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## Hypoglycaemia

Hypoglycaemia, or hypo, is the medical term for low blood glucose levels – that is a blood glucose level of less than 4 mmol/l. This is too low to provide enough energy for your body's activities. Hypos can happen when you are treated with insulin or some diabetes tablets. No matter how much you know about diabetes or how careful you are, if your diabetes is treated with certain medication, you are likely to experience some hypos. If you have Type 2 diabetes and your diabetes is not treated with certain tablets or insulin, you will not have a hypo.

### **What causes a hypo? A hypo can be caused by the following:**

- too much insulin / too much diabetes medication
- a delayed or missed meal or snack
- not enough food containing carbohydrate
- unplanned or strenuous activity
- drinking too much alcohol or alcohol without food
- sometimes there is no obvious cause.

### **Signs of a mild hypo**

Most people have some warning signs when their blood glucose level starts to go low. These include:

- feeling hungry
- trembling or shakiness
- sweating
- anxiety or irritability
- going pale
- fast pulse or palpitations
- tingling of the lips
- blurred vision.

### **Signs of a more severe hypo**

- difficulty in concentrating
- vagueness or confusion
- irrational behaviour.

### **Immediate treatment**

Once you notice your hypo warnings, take action quickly or it is likely to become more severe, and you may become unconscious or have a fit.



Immediately treat with a 10-20g of a short-acting carbohydrate such as:

- a glass of Lucozade or non-diet drink
- three or more glucose tablets
- five sweets, eg jelly babies
- a glass of fruit juice

The exact quantity will vary from person to person.

If your hypo is more severe and you cannot treat it yourself, someone else can help you by:

- applying GlucoGel (or treacle, jam or honey) on the inside of your cheeks and gently massaging the outside of your cheeks.
- If you are unconscious, Glucagon can be injected if the person you are with has been trained to use it. Otherwise the people you are with should call an ambulance immediately.

**Important:** If you are unable to swallow or unconscious, you should not be given anything by mouth (including GlucoGel, treacle, jam or honey). Make sure your family and friends are aware of this. If you are unconscious, you should be placed in the recovery position (on your side with your head tilted back) so that your tongue does not block your throat.

## Follow-on treatment

To prevent your blood glucose levels dropping again, you should follow your sugary foods with 10-20g of a longer-acting carbohydrate such as:

- half a sandwich
- fruit
- a small bowl of cereal
- biscuits and milk
- the next meal if due.

The exact quantity will vary from person to person.

## Hypos at night

If you have a hypo while sleeping, it is unlikely that you will come to any harm. The hypo may wake you but, if it does not, you may wake up feeling very tired, with a headache or hangover sensation. If you are concerned about night-time hypos, check your blood glucose between 2am and 3am when hypos are most likely to happen. Keep something sugary by your bed just in case. Alternatively have a snack before bed-time such as biscuits and milk, half a sandwich, fruit or yoghurt.

## Hypos and physical activity

Physical activity lowers your blood glucose level so it is important to eat some form of carbohydrate before, possibly during and after your activity especially if it is strenuous or lasts a long time. Hypos can happen up to 36 hours after strenuous or prolonged physical activity so you might need to adjust your medication or carbohydrate intake to compensate.

## Hypos and driving

Always test your blood glucose levels before driving. If you feel you may be going hypo, pull over, stop the car as soon as it is safe to do so and remove the keys from the ignition. Leave the driving seat and treat your hypo in the usual way. Do not attempt to start driving again until you are sure your blood glucose levels have risen again.



## Hypos and alcohol

Drinking a lot of alcohol or drinking on an empty stomach makes a hypo more likely to occur. The outwards signs of a hypo are also very similar to those of being drunk. Always have something to eat if you are drinking alcohol, and tell the people you are with about your diabetes and what to do if you need help treating a hypo.

### Important points to remember:

- Always have something sugary with you for use in an emergency.
- Wear some medical I.D.
- Tell your friends or family what signs you have when you go hypo and how to treat it, as you may not be able to think clearly when your blood glucose goes low.
- If you do become unconscious through a hypo, your body will eventually release its stores of glucose into the blood and you will recover.
- You will come to recognise your own hypo warning signs, but these may change over time, so be prepared to check your blood glucose level if you experience any unusual symptoms.

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