

Managing Type 1 diabetes can be more challenging when you're sick. Illnesses like colds, flu, or stomach bugs can cause your blood sugar levels to rise, and your body may need more insulin than usual. Proper sick day management is essential to avoid serious complications like diabetic ketoacidosis (DKA). This guide will help you manage your diabetes effectively during sick days and keep you safe.

Why Does Blood Sugar Rise When You're Sick?

When you're sick, your body produces stress hormones like cortisol and adrenaline. These hormones can raise blood sugar levels and make your body less responsive to insulin. This means you may need more insulin and more frequent monitoring of your blood sugar and ketone levels when you are unwell.

What is DKA and How to Prevent It?

DKA is a life-threatening condition that occurs when your body breaks down fat too quickly, producing high levels of ketones (acids) in the blood. Early detection of DKA is key and monitoring your blood ketone levels can help prevent it.

- **How to Test for Ketones:** Use a personal blood ketone meter, such as the Freestyle Lite meter or Freestyle Libre Reader, which measures both glucose and beta-hydroxybutyrate (BHB), a type of ketone.
- **When to Act:** Any blood ketone value above 0.6 mmol/L is abnormal and requires immediate action.

Steps for Sick Day Management in Type 1 Diabetes

1. Test Blood Sugar Frequently:

- Check your blood sugar every 15-30 minutes until it starts to go down.

- Your goal is to keep blood sugar levels below 10 mmol/L (180 mg/dL).

2. Test Blood Ketones Regularly:

- Check your blood ketones every 2 hours until they start to decrease.
- Your goal is to keep ketones below 0.6 mmol/L, though this may take 12-18 hours to achieve.

3. Push Salty Fluids:

- Staying hydrated is critical to prevent dehydration and help your body manage the illness.
- Drink 1-2 cups of broth (beef, chicken, or vegetable) every 30 minutes. You can also make your own saline solution by dissolving 1 teaspoon of salt in 2 cups of water or 2 teaspoons in a liter of water.

4. Take Extra Insulin:

- If your blood sugar is above 12 mmol/L (220 mg/dL), take extra rapid-acting insulin every hour.
- **Dosing Example:** If your average total daily dose (TDD) of insulin is 70 units (e.g., 34 units of basal insulin and 36 units of rapid insulin), take 15% of this amount as a bolus every hour. In this example, that would be 10-11 units of rapid insulin.
- Continue taking extra insulin every hour until your blood sugar drops below 12 mmol/L.

5. Know When to Seek Medical Care:

- If you are unable to keep fluids down due to vomiting.
- If your blood sugar remains above 15 mmol/L (270 mg/dL) after 8 hours, even with extra insulin.
- If you experience symptoms like difficulty breathing, severe stomach pain, or confusion—these could be signs of worsening DKA and require immediate medical attention.

Special Considerations for Those on SGLT2 Inhibitors

If you take an SGLT2 inhibitor (e.g., empagliflozin, dapagliflozin, canagliflozin), you need to be extra cautious when sick:

- **Stop the SGLT2 Inhibitor:** If you feel unwell, stop taking your SGLT2 medication, even if your blood sugar is below 10 mmol/L (180 mg/dL).
- **Focus on Hydration:** Drink salty fluids like broth to maintain hydration and electrolyte balance.
- **Monitor Blood Ketones:** Even with lower blood sugar levels, ketones can become elevated when using SGLT2 inhibitors, so frequent ketone testing is essential.