

## Session 8: Heart Healthy Diet



There can be a lot of information and resources about healthy eating, especially after you've had a cardiac event. At times, this information is overwhelming and it's hard to filter what applies to you and what does not. As part of the Cardiac Education & Rehabilitation program, you have access to a Registered Dietitian who will work with you on your nutritional goals and set an individualized healthy eating plan.

**\*\*The information provided in this chapter is meant for the general population and not meant to substitute information given to you by your health care professional\*\***

| <b>The 5 F's of Healthy Eating</b> |   |
|------------------------------------|---|
| <b>Fiber</b>                       | Eat vegetables, whole grains, lentils and legumes. Fiber can be found in complex carbohydrates, such as wild rice and oatmeal. It can also be found in fresh fruits and vegetables.   |
| <b>Fish</b>                        | Fatty fish such as: sardines, anchovies, salmon, trout, and pickerel are excellent sources of healthy omega-3 fatty acids.  |
| <b>Fruit</b>                       | Frozen or fresh fruits and vegetables are a great source of nutrients. Canned sources can also be a good alternative. However, be cautious as they may be packed in syrup or have a higher salt content.  |
| <b>Fresh</b>                       | Limit excess consumption of pre-packaged or prepared foods; focus on fresh as often as you can!   |
| <b>Fat</b>                         | Consume more mono- and poly-unsaturated fats and less saturated fats (from animal sources) and trans fats (from processed foods). Limit foods that are high in cholesterol (animal sources). See "Types of Fat" section below for more information. |

Consider portion control as part of healthy eating. Look at the following table to help you determine proper portion sizes for different foods.

## Serving-Size Comparison Chart

| FOOD                                       | SYMBOL  | COMPARISON     | SERVING SIZE |
|--|---|----------------|--------------|
| <b>Milk &amp; Milk Products</b>            |   |                |              |
| Cheese (string cheese)                     |       | Pointer finger | 1½ ounces    |
| Milk and yogurt (glass of milk)            |       | One fist       | 1 cup        |
| <b>Vegetables</b>                          |   |                |              |
| Cooked carrots                             |       | One fist       | 1 cup        |
| Salad (bowl of salad)                      |     | Two fists      | 2 cups       |
| <b>Fruits</b>                              |   |                |              |
| Apple                                      |   | One fist       | 1 medium     |
| Canned peaches                             |   | One fist       | 1 cup        |
| <b>Grains, Breads &amp; Cereals</b>        |   |                |              |
| Dry cereal (bowl of cereal)                |   | One fist       | 1 cup        |
| Noodles, rice, oatmeal (bowl of noodles)   |   | Handful        | ½ cup        |
| Slice of whole wheat bread                 |   | Flat hand      | 1 slice      |
| <b>Meat, Beans &amp; Nuts</b>              |   |                |              |
| Chicken, beef, fish, pork (chicken breast) |   | Palm           | 3 ounces     |
| Peanut butter (spoon of peanut butter)     |   | Thumb          | 1 tablespoon |

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## Healthy Portions

When you're filling your plate, try to fill at least half of it with vegetables. Fill one quarter of the plate with a lean protein, like chicken, fish, beans or lentils. The other quarter of the plate can be a healthy carbohydrate, like brown rice, a piece of bread, or whole grain pasta. See information on healthy carbohydrates on page 77 for more healthy options!



\*Image from [www.food-guidecanada.ca](http://www.food-guidecanada.ca), 2019

## Types of Fat

Fats are an essential part of a healthy diet and provide us with calories and energy, like protein and carbohydrates. Our liver makes all the cholesterol our body needs, but food sources of fat can increase the amount of cholesterol in our bodies.

| Type of Fat in Food | Effect  | Sources   |   |
|---------------------|---|---|---|
| <b>Saturated</b>    | Occurs naturally in animal products, solid at room temperature, and you cannot see through it   | Raises LDL cholesterol                            | Mostly hidden in foods, like processed foods, meat, butter, and lard                                      |
| <b>Unsaturated</b>  | <b>Trans Fat</b><br>Rarely occurs in food naturally – it’s an <i>unsaturated fat that has been hydrogenated</i> (shelf life has been extended – solidifies fats that would otherwise be liquid) | Raises LDL and lowers HDL                         | Hard margarines, shortening, lard, fried food, chips, cookies, pastries, pre-packaged food                |
|                     | <b>Mono-unsaturated Fatty Acids (MUFA)</b>  | Helps to lower LDL cholesterol and maintain HDL   | Olive oil, canola oil, avocado, almonds, peanuts, natural peanut and almond butters                       |
|                     | <b>Poly-unsaturated Fatty-Acids (omega-3, omega-6) (PUFA)</b>   | Helps to lower LDL, doesn’t have an effect on HDL | Sunflower oil, corn oil, flax, walnuts, pine nuts, sesame and sunflower seeds, salmon, sardines, pickerel |



| Types of Fat in Blood |  | Description  | Notes  |
|-----------------------|--|--|--|
| Cholesterol           | Low-Density Lipoprotein (LDL)  | <b>“Bad” cholesterol</b> contributes to fat build-up in the arteries<br><b>“L” = lousy</b>   | The liver makes all the cholesterol your body needs. The “bad” fats you eat may raise your cholesterol levels. |
|                       | High-Density Lipoprotein (HDL)   | <b>“Good” cholesterol</b> helps prevent fat build up in the arteries<br><b>“H” = healthy</b> |  |
| Triglycerides         | When you eat calories your body doesn’t use right away, they’re stored as triglycerides. | Makes blood thick and tar-like   | Too many triglycerides in the blood can lead to narrowing and hardening of the arteries.                       |

### Steps You Can Take to Increase HDL and Lower LDL Cholesterol

Try one of the suggestions in each section to see if you can improve your Lipid Profile (Cholesterol Levels) for your next bloodwork check. You can also use your goal setting worksheet to help with this action plan.

| How Can I Increase my HDL Cholesterol?   |                |
|--|----------------|
| Suggestion   | My Action Plan |
| Increase your activity level—work up to 150 minutes per week or 30 minutes per day, in bouts of 10 or more minutes |                |
| Increase your intake of omega-3 and mono-unsaturated fats  |                |
| Eat more fruits and vegetables   |                |
| If you smoke, try to cut back or quit!   |                |

| <b>How Can I Decrease my LDL Cholesterol?</b>  |  |
|--|--|
| Increase your activity level—work up to 150 minutes per week or 30 minutes per day, in bouts of 10 or more minutes |  |
| Decrease use of foods with trans fats, like deep-fried foods, chips, cookies                                       |  |
| Decrease use of saturated fats, like full fat dairy products and processed meats                                   |  |
| Add more soluble fiber to your diet (see fiber information below)  |  |

### Fiber

A heart-healthy diet includes foods that are high in fiber. Good sources of fiber can be found in two food groups: complex carbohydrates, such as wild and brown rice, and fresh fruits and vegetables. Fiber is an important part of a healthy diet; however, most of us are getting less than half the recommended amount!

There are some easy ways to boost your fiber intake. Simply switching to a high-fiber cereal from a refined one, switching from white bread to whole wheat bread, or switching from white rice to brown rice can make a dramatic difference in your fiber intake.

| Types of Fiber   | Description  | Sources   |
|------------------|--|---|
| <b>Soluble</b>   | A soft fiber that may help lower cholesterol and help to control blood sugar.        | Oatmeal, oat bran, legumes such as dried beans, peas and lentils and fruit like apples, oranges and strawberries.   |
| <b>Insoluble</b> | Also known as “Roughage.”<br>It helps you feel fuller and promotes bowel regularity. | It’s found in wheat bran, whole-grain foods and the skins, leaves and seeds of fresh fruit and vegetables.<br>Helps to reduce constipation.<br>When eating high-fiber foods, be sure to have plenty of water or broth-based soups to aide in good digestion and prevent bloating or diarrhea. |

When shopping for high-fiber, check food labels carefully. Look for 100% whole grain or 100% whole wheat with the germ at the beginning of the ingredients list, and check the fiber content in the Nutrition Facts tables. Products with **2 grams of fiber or more per serving** are a healthy option.

| Nutrition Facts                  |       |     |
|----------------------------------|-------|-----|
| Serving Size 1 Slice             |       |     |
| Servings per Container 22        |       |     |
| Amount per serving               |       |     |
| Calories 50 Calories from Fat 10 |       |     |
| % Daily Value *                  |       |     |
| Total Fat                        | 1g    | 1%  |
| Saturated Fat                    | 0g    | 0%  |
| Cholesterol                      | 0mg   | 0%  |
| Sodium                           | 115mg | 5%  |
| Total Carbohydrate               | 10g   | 3%  |
| Dietary Fiber                    | 5g    | 20% |
| Sugars                           | 1g    |     |

### Carbohydrates

Carbohydrates are an essential part of heart-healthy eating. Found in vegetables, fruit, and whole grains, carbohydrates are a primary source of energy for the body. They also have a wealth of vitamins and minerals and they're an important source of fiber. There are two types of carbohydrates you can choose.

| Type of Carb  | Description   | Source   |
|---------------|---|--|
| Complex Carbs | Complex carbs break down slowly, helping you feel full longer, which can help prevent overeating. They score low on the GI Scale (see below).     | Fresh fruits and vegetables, whole grains such as 100% whole grain bread and brown rice, nuts, soy products, and legumes such as dried beans and peas. |
| Simple Carbs  | The simplest carbohydrate is white sugar! It breaks down quickly in the body, leaving you hungry sooner. They score high on GI scale (see below). | Most commercial bakery products, sugary soft drinks, sugary cereals, white bread, and white rice have simple carbs.                                    |
|               |   |  |

## The Glycemic Index

The **Glycemic Index (GI)** is a relative ranking of carbohydrates in foods according to how they affect blood glucose levels. Carbohydrates with a low **GI** value (55 or less) are more slowly digested, absorbed and metabolized, and cause a lower and slower blood glucose rise.

| <b>LOW GI (55 or less)*<br/>Choose most often</b>   | <b>MEDIUM GI (56-69)*<br/>Choose more often</b>   | <b>HIGH GI (70 or more)*<br/>Choose less often</b>   |
|---|---|--|
| <b>BREADS</b>   |   |  |
| <ul style="list-style-type: none"> <li>• 100% whole wheat</li> <li>• Heavy mixed grain</li> <li>• Pumpernickel</li> </ul>   | <ul style="list-style-type: none"> <li>• 60% whole wheat</li> <li>• Rye bread</li> <li>• Pita</li> </ul>                                  | <ul style="list-style-type: none"> <li>• White bread</li> <li>• Kaiser roll</li> <li>• Bagel, white</li> </ul>                                     |
| <b>CEREAL</b>   |   |  |
| <ul style="list-style-type: none"> <li>• All Bran™</li> <li>• Bran Buds with Psyllium™</li> <li>• Oat Bran™</li> </ul>  | <ul style="list-style-type: none"> <li>• Puffed wheat</li> <li>• Oatmeal</li> <li>• Quick oats</li> </ul>                                 | <ul style="list-style-type: none"> <li>• Bran flakes</li> <li>• Corn flakes</li> <li>• Rice Krispies™</li> </ul>                                   |
| <b>GRAINS</b>   |   |  |
| <ul style="list-style-type: none"> <li>• Barley</li> <li>• Pasta/noodles</li> <li>• Parboiled or converted rice</li> </ul>  | <ul style="list-style-type: none"> <li>• Basmati rice</li> <li>• Brown rice</li> <li>• Couscous</li> </ul>                                | <ul style="list-style-type: none"> <li>• Short-grain rice</li> </ul>   |
| <b>OTHER</b>  |   |  |
| <ul style="list-style-type: none"> <li>• Sweet potato</li> <li>• Yam</li> <li>• Legumes (lentils, chickpeas, kidney beans, split peas, soy beans, baked beans)</li> </ul> | <ul style="list-style-type: none"> <li>• Potato, new/white</li> <li>• Sweet corn</li> <li>• Popcorn</li> <li>• Black bean soup</li> </ul> | <ul style="list-style-type: none"> <li>• Potato, baking (Russet)</li> <li>• French fries</li> <li>• Rice cakes</li> <li>• Soda crackers</li> </ul> |

\*Adapted from Diabetes Canada [www.diabetes.ca](http://www.diabetes.ca) , 2017

## Protein and Cardiac Health

Protein is an essential part of our diet for building muscles and for brain and heart health. Protein is like carbohydrate and fat, in that the main purpose is to give us calories or energy. Protein is found in animal-based products, like fish, meat and dairy products. It's also plant-based, in the form of legumes, nuts, and some grains. We should eat a healthy source of protein every day. If you don't get enough protein in your diet, your memory and mental agility may decrease.

Because protein sources are often high in calories, try to limit your serving size to approximately 4 ounces, or the size of the palm of your hand.

Daily intake recommendation for protein is based on individual body weight. The calculation is 0.8 grams of **protein** per kilogram of **body weight**, or 0.36 grams per pound. For example, a 200lb male should intake 72 grams of protein per day ( $200 \times 0.36 = 72$ ). This calculation is meant for the general population. There may be variations, depending on your activity level, other health conditions or what is recommended specifically for you. Talk to your dietitian if you have more questions about protein!

| Type of Protein     | Choose More Often  | Choose Less Often  |
|---------------------|--|--|
| <b>Animal Based</b> | <ul style="list-style-type: none"> <li>• Non-predatory fish, like pickerel or mackerel</li> <li>• Chicken</li> <li>• Low fat dairy, like cottage cheese, 1% milk, low fat cheese, Greek Yogurt</li> <li>• Wild Game (moose, deer)</li> </ul> | <ul style="list-style-type: none"> <li>• Red meat</li> <li>• Processed Meats</li> <li>• Higher Fat Dairy (2% milk or homogenized milk, full fat cheese)</li> </ul> |
| <b>Plant Based</b>  | <ul style="list-style-type: none"> <li>• Beans*</li> <li>• Lentils/legumes*</li> <li>• Tofu</li> <li>• Nuts (raw or plain, not roasted or salted)</li> </ul>   | <ul style="list-style-type: none"> <li>• Nuts (especially if they have added salt, seasoning or sugar)</li> </ul>  |

\* Beans, lentils and legumes can be dried, canned, or frozen. If you purchase canned beans, ensure they're a low-sodium/low-sugar option. You can also rinse them under water before use to reduce the sodium content

## Salt

There is a place for salt in a healthy eating plan, however most of us consume two or even three times the recommended amount, often without realizing it! We need small amounts of salt for healthy body function. The Heart & Stroke Foundation suggests that Canadians use no more than 1tsp (5ml) of salt per day (2300mg), regardless of where the salt comes from (whether it's added or already existing in foods).

Check Nutrition Facts table on food products for sodium or salt. If the daily value of sodium listed is 10% or less, the product is considered low in salt.

For some people, excess dietary salt can increase the amount of blood in the arteries, raise blood pressure, and increase the risk of heart disease and stroke. If you can lower your salt/sodium intake a little each day, you can help reduce your blood pressure. About 80% of the salt we consume comes from processed foods, including fast foods, pre-packaged foods, processed meats such as hot dogs and lunchmeats, canned soups, bottled salad dressings, condiments like ketchup and pickles, and salty snacks like potato chips.

To help reduce added, unnecessary salt:

- Limit pre-prepared, pre-package, or processed foods
- Eat more fresh fruits and vegetables
- Reduce the amount of salt you add while cooking, baking, or at the table.
- Experiment with other seasonings, such as fresh onion and garlic (rather than the dried or salted versions), other fresh or dried herbs.
- Check food labels and opt for low-salt or no salt added versions
- Create your own salad dressing by mixing healthy oil (like olive oil) with some vinegar and fresh or dried herbs.

Kosher salt, sea salt, and gourmet salts all have about the same amount of sodium as regular table salt. They're not healthier choices!

For more information about salt and sodium, check out [www.sodium101.ca](http://www.sodium101.ca).



# Grocery Budget Tips

| Food Group                    | Cost-Saving Tip  |
|-------------------------------|--|
| <b>Fruit &amp; Vegetables</b> | <p>Buy fresh vegetables when they're in season, or try growing one or two different vegetables in a garden of your own!</p> <p>Buy frozen or canned fruits and vegetables when fresh items aren't in season or readily available. Make sure you rinse the canned produce before cooking or eating, in order to rid it of extra salt and/or sugar.</p> <p>Limit fruit juices. Water is the best choice.</p>   |
| <b>Grain Products</b>         | <p>Grain products can be purchased in bulk. Experiment with varieties of oats, brown rice, and barley</p> <p>Purchase unsweetened cereals, which will allow you to control how much sugar you add. Sweetened cereals often cost more than unsweetened!</p> <p>Hot cereals, like oatmeal and cream of wheat, are excellent options. They're inexpensive and rich in nutrients and fiber.</p> <p>Try "No Name" or store brand varieties. Often they're the same quality as the brand name option, but at a reduced cost!</p> |
| <b>Milk Products</b>          | <p>Buy milk in bags rather than cartons.</p> <p>Buy cheese in larger bricks, rather than pre-shredded cheese. You can cut it or grate it yourself.</p> <p>Use skim milk powder or canned milk in recipes instead of more expensive fresh milk.</p>   |
| <b>Meat Products</b>          | <p>Try non-meat protein sources like dried beans, peas, lentils, eggs and nut butters. Try canned tuna, salmon and sardines for budget-friendly protein options.</p> <p>A whole chicken costs less than purchasing chicken pieces.</p>   |

\*Adapted from Eat Right Ontario [www.eatrightontario.ca](http://www.eatrightontario.ca), 2017

## Session 8: What Have I Learned So Far?

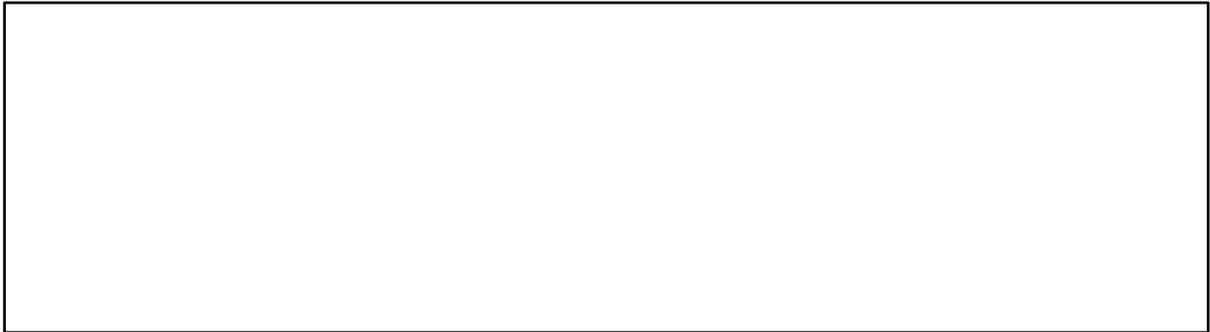
1. What are three of the five F's of healthy eating?

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2. To the best of your ability, draw a plate divided with healthy portions split between fruits/vegetables, proteins, and starches:



3. What are two things I can do to save money at the grocery store?

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4. What are three foods that I should limit in order to enjoy a heart healthy diet?

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### Online Nutritional Resources:

#### Unlock Food

[www.unlockfood.ca](http://www.unlockfood.ca)

#### Health Canada – Sodium

<https://www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/sodium.html>

#### Dietitians of Canada

[www.dietitians.ca](http://www.dietitians.ca)