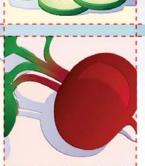
# A Glance at Meal Planning for People with Diabetes





When you have diabetes, your body does not make proper use of the energy circulating in your bloodstream in the form of **glucose**. That is why your glycemia (blood glucose level) can rise above normal values.

The glucose circulating in the bloodstream comes mainly from the **carbohydrates** (sugars) we eat. **Carbohydrates** (ex.: starch, fructose, lactose) are found naturally in many types of food: **starchy foods**, **legumes**, **fruit**, **fruit juice**, **vegetables**, **milk** and **yogurt**. Sugars are also added to many other foods: cookies, sweetened drinks, candy, cake, etc. If you have diabetes, you should not eliminate all carbohydrates from your diet. You should, however, **carefully monitor the amount of carbohydrates tes you eat and apportion them evenly over at least three meals** in order to control your blood glucose.

To avoid or delay complications to your eyes, kidneys, nerves, blood vessels and heart, you should try to maintain your glycemia (blood glucose levels) at

- 4 to 7 mmol/L prior to eating;
- 5 to 10 mmol/L two hours after eating.

#### How much carbohydrate do you need?

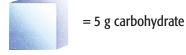
The number of calories and carbohydrates that you need each day depends on many factors, such as your age, height, weight and the amount of physical activity you do. Most people generally need 45 to 75 g of carbohydrates per meal and 15 to 30 g of carbohydrates per snack. The section **Food to eat every day** (p.6) tells you the minimum and maximum number of servings from each food group that you should eat each day to stay healthy. Your dietitian will help you determine the exact amounts that you need.

Dietitian: \_\_\_\_\_

Telephone: \_\_\_\_\_\_

#### Sugar Cubes

The sugar cube concept helps us visualize the carbohydrate content of each food group so you can easily identify the foods with the most carbohydrate and, therefore, the greatest effect on your blood sugar (glycemia). Each sugar cube represents 5 grams of carbohydrate (or 1 teaspoon or 1 packet of sugar).



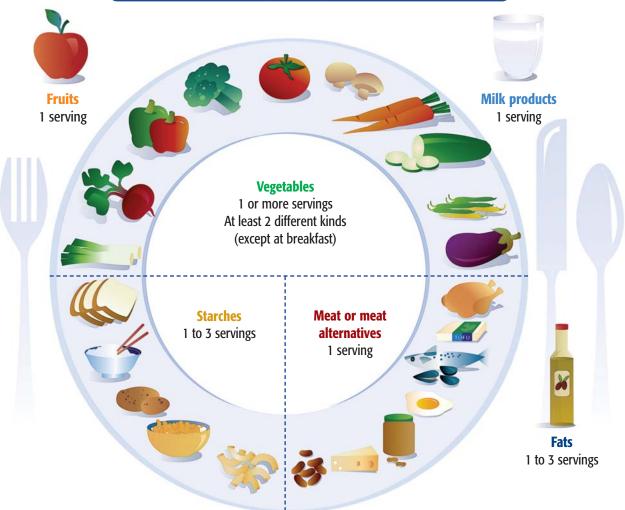
#### Tips to help you control your blood glucose levels and weight

- Try to do at least **30 minutes of moderately intense physical activity** most days of the week. Examples of moderate activity: brisk walking, biking, swimming, aqua fitness, dancing, raking leaves.
- Eat **3 well-balanced meals** per day. Don't skip meals. If you get hungry between meals or are unable to finish a meal, eat a **nutritious snack**. Examples of nutritious snacks:
  - 250 mL of vegetable juice plus raw vegetables
  - 1 fruit with a few nuts
  - 1 slice of toast spread with cottage cheese
  - 250 mL of milk
- Try to eat your meals and snacks at the same time every day. Space your meals 4 to 6 hours apart and snack 3 hours after meals.
- Choose high-fibre foods: whole-grain breads, high-fibre cereals, legumes, brown rice, wholewheat pasta, fruit, vegetables, nuts and seeds.
- Limit your consumption of sweetened and non-nutritious (so-called "empty-calorie") foods: cookies, fruit drinks, soft drinks, candy, brown sugar, sugary cereals, chocolate, jam, cake, molasses, honey, pastry, syrups, sugar, pie, etc. If you do eat them, take a small portion and only eat these foods on rare occasion.
- Drink 1 to 2 litres of water per day and reduce your consumption of fruit juices.
- If you use sugar substitutes (acesulfame-K, aspartame, cyclamates, saccharine, sucralose, maltitol, sorbitol, xylitol, etc.), do so in moderation.
- If you drink **alcohol** (wine, beer, hard liquor), eat something with it, and limit yourself to 1 or 2 drinks per day. Alcohol can increase or decrease your blood glucose level. You should avoid alcohol completely if you have high blood pressure or elevated triglyceride levels.

#### Tips for a healthy heart

- Limit your consumption of foods that are Limit your consumption of very salty foods: high in fat, saturated fat or trans fats: bacon, butter, cookies, deli meats, chocolate, cream, ice cream, chips, fried foods, cheese with more than 20% milk fat, hydrogenated margarine, commercially prepared muffins, pastry, lard, shortening, cream sauces, etc.
  - condiments (ketchup, mustard, etc.), deli meats, chips and other salty snack foods, pickles, sauces (soy, BBQ, etc.) and commercially prepared soups, salt, etc.

#### A **balanced meal** containing 45 to 75 g of carbohydrates looks like this:



#### Use your hand to measure the size of your servings



The tip of your thumb equals about 5 mL (1 teaspoon), or 1 serving of vegetable oil or margarine.



The palm area of your hand equals about 90 g (3 ounces), or 1 serving of meat, poultry, fish or tofu.

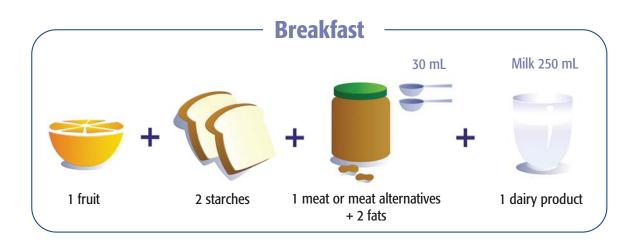


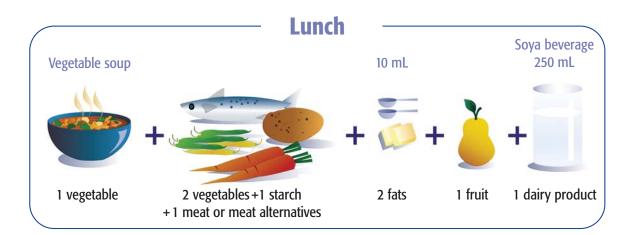
Your thumb equals about 15 mL (1 tablespoon), or 1 serving of nuts or seeds.

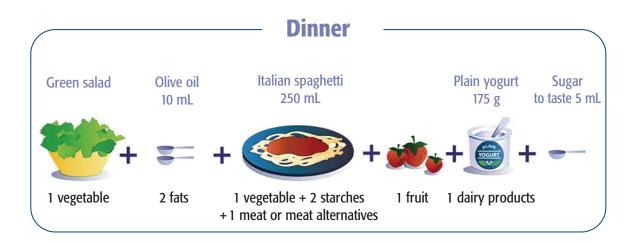


A fist equals about 250 mL (1 cup), or 2 servings of starches, 2 servings of cut-up fruit, 1 serving of vegetables or 1 serving of milk.









## Foods to Eat Every Day

STARCHES	1 serving of starches = 15 g of carbohy	ydrates =
	<ul> <li>Serving of startnes - 15 g of carbon</li> <li>5 to 12 servings per day</li> <li>1 slice of bread</li> <li>1/2 pita pocket or 1/2 hamburger bun</li> <li>4 Melba toasts</li> <li>125 mL (1/2 cup) of cooked pasta</li> <li>125 mL (1/2 cup) of cooked legumes (baked beans, pea soup, lentils, chick peas)</li> </ul>	My needs: servings • 125 mL (1/2 cup) of mashed potatoes • 75 mL (1/3 cup) of <b>cooked</b> rice, bulgur or barley • 75 mL (1/3 cup) of corn kernels • 125 mL (1/2 cup) of breakfast cereal (only lightly sweetened), containing at least 2 g of fibre per serving

VEGETABLES	1 serving of vegetables = 5 g of carbohydrates =	
	At least 3 servings per day       My needs: servings         • 125 mL (1/2 cup) of cooked vegetables         • 125 mL (1/2 cup) of vegetable juice	
	<ul> <li>250 mL (1 cup) of raw vegetables</li> <li>Eat a wide variety of vegetables, in generous quantities.</li> <li>Choose deeply coloured vegetables: deep green, orange, red.</li> </ul>	

Fruits make excellent dessert. They are high in fibre and full of vitamins.

MILK PRODUCTS	1 serving of milk products = 12 to 15 g of carbohydrates =	
	<ul> <li>2 to 4 servings per day My needs: servings</li> <li>250 mL (1 cup) of milk</li> <li>250 mL (1 cup) of enriched soy beverage</li> <li>175 mL (3/4 cup) or 175 g of natural or flavoured yogurt with no added sugar</li> <li>Choose products with 2% milk fat (m.f.) or less.</li> </ul>	

<ul> <li>2 to 3 servings per day</li> <li>60 to 90 g (2 to 3 oz.) of meat, poultry, fish, seafood or giblets</li> <li>125 mL (1/2 cup) or 100 g of firm tofu</li> <li>250 mL (1 cup) of cooked legumes (also counts as 2 servings</li> <li>My needs: servings</li> <li>1 to 2 eggs</li> <li>125 mL (1/2 cup) of cottage cheese</li> <li>60 g (2 oz.) of low-fat cheese (less than 20% m.f.)</li> <li>30 mL (2 tablespoons) of peanut butter (also counts as 2 servings of fat)</li> </ul>
of starches) Trim off all visible fat. Eat fish 2 to 3 times per week.

FATS	1 serving of fats = 0 g of carbohydrates	
	<ul> <li>4 to 8 servings per day</li> <li>5 mL (1 teaspoon) of vegetable oil (ex.: peanut, canola, olive)</li> <li>5 mL (1 teaspoon) of non- hydrogenated margarine</li> <li>Choose monounsaturated or polyunsaturated</li> </ul>	<ul> <li>My needs: servings</li> <li>5 mL (1 teaspoon) of mayonnaise</li> <li>10 mL (2 teaspoons) of salad dressing with a vegetable-oil-base</li> <li>15 mL (1 tablespoon) of nuts or seeds</li> </ul>

### One step at a time...

Changing lifestyle habits takes time and motivation. Attempting to change everything too fast often ends in failure. Set realistic goals, give yourself time and get the help you need (family, friends, professionals, self-help groups, books).

My goals:

Ex. : I will eat 3 meals a day starting next Monday.

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