



An Introduction to Diabetes

Diabetes is a term used to describe a cluster of conditions in which the body is unable to produce any or enough effective insulin. This is a hormone needed for glucose to enter the cells to be converted to energy.

Glucose is the fuel that your body needs. In your diet, this comes from foods such as fruit, milk, some vegetables, starchy foods and sugar. To help control your blood glucose you will need to eat healthy foods and be active. You may also need to take pills and/or insulin.

There are two main types of diabetes

Type 1:

Commonly diagnosed in children and adolescents, this occurs when the pancreas is unable to produce insulin.

Type 2:

Usually developed in adulthood, this occurs when the pancreas does not produce enough insulin and when the body does not effectively use the insulin that is produced.

Healthy Eating Tips for Diabetes

1. Eat three meals each day, including breakfast.
2. Try not to skip meals.
3. Space meals 4 to 6 hours apart.
4. Breakfast, lunch and supper should be about the same size.
5. Avoid very large or very small meals.
6. Have one piece of fresh fruit at each meal.
7. Limit juice to 1/2 cup per day.
8. Limit your intake to high fat foods, including deep fried or fried foods.
9. Limit meat portions to the size of the palm of your hand and choose fish or skinless poultry more often.
10. Be careful of added fats. Choose low fat or fat free dressings or spreads.

Eat Right Ontario: 1-877-510-5102

Space on the Plate Meal Plan

Half of a standard dinner plate should contain at least two kinds of vegetables.

Of the remaining half, one quarter should contain starches such as potato, rice or pasta. The other quarter should contain protein, such as fish, lean meat, chicken, beans or lentils.

Also, be sure to have a beverage like milk and a piece of fresh fruit.

Handy Portion Guide

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

A serving size of peanut butter or cheese would be the size of two thumbs.

A thumb-tip equals a teaspoon. Three thumb-tips equal a tablespoon, about the amount of milk you would put in coffee.

The palm of your hand equals a serving of meat, fish or poultry. This is about three ounces.

A fist equals a cup. This would be the size of a serving of grains and starches.

Blood Glucose Targets

The Canadian Diabetes Association advocates that under optimal circumstances, the fasting or before meal target should be 4.0 – 7.0 mmol/L, and that the 2-hour post meal target should be 5.0 – 10.0 mmol/L.

However, targets need to be individualized.

Ask your Health Care Provider or Diabetes Education Program what your blood glucose targets should be and your risk of hypoglycemia

Hypoglycemia

This refers to a blood glucose level of less than 4 mmol/L or when symptoms are present at a level close to this.

Symptoms may include:

- Trembling, shaky
- Sweaty
- Difficulty concentrating or thinking
- Hungry

Be sure to inform any significant others of these potential symptoms for early hypoglycemia recognition.

Causes of hypoglycemia include:

- Eating less than usual, or delayed meals or snacks
- Undertaking more physical activity than usual
- Recent weight loss
- Drinking alcohol
- Taking too much medication (diabetes pill or insulin)

What you need to do:

1. Don't wait. Act now!
 - Chew 15 grams of glucose tablets OR
 - Drink 3/4 cup (175 mL) of juice or regular pop
2. Follow-up
 - Check your blood sugar after 15 minutes. If less than 4 mmol/L, treat again
 - If your usual meal is more than 1 hour away, you need a snack of slower-acting foods such as 6 crackers and cheese
3. Check your blood sugar before and after treating a low blood sugar, if possible

When to Ask for Assistance

It is important to know the times when you need assistance. Hypoglycemia (low blood glucose) and hyperglycemia (high blood glucose) can both become serious conditions if left untreated.

When to call your Health Care Provider, visit an Emergency Department or call for an Ambulance (911):

Hypoglycemia:

- More than 2 readings/day less than 4 mmol/L OR
- 3-4 readings less than 4 mmol/L in a week OR
- Any severe low blood glucose (where you need help).

Hyperglycemia:

- For 2 consecutive days readings are higher than 14 mmol/L OR
- You are experiencing symptoms such as; nausea, vomiting, blurry vision, urinating more than usual, feeling weak or tired, or being unable to eat or drink.

Additional Information

Ask your health care provider if a referral to a diabetes program has been made for you.

For general diabetes-related concerns prior to accessing a diabetes program, speak to your Health Care Provider or contact Telehealth Ontario at 1-866-797-0000.

Other Instructions: