Treating hypoglycaemia or “hypos” (Insulin pump)

Hypoglycaemia or a “hypo” means a low level of glucose in the blood. Hypos can occur for a number of different reasons. These include not eating enough carbohydrate, having too much insulin or some diabetes medications. Unplanned exercise or alcohol can also cause hypos.

Common hypo symptoms include:
• feeling hungry
• feeling “shaky”
• sweating
• being irritable or mood changes
• feeling weak or tired

If a hypo is suspected:

Step 1: Test BGL
• If less than 4 mmol/L: treat with 1 serve/exchange* (15g) of fast acting carbohydrate.
• If less than 2.5 mmol/L: treat as above AND suspend pump for 30mins or until BGL is more than 4 mmol.
• DO NOT BOLUS for carbohydrate given for hypo treatment!

Step 2: Re-test BGL in 15 mins – if BGL still below 4 mmol/L repeat Step 1 until BGL is more than 4mmol/L.

Step 3: Usually there is no need to follow with slow acting carbohydrate on an insulin pump.

If the next meal or snack is more than 30 minutes away you may choose to have 15g of slower-acting carbohydrate.

If BGL is less than 4 mmol/L but there are no symptoms, still treat as above. Some people lose the ability to feel hypo symptoms.

<table>
<thead>
<tr>
<th>Fast-acting carbohydrate – 1 serve (15g carbohydrate)</th>
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<tr>
<td>#Lucozade 100ml or Glucose tablets (#Dextabs) or Gel : 3-4 tablets or 1 tube gel (equal to 15g carbohydrate) or Jelly beans : 6-7 regular sized or Jelly beans 4 large (e.g. Glucogel®) or #Fruit Tingle 6, # Cool Mints 4 #Regular non-diet cordial (undiluted) : 30-40ml or #Sugar, Jam or Honey: 1 tablespoon or #Fruit juice or #regular soft-drink (non diet): 150-200ml</td>
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<th>Slower-acting carbohydrate– 1 serve (15g carbohydrate)</th>
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<tr>
<td>Bread : 1 slice or #Fruit : 1 medium piece or Biscuits : 2-3 plain sweet biscuits or #Milk : 1 cup (250 ml) or 1 tub low fat yoghurt or 1 Muesli Bar</td>
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*Children under 4 years of age: use ½ serve of carbohydrate #Indicates gluten free
NB – Sweet foods that are also high in fat (e.g. chocolate and ice-cream) are not the best foods to treat a hypo. The fat content slows down the absorption of the carbohydrate.

**It is important to always carry hypo treatment.**

Do not give extra insulin to correct high blood glucose levels for at least 6 hours following any hypo event.

Pump settings may need to be changed if hypos occur frequently, or if slower acting carbohydrates are often needed to maintain blood glucose levels after a hypo or between meals. Discuss this with the Diabetes team.

**Hypo emergencies**

If a hypo is not treated quickly and the blood glucose level drops too low this can lead to:

- A loss of coordination
- Confusion
- Slurred speech
- Loss of consciousness/seizures.

If the person needs help to treat the hypo this is called a **serious hypo**.

If the person is unconscious, drowsy or unable to swallow **do not give food or fluid by mouth**.

**This is an EMERGENCY.**

- Place the patient on their side and clear the airway
- Call an ambulance (000) and state diabetic emergency
- Give glucagon if available and you are trained to give it

**Glucagon** is a hormone which RAISES blood glucose levels. It should only be injected by someone trained to give it. People with diabetes should make sure family members, friends or flatmates are trained to give glucagon if needed. A doctor or a Credentialed Diabetes Educator can teach people how to give glucagon injections.

After glucagon treatment, extra carbohydrate should be eaten straight away to stop blood glucose levels falling again.

Family members, friends or flat mates should be made aware of how to stop or disconnect a pump in the event of a severe hypo.