

# Insulin Pump Readiness Quiz

WakeMed Children's Endocrinology & Diabetes

**Directions:**

The purpose of this quiz is to help determine if you and your family are ready to start insulin pump therapy. A passing score is needed in order to start insulin pump therapy.

After reading the Insulin Pump Therapy PowerPoint, please complete this quiz. Once completed, you may submit it to our office either by drop off, mail, or fax. For patients 12 years of age and younger, one quiz will be provided for the patient and parent(s)/caretaker to complete and pass the quiz together. If the patient is 13 years of age or older, then the patient and the parent(s)/caretaker will each be expected to take and pass the quiz.

You must have 12 out of the 15 questions correct to pass this quiz. If you score less than 12 correct, you may be given an opportunity to meet with a provider to discuss the quiz and insulin pump therapy further or you can discuss the quiz at your next scheduled clinic appointment.

If you have any questions or concerns, please contact our office.

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1. What is an insulin pump? (Select all that apply)
- a. Device that will check my blood sugar and automatically deliver insulin.
  - b. Alternate way to deliver insulin instead of through a pen or syringe.
  - c. Device that delivers insulin continuously through a small catheter that I program and manage.
  - d. Device that delivers **long** acting insulin.
  - e. Device that delivers **short** acting insulin.

2. True/False

An insulin pump means I will not have to check my blood sugar anymore and will automatically fix my blood glucose control.

3. What best defines a **basal** rate in an insulin pump?
- a. Long acting insulin that lasts for 24 hours that is given once a day.
  - b. A programmed short acting insulin rate that delivers small amounts every few minutes over 24 hours.
  - c. A short acting insulin rate that doesn't need to be programmed because it is the same for everyone and never changes.
  - d. A short acting insulin dose that is given before meals or to correct a high blood sugar.

4. What best defines **bolus** dosing in an insulin pump?
- a. Long acting insulin given at various times over 24 hours.
  - b. A programmed short acting insulin dose given every 2-3 hours through the pump.
  - c. A programmed short acting insulin dose that delivers small amounts every few minutes over 24 hours.
  - d. A user initiated dose of short acting insulin given before meals or to correct a high blood sugar.

5. You check your blood sugar before dinner and it is 212 mg/dL. You count your carbohydrates before dinner and you see that you are having 57 grams of carbohydrates. You take 1 unit of insulin for every 10 grams of carbohydrates. Your blood sugar correction formula is  $(BG-125)/25$ .

What do you expect the bolus dose of insulin to be?

- a. 9 units
- b. 6 units
- c. 4 units
- d. 10 units

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6. Which of the following are **advantages** of using an insulin pump?

- a. Improved blood sugar control.
- b. Eliminate individual injections.
- c. Convenience and flexibility.
- d. All of the above.

7. Which of the following are **disadvantages** of using an insulin pump?

- a. Diabetic Ketoacidosis (DKA).
- b. Remembering to give insulin boluses.
- c. Psychological factors.
- d. All of the above.

8. True/False

One of the most common difficulties for pump users is forgetting to bolus for food eaten.

9. Yes/No

Is it important to give bolus insulin whenever carbohydrates are eaten because carbohydrates are faster than insulin?

10. A pump user is unsure of what to do while exercising and wearing an insulin pump and fears of dropping low. What should the pump user do?

- a. Physically take off the pump.
- b. Eat a snack before exercise and decrease the amount of bolus insulin given.
- c. Utilize a temporary basal rate to decrease insulin while exercising.
- d. All of the above could be an option during exercise.

11. You are about to play a game of kickball with your friends. The game usually lasts for an hour but can be longer. You test your blood sugar and it is 305 mg/dL. You check your ketones and they are small. What should you do next?

- a. Nothing- let's get the game going!
- b. Do a temporary basal rate at a decrease of 50% for an hour and go play.
- c. Administer a bolus dose of insulin and then go play.
- d. Administer a bolus dose of insulin, drink water, and hold off on the game.

You are bummed you are missing the game but check blood sugar and ketones in two hours like Dr. Lagarde and Dr. Lockemer suggested you do. Your blood sugar is now 212 mg/dL and you have no ketones. Are you okay to join the game?

- a. Yes
- b. No

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12. You are watching TV when all of a sudden your pump alerts you that there is a malfunction. It is unclear if you are getting the insulin you need. What do you do next?
- a. Call the toll free number on the back of your pump.
  - b. Ignore the alert and continue watching TV.
  - c. Call the office to speak with a member of your diabetes team and make sure you have a backup plan.
  - d. A and C are both correct actions to take.

13. True/False

There is no need to have a backup plan when I am on the pump, such as Lantus or short-acting insulin pens/vials, because my pump will never malfunction or fail.

14. You are ready to tell Dr. Lagarde or Dr. Lockemer you are ready to start insulin pump therapy. What clinical criteria must be present at your next clinic appointment? (Select all that apply)
- a. Testing at least four times a day.
  - b. Ability to count carbohydrates correctly.
  - c. Forgetting to take insulin doses.
  - d. Testing at least twice a day.
  - e. Ability to calculate insulin doses correctly.
  - f. Ability to guess how much insulin to take.
  - g. Taking Lantus and short-acting insulin all of the time with the exception of a few missed doses.
15. What other behaviors are necessary to show Dr. Lagarde or Dr. Lockemer you are ready to go on an insulin pump?
- a. Motivation/desire to be on an insulin pump.
  - b. Problem-solving skills.
  - c. Family support/realistic expectations.
  - d. All of the above.