

Insulin and blood glucose with type 1 diabetes

Why do I have to take insulin?

With type 1 diabetes, the body suffers from a lack of insulin. The cells which normally produce insulin are destroyed, leading to high levels of blood glucose and feelings of sickness. To keep your blood glucose in balance, insulin must be supplied to the body through daily insulin injections or an insulin pump. If the body does not receive insulin, you can suffer from ketoacidosis, which is an acute and potentially life-threatening condition.

Why do I have to take insulin?

With type 1 diabetes, the body suffers from a lack of insulin, which makes blood glucose excessively high. To keep your blood glucose in balance, insulin must be supplied to the body through daily insulin injections or an insulin pump.

Why do I have to check my blood glucose myself?



Regular blood glucose tests are an important part of diabetes treatment.

You decide how frequently to test your blood glucose after discussing it with your diabetes team. By measuring your blood glucose, you can find out about the correlation between nutrition, exercise and blood glucose. Aside from nutrition and exercise, blood glucose can be affected by stress, fevers and infections, and other medicines. Blood glucose tests also help determine whether you need to adjust your insulin dose and help you avoid excessively low blood glucose.

Your personal target levels for fasting glucose and mealtime glucose are determined in discussion with your diabetes team. It is generally recommended that blood glucose should be between:

4-6 mmol/l – in the morning and before meals

4-8 mmol/l – 2 hours after a meal

Why do I have to check my blood glucose myself?

Blood glucose affects how you feel, and also your health in the long run. Checking your blood glucose yourself is therefore important.

By checking it yourself, you can find out how your blood glucose is affected by different foods, exercise and insulin treatment.

What are fasting glucose and mealtime glucose?

Fasting sugar/fasting glucose is measured in the morning after fasting overnight. Mealtime glucose is measured two hours after a meal and indicates how well your body can cope with the energy from the meal.

What is low blood glucose?



Excessively low blood glucose is known as hypoglycaemia. If blood glucose is below 4 mmol/l, you need to consume something sweet to increase blood glucose.

- Take dextrose (3 grams per 10 kg of body weight).
- Drink water.
- Measure your blood glucose again after approx. 15 min.
- Repeat if necessary.

If you do not have any dextrose, take sugar cubes, fruit juice, squash, a soft drink or anything sweet. Low blood glucose must always be remedied immediately so that it does not decrease to excessively low levels. If blood glucose is too low, there is a risk of unconsciousness.

Signs of low blood sugar may be:

- Sweatiness, shakiness and palpitations
- Paleness, hunger
- Irritation
- Headaches
- Reduced attentiveness, slurred speech
- Abnormal vision

If you require more information, you can ask your doctor or nurse. You are also welcome to contact Medical Information at Lilly.

Telephone: 08-737 8800
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