

Explaining hypoglycemia and diabetes

Recent advancements in diabetes research have provided diabetic patients with a number of options to assist with the self-management of their diabetes.

Read Beth and Nadia's conversation and complete the last part of the information leaflet.

Nadia: There are basically three options for giving yourself your daily dose of insulin.

Beth: Oh, great. I didn't realize there were any options.

Nadia: Yes, there are. There's been quite a lot of research into giving diabetics the easiest, most convenient way of taking their daily insulin. Ok, let's look at the first option. This one is worn on the body all the time, that's night and day. It's an insulin pump.

Beth: How do they work?

Nadia: They deliver a steady flow of insulin throughout the day. They can push through both rapid and short-acting insulin- it doesn't matter which- through a catheter which is placed under the skin.

Beth: I see. So you wouldn't be giving yourself a needle every time.

Nadia: No, you wouldn't. That's one advantage of the technology. The other upside is that it can give you an extra, or bolus, dose to cover those times when you eat more carbohydrate, for example during a meal or snack. The real advantage of this is that patients have fewer large swings in blood glucose levels. The main disadvantage is the cost. It's the most expensive option.

Beth: Ok. What other options are there?

Nadia: The second option is insulin with an insulin syringe. Insulin is drawn up from a vial into a disposable syringe. This means that the dose required can be drawn up, and varying doses can be drawn up if needed.

Beth: Would that be, say, if you'd eaten a little extra treat that day?

Nadia: Could be. Also, one or two types of insulin can be mixed in the syringe as long as you follow the rule: cloudy insulin before clear insulin.

Beth: Right. The markings on the side of the syringe look quite small, don't they?

Nadia: The markings are difficult to see, which makes drawing up accurate doses more difficult. It's the cheapest option but the least convenient.

Beth: Right.

Nadia: That leads us to option three. It's called an insulin pen. This one has an insulin cartridge which fits into the device and can be changed when it's finished. There are also pre-filled devices which are disposable and easier for diabetics who have arthritis or are visually impaired.

Beth: They would be much easier to use, wouldn't they?

Nadia: Yes, they're much easier to use and more convenient than syringes. They can even fit into your pocket and look like the real thing! You do still need a needle with this one. The needle is inserted on the end of the device and changed with its injection.

Beth: I see and I suppose you still have to store the insulin in the same way? It has to be stored in the fridge, doesn't it?

Nadia: Any unopened insulin can be stored in the fridge, just don't let it freeze. Once the insulin is opened it can last up to thirty days if it's kept at a temperature of less than thirty degrees.

Beth: That's easy to remember. Thirty degrees for thirty days. Thanks, Nadia.

Option 1

- Worn all the time, delivers a (1) _____ of insulin throughout the day.
- Rapid or short-acting insulin is delivered through a (2) _____ placed under the skin.
- Give an extra, or (3) _____, dose to cover times when more carbohydrate is eaten during a meal or snack.
- Patient has fewer (4) _____ in blood glucose levels.
- Most expensive option.

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Option 2

- Insulin is drawn up from a (5) _____ into a (6) _____ syringe.
- (7) _____ doses can be drawn up if needed.
- One or two types of insulin can be (8) _____ in the syringe.
- Markings on the side of the syringe can be difficult to see, which makes drawing up (9) _____ more difficult.
- Cheapest option but least (10) _____ .

Option 3

- Insulin (11) _____ fits into the device and can be changed.
- (12) _____ - _____ devices are disposable and easier for diabetics who have arthritis or are visually impaired.
- Easier to use and more (13) _____ than syringes; can even fit into your pocket.
- Needle is inserted on the (14) _____ of the device and changed with each injection.

Discuss the advantages and disadvantages of each option. Which one would you recommend for Beth? Which one would you choose if you were Beth?