

**ST. JOHN'S  
RIVERSIDE HOSPITAL**



**CARDIAC  
CATHETERIZATION  
LABORATORY**

*Dear Patient and Family,*

*We are providing you with information you will need before, during and after your procedure.*

*We hope this information will assist you and your family toward a healthy recovery.*

*If you have any questions, please ask your St. John's Riverside Hospital Health Care Team; they will be pleased to answer them for you. Call the Cath Lab at 964-4714.*

*Thank you.*

*Barbara Ventura, NP  
Clinical Nurse Manager*



### **Atherosclerosis**

*Atherosclerosis is a disease affecting arterial blood vessels. It is sometimes called hardening or clogging of the arteries. It is the buildup of cholesterol, fatty and inflammatory deposits (also known as plaque) on the inner walls of arteries.*

### **Coronary Artery Disease**

*Coronary Artery Disease, also known as Atherosclerotic Heart Disease, is the narrowing or blockage of the coronary (heart) arteries. Your coronary arteries are shaped like tubes. Coronary Artery Disease occurs when the walls of the arteries thicken and deposits of plaque and fat buildup block or narrow the flow of oxygen rich blood to the heart muscle. The heart is deprived of oxygen and the vital nutrients it needs to work properly. This can cause chest pain called angina. When one or more of the arteries become blocked a heart attack may occur.*



## **Cardiac Catheterization**

*Cardiac Catheterization is an imaging procedure that allows your doctor to evaluate your heart structure and function.*

*Cardiac Catheterization is used to evaluate or confirm the following:*

- Evaluate or confirm the presence of coronary artery disease, disease of the aorta or cardiac valve disease.*
- Determine the need for further treatment (such as an interventional procedure).*
- Evaluate heart muscle function.*

*During a cardiac catheterization, a long narrow tube called a catheter is inserted through a plastic introducer sheath (a short hollow tube that is inserted in your leg or arm). The catheter is guided through the blood vessel to the coronary arteries with the aid of a special x-ray machine.*

*Contrast material is injected through the catheter and x-ray moving images are created. Digital films identify the site of narrowing or blockage in the coronary artery. This part of the procedure is called coronary angiogram.*



## MEDICATIONS

*Taking all of your medication correctly and daily will be the key to feeling better and avoiding problems. Always carry a list of medications with you in your wallet for easy identification.*

### ASPIRIN

**NEVER** discontinue any medication unless instructed to do so by a doctor/ healthcare provider.



*Why is aspirin prescribed to you?*

*A daily dose of aspirin may be used to ensure sufficient blood flow. Aspirin may also be taken to decrease the chance of a second heart attack or other heart problems.*

*Most important fact about aspirin...*

*Aspirin slows clotting and it will take longer than usual to stop bleeding. Notify any doctor or dentist before planning any invasive procedure.*

*If you miss a dose...*

*Take it as soon as you remember. If it is almost time for your next dose, skip the one you missed and go back to the regular schedule. Never take 2 doses at the same time.*

*What side effects may occur?*

*Side effects may include: Heartburn, nausea and/or vomiting, possible involvement in formation of stomach ulcers and bleeding, small amounts of blood in stool, stomach pain, stomach upset.*

## OTHER IMPORTANT MEDICATIONS

### GLUCOPHAGE (METFORMIN) AND MEDICATIONS CONTAINING GLUCOPHAGE (METFORMIN)

*If you are on this medication please do not take it for two days after the procedure. Resume it on the third day after your catheterization.*

### LIPID-LOWERING DRUGS

*Talk to your primary doctor/healthcare provider about lipid-lowering medication (statins). This medication helps to prevent heart attacks.*

### COUMADIN

*If you are on this medication, please resume it on \_\_\_\_\_  
and follow up with your primary doctor/healthcare provider for blood work.*



## POST-CATHETERIZATION INSTRUCTIONS FOR DIET & EXERCISE

*It is extremely important to lead a heart-healthy lifestyle in order to fight cardiovascular disease and prevent a heart attack. Goals to achieve in maintaining heart-healthy living involve personal lifestyle change centered on weight reduction, healthy nutrition, sodium reduction, and regular physical activity. Here are a few simple guidelines to help you achieve a new healthier heart and lifestyle after your procedure.*

### HEALTHY HEART DIET

*The goal of a healthy heart diet is to decrease your risk of heart disease. Some of the major risk factors for heart disease are high blood cholesterol, high blood pressure and being overweight.*

*Cholesterol (koh-LES-ter-ol) is a type of fat that is found in your blood. Making changes to your diet, lowering your blood pressure, and losing weight are ways to decrease your risk for heart disease. Other ways to decrease your risk include getting more exercise and stopping smoking.*



*A healthy heart diet limits fat and cholesterol to help lower your blood cholesterol. Adding soluble fiber to your diet may also help to decrease your blood cholesterol levels. Decreasing the amount of sodium (SO-de-um) that you eat and drink may help to control your blood pressure. You may also lose weight on this diet because decreasing your fat intake will decrease your calorie intake. Decreasing calories in your diet can help you to lose weight.*

### NUTRITION STRATEGIES

*Heart disease is the number one cause of death in the United States. You can decrease your possibility of getting sick by modifying some aspects of your lifestyle such as diet and exercise habits.*

#### Advice for a Healthy Diet

- *Consume less fat*
- *Consume less cholesterol*
- *Consume less sodium*
- *Decrease calorie intake, if overweight*
- *Consume more fiber*

- Include bread, rice, and cereals high in fiber
- Include a variety of fruits and vegetables
- If you drink beer, wines or other alcoholic beverages, do so in moderation. Consume no more than 2 or 3 drinks per week.

## LOW FAT DIET

*Excessive consumption of fat is related to cardiovascular disease and can also lead to weight gain and obesity.*

*It is important to decrease your intake of foods containing saturated and trans fat, and to choose more foods containing unsaturated fat. Read the nutrition labels and look for the amount of saturated, trans, and unsaturated fats in the products you want to buy.*



*Saturated fats contribute to heart disease. They are generally found in foods of animal origin (meat, butter, milk, cheese, and other full fat dairy products), fried foods and coconut and palm oil.*

*Trans fats have a similar effect in the body as saturated fats. They can be found in foods containing hydrogenated oils. Avoid baked goods, fried foods, crackers, chips and stick margarine.*

*Make sure to read the ingredient list on the foods you are buying!*

*Unsaturated fats (monounsaturated and polyunsaturated) are healthier and are preferred for a heart healthy diet. They are found in fish, vegetable oils (sunflower, safflower, peanut, corn, olive) and nuts (walnuts, peanuts, almonds).*

## COOKING FOR A HEALTHY HEART

Utilize cooking methods that use a small amount of fat, such as:

Grilling

Baking

Steaming

Sautéing

Poaching

Roasting

Boiling

Stir Frying

It is not necessary to omit these foods completely, but it is important to eat them in moderation. Also, you can substitute high fat foods with other more healthy choices:

### **In place of...**

*Whole milk or 2% milk, and cream*

*Cooking with butter, coconut oil, palm oil*

*Fried foods*

*Fatty cuts of meat, like ribs*

*A whole egg in recipes*

*Regular yogurt, cottage cheese, sour cream and mayonnaise*

*Cream butter*

*Cheese*

*Vegetables and fruit like palm and coconut*

*Snacks/Dessert such as: Potato chips, cake, fried plantains, donuts, cakes, cookies, pudding*

### **Have the following.....**

*Use skim milk or 1% milk*

*Cook only with oils made from: corn, safflower, sunflower, soy, cottonseed, olive, canola, peanut, and sesame*

*Eat foods that are baked, broiled, roasted, grilled, or cooked in the microwave*

*Choose lean cuts like tenderloin and throw out the fatty parts*

*Use two egg whites in place of an egg yolk*

*Use low-fat plain yogurt, cottage cheese, sour cream or mayonnaise*

*Use lemon, vinegar nonhydrogenated margarine (Smart Balance, Promise)*

*Low-fat cheese*

*All types of fruit and vegetables. Eat avocado and olives in moderation*

*Jell-O, fruit ice, angel food baked chips, nuts.*

Some risk factors for heart disease are related to your diet: High blood pressure, high blood cholesterol, diabetes and obesity. The old saying “You are what you eat” may be more true than we realized.

## LOW CHOLESTEROL DIET

### CHOLESTEROL

*Cholesterol circulates in our blood. When the level goes up it accumulates in our arteries. Little by little the arteries will get blocked and the blood flow will decrease. This can cause heart disease.*

*Cholesterol is found only in foods of animal origin, such as meat, chicken, eggs, milk, cheese and butter.*

*There are 2 types of cholesterol:*

*LDL – the “bad” cholesterol: tends to accumulate in artery walls*

*HDL – the “good” cholesterol: helps to remove cholesterol from the arteries*

*To maintain normal blood cholesterol levels, follow a diet that is low in cholesterol, saturated fat, and high in fiber.*

### FOODS HIGH IN CHOLESTEROL

### PREFERRED FOODS

#### MEAT

*Fatty meats such as:  
pork sausage and hamburgers.*

*Fried meats.*

*Processed meats (salami, bologna),  
organ meats (kidneys, brain, liver  
and patés)*

*Lean meats (sirloin, tenderloin),  
veal, buffalo, bison, turkey*

#### POULTRY

*Fatty cuts (duck, goose)*

*Chicken (without the skin), turkey*

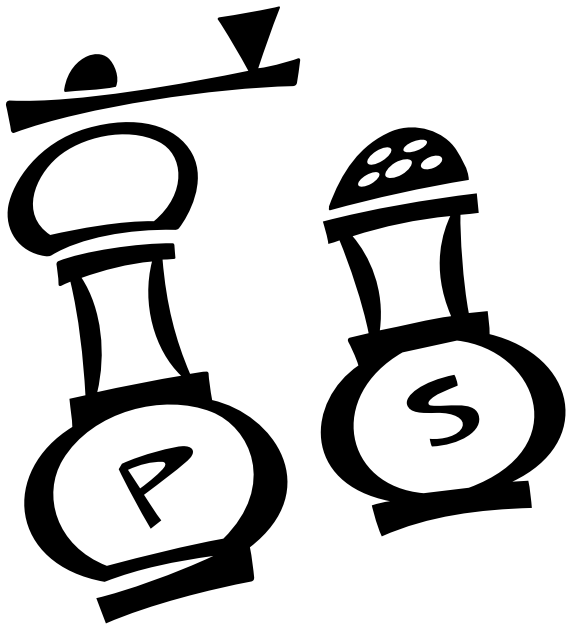
#### FISH AND SEAFOOD

*Lobster, shrimp, crab, oysters*

*All types of fresh fish, imitation  
crab*







## LOW SALT DIET

*Decreasing your intake of salt can seem difficult, but it doesn't have to be. Salt (sodium) is important for the body. Nevertheless, for some people the consumption of salt can be reduced to prevent some heart problems caused by high blood pressure and fluid retention.*

## GENERAL RULES TO DECREASE THE CONSUMPTION OF SALT

- *Don't use the salt shaker to add salt to prepared foods*
- *Read the nutrition information on food packages*
- *Look for products "low in sodium" or "reduced sodium"*
- *Cook with a minimal amount of salt, or better yet, without salt (remember that one teaspoon of salt contains about 2,300mg of sodium)*
- *Use herbs and spices in place of salt to season food*
- *Don't eat canned, cured, smoked, pickled or highly processed foods*

*Cooking without salt does not mean that food will have less taste. The following are ingredients that can be used to season food and give it more flavor without needing to add salt.*

*Garlic/onion powder/ginger/oregano/rosemary/cilantro/garlic powder/onion/nutmeg/paprika/lemon/onion juice/basil/mustard/cloves/sage/scallion/anise/pepper/cinnamon/cumin/chili powder/mint/vinegar/parsley/chives/salt-free broth/dill/thyme/bell peppers*

## FOODS HIGH IN SODIUM

*Consume the least amount possible of the following high sodium foods:*

### **Meats and Meat Substitutes**

*Anchovies, Herring, Sardines, Processed Meats (salami, sausage, bologna, pastrami, ham), Bacon, Hot Dogs, Smoked Salmon, Dried Cod*

### **Dairy Products**

*Hard and Soft Cheese, Cheese Sauces and Spreads, Buttermilk, Party Dips*

### **Grains and Nuts**

*Salted Crackers and Breads, Salted Popcorn, Chips, Corn Chips, Salted Pretzels, Salted Nuts and Peanut Butter*

### **Vegetables**

*Olives, Pickles and Sauerkraut, Canned Vegetables, Tomato Juice, Tomato Puree/Sauce*

### **OTHERS**

- *Soup stocks or soup cubes that don't specify low/no salt*
- *Processed foods, desserts, packaged mixes and prepackaged meats*
- *BBQ Sauce, Soy Sauce, Ketchup, Worcestershire Sauce*
- *Ingredients such as MSG, Sodium Bicarbonate, Sodium Citrate*

## DIET AND COUMADIN® (WARFARIN)

*Coumadin® is an anticoagulant: it helps to thin the blood and reduce the formation of clots in the blood.*

*Vitamin K has a very important role in the process of coagulation of the blood (the opposite of thinning it).*

*Foods with a high Vitamin K content change the way in which Coumadin® affects your body. To help Coumadin® have the proper effect, it is important to maintain a consistent intake of Vitamin K. Avoid sudden increase and decrease of the vitamin in your diet.*



### Foods With a High Vitamin K Content

#### Vegetables

- Avocado/Parsley/Broccoli/Scallions
- Spinach/Green Cabbage/Seaweed/Brussels Sprouts
- Green Turnips/Watercress/Lettuce/Endive
- Asparagus/Chard/Gherkins/Kale

#### Others

- Chick peas/Lentils/Mung beans/Mustard greens
- Mayonnaise/Pistachios/Green Tea
- Cranberry Juice

#### OILS

- Soy/Canola

**If you consume alcohol, do so in moderation.**

## EXERCISE

- *Lack of physical activity is a risk factor for heart disease.*
- *Regular physical activity eases stress and depression, helps control weight, and helps lower blood pressure and cholesterol levels.*
- *After your procedure, you may return to your regular exercise routine within a few days of the procedure, depending on the difficulty of the activity. For example, short walks after dinner may be resumed one or two days after the procedure while more vigorous activity, such as aerobic exercise, may require more time after the procedure. If in doubt, ask your Physician/NP.*
- *Swimming, cycling, jogging, skiing, aerobic dancing, tennis, walking or any of dozens of other activities can help your heart. Whether it is included in a structured exercise program or just part of your daily routine, exercise can be started after discussion with your physician.*
- *Aim for at least 30 minutes of physical activity on most days of the week, if not all.*
- *Start slow and don't try to do too much too fast. Gradually build up.*
- *Exercise at an intensity appropriate for you.*
- *Pick activities that are fun, that suit your needs and that you can do year-round.*
- *Wear comfortable clothing and footwear.*
- *Take more time to warm up and cool down before and after your workout, and don't forget to stretch; it helps maintain lean muscle mass.*
- *Don't rely on your sense of thirst; drink water on a fixed schedule.*
- *Consider joining a cardiac rehabilitation program.*

## CARDIAC REHABILITATION

- *A cardiac rehabilitation program is for people who are getting better after heart problems by helping them change their lifestyle habits. It can do a lot to speed your recovery and reduce your chances of future heart problems.*
- *Everything you need to get and stay healthy is in one place, and medical staff is on hand at all times.*
- *The following takes place during your rehabilitation program:*
  - o *Exercise using a treadmill, bike, rowing machine or walking/jogging track.*
  - o *A nurse or other healthcare professional will monitor your heart rate, blood pressure, ECG and any change in symptoms.*
  - o *Start a safe, slow exercise program that gradually helps you build strength: slowly, you will move into a more intensive program.*

*Remember: If you've had a heart attack, don't forget that resting after a heart attack is just as important as participating in recreation and social events. If you feel tired during the day, take a nap or a short rest. Heart patients should rest before they get too tired. Plan some type of relaxation for short periods several times a day.*



## SMOKING CESSATION

*Avoid use of and exposure to tobacco products. If you smoke, it is never too late to quit smoking. Smoking harms the heart, lungs and the blood. You are more likely to have a heart attack, lung disease, or cancer if you smoke. You will help yourself and those around you by not smoking. It is never too late to quit. Ask your caregiver for the CareNote on how to stop smoking if you are having trouble quitting.*

*Call or write the following for more information about the risks of smoking.*

- *Smokefree.gov*  
Phone: 1-800-784-8669  
Web Address: [www.smokefree.gov](http://www.smokefree.gov)
- *American Lung Association*  
61 Broadway, 6<sup>th</sup> Floor  
New York, NY 10006  
Phone: 1-800-586-4872  
Web Address: <http://www.lungusa.org>
- *National Cancer Institute*  
Phone: 1-800-422-6237  
Web Address: <http://www.cancer.gov>

## **\*\* IMPORTANT \*\***

**If you have any questions/concerns, feel free to call the cardiac cath lab @ 914-964-4714 and ask to speak to the Cardiac Cath Lab Nurse Practitioner. We will be glad to assist you.**

### **Follow-Up Care**

*Your Cardiologist, Dr. \_\_\_\_\_ will follow and monitor you after your discharge. Be sure to call and make a follow-up appointment for 1-2 weeks after your procedure.*

*If you have symptoms such as chest pain, palpitations, shortness of breath, or difficulty breathing, immediately call your doctor, call 911, or go to the closest Emergency Room.*

Notes

