



# After Your Coronary Intervention Procedure

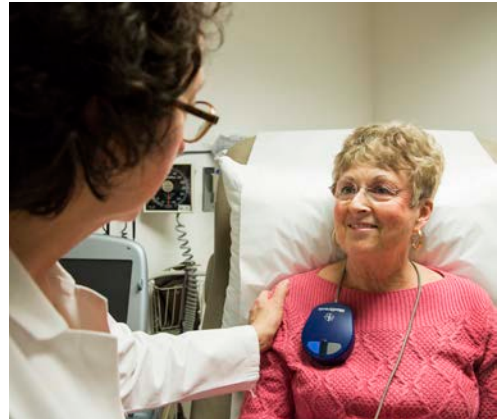
## *Steps to a healthy heart*

*This handout gives guidelines for activity, diet, follow-up care, and medicines after your cardiac intervention procedure. It can also help you get started on reducing your specific risk factors for future heart problems.*

Your Cardiologist:

\_\_\_\_\_

Phone: \_\_\_\_\_



*Talk with your cardiologist if you have any questions after your procedure.*

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## About Your Procedure

At UW Medical Center, heart procedures are done by a special team in the cardiac catheterization laboratory. These procedures are called *interventions*. There are many different interventions that open the heart arteries. Your doctor will choose the one that is best for you.

After your intervention, your heart will get more blood and oxygen. This will help it work better. This handout describes what *you* can do for your heart after you have had the procedure.

## What You Can Do

### Take Charge

If there has been heart disease in your family, it increases your risk for having heart problems. You and your doctor cannot control this factor.

But, you can make many changes to improve the quality of your life, and even help you live longer. Do all that you can to change your lifestyle and lower your risk factors for heart disease.

Diabetes and high blood pressure are risk factors that you can control with healthy lifestyle choices and regular medical care. Some other risk factors for heart disease that you have control over are:

- Smoking
- High cholesterol
- Excess weight
- Food choices

## After Your Procedure

### Catheterization Only

After your doctor has gathered all the information needed from the procedure, we will remove the catheter(s) and sheath. We will apply pressure to the insertion site to prevent bleeding.

We will then place a *sterile* (germ-free) dressing over the insertion site to keep the area clean. Your nurse will check this site often.

- **If an artery in your leg was used:** You must keep your leg straight for 1 to 6 hours during your recovery time.
- **If an artery in your arm was used:** We will place a band around your arm after the procedure. It will be in place for 1 to 2 hours. The band helps close your artery and stop the bleeding. You must limit how much you use your arm while the band is on and after it comes off (see instructions under “Arm Insertion” on pages 4 and 5).

- Different devices may be used to close your artery and stop the bleeding. We will give you instructions for the device that you have.

After the catheterization, you will be taken back to Cardiac Procedures, where you will begin to recover. If you have an angiogram **without** an interventional procedure, expect to stay in Cardiac Procedures Recovery at least 4 hours after your procedure.

During recovery:

- You must lie flat. Your nurse will help you stay comfortable. You may be given pain medicines if you have any problems lying flat.
- You will be able to eat as usual.
- We will check your pulse, blood pressure, and dressing often during the first 3 to 4 hours after your procedure.

### **Catheterization with an Intervention**

If you have an intervention, **you may need to stay overnight in the hospital**. You may not know before the procedure that you will have an intervention, so please plan to stay in the hospital for at least 24 hours.

### **Discharge**

Before you are discharged from the hospital:

- A doctor or nurse practitioner will check your insertion site. They will also talk with you about the results of your procedure.
- If needed, your medicines or diet will be adjusted. Your nurse will teach you about these changes and talk with you about your follow-up care.
- Ask questions if you do not understand something your nurse or doctor tells you.

### **If You Had ANY Sedation**

Sedation can make you sleepy, and make it hard for you to think clearly. Because of this:

- **A responsible adult must take you home after your procedure.** You may not take a bus, shuttle, taxi, or any other transportation by yourself.
- **For 24 hours after your procedure:**
  - Do **NOT** drive.
  - Make sure you have a responsible adult who can help you if needed during this time.
  - Do **NOT** be responsible for the care of anyone else, such as children, pets, or an adult who needs care.

- Do **NOT** drink alcohol or take drugs other than the ones your doctors prescribed or suggested.
- Do **NOT** make important decisions or sign legal papers.

## **When You Get Home**

### **Groin Insertion**

If the catheter was inserted in your groin:

- For the **rest of the day** after your procedure:
  - Rest quietly at home
  - Do **not** drive for 24 hours
- **Starting 24 hours after you are discharged**, you may:
  - Return to light activity
  - Drive
  - Shower
- For **48 hours** after your procedure:
  - Do **NOT** do anything that puts stress on your puncture site. This includes housework, gardening, and many self-care tasks. Ask for help with any tasks that need to be done during this time.
  - You may go up and down stairs, but limit how much you do this.
- For **7 days** after your procedure:
  - Do **NOT** lift anything that weighs more than 10 pounds (4.54 kilograms). A gallon of milk weighs almost 9 pounds. This includes pets, groceries, children, trash, and laundry.
  - Do **NOT** hold your breath, bear down, or strain when having a bowel movement.
  - Do **NOT** allow the puncture site to be covered by water. This means do not take a bath, sit in a hot tub, or go swimming.

### **Arm Insertion**

If the catheter was inserted in your arm:

- For **48 hours** after your procedure:
  - **AVOID** lifting, pushing, or pulling with the affected arm.
  - **AVOID** bending, turning, or twisting your wrist on the affected arm.
  - Do **NOT** have your blood pressure taken on the affected arm.



### **If You Have Angina Symptoms**

*Remember the American Heart Association's advice on using nitroglycerin:*

1. Place a nitroglycerin pill under your tongue.
2. If the angina does not go away in 5 minutes, place a 2nd nitroglycerin pill under your tongue.
3. Wait 5 minutes, and if you still have angina, place a 3rd nitroglycerin pill under your tongue.
4. If you still have pain after 15 minutes and you have used 3 nitroglycerin pills, do **NOT** drive yourself to the hospital! **CALL 911.**

- For **5 days** after your procedure:
  - **AVOID** vigorous exercise that uses the affected arm.
  - Do **NOT** lift more than 5 pounds with the affected arm. A 2-liter bottle of soda weighs more than 4 pounds.
- You may shower the day after your procedure, but do **not** take a bath, sit in a hot tub, or go swimming for 5 days.
- It is normal to have a small bruise or lump at the insertion site in your wrist.

### **Diet**

You may resume eating your regular foods, unless your doctor or nurse advised you to change your diet. If you have questions about these changes, you can ask your primary care provider (PCP) for a referral to a dietitian. The dietitian can help you plan meals and snacks for your new dietary plan.

### **Pain Control**

- You will most likely be sore for 1 to 2 days at the puncture site where the catheter was inserted.
- You may take acetaminophen (Tylenol) to relieve pain. Follow the dose instructions on the package.
- **For 5 days after your procedure**, do **not** take anti-inflammatories such as ibuprofen (Advil, Motrin) or naproxen (Aleve, Naprosyn). They may cause bleeding.
- If your doctor prescribed aspirin for your heart, you may take it as usual. But do **not** take extra aspirin for pain control.

### **Site Care**

- You may remove the dressing or bandage 24 hours after your procedure.
- Keep the area clean and dry.
- After you remove the dressing, gently clean the site with mild soap and water. Do **not** scrub or rub the area. Pat dry with a clean towel.
- For the next 3 days, watch for signs of infection. Call the cardiologist who did your procedure if you see:
  - Redness around the site
  - Fever higher than 101.5°F (38.6°C)
  - Drainage at the site

- You may have a bruise where the catheter was inserted. If the catheter was inserted through your groin, the bruise may spread down your leg. It may take 2 to 3 weeks for the bruise to go away

## When to Call for Help

**If you have sudden, heavy bleeding or a lot of swelling that you cannot control, apply firm pressure to the site and call 911.**

Call 206.598.6190 and ask to page the Cardiology I Fellow on call if you have:

- **Drainage** from the site
- A lot of **redness** around the site

## Bleeding

If you have light or moderate bleeding or swelling at the site, use clean fingers to apply pressure on it for 10 minutes.

- If bleeding does not stop or swelling does not go down in 10 minutes, **call 911 right away**. Keep applying pressure until help arrives.
- **If your catheter was placed in your arm:** If the bleeding stops or the swelling goes down, sit quietly for 2 hours. Do **not** bend the affected wrist. Call the cardiologist who did your procedure as soon as you can.

## Other Concerns

Also call the cardiologist who did your procedure if you have:

- Any of these **signs of infection**:
  - Redness
  - Fever higher than 101.5°F (38.6°C)
  - Drainage
  - Change in the bruise or lump at the insertion site
- **Numbness** in your arm or wrist (if a catheter was placed in your wrist)
- **Severe pain** that is not relieved by acetaminophen (Tylenol)

## Medicines After the Procedure

- If you had a stent placed, you will take:
  - Aspirin to prevent blood clots in the artery where the stent was placed.
  - A blood-thinning medicine similar to aspirin that will help prevent blood clots. One of these is called clopidogrel (Plavix), but your cardiologist may prescribe a similar medicine with a different name.

- For minor pain, you may take acetaminophen (Tylenol), either regular (325 mg) or extra strength (500 mg). Do **not** take more than 4 gm (4,000 mg) in a 24-hour period.
- Resume all your prescribed medicines. Call your doctor if you have side effects, but do not stop taking the medicines unless your doctor tells you to.
- **Carry a list of your medicines with you at all times.**
- **Bring all your medicines with you whenever you see your doctor.** This includes vitamins and herbal supplements.

## Follow-up Care

- Schedule a follow-up visit with your heart doctor (cardiologist) or primary care provider (PCP). **Do not miss this appointment.** Follow-up visits are usually 2 to 4 weeks after you leave the hospital.
- Keep taking your prescribed medicines unless your provider tells you otherwise.
- After your procedure, the artery in your heart can become blocked again. Watch for the same symptoms that you had before the procedure. Call your doctor right away if your symptoms return.

## Risk Factors

### Smoking

**Smoking is one of the greatest risks for heart disease.** The tar and nicotine in tobacco smoke cause your arteries to narrow and *spasm* (contract). Carbon monoxide in the smoke reduces the natural blood-thinning effects of your artery walls. This can lead to the artery that your doctor opened becoming blocked again.

**If you smoke, you need to stop NOW.** You should also avoid being in the same room with anyone who is smoking.

If you use nicotine patches or nicotine gum to stop smoking, **do NOT smoke** while you are using them. Smoking while using nicotine products may cause a stroke or heart attack.

### ***Local Stop-Smoking Programs***

The American Cancer Society has a list of stop-smoking programs in the Seattle area. If you live outside the Seattle area, they will be glad to refer you to a program or agency in your area.

Call the Washington Division of the American Cancer Society at 800.ACS.2345, or call or write to one of these agencies:

- **American Cancer Society**, [www.cancer.org](http://www.cancer.org), 206.937.7169  
4535 California Ave. S.W., Seattle, WA 98116
- **American Heart Association**, [www.amhrt.org](http://www.amhrt.org), 206.632.6881  
4414 Woodland Park Ave. N, Seattle, WA 98103
- **American Lung Association**, [www.lungusa.org](http://www.lungusa.org), 206.441.5100  
2625 Third Ave., Seattle, WA 98121

## Diet, Weight, and Cholesterol

What you eat (your diet) is a very important part of treating and preventing artery blockages after your procedure. By eating the right foods and exercising, you can also control or lose weight.

For heart patients, we advise you to:

- **Restrict your intake of both saturated and unsaturated fats.**  
The goal is to decrease the level of fats in your blood. These fats can cause blockages in your arteries.
- **Eat foods that are low in cholesterol.** Ask your PCP if you need medicine to lower your cholesterol.
- **Avoid foods that are high in sodium (salt)** to prevent high blood pressure.
- **Limit coffee, tea, and other drinks that contain caffeine.**  
Caffeine stimulates your heart and makes it work harder.
- **Lose extra weight.** Follow a healthy weight-reducing diet under a doctor's supervision. Plan to lose weight by changing your lifestyle and eating behaviors. Do **not** go on a crash diet. Most people who lose weight on crash diets gain back the weight when the diet is over. And, crash diets can damage your vital organs, including your heart.

## Exercise

*Aerobic* exercise increases your body's use of oxygen. This type of exercise will help you lose weight. It will also help you feel better. Make aerobic exercise a part of your daily routine. Talk with your PCP before starting any new exercise, and add new activities slowly.

- **Walking** is a great way to exercise. Start with a 5-minute stroll at an easy pace, and add a minute or so every few days. Slowly work up to a 30- to 60-minute brisk walk, 4 to 5 times a week.
- **Swimming** is also a great workout for your heart, but weight loss from swimming will be slower. This is because your body works to keep you warm when you are in the water by producing fat to insulate you. If you like swimming, include it in your exercise program, along with walking.



## Changes in Your Diet Can Make a Big Difference!

Improve your heart health by choosing foods from the “OK” column in the table below. The foods in the “Avoid” column may be harmful to your heart and blood vessels

### Foods to Eat and Foods to Avoid

Food	OK	Avoid
<b>Vegetables</b>	Fresh, frozen, or canned vegetables without saturated fat; baked beans with no bacon or fat	Buttered, creamed, or fried vegetables; pork and beans
<b>Fruit</b>	Fresh, frozen, canned (packed in juice), or dried fruit or juices, avocado in small amounts	Coconut
<b>Breads, Grains, Cereals, and Pastas</b>	Whole grain, raisin, French, white, and rye breads; bagels, graham crackers, pretzels, and other low-fat crackers; cold and hot cereals and other grain products such as pasta, rice, barley, oats, and others	Egg noodles, rolls or bread made with egg yolks or saturated fats (most commercial baked goods)
<b>Dairy</b>	1% or nonfat milk, buttermilk, nonfat yogurt, 1% or nonfat cottage cheese, sherbet, nonfat frozen yogurt	Ice cream, cream cheese, sour cream, whipped topping, cream substitutes that contain coconut or palm oil, chocolate milk, evaporated milk, condensed whole milk
<b>Protein Foods</b>	Chicken and turkey (without skin), lean beef, veal, pork, lamb, fish and shellfish (boiled, baked, or steamed), tofu, legumes, egg whites, egg substitutes	Egg yolks, heavily marbled or fatty meats (luncheon meat, bacon, sausage), organ meats (liver, brain, kidney, sweetbreads)
<b>Fats</b>	Safflower oil, corn oil, cottonseed oil, sunflower oil, sesame oil, canola oil, olive oil, soybean oil, peanut butter, soft margarine	Butter, cream, lard, bacon, meat drippings, cocoa butter (chocolate), coconut oil, palm oil
<b>Beverages</b>	Fruit and vegetable juices, water, buttermilk, carbonated beverages, decaf coffee and tea, low-fat (1%) milk, skim milk	Cream, whole milk, evaporated whole milk, coffee and tea with caffeine
<b>Desserts</b>	Angel food cake, Jell-O, meringue pies, frozen yogurt, nonfat ice creams, and baked goods made with allowed ingredients, such as polyunsaturated fats, skim milk, egg whites	Baked goods that contain whole milk, saturated fats, egg yolks, cashews, macadamia nuts, chocolate
<b>Sweets and Snacks</b>	Jams, jellies, honey, syrup, fat-free candy, popcorn with no butter added	Chocolate, caramel, butter mints, fudge, buttered popcorn

## Stress

Tension, anxiety, emotional upset, pressure, and strain are all forms of stress. When you are under stress, your blood pressure rises and your heart beats faster. This makes your heart work harder.

You can't always control stress in your life, but you can control how you respond to it. Think about going to a class or workshop to learn ways to cope with stress. Check with local colleges and community groups such as the American Heart Association (see page 8). Ask your doctor or nurse for more information.

If you are feeling stressed, try using one of these methods to help you relax and lower the effects of stress on your body:

### Deep Breathing

When we are tense, we often breathe faster, more shallowly, and out of rhythm. To lower stress:

- Breathe in slowly through your nose. Let your abdomen expand like a balloon.
- Breathe out slowly through pursed lips. Let your jaws relax.
- Repeat this relaxed breathing until you feel the tension going away.

### Relaxing Muscles

Starting with your toes and slowly moving up to your face, tighten and then relax 1 group of muscles at a time. When you are finished, notice how much lighter your muscles feel.

### Imagery

Visualize a situation that has been calming to you in the past. Imagine, as clearly as you can, doing whatever relaxes you most. You may see yourself lying on a beach with the sun warming you, hearing the sounds of the waves, and feeling the warm sand. As you imagine this pleasant setting, your tension will lessen and go away.

Or, you might imagine that a bright light is shining down on you. Imagine that you slowly lift your face and look at the source of the light. Feel the white light flood through your body. As it fills you, picture your tension as red light leaving your body through your feet.

## To Learn More

Talk with your nurse or doctor if you have any questions. For instance, you may want to know about when to return to work, or you may have questions about resuming intimacy and sexual activity.

Your doctor can also refer you to a dietitian. A dietitian can help you create an eating plan that will work for you.

Take good care. The best of health to you.

### Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- **For general questions** weekdays from 8 a.m. to 5 p.m., call the Regional Heart Center at 206.598.4300.
- **For questions related to your procedure** weekdays from 6:30 a.m. to 8 p.m., call Cardiac Procedures at 206.598.7146. Ask to talk with a nurse.
- **For urgent concerns related to your procedure**, or if it is after hours or on a weekend or holiday, call 206.598.6190 and ask to page the Cardiology I Fellow on call.