Blood Glucose Self-Monitoring

BOOKLET

Diabetes Québec

Important Telephone Numbers

My name is _____ **and I have** _____ **diabetes**
(type 1, type 2, gestational, etc.)

Tel.: _____

Tel.: _____

Emergency contact person: _____ Cell.: _____

My family doctor: _____ Tel.: _____

My endocrinologist (if applicable): _____ Tel.: _____

My drugstore or pharmacist: _____ Tel.: _____

My dietitian: _____ Tel.: _____

My nurse: _____ Tel.: _____

Table of Contents

Why do we recommend measuring your blood glucose (sugar)?

- To determine if your blood glucose level (the level of sugar in your blood) is high or low at specific times;
- To check the impact of the various treatment components on your blood glucose and adjust them if necessary;
- To understand the different factors affecting your blood glucose: diet, exercise, sleep, stress, illness, etc.;
- To help your attending physician make changes to your medication, if applicable;
- To check whether the symptoms you are experiencing are related to variations in your blood glucose or not;
- To identify hypoglycemia, a drop in your blood glucose, and treat it immediately;
- To complete the information provided by your glycated hemoglobin (HbA1c), meaning your average blood glucose level for the past two or three months;
- To develop a feeling of trust, responsibility and independence;
- To enhance your ability to self-manage and follow the treatment discussed with your healthcare team.

All this is in order to keep your blood glucose values as close as possible to target values and to reduce the risk of developing diabetes-related complications.

What are the target blood glucose values?

The measurements	For the majority of adults with type 1 or type 2 diabetes*	Your personalized target values, if applicable
Fasting and before meals	4.0 to 7.0 mmol/L	
2 hours after starting a meal	5.0 to 10.0 mmol/L	
Glycated hemoglobin (HbA1c)	7% or less	

* These values come from *2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada*.

Your personalized blood glucose (sugar) monitoring schedule

Your health care team recommends that you measure your blood glucose _____ times per day or _____ times per week.

Recommendation date: _____

Use the table below to plan when you will measure your blood glucose levels according to your physician's recommendations. You can use Xs or ✓s in the table.




Day	Breakfast		Lunch		Supper		Bedtime	Other
	Before	After*	Before	After*	Before	After*	Before	
Monday								
Tuesday								
Wednesday								
Thursday								
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Saturday								
Sunday								

* 2 hours after starting to eat

How do you ensure that your blood glucose reader results are accurate?

- ☐ Follow the usage instructions for your blood glucose reader.
- ☐ Make sure the strips you use are in good condition.
- ☐ Check that your blood glucose meter is working properly by using the control solution often supplied with your meter. If the solution is not provided, you can usually get it from a pharmacist or the company that makes the meter. The recommended times for doing this test are as follows:
  - Each time you open a new container of test strips;
  - If you suspect that your meter or test strips are not working properly;
  - If you repeatedly get unexpected blood glucose readings;
  - If your reader is damaged or has been dropped.
- ☐ At least once a year, compare the results of a fasting blood glucose measurement from your meter with a fasting blood glucose reading obtained from a blood test done at the same time. Consult a health care practitioner to determine how much difference between the two results is acceptable.

When blood tests are requested, make sure the box for a fasting blood glucose test is checked. Ask your doctor for the results or consult your Québec Health Booklet online.

How to use this booklet




Day	Breakfast			Lunch			Supper			Bedtime		Other
	Before	Carbo-hydrates/ insulin	After*	Before	Carbo-hydrates/ insulin	After	Before	Carbo-hydrates/ insulin	After	Before	Carbo-hydrates/ insulin**	
Monday 1 __ / ___	2	3										4
Time												
Observations	5											

* 2 hours after starting to eat

** Not everyone with diabetes needs a snack before bed. When in doubt, talk to a dietitian for personalized advice.

1 Enter the date (e.g., 05 / 03 for March 5).

2 Enter your blood glucose value measured in the upper box and in the box underneath, enter the time when you measured your blood glucose. The "After" column corresponds to your blood glucose measured 2 hours after having begun to eat.

3 Enter the amount of carbohydrates you consumed (in grams) in the upper box. If you take insulin, add in the same box the amount of insulin you administered as needed (in units). In the box underneath, enter the time you started eating your meal.

4 Enter the time and the blood glucose value measured at a time other than the times suggested in the table, if necessary.

5 Note any observations that could explain a variation in your blood glucose level (e.g., diet, exercise, stress, illness, treatment changes, an error in the schedule or dose of insulin or antihyperglycemic drug, hormonal changes, etc.). Use an "*" to indicate hypoglycemia, that is, when your blood glucose level drops below 4.0 mmol/L.

Other recommendations provided: _____

_____

_____




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Questions for your health care team/Notes

Symptoms of hypoglycemia

If you are being treated with insulin or with drugs that increase the production of insulin by the pancreas[1], you are at risk of hypoglycemia.


MOOD SWINGS


WEAKNESS


HEADACHE


BLURRED VISION


DIZZINESS


SWEATING


HUNGER


TREMBLING

1. Gliclazide (Diamicron[MD] and Diamicron[MD] MR), Glimepiride (Amaryl[MD]), Glyburide (Diabeta[MD]), Repaglinide (GlucoNorm[MD]).

Treatment of hypoglycemia (less than 4 mmol/L)

Take immediate action

1. **Take 15 g of rapidly absorbed carbohydrates (choose one):**

— 4 Dex4® tablets;
— 15 ml (1 tablespoon) of corn syrup, honey or maple syrup;
— 15 ml (1 tablespoon or 4 packets) of sugar dissolved in water;
— 150 ml (⅔ cup) of a **regular** soft drink, fruit drink or fruit juice;
— 18 to 20 g of clear candies (ex: 6 Life Savers® candies).

2. **Wait 15 minutes, at rest**

3. **Measure your blood glucose again**

A) If the reading is less than 4 mmol/L: Treat yourself again following steps 1 to 3

B) If the reading is 4 mmol/L or higher: Have a snack containing 15 g of carbohydrates and some protein if the next planned meal or snack is **more than an hour** away. E.g., 1 slice of bread with 30 g (1 oz.) of cheese.

Be proactive!

— Try to identify the cause of the hyperglycemia or hypoglycemia.
— Take the necessary measures to avoid a reoccurrence.
— Consult a health professional, if necessary.

Questions about diabetes?

InfoDiabetes Service
514-259-3422
1-800-361-3504
infodiabete@diabete.qc.ca

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