Hypoglycaemia
How to recognise, treat and prevent Hypos

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What is a hypo?

A hypo (or hypoglycaemia) occurs when your blood glucose (sugar) level drops too low. A reading below 4mmol/L is too low and should be treated as a hypo, even if you don’t feel low. Sometimes it can be hard to balance food, activity and medication. Your blood glucose levels may then go too low and you can feel hypo.

What does a hypo feel like?

Everyone has their own hypo warnings. The more common ones are:

- Sweating
- Feeling shaky or dizzy
- Loss of energy/weakness
- Hunger
- Pounding heart
- Speech problems
- Blurred vision
- Tingling around the mouth
- Difficulty concentrating

Sometimes your friends or family may notice the early symptoms before you do.
What causes a hypo?

Hypos are more likely to happen when:

- you have delayed or missed a meal
- you have less carbohydrate (starchy) foods than usual
- you take extra exercise or activity without eating a carbohydrate snack or cutting back on your medication
- you take too much insulin or too many tablets
- you have been drinking alcohol

Will I have a hypo?

Anyone taking insulin or sulphonylurea tablets like Gliclazide or Glibenclamide may experience hypos.

How can I prevent a hypo?

- Eat regular meals with starchy carbohydrate (e.g. potatoes, rice, pasta, bread or cereals)
- Plan ahead — you may need to take extra starchy carbohydrate if you think your meal is going to be delayed
- If you are more active or exercising have an extra starchy carbohydrate snack, or more with your meal
- You may be advised to reduce your insulin when you are exercising
- Check your blood glucose levels before and after activity or exercise — you may need extra carbohydrate for several hours if you have been exercising a lot. If your blood glucose reading is the lower end of normal e.g. 4-7mmol/L before activity/exercise have a snack
- If you have been drinking alcohol, have a starchy carbohydrate snack before bed (e.g. toast/cereal)
To Treat your Hypo

**Step 1**
If you feel low, or have any of the symptoms discussed
Check your blood glucose levels if possible
If it is less than 4mmol/L follow these steps

**Step 2**

<table>
<thead>
<tr>
<th>Glucose less than 4 mmol/l take:</th>
<th>Glucose less than 3 mmol/l take:</th>
<th>Glucose less than 2 mmol/l take:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Dextro-Energy tablets</td>
<td>14 Dextro-Energy tablets</td>
<td>1-2 tubes Glucogel or 4 jelly babies</td>
</tr>
<tr>
<td>or</td>
<td>or</td>
<td>And</td>
</tr>
<tr>
<td>5 GlucoTabs</td>
<td>10 GlucoTabs</td>
<td>14 Glucose Tablets or 10 Glucotabs</td>
</tr>
<tr>
<td>or</td>
<td>or</td>
<td>or</td>
</tr>
<tr>
<td>1 bottle GlucoJuice</td>
<td>2 bottles GlucoJuice</td>
<td>2 bottles GlucoJuice</td>
</tr>
<tr>
<td>or</td>
<td>or</td>
<td>or</td>
</tr>
<tr>
<td>150-200mL Orange Juice</td>
<td>300-400mL Orange Juice</td>
<td>300-400mL Orange Juice</td>
</tr>
<tr>
<td>Or</td>
<td>Or</td>
<td>Or</td>
</tr>
<tr>
<td>4 jelly babies</td>
<td>8 jelly babies</td>
<td>8 jelly babies</td>
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<tr>
<td>or</td>
<td>or</td>
<td>or</td>
</tr>
<tr>
<td>15-20g of fast acting carbohydrate</td>
<td>30-40g of fast acting carbohydrate</td>
<td>30-40g of fast acting carbohydrate</td>
</tr>
</tbody>
</table>
Step 3
Recheck your blood glucose levels in 10 mins.
If still below 4mmol/l, repeat step 2
Once above 4mmol/l have a starchy snack or your meal
e.g. Piece of fruit or 1 slice of toast or cereal bar or 1 sandwich

Step 4
Try to work out what happened. If hypos are an ongoing, consider reducing your medication or contacting your usual care provider for advice.
Be prepared—carry appropriate hypo treatment with you at all times (see overleaf)

Chocolate & other snacks are not appropriate first line hypo treatment as they do not work so quickly

As soon as you feel hypo check your blood glucose levels (if able), or if you have a blood glucose of less than 4mmol/L on routine testing, treat it immediately (see overleaf)

Lucozade Energy sugar content has been reduced. If you are used to using it, you will need to increase the amount you take by 2-3 times depending on the flavour

Contact your team if hypos are happening regularly

If you are using continuous glucose monitoring or the Libre system, please check your blood glucose with a meter
References
American Diabetes Association: Standards of Medical Care in Diabetes. Diabetes Care: 2016 39 (Supp1) s1-s106


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Tattersall RB: Frequency, causes and treatment of hypoglycaemia in Frier BM, Fisher BM: Hypoglycaemia in clinical diabetes: 1999 : Chichester

www.diabetesuk.org [Accessed 02/03/17]

www.nhs.uk/Conditions/Hypoglycaemia/Pages/Treatment.aspx [Accessed 02/03/17]
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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