

## **Type 2 Diabetes:**

# **Sick Day Management with Mealtime Insulin**

When you are sick, your blood sugar level may be harder to keep under control. Your blood sugars may get too high or too low. You need to test your blood sugars more often when you are sick.

### **Things to Remember:**

- 1. Take your usual diabetes medication.....UNLESS**  
you are unable to drink enough fluid to keep hydrated (e.g. vomiting, diarrhea), you should **STOP** the following diabetes medications:
  - Metformin
  - Sulfonylureas e.g. Glyburide, Gliclazide (Diamicon)
  - SGLT2 inhibitors e.g. Jardiance, Invokana, Forxiga
- 2. Check your blood sugar**
  - Check your blood sugar level every 4 hours. Have someone else check it for you if you are too sick to do it yourself.
  - Write down the blood sugar levels so that you have them if you need to call your health care provider.



### **When should I see my health care provider or go to an Emergency Department?**

- have been sick for 2 days and are not getting better
- find your blood sugar level is too high (Stays over 14 mmol/L)
- have a cold, infection or flu that is getting worse
- have diarrhea that is ongoing or getting worse
- have a high fever (greater than 38C or 100.4F)
- have stomach pain and nausea that will not go away
- you are unable to eat or drink due to vomiting for longer than 24 hrs.

## Type 2 Diabetes: Sick Day Management with Mealtime Insulin

### Foods for Sick Days

Drink plenty of sugar-free fluids such as water, weak or caffeine-free tea, sugar free pop, or broth. Try to drink 8 to 10 cups of fluid per day

Continue to eat your usual foods as much as possible. If you are not able to eat your usual foods, have **one** of the following every 1 to 2 hours, even if your blood glucose is high. (Each of these servings contains about 15 grams of carbohydrate.)

- ½ cup (125 ml) fruit juice
- ½ cup (125 ml) regular pop (not sugar-free)
- 1 cup (250 ml) Gatorade®
- ½ cup (125 ml) regular Jell-O®
- 1 twin popsicle
- 1 cup (250 ml) milk
- 1 cup (250 ml) cream soup
- ½ cup (125 ml) ice cream, custard or pudding
- 6 soda crackers
- 1 slice toast with margarine/butter/jam
- ½ cup (125 ml) applesauce
- ½ cup (125 ml) liquid meal replacement

## Type 2 Diabetes: Sick Day Management with Mealtime Insulin

### Insulin Management

Continue to take your insulin even if you are not eating your normal meals. Your insulin requirements may increase when you are sick and so you need to do **ONE** of the following:

- Follow the correction/sliding scale your diabetes team or doctor has given you **Or**
- Follow suggestions given in the tables on page 4 for extra insulin.

Continue to take your long acting insulin when you are ill.

Continue to follow your meal plan. If you are unable to eat your usual foods, try to follow the **Foods for Sick Days** on page 2. You will need to adjust your base dose of your rapid/mealtime insulin based on your intake of carbohydrates.

### What to do if you do not have a preset correction scale

1. When your blood sugar is 14 mmol/l or higher, you need to take extra rapid acting insulin.
2. Insulin adjustments are based on your total daily dose (TDD) of insulin. To get your TDD, add your usual unit doses of both rapid-acting (mealtime) and long acting insulin. For example:
  - Long-acting insulin at bedtime: 40 units
  - Rapid-acting insulin at breakfast: 12 units
  - Rapid-acting insulin lunch: 10 units
  - Rapid-acting insulin dinner: 10 units
  - Your TDD would be  $40+12+10+10=72$  units
3. Your sick day adjustment will then be a percentage of your TDD. The adjustment could be 10%, 15%, or 20% of your TDD, based on your blood sugar levels. See **Table A** on page 4.
4. You can calculate your extra insulin by doing the math yourself. For example, if your TDD is 72 units,  $10\% = 7.2$  extra units (round to 7),  $15\% = 10.8$  extra units (round to 11),  $20\% = 14.4$  extra units (round to 14)

Or

Use **Table B** on page 4 to determine what your suggested sick day insulin adjustment is, based on your blood sugar levels.

## Type 2 Diabetes: Sick Day Management with Mealtime Insulin

**Table A**

Blood Glucose	Extra Insulin (using rapid/mealtime insulin only)
14 to 16 mmol/l	10% of TDD
16.1-22 mmol/l	15% of TDD
22.1 or more	20% of TDD

**Table B**

Total Daily Dose (TDD) Units	Extra 10% rapid insulin	Extra 15% rapid insulin	Extra 20% rapid insulin
11 to 20	1 to 2 units	2 to 3 units	2 to 4 units
21 to 30	2 to 3 units	3 to 4 units	4 to 6 units
31 to 40	3 to 4 units	4 to 6 units	6 to 8 units
41 to 50	4 to 5 units	6 to 7 units	8 to 10 units
51 to 60	5 to 6 units	7 to 9 units	10 to 12 units
61 to 70	6 to 7 units	9 to 10 units	12 to 14 units
71 to 80	7 to 8 units	10 to 12 units	14 to 16 units
81 to 90	8 to 9 units	12 to 13 units	16 to 18 units
91 to 100	9 to 10 units	13 to 15 units	18 to 20 units
101 to 120	10 to 12 units	15 to 18 units	20 to 24 units

Important:

The suggested extra rapid insulin can be taken either by:

1. Adding the suggested dose to your usual mealtime dose of rapid acting insulin.
- Or**
2. Taking an injection of rapid acting insulin every four hours using the suggested dose listed to fix the high blood sugars if not eating your regular meals.