



Adjusting your Twice Daily Premixed Insulin

Name of my insulin	Name of my device
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My target blood glucose range is: **mmol before meals and** **mmol before bed.**

Premixed insulin is usually given twice a day, before breakfast and before evening meal. It is a mixture of mealtime and background insulin. It is important that you have a regular meal pattern ensuring each of your meals contains around the same portion of carbohydrate when prescribed premixed insulin.

If your glucose is regularly above or below your target range the appropriate insulin dose should be adjusted.

The step-by-step approach to insulin dose adjustment

1. Which glucose is out of your target range?
2. Exclude other causes.
3. Is there a consistent pattern in your glucose readings over 3 -4 days?
4. Adjust the relevant insulin dose by 2 - 4 units.
5. Review your glucose over 3 - 4 days - Has the insulin dose adjustment been effective?
6. Repeat the process from step 1.

Which insulin dose should I adjust?

Time of Glucose Test	Glucose above your target range	Glucose below your target range
Before Breakfast	Increase evening meal dose	Reduce evening meal dose
Before Lunch	Increase breakfast dose	Reduce breakfast dose
Before Evening Meal	Increase breakfast dose	Reduce breakfast dose
Before Bed	Increase evening meal dose	Reduce evening meal dose

Only make **one** dose adjustment at a time every 3-4 days. You will know when you have made the correct changes as your glucose levels will stay within your target range without experiencing regular hypos (when your glucose falls to below 4 mmol.).

Current Insulin Dose	Recommended Change to your Dose
10 – 20 units	Increase or decrease your dose by 1 – 2 units
21 - 30 units	Increase or decrease by 2 – 3 units
More than 30 units	Increase or decrease by 3 – 4 units

For further advice contact the Solihull Diabetes Community Team on 0121 7704432
See overleaf for hypoglycaemia signs symptoms and management.

What is hypoglycaemia?

Hypoglycaemia, or a 'hypo', occurs when the level of glucose in your blood drops too low. A blood glucose level of below 4.0 mmol/L is a hypo. Some people may experience hypoglycaemic symptoms at higher blood glucose levels.

What are the signs?

Signs of hypoglycaemia include hunger, irritability, blurred vision, trembling, feeling drowsy, sweating heavily, tingling of the lips, difficulty concentrating, slurred speech, and looking pale.

If left untreated, a severe hypo can lead to unconsciousness. If you are unable to wake up a person with diabetes, call 999 immediately.

How to treat a hypo

1. At the first signs of a hypo, you should test your blood glucose level to confirm hypoglycaemia. If you are using a CGM device (Libre or Dexcom) please confirm that you are experiencing a hypo by using a manual (finger prick) test with a glucose meter.
2. If your blood glucose level is below 4.0 mmol/L, have 15-20g of a fast-acting carbohydrate.

Examples of hypo treatments include:

- 200ml (a small carton) of smooth orange juice
- 60 ml Glucojuice or Lift, 5 glucotabs or 6 dextrose tablets
- A glass of full sugar (not diet) fizzy drink. Check the amount of carbohydrate per 100ml as these vary. You may need more than 200ml
- Sweets: 4-5 jelly babies, or 8- 10 jellybeans

Wait 10-15 minutes and re-test your blood glucose level.

If your level is still low, take another 15-20g fast-acting carbohydrate and re-test after another 10-15 minutes. If your level is 4.0 mmol/L or higher, you should then eat some longer-acting carbohydrate. If it is not a mealtime, have a snack of 15-20g of longer-acting carbohydrate to make sure your glucose level does not drop again before your next meal.

This could be one of the following:

A piece of fruit, a slice of bread or toast, a pot of yogurt, a small bowl of breakfast cereal, half a pint of milk, a medium slice of malt loaf, two digestive biscuits.

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