

# Prediabetes Self-Management Guide



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Adapted from the Diabetes Canada Clinical Practice Guidelines

## WHAT IS PREDIABETES?

**Prediabetes** is when your blood sugar levels are higher than normal, but not high enough for a diagnosis of type 2 diabetes. If you have prediabetes, you are at a high risk for developing type 2 diabetes and are also at a higher risk for heart disease and stroke.



Not everyone with prediabetes will develop type 2 diabetes!

You can prevent or delay developing type 2 diabetes by eating healthy, exercising regularly, and losing at least 5 to 10% of your body weight.

**Taking steps to live a healthier lifestyle is your chance to change your future to one that does not include type 2 diabetes!**

## WHAT INCREASES MY RISK OF GETTING PREDIABETES?



The following are risk factors for developing prediabetes. Check each item that applies to you:

- ☐ I am over 40 years old.
- ☐ I have a parent or sibling with diabetes.
- ☐ I am African, Arab, Hispanic, Asian, Indigenous, or South Asian.
- ☐ I had gestational diabetes or gave birth to a baby weighing more than 9 pounds.
- ☐ I have high blood pressure.
- ☐ I have high cholesterol.
- ☐ I have overweight or obesity.
- ☐ I have been diagnosed with metabolic syndrome\*.
- ☐ I have been diagnosed with polycystic ovary syndrome, acanthosis nigricans\*\*, a psychiatric disorder, or obstructive sleep apnea.
- ☐ I have been prescribed a glucocorticoid medicine, such as prednisone or cortisone.

You can control these 3 risk factors by keeping track of your targets (page 4) and using the tools provided in this booklet (page 5).

\*Metabolic syndrome is when a person has 3 or more of the following conditions - high blood pressure, high blood sugar, excess weight around the waist, abnormal cholesterol, or abnormal triglyceride levels.


\*\*Acanthosis nigricans is a condition that causes the skin in body folds and creases to darken and become velvety (most commonly around the neck, armpit and groin).

## TRACK YOUR TARGETS



To check how well you are managing your prediabetes, it is important to do your A1c and/or fasting blood sugar (FBG) test(s) at least every 6 months.

Track your progress against your targets in the table below:

Date dd/mm/yyyy	A1c*	FBG	LDL-C	Blood Pressure
Track this target...	At least every 6 months	At least every 6 months	Once a year	At every appointment
 <b>Target Levels</b>	< 6.0 %	< 6.1 mmol/L	< 2 mmol/L	< 130/80 mmHg

\***A1c** is also called the **glycosylated hemoglobin test**. This is a blood test that tells you how controlled your blood sugar has been over **the past 3 months**. Your doctor may choose to do this test every 3 or 6 months. It is an important tool to help you and your team assess your progress and care plan.

### Testing your blood sugar at home



If you have prediabetes, testing your blood sugar at home is optional. If you are interested in learning how and when to test at home, and what your targets should be, please book an appointment with one of our nurses in the Diabetes Education Centre.



# YOUR TOOLS FOR MANAGING PREDIABETES





## MANAGING YOUR WEIGHT

Having overweight or obesity and a higher waist circumference raises your risk of developing type 2 diabetes. A larger waistline is also linked to health problems such as heart disease and high blood pressure.

Waist circumference goals differ depending on ethnic background and gender.

In general, a healthy waist for:

- MEN is less than 40 inches (102 centimeters)
- WOMEN is less than 35 inches (88 centimeters)



**Losing weight can improve your** insulin resistance, blood sugars, blood pressure, and cholesterol levels.

Positive lifestyle changes, even small ones, can help you achieve and maintain a healthy body weight and improve your overall health. **Eat well, be active, be yourself!**

### Your Weight Loss Target:



- ☐ Aim for a loss of 5 to 10% of your weight.
- ☐ A healthy rate of weight loss is 1 to 2 pounds per week. You can achieve this with healthy eating and exercise.

My goal weight is  lb /  kg



*Example: Bob is 215 lb and has been encouraged to lose 5% of his current weight. To calculate how many pounds, he can use this equation:  $215 \times 0.05 = 10.8$*   
Bob's goal is to lose 11 lb in 2 to 3 months.

## Tips to Help you Manage Your Weight



### Healthy eating is more than the foods you eat.

- Be mindful of your eating habits.
- Cook more often.
- Read food labels.
- Be aware of food marketing and how it can influence your choices.

### Aim for a variety of healthy foods every day.

- Aim for half of your plate to be vegetables.
- Aim to have plant proteins more often.
- Choose water as your main drink of choice.
- Choose whole grains.

### Build a healthy relationship with food and eating.

- Take your time to eat.
- Be mindful of your hunger and fullness cues.
- Plan ahead.
- Eat meals with others.



## PHYSICAL ACTIVITY

Regular physical activity reduces your risk of type 2 diabetes and helps you maintain your weight loss.

Any form of movement that causes your body to burn calories is physical activity. When you are moving, your active muscles use up sugar for energy, which helps prevent the sugar from building up in your blood.

### Regular physical activity can improve your:

- Blood sugars
- Blood pressure
- Cholesterol levels
- Mental health
- Heart health
- Body image
- Sleep
- Quality of life.

### Did you know?

Regular walking for a minimum of 30 minutes a day reduces the risk of developing type 2 diabetes by 35 to 40%.

(Diabetic Medicine, 2007)



### If you have:

- Not been active for some time and plan to do an exercise more strenuous than brisk walking
- Any joint or muscle issues
- Shortness of breath or chest pain

### Speak to your doctor **BEFORE** you start any exercise program.

Ask your doctor what level and type of activity that is best for you.

### When exercising:

1. Listen to your body. **STOP** if you feel unwell.
2. Stay hydrated.
3. Wear appropriate shoes and socks.

## What types of physical activity can I do?

**Aerobic Exercises:** This type of exercise uses your major muscle groups to increase your heart rate.



Cleaning



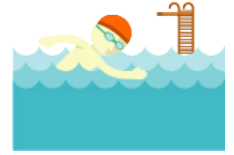
Lawn Mowing



Bowling



Biking



Swimming

Moderate Activity

Vigorous Activity



Gardening



Walking



Dancing



Skating

**Resistance Exercises:** This type of exercise involves working against a resistance - either your body weight, water, or hand weights. These exercises may help to maintain weight, increase muscle, and improve mobility.



Resistance bands



Weight lifting



Pilates



Bodyweight exercises

**Stretching Exercises:** This type of exercise improves your range of motion.



Stretching



Yoga

### To reduce your risk of injury or pain:



- Start slowly. Do 5 to 10 minutes a day, and gradually build up to 30 minutes a day.
- Warm up and cool down.
- Choose low impact activities, such as swimming or upper body exercises.



## Your Physical Activity Target

- ☐ Aim for at least 30 to 60 minutes of moderate to vigorous exercise most days of the week.
- ☐ Try not to go more than 2 days without any exercise.
- ☐ When you are ready and able, add 20 minutes of resistance exercises, 2 to 3 times a week.

## Easy Ways to Stay Active

- Use the stairs instead of the elevator.
- Dance when music is playing.
- Do exercise while waiting for a meal to cook.
- Go for a walk with a friend, or if you are bored or frustrated.
- Stand while waiting for the bus.
- Park further from the entrance.
- Walk or bike when you can.
- Wash your car by hand.

### Did you know?

Doing three 10-minute exercise sessions has the same effect as doing one 30-minute exercise session of equal intensity.



### Remember!

Regular activity, with or without weight loss, can improve:

- Blood sugars
- High blood pressure
- High cholesterol
- Mental health
- Body image.



Making good food choices, eating a balanced meal, and eating the right amount of food (through portion control) at the right time can help control blood sugar levels.





## Healthy Eating Tips

- ✓ **Watch your portions.** Aim for a balanced plate (see pg. 18-19)
- ✓ **Eat healthy carbohydrates.** Choose low glycemic index carbs most often (see pg. 14-15)
- ✓ **Eat more whole foods and less processed foods.** Limit foods high in salt, sugar, and saturated fat, such as pop, juice, pastries, fried foods, candy, honey, and jam.
- ✓ **Eat more vegetables and fruit.** Fresh, frozen, or canned vegetables and fruit at every meal/snack.
- ✓ **Be consistent with your carbs.** Aim for 3 meals a day. Space them out no more than 6 hours apart.
- ✓ **Choose good fats.** Unsaturated fats, such as olive oil, avocado, soft margarine, nuts and seeds, fish.

**HOW** you eat is as important as **WHAT** and **HOW MUCH** you eat. Practice eating mindfully and promote a healthy relationship with food.

## Examples of healthier choices:

 <b>Instead of...</b>	 <b>Try....</b>
French fries	Baking strips of potatoes or sweet potatoes in your oven with a small amount of oil and herbs and spices.
Ice cream and frozen dessert	Freezing yogurt in a popsicle tray.
Potato chips	Plain popcorn or homemade baked pitas.
Pop and juice	Adding flavour to your water with cucumber slices, lemon, or herbs like mint.
Pastries	Making your own high-fibre, low-fat pastries.



## What are carbohydrates?

Carbohydrates are one of the 3 key nutrients in our diet. Your body breaks down carbohydrate into sugar. This raises your blood sugar levels and provides the body with energy.

There are 3 main types of carbohydrates - starches, sugars, and fibre.

- **Starches** and **sugars** raise your blood sugars.
- **Fibre** does NOT break down into sugar. It slows the digestion of food and the movement of sugar into your blood.

You do not have to get rid of carbohydrates from your diet, but it is important to watch your portions and choose carbohydrate foods high in fibre.



## Which foods contain carbohydrates?

The table on the next page shows common foods that are high in carbohydrates compared to foods that contain very little carbohydrates. You can refer to this Diabetic Food Guide when making healthy food choices that have minimal effect on your blood sugar levels.

## Which carbohydrate foods contain fibre?

Fibre is a type of carbohydrate that your body does NOT turn into sugar. Our bodies need between 30 to 50 grams of fibre a day, but most people only get 14 grams a day. To get enough fibre, choose foods with at least 4 grams of fibre per serving.

### There are 2 types of fibre in foods:

	Soluble Fibre	Insoluble Fibre
<b>What it does</b>	Helps control blood sugar levels and lower LDL cholesterol.	Helps keep your bowels regular and promotes a healthy digestive system.
<b>Where it's found</b>	<ul style="list-style-type: none"><li>• Bran buds</li><li>• Barley</li><li>• Konjac noodles</li><li>• Legumes (chickpeas, lentils, peas, beans)</li><li>• Oat bran</li><li>• Oatmeal</li><li>• Vegetables (eggplant, okra) and fruits (apple, citrus, berries)</li></ul> 	<ul style="list-style-type: none"><li>• Seeds</li><li>• Skins on vegetables and fruits</li><li>• Wheat bran</li><li>• Whole grains</li></ul> 

### Did you know?

15 grams of carbohydrates = 3 tsp of sugar






# Diabetes Food Guide

## Foods Containing Carbohydrates

### HEALTHY Choose MORE often


#### Grains and Starches

 **Aim:** Make ¼ of your plate grains and starches. Choose whole grains.

**Examples:** Cereal, whole grain bread, pita bread, pasta, crackers, rice, plantains, corn, potatoes, squash, turnips




#### Fruit

 **Aim:** 2 to 3 servings a day. Choose fresh/frozen fruit most often.

**Examples:** Apples, bananas, cantaloupes, kiwis, grapes, oranges, peaches, pineapples, raspberries




#### Milk and Alternatives

 **Aim:** 2 to 3 servings a day. Choose low-fat, unsweetened options most often.

**Examples:** skim/1%/2% milk, unsweetened soy milk, plain yogurt, no sugar added



#### Legumes

 **Aim:** These are high in fibre and protein. Add to your diet regularly.

**Examples:** White beans, lentils, kidney beans, split peas, chickpeas



### LESS HEALTHY Choose LESS often

#### Other foods

**LIMIT:** Have in moderation.


**Examples:** Honey, orange juice, chocolate milk, ice cream, sugar, candy, chocolate, chips, pop



## Foods Containing VERY LITTLE Carbohydrates

### HEALTHY - Choose MORE often


#### Vegetables

 **Aim:** Make ½ of your plate veggies. Cook using leaner methods (steaming).

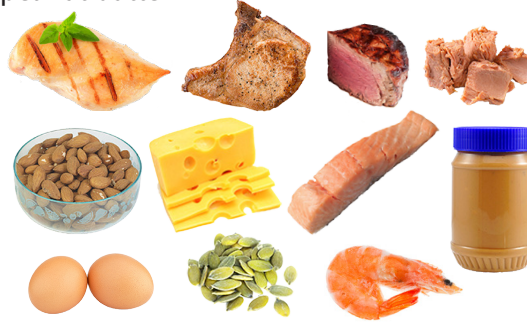
**Examples:** Mushrooms, tomatoes, cucumbers, kale, cabbage, carrots, brussels sprouts, green beans, cauliflower, celery, broccoli, eggplant




#### Proteins

 **Aim:** Make ¼ of your plate protein. Choose lean proteins.

**Examples:** Chicken breast, pork chop, lean beef, almonds, salmon, canned tuna, eggs, cheese, sunflower seeds, seafood, natural peanut butter



#### Fats

 **Aim:** Have in moderation. Choose healthy fats.

**Examples:** Canola or olive oil, soft tub margarine, salad dressing, mayo, avocados



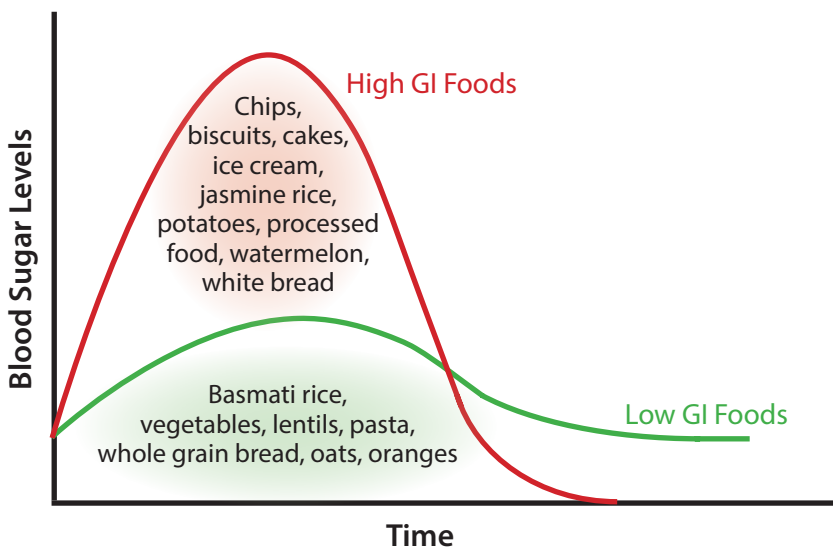


## Using the Glycemic Index\*

The **Glycemic Index (GI)** is a scale that ranks carbohydrate foods based on how **quickly** and how **high** they raise blood sugar levels. Choosing low GI foods can help you:

- Control your blood sugar and cholesterol levels
- Control your appetite
- Reduce your risk of heart disease.

### Blood Sugar Response From High GI vs. Low GI Foods



The body digests and absorbs **high GI foods** quickly, giving a **fast** and **high rise** in blood sugar levels.




The body digests and absorbs **low GI foods** slowly, giving a **slow** and **small rise** in blood sugar levels.

### Tips when consuming carbohydrate foods






- ✓ **Avoid overcooking starches:** The more you cook starch, the easier it breaks down into sugar, raising your blood sugar levels more quickly.
- ✓ **Introduce low GI foods gradually:** Gradually add low GI foods into your diet and drink plenty of fluids to avoid discomfort and gas.
- ✓ **Be aware of your portion sizes:** Eating large portions of low GI foods can still make your blood sugar levels too high.

\*Adapted with permission from Vancouver Coastal Health's Glycemic Index and Diabetes - FL.860.G525

FOOD TYPE	Examples of Carbohydrate Foods Based on Glycemic Index*:		
	 <b>Low</b> Use <b>MOST</b> Often	 <b>Medium</b> Use in <b>MODERATION</b>	 <b>High</b> Use <b>LESS</b> Often
<b>Breads</b>	<ul style="list-style-type: none"> <li>• Corn/whole grain tortilla</li> <li>• Heavy mixed grain bread</li> <li>• Sourdough bread</li> <li>• Spelt bread</li> <li>• Teff injera</li> </ul>	<ul style="list-style-type: none"> <li>• Chapati, roti, pita</li> <li>• Flaxseed bread</li> <li>• Rye, pumpernickel bread</li> <li>• Whole wheat tortilla</li> </ul>	<ul style="list-style-type: none"> <li>• Corn injera</li> <li>• Fufu</li> <li>• Garri</li> <li>• Mantou (Chinese steamed buns)</li> <li>• Naan</li> <li>• White bread/bagel</li> <li>• Whole wheat bread</li> </ul>
<b>Cereals</b>	<ul style="list-style-type: none"> <li>• All-Bran Original</li> <li>• Bran buds</li> <li>• Oat Bran</li> <li>• Steel cut oats</li> </ul>	<ul style="list-style-type: none"> <li>• Cream of Wheat (regular)</li> <li>• Muesli</li> <li>• Oats (instant, large flake, quick)</li> <li>• Raisin Bran</li> <li>• Shredded Wheat</li> </ul>	<ul style="list-style-type: none"> <li>• All Bran Flakes</li> <li>• Cheerios</li> <li>• Congee</li> <li>• Cornflakes</li> <li>• Instant cream of wheat</li> <li>• Instant oats</li> <li>• Rice Krispies</li> <li>• Special K</li> </ul>
<b>Pasta &amp; Noodles</b>	<ul style="list-style-type: none"> <li>• Bean thread noodles</li> <li>• Mung bean noodles</li> <li>• Pasta (cooked al dente)</li> </ul>	<ul style="list-style-type: none"> <li>• Buckwheat noodles (soba)</li> <li>• Rice noodles</li> <li>• Rice vermicelli</li> <li>• Udon</li> </ul>	<ul style="list-style-type: none"> <li>• Chinese Northern white noodles</li> <li>• Plain steamed glutinous rice roll</li> </ul>
<b>Rice</b>	<ul style="list-style-type: none"> <li>• Parboiled rice</li> <li>• Uncle Ben's converted rice</li> </ul>	<ul style="list-style-type: none"> <li>• Basmati rice</li> <li>• Brown rice</li> <li>• Wild rice</li> </ul>	<ul style="list-style-type: none"> <li>• Glutinous rice</li> <li>• Instant rice</li> <li>• Jasmine rice</li> <li>• Short grain rice (sushi, arborio)</li> <li>• Sticky rice</li> </ul>
<b>Other Grains</b>	<ul style="list-style-type: none"> <li>• Barley</li> <li>• Buckwheat/Kasha</li> <li>• Bulgur</li> <li>• Quinoa</li> </ul>	<ul style="list-style-type: none"> <li>• Cornmeal*</li> <li>• Couscous</li> <li>• Idly</li> <li>• String hopsers</li> <li>• Taco Shells</li> </ul>	<ul style="list-style-type: none"> <li>• Millet</li> <li>• Tapioca</li> </ul>
<b>*These medium GI foods are at the high end of the range (GI &gt; 65)</b>			

\*Adapted with permission from Vancouver Coastal Health's Glycemic Index and Diabetes - FL.860.G525

FOOD TYPE	Examples of Carbohydrate Foods Based on Glycemic Index*:		
	 <b>Low</b> Use <b>MOST</b> Often	 <b>Medium</b> Use in <b>MODERATION</b>	 <b>High</b> Use <b>LESS</b> Often
<b>Starchy Vegetables</b>	<ul style="list-style-type: none"> <li>• Cassava</li> <li>• Plantain, green</li> <li>• Peas</li> <li>• Sweet Potato, yams</li> <li>• Taro</li> <li>• Winter squash</li> </ul>	<ul style="list-style-type: none"> <li>• Beets</li> <li>• Breadfruit, raw</li> <li>• Parsnip</li> <li>• Plantain, ripe</li> <li>• Potato, new or white</li> <li>• Sweet corn</li> </ul>	<ul style="list-style-type: none"> <li>• Baking Potato (Russet/ Idaho)</li> <li>• French Fries</li> <li>• Instant mashed potatoes</li> <li>• Mashed potato</li> </ul>
<b>Fruits</b>	<ul style="list-style-type: none"> <li>• Apple</li> <li>• Banana (green, unripe)</li> <li>• Berries</li> <li>• Cantaloupe</li> <li>• Grapefruit</li> <li>• Honeydew</li> <li>• Mango</li> <li>• Orange</li> <li>• Peach</li> <li>• Pear</li> <li>• Plum</li> <li>• Pomegranate</li> </ul>	<ul style="list-style-type: none"> <li>• Banana (ripe, yellow)</li> <li>• Cherries</li> <li>• Cranberries (dried)</li> <li>• Grapes</li> <li>• Jackfruit</li> <li>• Kiwi</li> <li>• Lychee</li> <li>• Pineapple</li> <li>• Raisins</li> </ul>	<ul style="list-style-type: none"> <li>• Banana (brown, over-ripe)</li> <li>• Fruit juice</li> <li>• Watermelon</li> </ul>
<b>Milk and Alternatives</b>	<ul style="list-style-type: none"> <li>• Almond milk (unsweetened)</li> <li>• Cow's milk (skim/1%/2%)</li> <li>• Soy milk (unsweetened)</li> </ul>		<ul style="list-style-type: none"> <li>• Rice milk</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• Baked beans</li> <li>• Chana dal</li> <li>• Chickpeas</li> <li>• Dhokla</li> <li>• Edamame</li> <li>• Kidney beans</li> <li>• Lentils</li> <li>• Popcorn</li> <li>• Split peas</li> </ul>	<ul style="list-style-type: none"> <li>• Arrowroot biscuits</li> <li>• Black bean soup</li> <li>• Breton wheat crackers*</li> <li>• Digestive biscuits</li> <li>• Green pea soup</li> <li>• Ryvita crackers</li> <li>• Social tea biscuits</li> <li>• Stoned wheat thins*</li> </ul>	<ul style="list-style-type: none"> <li>• Graham wafers</li> <li>• Melba toast</li> <li>• Pretzels</li> <li>• Regular pop</li> <li>• Rice cakes</li> <li>• Rice crackers</li> <li>• Sky Flakes</li> <li>• Soda crackers</li> <li>• Vanilla wafers</li> </ul>
<b>*These medium GI foods are at the high end of the range (GI &gt; 65)</b>			

\*Adapted with permission from Vancouver Coastal Health's Glycemic Index and Diabetes - FL.860.G525



## What is protein?





Protein is the second basic nutrient in a healthy diet and helps build and maintain all body tissues.

Protein foods have a **minimal effect** on raising your blood sugar level. In fact, including some protein foods with your carbohydrate foods **may help slow down the rise of your blood sugars**. However, eat protein foods in moderation. Too much protein can increase your risk for heart disease and weight gain.

## Did you know?



Studies have shown that replacing animal protein with plant protein over 8 weeks improved A1C and fasting blood sugars in people with type 2 diabetes.

	 <b>Choose more often... HEALTHY PROTEINS</b>	 <b>Choose less often... LESS HEALTHY PROTEINS</b>
		
<b>Red Meat</b>	<ul style="list-style-type: none"> <li>Lean cuts of beef or veal (round, flank, chuck, sirloin, tenderloin, stewing, extra-lean ground)</li> <li>Pork chop, tenderloin, shoulder, or back bacon</li> <li>Lamb loin, leg, or shoulder</li> <li>Goat</li> </ul>	<ul style="list-style-type: none"> <li>Fatty cuts, such as prime rib or ribs</li> <li>Marbled meats</li> <li>Organ meats such as liver, heart, kidney, gizzards</li> <li>Bacon, ham hocks</li> <li>Cold cuts, deli meats, salami</li> <li>Hotdogs, sausages</li> </ul>
<b>Fish</b>	<ul style="list-style-type: none"> <li>Fresh or frozen fish or seafood</li> <li>Fish or seafood, canned in water</li> </ul>	<ul style="list-style-type: none"> <li>Fried or battered fish or seafood</li> <li>Fish, canned in oil</li> <li>Salted, dried fish</li> </ul>
<b>Poultry</b>	<ul style="list-style-type: none"> <li>Chicken and turkey with skin removed</li> <li>Eggs (including omega-3 eggs)</li> </ul>	<ul style="list-style-type: none"> <li>Fried or battered chicken or turkey</li> <li>Poultry skins</li> <li>Duck, goose, self-basting turkeys</li> </ul>
<b>Meatless Alternatives</b>	<ul style="list-style-type: none"> <li>Tofu, TVP, tempeh</li> <li>Legumes, dried beans, lentils, or peas</li> <li>Walnuts, almonds, pecans, pistachios</li> <li>Pumpkin seeds, sunflower seeds</li> <li>Yogurt (plain, no sugar added)</li> <li>Skim, 1%, or 2% milk</li> <li>Low-fat cheese (less than 20% M.F.)</li> <li>Natural nut butters</li> </ul>	<ul style="list-style-type: none"> <li>Honey-roasted, salted, or seasoned nuts or seeds</li> <li>High-fat cheeses</li> </ul>










## What is fat?

Fat is the last basic nutrient in a healthy diet. There are 3 types of fats - saturated, unsaturated, and trans fatty acids (trans fats).

Unsaturated fats are considered the “good fats”. They are healthier than the other fats because they can lower your levels of “bad” cholesterol (LDL cholesterol) in your blood. The “good” fats also have a **minimal effect** on raising your blood sugar level.

Including some of the “good” fats with your carbohydrate foods will slow down the rise of your blood sugar levels and protect your vital organs. But, watch your portions! Large amounts of fat can easily cause weight gain and increase your risk for heart disease.

	Types of Fats	Major Food Sources	Effects on the Body
Choose more often... <b>HEALTHY FATS</b> 	Monounsaturated Fats 	<ul style="list-style-type: none"> <li>• Olive, canola, safflower, sunflower, sesame, peanut oils</li> <li>• Soft tub margarine</li> <li>• Avocados</li> </ul>	↓ LDL ↑ HDL
	Polyunsaturated Fats 	<ul style="list-style-type: none"> <li>• Canola, flaxseed, corn, safflower, soybean, sunflower oils</li> <li>• Soft tub margarine</li> <li>• Walnuts</li> </ul>	↓ LDL
	Omega-3 fatty acids 	<ul style="list-style-type: none"> <li>• Fatty fish (salmon, trout, mackerel, herring, sardines)</li> <li>• Nuts and seeds (walnuts and pine, sesame, sunflower, flax, pumpkin seeds)</li> </ul>	↓ LDL ↓ Triglycerides ↓ Blood pressure Prevents blood clotting
<b>LESS HEALTHY FATS</b> 	<b>Choose less often...</b> Saturated Fats 	<ul style="list-style-type: none"> <li>• Full fat dairy products (3.25% M.F. milk, 2% M.F. yogurt, &gt; 20% M.F. cheese), butter, lard, ghee, tropical oils (coconut, palm found in instant noodles, chocolate, cookies, ice cream)</li> <li>• Red meat</li> </ul>	↑ LDL ↑ Total Cholesterol
	<b>AVOID...</b> Trans Fats 	<ul style="list-style-type: none"> <li>• Used to be in processed foods. Canada no longer allows trans fats to be added to food.</li> <li>• In some foods, trans fats may be replaced with saturated fat like palm oil.</li> </ul>	↑ LDL ↓ HDL ↑ Triglycerides



## HEALTHY EATING: SPACE ON YOUR PLATE

**BREAKFAST:** Use this plate\* as a guide to make a healthy **breakfast**. Follow how the plate is divided to control your portions and choose healthy food options from each of the food groups:

- Babybell (light), Laughing Cow cheese (light)
- Canned fish (water-packed)
- Cottage cheese (low-fat)
- Eggs
- Tofu
- Hard cheese (light, low-fat, < 20% M.F.)
- Legumes (beans, lentils, dahl)
- Nuts, seeds
- Nut butters (peanut or almond)
- Peameal bacon (occasionally)



**Protein**  
**1/4 of your plate**

**100% whole grains:** bread, English muffin, waffle, pita, tortilla, whole grain roti

**Hot cereal:** oatmeal, cornmeal, Cream of Wheat

**Cold/dry cereal:** Look for cereals with at least 4 g of fibre per serving and less than 10 g of sugar per serving.



**Grains & Starches**  
**1/4 of your plate**

**Fresh or frozen:**

- 1 medium fruit
- 1/2 grapefruit
- 2 kiwis
- 2 clementines
- 2 tangerines
- 15 grapes
- 1 melon wedge
- 1/2 large banana
- 1/2 mango
- 2 plums
- 1 cup blueberries
- 2 cup blackberries/raspberries/strawberries
- 15 cherries



**Fruit**  
**1/4 of your plate**

**Milk & Yogurt**  
**1/4 of your plate**

**Milk:** Skim, 1%, 2%, goat milk, soy milk (unsweetened), almond milk

**Yogurt:** < 2% M.F., no sugar added

**Kefir:** < 2% M.F.

**Buttermilk:** < 2% M.F.



**Canned:** 1/2 cup serving, "in it's own juice" or water

\*Use a 9-inch plate or a shallow bowl



**LUNCH AND DINNER:** Use this plate\* as a guide to make a healthy **lunch** or **dinner**. Follow how the plate is divided to control your portions and choose healthy food options from each of the food groups:

- Fish (fresh, frozen, canned)
- Lean meat
- Skinless chicken
- Legumes (lentils, beans)
- Eggs
- Tofu, Tempeh
- Paneer
- Cheese (< 20% M.F.)
- Nut butters



**Protein**  
**1/4 of your plate**

- Rice (parboiled, basmati, brown)
- Pasta (cooked al dente)
- Barley
- Quinoa
- Bulgur
- Sweet potato
- Whole grain bread
- Roti, chapatti
- Plantain
- Pita (whole wheat)
- Tortilla (whole wheat)



**Grains & Starches**  
**1/4 of your plate**



**Vegetables (2 kinds)**  
**1/2 of your plate**


**Try to have a dark green and a bright-coloured vegetable every day.**

\*Use a 9-inch plate or a shallow bowl





## HEALTHY EATING: HANDY PORTION GUIDE

Your hands can also be very useful in estimating portions. When planning a meal, use the following portion sizes as a guide:





**MILK AND ALTERNATIVES**  
Drink up to 1 cup (250 mL) of low-fat milk with a meal.






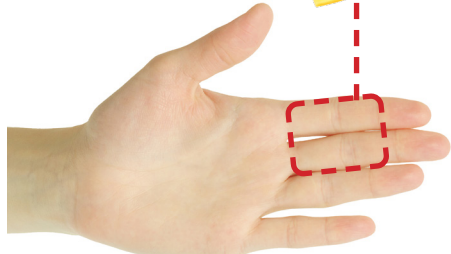
**GRAINS AND STARCHES/FRUITS**  
Choose an amount the size of your fist for grains or starches, or fruit.







**VEGETABLES**  
Choose as much as you can hold in both hands. Choose brightly coloured vegetables (such as green or red peppers, broccoli or red peppers, broccoli)






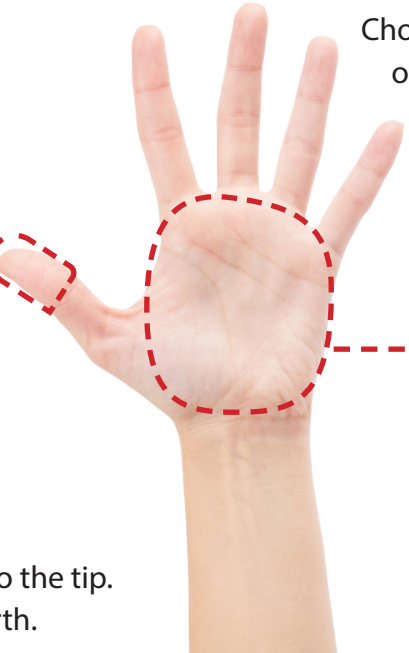
**CHEESE**  
A portion is equivalent to about 2 fingers.







**FAT**  
Limit fat to an amount the size of the tip of your thumb.







**MEATS AND ALTERNATIVES**  
Choose an amount the size of the palm of your hand and the thickness of your little finger.





**PEANUT BUTTER**  
A tablespoon is about from your thumb knuckle to the tip. A portion of peanut butter is about 2 thumbs' worth.





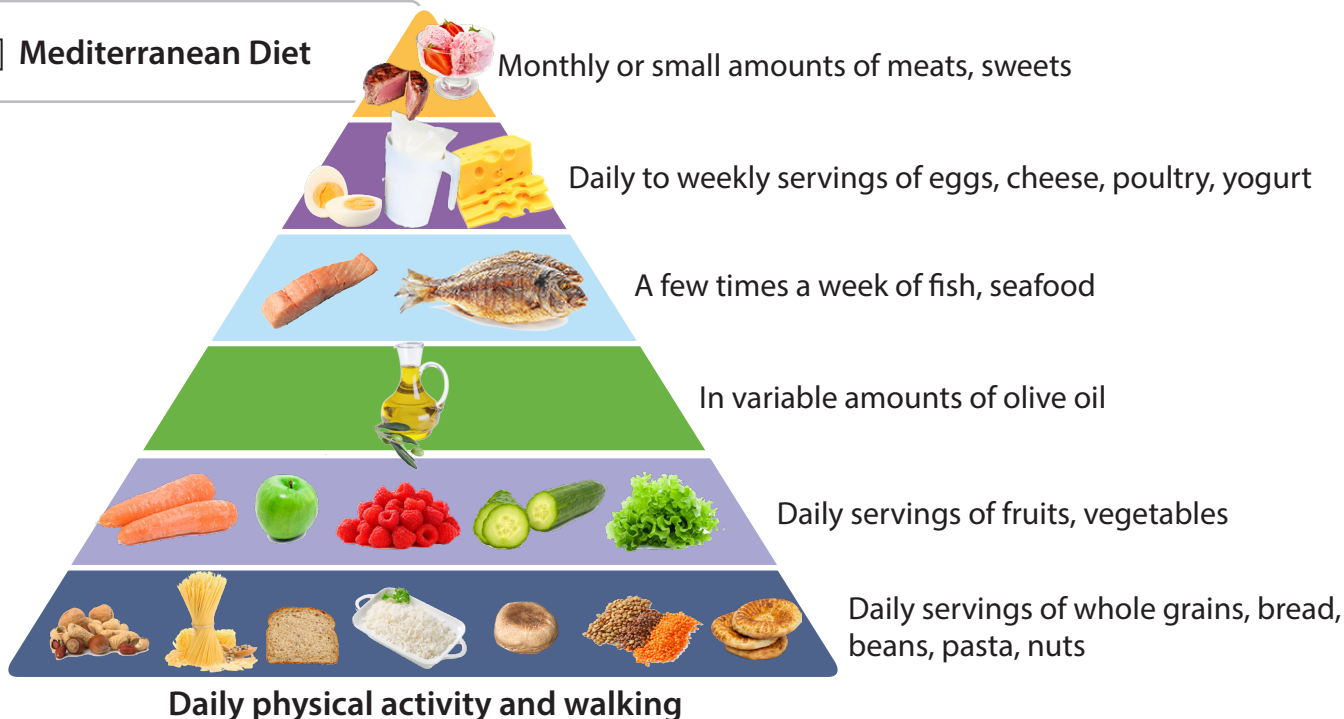




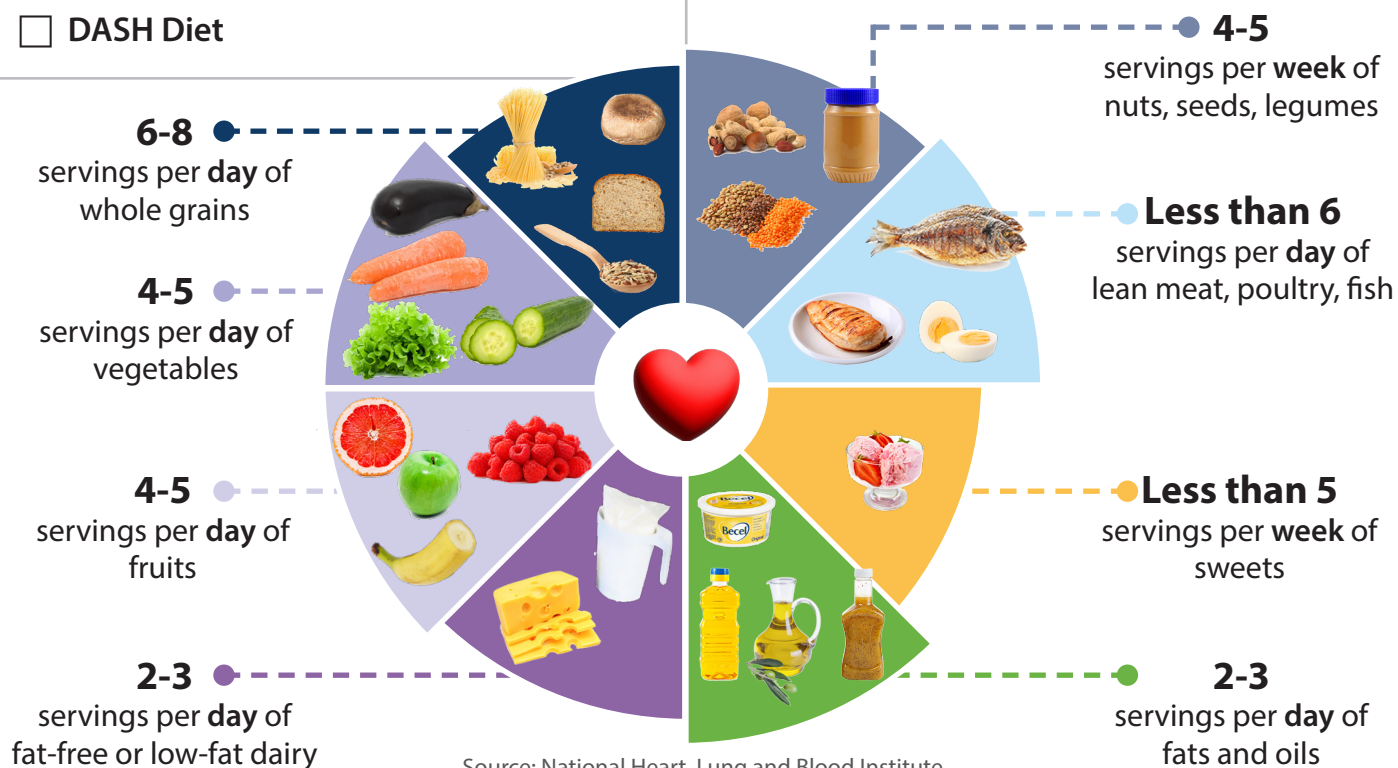
## HEALTHY EATING: EATING PATTERNS

There is no "one-size-fits-all" diet. Choose one that supports your best health and that you can maintain over time. The following are eating patterns that you can use to help reduce your risk for type 2 diabetes.

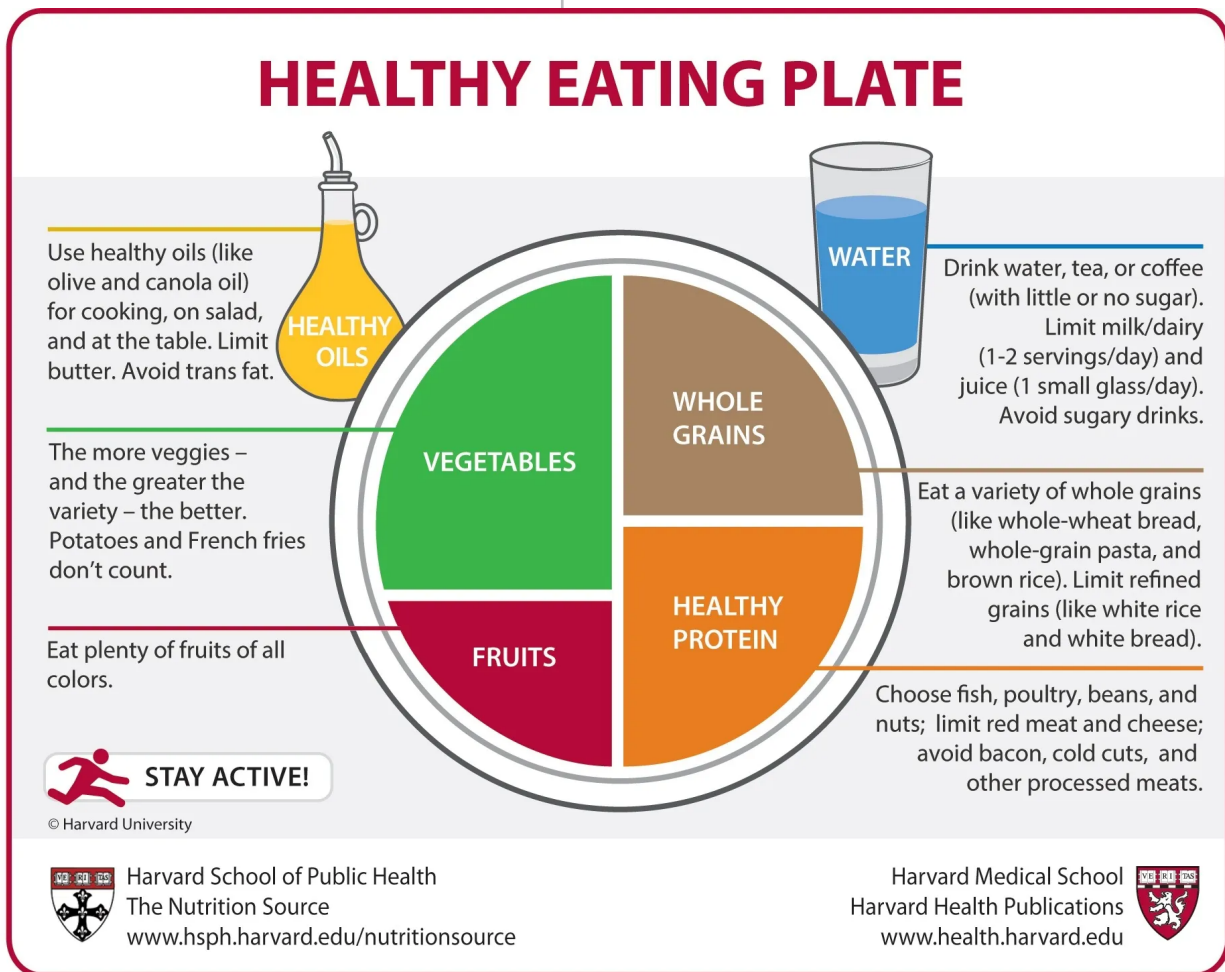
### ☐ Mediterranean Diet



### ☐ DASH Diet



Source: National Heart, Lung and Blood Institute

☐ The Alternative Healthy Eating Index

Visit Diabetes Canada at [www.diabetes.ca](http://www.diabetes.ca) for more information and sample meal plans that follow these eating patterns.



## HEALTHY EATING: SAMPLE MEAL PLAN

	SAMPLE Meal Plan for WOMEN	SAMPLE Meal Plan for MEN
Breakfast	<ul style="list-style-type: none"><li>½ cup (125 mL) shredded wheat cereal</li><li>1 cup (250 mL) skim milk</li><li>½ banana</li><li>12 almonds</li><li>Coffee or tea</li></ul>	<ul style="list-style-type: none"><li>2 slices whole grain bread</li><li>1 cup (250 mL) skim milk</li><li>½ banana</li><li>2 slices low fat cheese</li><li>1 tsp (5 mL) Becel margarine</li></ul>
Morning Snack	<ul style="list-style-type: none"><li>3.5 oz (100 g) no-sugar added yogurt</li></ul>	<ul style="list-style-type: none"><li>Medium apple</li></ul>
Lunch	<ul style="list-style-type: none"><li>2 slices whole wheat bread</li><li>½ cup (250 mL) canned salmon</li><li>1 tbsp (15 mL) light mayonnaise</li><li>1 tbsp (15 mL) salad dressing</li><li>2 cups (500 mL) mixed greens</li><li>1 cup (250 mL) blueberries</li><li>Tea or coffee</li></ul>	<ul style="list-style-type: none"><li>1 whole wheat pita</li><li>½ cup (125 mL) diced chicken</li><li>Lettuce, tomatoes, diced peppers</li><li>2 tbsp (30 mL) light mayonnaise</li><li>1 cup (250 mL) strawberries</li><li>1 cup (250 mL) milk</li></ul>
Afternoon Snack	<ul style="list-style-type: none"><li>Medium pear</li></ul>	<ul style="list-style-type: none"><li>3.5 oz (100 g) no-sugar added yogurt</li></ul>
Dinner	<ul style="list-style-type: none"><li>1 cup (250 mL) parboiled rice</li><li>3 oz (85 g) grilled salmon</li><li>1 tsp (5 mL) Becel margarine</li><li>1 cup (250 mL) roasted vegetables</li></ul>	<ul style="list-style-type: none"><li>1 ½ cup (375 mL) whole wheat pasta</li><li>1 cup (250 mL) tomato sauce</li><li>Salad</li><li>4 oz (115 g) baked fish filet</li><li>1 tbsp (15 mL) light salad dressing</li></ul>



## HEALTHY EATING: READING FOOD LABELS

**A**

**Per Serving (Serving Size):** Nutrition information is based on this serving size. Multiply or divide based on your portion.

### Nutrition Facts Valeur nutritive

Per 1 cup (250 mL)  
pour 1 tasse (250 mL)

**A**

**Calories 96**

% Daily Value\*  
% valeur quotidienne

**B**

**Fat / Lipides** 0 g 0 %  
Saturated / saturés 0 g 0 %  
+ Trans / trans 0 g

**Carbohydrate / Glucides** 36 g  
Fibre / Fibres 6 g 24 %  
Sugars / Sucres 3 g 3 %

**C**

**Protein / Protéines** 2 g  
**Cholesterol / Cholestérol** 0 mg  
**Sodium** 0 mg 0 %  
Potassium 450 mg 10 %  
Calcium 30 mg 2 %  
Iron / Fer 0 mg 0 %

\*5% or less is **a little**, 15% or more is **a lot**

\*5% ou moins c'est **peu**, 15% or plus c'est **beaucoup**

**B**

**% Daily VALUE (DV):** The Daily Value shows if there is a lot or a little of the nutrient in a serving of food. It also makes it easier to compare foods. The DV is based on recommendations for a healthy diet. Eat a variety of foods to meet 100% of your daily requirements.

**5% DV or less = A LITTLE**

**5% DV or more = A LOT**

Choose foods with:

LESS... (< 5% DV)	MORE... (> 5% DV)
<ul style="list-style-type: none"> <li>• Fat</li> <li>• Saturated fat</li> <li>• Trans fat</li> <li>• Sodium</li> <li>• Sugar</li> </ul>	<ul style="list-style-type: none"> <li>• Fibre</li> <li>• Vitamin A</li> <li>• Calcium</li> <li>• Iron</li> </ul>

**C**

**Sugars and Starch:** Include naturally occurring sugars in fruit and milk, as well as added or refined sugars. It is easy to see how much added sugar you are getting from foods that have little or no naturally occurring sugar (such as soft drinks, pastries). Aim to limit added sugars to 40 grams or 1 teaspoon/day.



## MANAGING YOUR CHOLESTEROL

Two main types of cholesterol are found in your blood: HDL ("good") cholesterol and LDL ("bad") cholesterol.

- High levels of HDL ("good") cholesterol in your blood can reduce your risk of heart disease.
- High levels of LDL ("bad") cholesterol in your blood can increase the risk of heart disease.

If a blood test shows you have high cholesterol, this means you have a high level of LDL cholesterol in your blood. You can reduce your LDL cholesterol levels by managing your weight, eating healthy, and regular physical activity.

### Healthy eating tips to lower your LDL cholesterol levels



#### Choose...

**Lower-fat foods**, such as 1% or skim milk, low-fat yogurt, lean meats with visible fats trimmed, skinless poultry, cheese with less than 20% M.F.



**High-fibre foods, such as whole grains and legumes**



Small amounts of **unsaturated fats**, such as olive oil, canola oil, peanut oil, nuts and seeds (such as peanuts, almonds, ground flax), soft, non-hydrogenated margarine



At least 2 meals per week of **fatty fish** (salmon, trout, sardines)



#### Limit or Avoid...

Cholesterol-containing foods

Saturated fats

Trans fats

### Are you doing all you can to lower your LDL?

Yes No

- |   |                          |                          |
|---|--------------------------|--------------------------|
| 1. I am taking my cholesterol medicine(s) as prescribed by my doctor. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. My weight is in the healthy range.                                 | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. My waist measurement is in the healthy range.                      | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I choose low-fat foods and avoid saturated and trans fats.         | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. I limit cholesterol-containing foods.                              | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. I choose high-fibre foods.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. I eat vegetables and fruits every day.                             | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. I am physically active on a regular basis.                         | <input type="checkbox"/> | <input type="checkbox"/> |



#### How are you doing?

If you answered **YES** to every statement, it means you are on the right track.

If you answered **NO** to one or more of the goals, decide which steps you are ready to take.



## MANAGING YOUR STRESS

Stress is a normal part of life, but it can get in the way of your ability or desire to make lifestyle changes. When you are under stress, your body increases the release of other hormones, such as cortisol, so that there is more sugar in the blood to convert to energy.

For those without diabetes, this stress-induced rise in blood sugar is followed by a release of insulin to make sure the rise in blood sugar is not too high or too long. However, if you have prediabetes, insulin may not always work to regulate the blood sugar levels, so the sugar builds up in the blood.



### Tips to manage your stress

- ✔ Set aside 20 minutes every day to relax.
- ✔ Be physically active. Exercise releases endorphins, which are the body's natural pain and stress fighters.
- ✔ Share your feelings with friends, family, or a counselor.
- ✔ Get enough sleep - about 7 to 8 hours a day.
- ✔ Learn to say, "NO". Practice being assertive.
- ✔ Ask for help. Be easy on yourself.



**Did you know?** The combination of high blood sugars and smoking dramatically increases the risk of damage to the blood vessels that feed the heart, brain, eyes, kidneys and peripheral nerves. If someone with diabetes smokes, they face 3 times the risk of a heart attack compared to a non-smoking person with diabetes.





If you smoke and would like help to quit, contact:

**Smoker's Helpline**  
**Tel:** 1-877-513-5333  
**Web:** [www.smokershelpline.ca](http://www.smokershelpline.ca)



## SETTING GOALS AND NEXT STEPS

There are many things you can do to prevent or delay developing type 2 diabetes. Take a moment to decide which changes you would like to make first. Try to make goals that are S.M.A.R.T. - Specific, Measurable, Attainable, Relevant, and Timely. Below is an example of S.M.A.R.T. goals:

To improve my health, I will...	To achieve that, my S.M.A.R.T. goal is...
<p>Increase my physical activity level.</p> 	<p><i>Example: I will walk 10 minutes every other day after work.</i></p>
<p>Improve my diet.</p> 	<p><i>Example: I will drink water instead of juice on weekdays.</i></p>
<p>Reduce my stress.</p> 	<p><i>Example: I will do 5 minutes of deep breathing on my lunch break every day.</i></p>
<p>Cut down on smoking.</p> 	<p><i>Example: I will stop having a cigarette every morning to start.</i></p>
<p>Work on something else that is bothering me.</p>	<p><i>Example: I will reduce my screen time to 2 hours a day on weekdays.</i></p>

## Next Steps

Managing prediabetes is a lifelong journey and good support is essential. There is still a lot left to learn and it will take time.

At the Diabetes Education Centre, we can provide you with access to health professionals that are committed to supporting you with a safe and healthy plan to manage your condition.



### Check off the information that you may be interested in learning about:

- ☐ How can I make better food choices at the store?
  - Book an appointment with a dietitian
- ☐ How do I plan healthy meals?
  - Book an appointment with a dietitian
- ☐ How do I test my blood sugar?
  - Book an appointment with a nurse
- ☐ How can I conquer emotional eating and/or yo-yo dieting?
  - Book an appointment with a dietitian
- ☐ How can I manage my stress?
  - Ask us for a referral to speak to a social worker
- ☐ How can I find help to quit smoking?
  - Call Smoker's Helpline at 1 (877) 513-5333
- ☐ Other:





## USEFUL RESOURCES

For more information about prediabetes and help on managing it, visit the following resources:

### Web sites

#### **Calorie King**

[www.calorieking.com](http://www.calorieking.com)

#### **Diabetes Canada**

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

#### **DiaTribe Learn**

[www.diatribel.org](http://www.diatribel.org)

#### **Dietitians of Canada**

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

#### **Health Canada (Nutrition Resources)**

[www.hc-sc.gc.ca/fn-an/nutrition/index-eng.php](http://www.hc-sc.gc.ca/fn-an/nutrition/index-eng.php)

#### **Heart and Stroke Foundation of Canada**

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

#### **Unlock Food**

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

### Apps

#### **Cookspiration**

Access healthy recipes

[www.cookspiration.com](http://www.cookspiration.com)

#### **Fat Secret**

Write in a food journal

[www.fatsecret.com](http://www.fatsecret.com)

#### **Headspace**

Guided meditation and mindfulness

[www.headspace.com](http://www.headspace.com)

#### **MyFitnessPal**

All-in-one food, exercise, and calorie tracker

[www.myfitnesspal.com](http://www.myfitnesspal.com)

#### **Nourishly**

Tracking for meals, hunger and fullness, sleep, stress, mood, digestive symptoms, and activity

[www.nourishly.com](http://www.nourishly.com)

### Patient and Family Resource Centre

The Patient and Family Resource Centre can help you find information on illness, diagnostic tests, drugs, community resources and more. You can also use a computer for email or internet searching.

The Patient and Family Resource Centre is located on Level 0. It is open from 8:00 a.m. to 4:00 p.m., Monday to Friday.

Tel: (416) 242-1000 ext. 81200

Email: [PFRC@hrh.ca](mailto:PFRC@hrh.ca) Web: <https://www.hrh.ca/resources/patient-family-resource-centre/>







## Diabetes Education Centre

Humber River Health offers the following services through its Diabetes Education Centre:

- One-on-one sessions
- Group classes, such as,
  - Prediabetes class (virtual)
  - Type 2 diabetes class (virtual)
  - Gestational diabetes class (virtual)
  - Grocery store tour (virtual)
  - Freestyle Libre class (in person)

We see adults who are:

- At risk for diabetes
- Diagnosed with prediabetes, type 1 diabetes, or type 2 diabetes
- Pregnant with diabetes
- Starting or changing insulin
- Managing diabetes by lifestyle alone or with medicine.

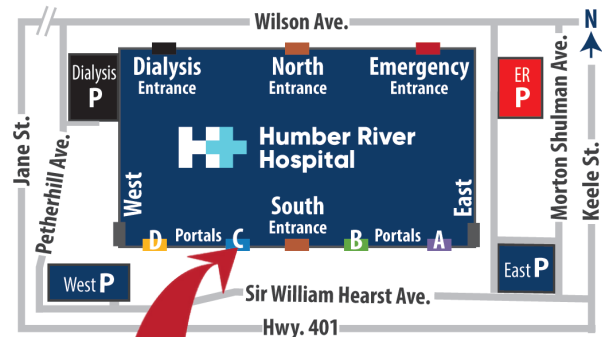
We accept self-referrals and faxed referrals from family doctors. If you have OHIP coverage, there is no cost for these services.

**Meeting your language needs!** At the Centre, we have staff who speak many languages and have access to over-the-phone interpretation in over 150 languages. We also provide some education handouts in other languages.

## Contact us

### The Diabetes Education Centre Humber River Health

Healthy Living Clinic (Level 1)  
1235 Wilson Ave., Toronto, Ont. M3M 0B2  
Tel: (416) 242-1000 ext. 23400  
Fax: (416) 242-1058



### Hours of operation:

Monday, Tuesday, Thursday, Friday:  
8:00 a.m. to 4:00 p.m.

Wednesday:  
8:00 a.m. to 8:00 p.m.