

DKA Prevention in Insulin Pump: Practice Cases #1

The risk of Diabetic Ketoacidosis (DKA) when on insulin pump is high because no long-acting insulin is used. Instead, the pump releases a tiny amount of rapid insulin every few minutes or bigger amounts when you bolus. If something blocks the insulin from being delivered or absorbed, the risk of DKA goes up, quickly. DKA left untreated can lead to hospitalization, or even death.

To keep you safe on pump, your educator will discuss DKA prevention with you - often. Please answer how you'd manage these examples below as if you were on a pump (if you aren't already). This is designed to give you practice for when "things just happen." Discuss your plans with your educator.

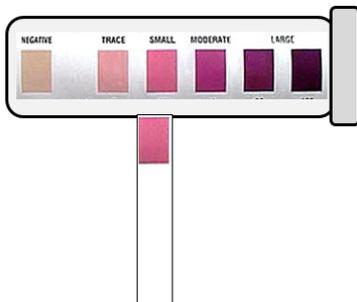
Questions:

- Suppose you're planning to exercise. Your glucose is 16.6 mmol/L so you checked for ketones. You know that some ketones are ok. Your result is below. (One is blood ketones. One is urine. You only need to use one, so choose. These results are equal.)



QUESTIONS:

- To lower your glucose reading, would you decide to exercise, give insulin or both?



- If you decided to give insulin, how many units would you give? And how?

- Is there anything else you'd consider doing?

- Suppose you were 5.6 mmol/L at lunch and bolused for a normal meal. Two hours after eating, the glucose was 13 mmol/L. You gave a bit of a correction according to your pump's suggestion. However, an hour after that you are now 19.6 mmol/L. Your ketones are negative. What would you do to keep yourself safe?
- You're driving from Edmonton to Calgary. You're almost 2 hr from home. Your pump has a malfunction alarm and stops delivering insulin. What would you do to keep yourself safe?