

'Sick day' Diabetes Management Guidelines - when ill with a fever, flu or infection

- ◆ Test blood sugar (glucose) and ketones every 4 hours, all day & night. **If blood ketones >3.0 mmol/L at any time, go to an Emergency Room immediately; you need Intravenous (IV) insulin and fluids.**
- ◆ The **Total Daily Dose (TDD) formula** helps you decide how much **extra** rapid or fast-acting insulin you need to take.
 1. Add up the number of units of insulin (all kinds) you usually take each day. (Use baseline or **usual** doses). Your **TDD = _____ units.**
 2. Calculate 10% = _____ 15% = _____ 20% = _____ of TDD. This is the extra dose (or supplement).
 3. Follow the chart to decide how much fast/rapid acting insulin to take every 4 hours, **in addition to your usual baseline insulin doses.** Repeat insulin every 4 hours, if needed, per chart.
 4. If not eating as usual, replace the usual carbohydrate with sugar containing fluids.

Your blood sugar tests (mmol/L)	Your blood ketone tests mmol/L	ACTION NEEDED * Able to take fluids	Your dose would be:
Blood sugar < 3.9	—	No extra Insulin. Decrease dose of pre-meal insulin as directed. Contact your health team if vomiting!	
Blood sugar 4.0 –16.0	Blood ketones <0.6	Use usual insulin dose (and scale) as for non-sick days.	
Blood sugar 4.0 –16.0	Blood ketones ≥0.6	Take a 10% supplement of rapid or fast-acting insulin, in addition to usual baseline insulin doses.	
Blood sugar > 16.0	Blood ketones <0.6	Take a 10% supplement of rapid or fast-acting insulin, in addition to usual baseline insulin doses.	
Blood sugar >16.0	Blood ketones ≥0.7 – 1.4	Take a 15% supplement of rapid or fast-acting insulin, in addition to usual baseline insulin doses.	
Blood sugar >16.0	Blood ketones ≥1.5- 3.0	Take a 20% supplement of rapid or fast-acting insulin, in addition to usual baseline insulin doses. CALL your Health Care Team as soon as possible!	

Example: At bedtime your blood sugar is 24.8 and blood ketones are 0.8 mmol/L.
Recommended action – take a 15% supplemental dose of rapid or fast-acting insulin, plus bedtime insulin. Recheck blood sugar and ketones every 4 hours during the night! Repeat insulin dose in 4 hours, as needed per chart. Maintain usual carbohydrate and extra fluids.

Pump Users:

If you experience a period of high glucose levels (> 16 mmol/L) and you are uncertain as to the cause, assume the site is not delivering insulin. Check for blood ketones (or urine if blood test not available). If blood ketones are > 0.6, your insulin delivery has likely been stopped for 4 hours or more.

1. Take insulin bolus with a syringe or pen, using the usual correction factor or the supplement below depending on your blood ketone level. Do not bolus with the pump.
2. Change the site and start using the pump again.
3. Check BG regularly, until stable.

Using Sick day Guidelines

- ◆ **ALWAYS TAKE SOME INSULIN! NEVER OMIT IT!**
 - ◆ When ill, your body may release its own stored glucose, causing a rise in blood glucose even though you may not eat as much. You always need to take insulin and you may need extra insulin.
- ◆ **CHECK YOUR BLOOD GLUCOSE AND KETONES (BLOOD OR URINE)**
 - ◆ Test blood glucose and ketones before meals and/or every 4 hours around the clock.
- ◆ **DRINK PLENTY OF EXTRA FLUIDS***
 - ◆ Your body needs about 9 cups (2200ml) of fluid daily to prevent dehydration.
 - ◆ If you cannot eat as usual, replace solid food with sugar containing fluid (see below).
- ◆ **IF YOU VOMIT TWICE OR MORE WITHIN 12 HOURS:**
 - ◆ Call your doctor or go to an Emergency Room.

Dietary Guidelines:

* IF YOU CANNOT EAT AS USUAL, REPLACE SOLID FOODS WITH SUGAR CONTAINING FLUIDS. Try to take 10 grams Carbohydrate every hour. Suggested 10 grams servings:

<u>mls</u>		<u>Cups</u>
75	Apple or Pineapple Juice	1/3
75	Orange Juice	1/3
50	Regular Jello	1/4
75	Regular Pop	1/3
75	Ice Cream	1/3
50	Sherbet	1/4
200	Milk	3/4
75	Sugar-Sweetened Kool-Aid	1/3
125	Apple Sauce	1/2
1/2	Popsicle	

****Avoid milk products if you are vomiting or have diarrhea**