angle then slowly return to start position.



5 Pull-up for Upper Back

Muscles used:

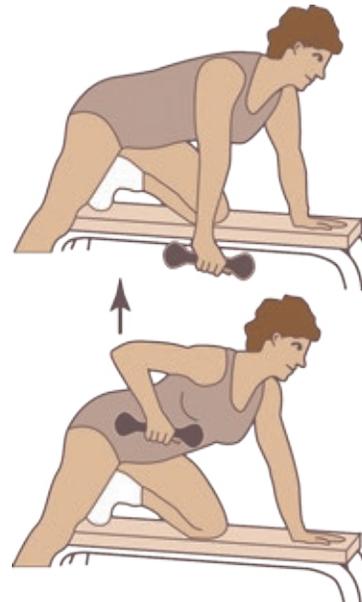
- Upper back

Body position:

- Place left leg and hand on bed, table, couch or bench
- Balance with right leg on floor

Movement:

- Lift weight with right arm with a motion "like cranking a lawn mower." Repeat exercise by lifting with left arm.



6 Lower Back Extension

Muscles used:

- Lower back

Body position:

- Lie face down with arms stretched overhead
- Keep legs straight and resting on floor or mat

Movement:

- Lift upper body as high as you can
- Tighten the muscles in buttocks and try to hold position for 10 seconds
- Return to start position



Strength Training Exercises

7 Abdominal Crunch

Muscles used:

- Abdominals

Body position: *Easier Method:*

- Lie on back with knees bent and feet flat on the floor, arms across your chest

Movement:

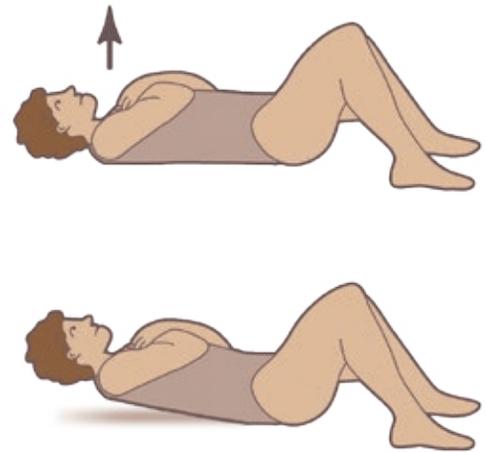
- Squeeze stomach muscles to lift shoulders and head off floor just 1 or 2 inches.
- Slowly lower shoulders back to floor

Body position: *Harder Method:*

- Same as easier method, but with hands behind the head

Movement:

- Same as above. Don't pull on head or neck.



8 Quadriceps Extension or Leg Press

Muscles used:

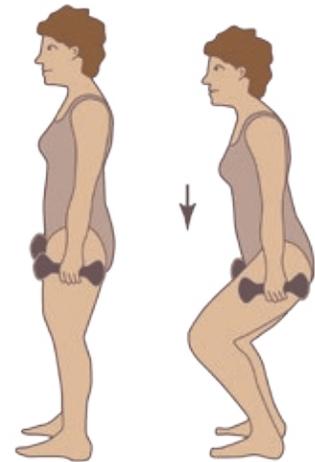
- Front and back of thighs, hips

Body position:

- Hold weight in each hand at side of body
- Place feet 18 to 20 inches apart, toes pointed forward

Movement:

- Keeping body as erect as you can, bend knees and lower body $\frac{1}{4}$ to $\frac{1}{3}$ of the way down
- Do not let heels come off the floor. Squeeze hips and back of thighs. Return to start position.



9 Calf Raises

Muscles used:

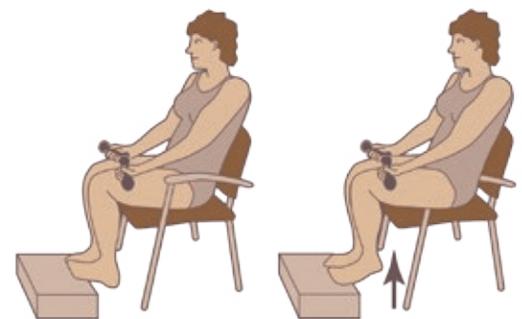
- Back of lower leg

Body position:

- Sit with weights supported on thighs and with ball of foot on a thick book or 2- to 3-inch thick board.

Movement:

- Press your heels up as high as you can, squeezing the calf muscles. Then slowly lower back to floor.



Relaxation Through Breathing

Purpose

- Learning to relax and manage your stress helps your heart.
- This simple breathing exercise can balance your nervous system and help you relax.

Belly Breathing

- Think that your belly is a big balloon and you are slowly filling it with air.
- Place your hands on your belly while you slowly breathe in and out.
- Watch your hands rise as you breathe in and fall as you breathe out.
- Focus on your belly while you continue to breathe slowly and deeply.
- Relaxation is the calm and peaceful feeling you get from **belly breathing**.

Practice

Set aside at least 10 minutes every day to practice **belly breathing**.

Tips

- When you feel stressed, practice belly breathing.
- You can practice anywhere or at any time such as when you are:
 - Watching TV
 - Taking a bath
 - Standing in line at the grocery store
 - Stuck in traffic
 - Cooking
 - During times of stress
 - Walking
 - When you want to relax

Tense to Relax

Purpose

- To understand the difference between tension and relaxation
- To relax deeply and fully

Guided Practice

- 1** Take 2 full, slow and deep belly breaths.
- 2** As you breathe in a third time, fully tighten your left arm from your shoulder to your hand.
- 3** Hold your breath and keep your arm tensed for 2-3 seconds.
- 4** As you breathe out, let your arm totally relax.
- 5** Repeat Steps 1-4 with your right arm, legs (each one at a time) and then your entire body.
- 6** Say to yourself something positive like:
 - "I have all the time in the world"
 - "I am relaxed and at peace"

Tips

- When you tense your muscles, really TENSE them. When you relax, really RELAX.
- When you breathe in, fill up your belly with air.
- When you breathe out, focus on your belly becoming soft.
- Remind yourself how calm and relaxed you are and that you can relax at any time. Notice how it feels to be relaxed.

Learn to Like Your Life

Purpose

- Think about the good things in your life. This will give you a warm feeling inside.
- That warm feeling will help you feel more peaceful and less stressed.
- Thinking about positive things is even better when you also do belly breathing.

Create a Warm and Positive Feeling

For 15-30 seconds, think about one of the following:

- Someone you love
- A place you find beautiful (the beach, for example)
- Something kind that someone did for you

Practice

Before you begin your day's activities:

- Write down or make a mental note of the things you need to get done during the day.
- Include two things you will think about that give you a warm and good feeling inside (like someone you love).

During a stressful time:

- Take two slow, deep belly breaths
- When you breathe in for your third breath think about:
 - Someone you love
 - A beautiful place
 - An act of kindness towards you

Tips

- When you think of a person you love, think of why you love them.
- When you think of a place, think about what makes this place special or beautiful to you.
- When you think about a kind act, think about what made this act so kind.
- Notice the good feelings that come from thinking about your life's blessings.

Learn to Pat Yourself on the Back

Purpose

- Notice the many good things you do.
- Learn to like yourself.
- Remind yourself that you work hard and are worthy of praise.



Why Is This So Hard?

- It's easy to forget how much good we do.
- We are often criticized for things we do wrong rather than praised for things we do right.
- It is hard to take credit for the many things we do well.
- People confuse pride in a job well done with showing off.

Guided Practice

Reflect back on your day:

- 1** Think of one or two things that you did that were helpful or that you did well.
- 2** Like yourself for the things you do that help others.
- 3** Like yourself for your talents and skills.

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Stanford Center for Research in Disease Prevention, Stanford University, Palo Alto, CA 94304*

Get Tough on Angina™

The sixth edition of this booklet is part of *Get Tough on Angina™*, a program of education and information for patients with angina and their families, funded through an educational grant from Gilead Sciences, Inc.

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Reviewers: Carolyn Landolfo, MD, Mayo Clinic, Jacksonville, FL
Susan Bush, RN, BSN, FPCNA, North Colorado Medical Center, Cardiac Rehabilitation, Greeley, CO

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Only your healthcare provider can diagnose and treat a medical problem.

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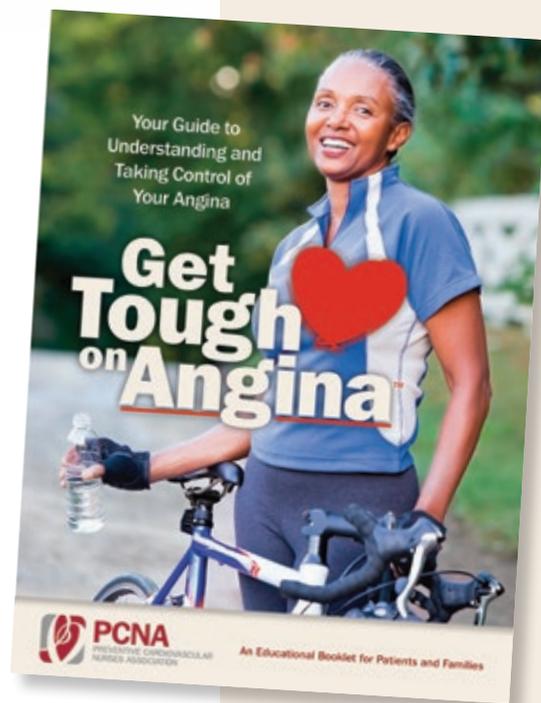
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**Get
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PCNA
PREVENTIVE CARDIOVASCULAR
NURSES ASSOCIATION

613 Williamson Street, Suite 200, Madison, WI 53703
Phone: 608-250-2440 • Email: info@pcna.net • Fax: 608-250-2410
Product ID PCNA700GT