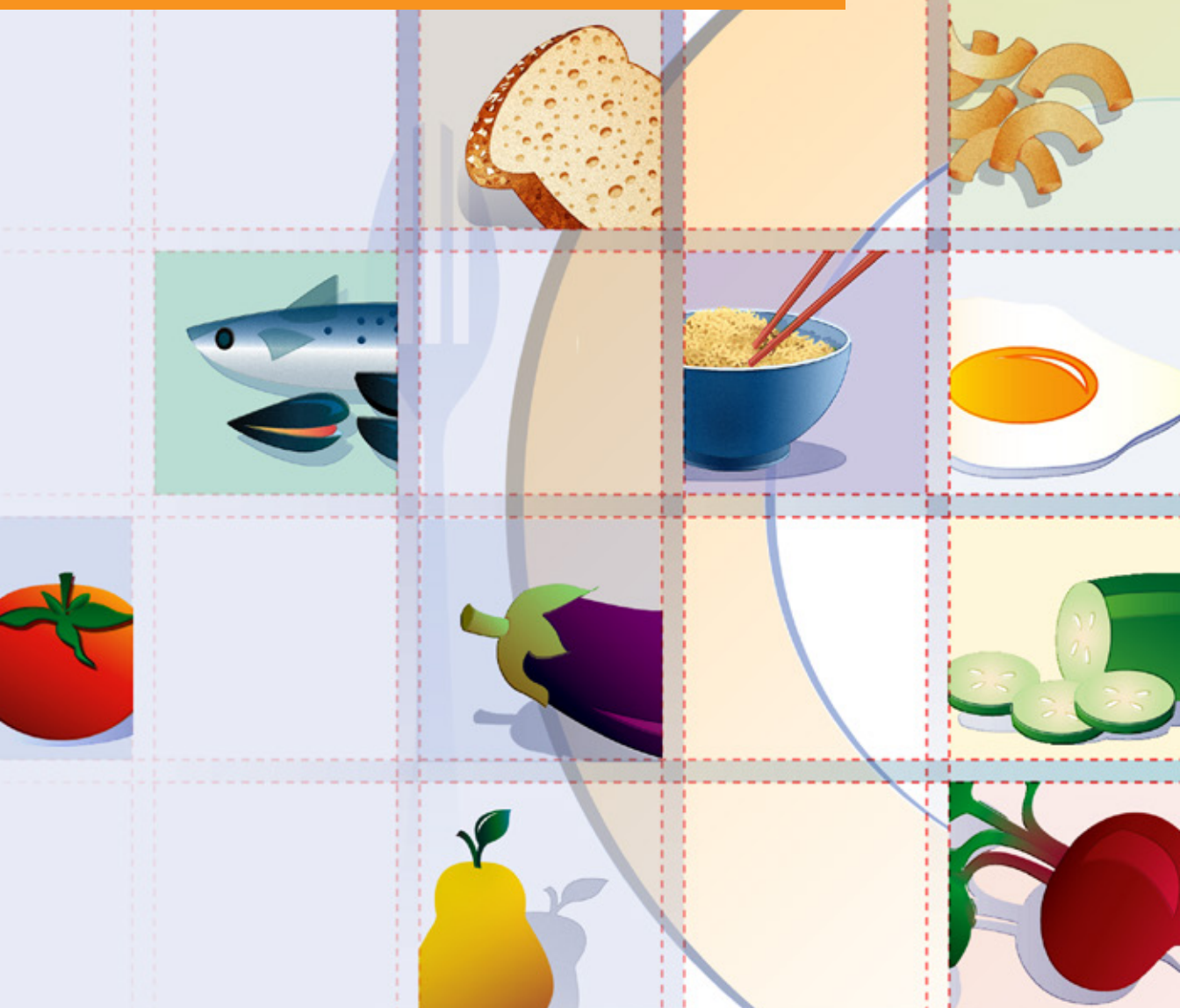


Meal Planning for People with Diabetes at a Glance



When you have diabetes, your body has trouble using the energy circulating in the form of **glucose** (sugar) in your blood, which is why your glycemia (blood sugar level) may rise above normal values.

Glucose circulating in the blood comes mainly from the **carbohydrates** (sugars) that you eat. Carbohydrates are found in many foods:

- They are found naturally in plain milk and yogurt, grain products, legumes, fruits and vegetables and their juices, etc.
- They are added to cookies, sweetened drinks, candies, cakes, granola bars, flavoured milks and yogurts, etc.

If you have diabetes, this does not mean that you should **eliminate** all carbohydrates from your diet since carbohydrates are the body's main source of energy. You should instead keep a close eye on the amount of carbohydrates you eat and spread them out over at least three meals in order to control your blood sugar level.

What amount of carbohydrates do you need?

The amount of carbohydrates that people need every day depends on various factors such as age, gender, height, weight and level of physical activity.

In general, most people need:

- 45 to 75 g of carbohydrates per meal
- 15 to 30 g of carbohydrates per snack, if required

Your dietitian can help you determine the amount of carbohydrates you need.

Dietitian: _____ Telephone: _____

The sugar cube method allows you to visualize the amount of carbohydrates in each food group, making it easier to estimate the total amount in your meals and snacks. Each sugar cube represents 5 grams of carbohydrates (or 1 tsp. or 1 sachet of sugar).



= 5 g of carbohydrates

Blood sugar level targets

To avoid or delay complications affecting your eyes, kidneys, nerves, blood vessels and heart, blood sugar level should normally be between:

- **4 and 7 mmol/L** before meals
- **5 and 10 mmol/L** 2 hours after meals

Tips to help you control your blood sugar level and your weight

- Physical activity offers many benefits for people with diabetes. To get maximum benefits, here are a few recommendations:
 - Do **30 minutes of moderate-intensity physical activity** (walking at a brisk pace, swimming, aquafitness, dancing, cycling, etc.) most days of the week. This activity can also be divided into ten-minute sessions.
 - Add two sessions of resistance exercises using elastic bands or light weights each week.
 - Take advantage of your daily activities (household chores, gardening, etc.) to get moving, and embrace active ways of getting around (walking, cycling, roller-blading, etc.).
- Eat **three balanced meals** every day. Avoid skipping meals. Snacks are not always necessary. However, if you feel hungry between meals or your diabetic medications require them, eat a nutritious snack. For example:
 - During the day: 1 fresh fruit or 175 g (3/4 cup) of yogurt
 - In the evening: 1 slice of toast with 15 mL (1 tbsp.) of peanut butter or 250 mL (1 cup) of milk

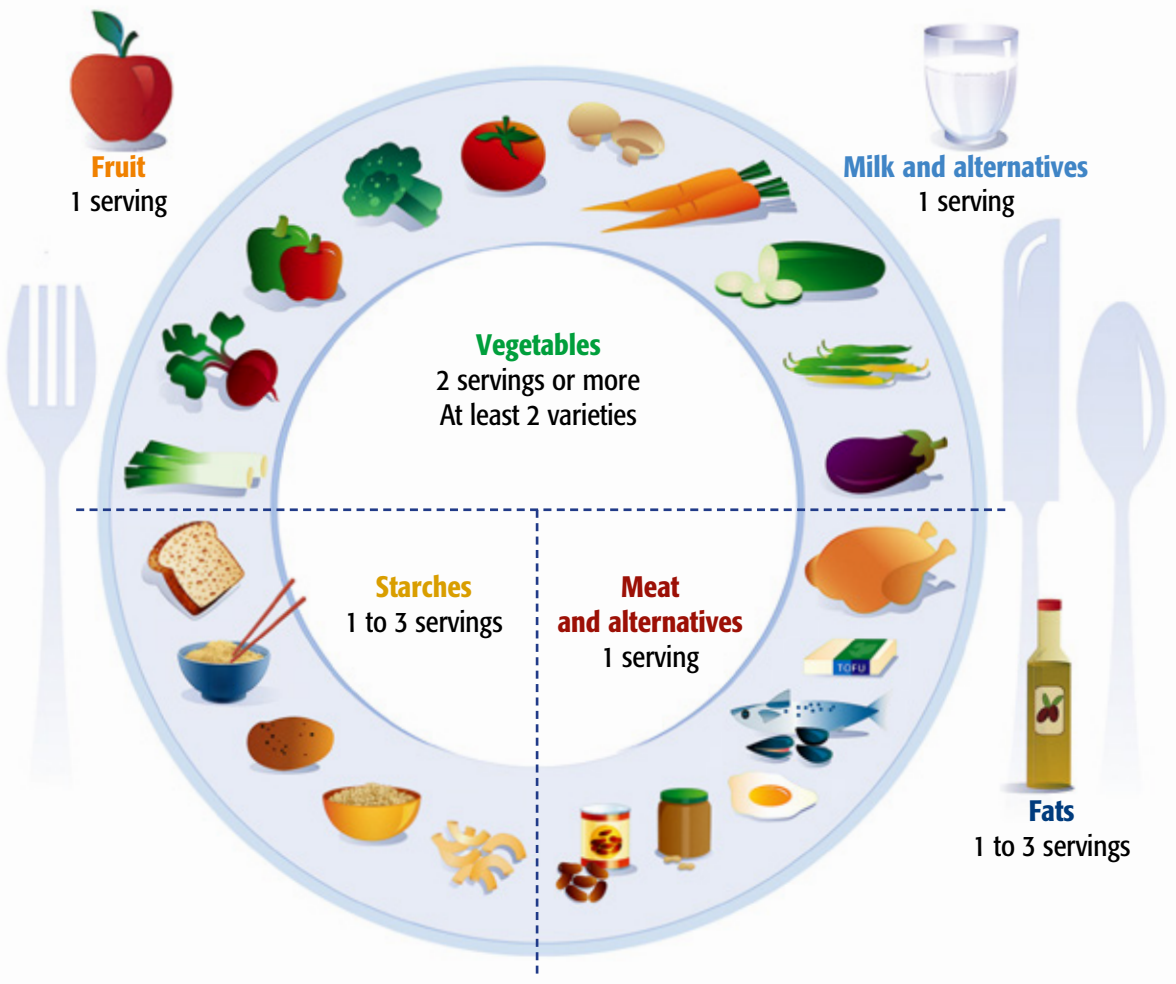
Raw vegetables can be eaten any time of the day!

- Eat your meals and snacks at **regular hours**. Space your meals at 4 to 6 hour intervals and, if needed, eat snacks 2 to 3 hours after meals.
- Go for **high-fibre foods**: whole grain products, legumes, fruits, vegetables, nuts and seeds.
- **Limit your intake of sugar-rich foods with little nutritional value**: donuts, cookies, fruit drinks, soft drinks, candies, brown sugar, sugar-rich cereals, chocolate, jam, cakes, molasses, honey, pastries, syrups, sugar, pies, etc. If you eat these foods, **eat very small servings** and then, **only occasionally**.
- **Drink water regularly** to quench your thirst. Choose water for your everyday beverage.
- If you use **sugar substitutes** (e.g., aspartame, cyclamate, saccharine, sucralose, stevia) or food products containing them, do so **in moderation**.
- If you drink **alcohol** such as wine, beer or spirits, do so while eating. Limit yourself to one or two drinks a day, but don't drink alcohol every day. Alcoholic beverages can raise or lower your blood sugar level. They can also cause weight gain because they are a source of calories. Check with your doctor to find out whether there are risks associated with consuming alcohol in your situation.

Tips for a healthy heart

- **Limit saturated fats** and cholesterol, which are found primarily in animal products and certain vegetable oils (e.g., palm oil) used in many processed foods.
- **Avoid trans fats or partially hydrogenated fats** found in processed foods, such as cookies, donuts, pastries, crackers, pies and fried foods.
- **Limit your intake of high-salt foods**: condiments (ketchup, mustard, etc.), deli meats, potato chips and other salty snack foods, marinades, ready to eat or frozen meals, sauces (soy, BBQ, etc.), store-bought soups and salad dressings.
- **Use less salt when cooking and avoid adding salt at the table**. Spice up your food with herbs, onion, garlic, lemon juice, etc.

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



Use your hand to estimate the size of your servings



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



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



Your thumb equals roughly 15 mL (1 tbsp.), or 1 serving of nuts or seeds.



Your fist equals roughly 250 mL (1 cup), or 2 servings of starches, 2 servings of fruit cut into pieces, or 2 servings of vegetables.

Examples of meals

Breakfast



1 fruit

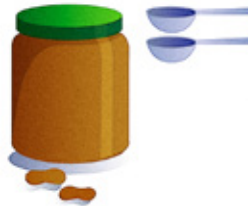
+



2 starches

+

Peanut butter
30 mL



1 meat and alternatives
+ 2 fats

+



Milk
250 mL

1 milk and alternatives

Lunch

Vegetable soup



1 vegetable

+



2 vegetables + 2 starches
+ 1 meat and alternatives

Non-hydrogenated
margarine
2 x 5 mL



2 fats

+



1 fruit

+



Soy beverage
250 mL

1 milk
and alternatives

Supper

Spaghetti
with tomato sauce
and meatballs



1 vegetable + 2 starches
+ 1 meat and alternatives

Garden salad

1 vegetable

Olive oil (salad
dressing)
2 x 5 mL



2 fats



1 fruit

+

Plain yogurt
175 g



1 milk
and alternatives

Foods to eat every day

STARCHES

1 serving of starches = 15 g of carbohydrates =



6 to 10 servings a day



- 1 slice of bread
- 1/2 pita bread or 1/2 hamburger bun
- 4 Melba toasts
- 75 mL (1/3 cup) of **cooked** pasta
- 125 mL (1/2 cup) of **cooked** legumes (red beans, lentils, chickpeas, etc.)
- 1/2 medium-sized potato or 125 mL (1/2 cup) of mashed potatoes
- 75 mL (1/3 cup) of **cooked** rice, couscous, or barley
- 125 mL (1/2 cup) of whole kernel corn
- 125 mL (1/2 cup) of breakfast cereal that is low in sugar and that contains at least 2 g of fibre per serving
- 125 mL (1/2 cup) of **cooked** quinoa

Go for whole grain products.

VEGETABLES

1 serving of vegetables ≤ 5 g of carbohydrates

At least 4 servings a day

- 125 mL (1/2 cup) of whole fresh, frozen or canned vegetables
- 125 mL (1/2 cup) of **cooked** leafy vegetables
- 125 mL (1/2 cup) of low-sodium vegetable juice
- 250 mL (1 cup) of **raw** leafy vegetable

Eat generous amounts of a wide variety of vegetables.

Go for the most highly coloured vegetables: dark green, orange, red.



FRUIT

1 serving of fruit = 15 g of carbohydrates =



2 to 5 servings a day



- 1 medium-sized fruit: orange, peach, apple, pear
- 1/2 banana or 1/2 grapefruit
- 2 small kiwis or 2 plums or 2 clementines
- 3 prunes
- 15 large grapes
- 30 mL (2 tbsp.) of raisins
- 125 mL (1/2 cup) of fruit cut into pieces
- 125 mL (1/2 cup) of unsweetened fruit compote
- 125 mL (1/2 cup) of 100% pure unsweetened fruit juice
- 250 mL (1 cup) of cantaloupe, Honeydew melon, or blackberries
- 500 mL (2 cups) of whole strawberries

Fruit make excellent desserts. They are rich in fibre, vitamins, and antioxidants. Choose whole fruit rather than fruit juice.

MILK AND ALTERNATIVES 1 serving of milk and alternatives = 12 to 15 g of carbohydrates =



2 to 4 servings a day

- 250 mL (1 cup) of milk
- 250 mL (1 cup) of fortified, vanilla-flavoured soy beverage
- 175 mL (3/4 cup) or 175 g of plain yogurt (5 to 10 g of carbohydrate)
- 2 100-g containers of unsweetened, fat-free, fruit or flavoured yogurt
- 100 mL (100 g) of fruit or flavoured (vanilla, coffee, etc.) yogurt, regular or greek

Go for products with 2% or less fat.

MEAT AND ALTERNATIVES 1 serving of meat and alternatives = 0 g of carbohydrate



2 to 3 servings a day

- 60 to 90 g (2 to 3 oz.) of poultry, fish, seafood, or lean meat
- 100 to 150 g (3 1/2 to 5 oz.) of firm tofu
- 175 mL (3/4 cup) of edamame (green soybeans) frozen, shelled
- 250 mL (1 cup) of **cooked** legumes (also equals 2 servings of starches)
- 2 eggs
- 125 mL (1/2 cup) of cottage cheese
- 60 g (2 oz.) of cheese with 20% or less fat
- 30 mL (2 tbsp.) of peanut butter (also equal 2 servings of fat)
- 125 mL (1/2 cup) of greek-style yogurt (0% M.F.)

Replace meat with legumes or soy foods, such as tofu or edamame (green soybeans), more often.

Trim visible fat from poultry and meat. Eat fish two to three times a week.

FATS

1 serving of fats = 0 g of carbohydrate



4 to 8 servings a day

- 5 mL (1 tsp.) of vegetable oil (e.g., canola, olive, peanut)
- 5 mL (1 tsp.) of non-hydrogenated margarine
- 5 mL (1 tsp.) of mayonnaise
- 10 mL (2 tsp.) of salad dressing made from vegetable oil
- 15 mL (1 tbsp.) of nuts or seeds
- 1/6 of an avocado
- 30 mL (2 tbsp.) of ground flax seed, chia seeds

Go for mono-unsaturated and poly-unsaturated fats.

Eating out

Your best strategy to ensure a healthy, balanced diet is to cook your own meals on a regular basis and to only eat meals prepared outside the home on an occasional basis.

When you eat meals prepared outside the home, choose one similar to the balanced meal model. To avoid eating too much, use your hands to estimate the size of the servings.

When you eat out, you should also measure your blood sugar level more often. This will help you to see the impact that meals eaten outside the home have on your blood sugar level and to make the appropriate adjustments, if required.

One change at a time...

Changing your lifestyle habits takes time and motivation. Wanting to change everything too fast often results in failure. Set realistic objectives, give yourself time, and make sure you have all the help you need (family, friends, professionals, support groups, books, etc.).

My objectives

- For example:
- I will eat three meals a day beginning next Monday.
 - I will eat at least two kinds of vegetables at lunch and supper.

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