

Managing hypos (hypoglycaemia)



Who is this leaflet for?

This leaflet is for people with diabetes, and their relatives or carers. It explains what hypoglycaemia (hypo) is and how to treat it. It also provides information on how to avoid it happening.

What is hypoglycaemia?

Hypoglycaemia (often called a 'hypo') is when your blood glucose level falls below a certain level (4 mmol/l).

You may experience a hypo if your diabetes is treated with insulin, or with diabetes tablets that encourage your pancreas to make insulin, such as Gliclazide.

What causes a hypo?

Blood glucose levels are more likely to fall too low if you have:

- had less carbohydrate (starchy) food than usual
- delayed or missed a meal
- had too much insulin or too many tablets
- been more active than usual
- had alcohol to drink.

Extremes in temperature may also cause a hypo but sometimes the cause is unclear.

Try to work out the cause of a hypo so that you can prevent it happening again.

What are the symptoms?

You may feel:

- shaky
- faint
- hungry
- irritable.

You may appear to others as:

- vague
- pale
- drowsy
- bad tempered.

You may experience:

- sweating
- headache
- a fast pulse or palpitations
- blurred vision
- poor concentration
- tingling around your mouth, hands, or feet.

You may have only one or two symptoms. Some people may not experience hypo symptoms until their blood glucose level falls well below 4 mmol/l. Even if symptoms are not present, a level below 4mmol/l is considered a hypo and should be treated.

What about night hypos?

Hypos can occur whilst you are asleep. These may wake you at the time or you may find you have symptoms such as headaches, tiredness and feeling sweaty on waking in the morning.

**Never ignore the warning signs of a hypo –
always treat a hypo immediately even if it happens
just before a meal.**

Flash / Continuous Glucose Monitoring systems

In times of rapidly falling glucose or symptoms of hypo, blood glucose (finger prick) monitoring must be used.

How do I treat a hypo?

Hypos are treated in two stages.

Stage 1

Take 15–20g of fast-acting carbohydrate food, such as **one** of the following:

- 150–200ml (mixer size can) of Coca Cola or Pepsi (not zero sugar or diet)
- 5–7 Dextrosol type glucose tablets
- 4–5 Lift glucose tablets
- 3–4 jelly babies
- 150–200ml pure fruit juice (small carton)
- 3–4 heaped teaspoons sugar dissolved in water
- 170–220ml Lucozade Original.

The carbohydrate content of products can change - check food labels regularly.

Chocolate, biscuits, or milk are not suitable at this stage.

Wait for 10 minutes, and then test your blood glucose. If it is still below 4mmol/l repeat Stage 1.

If your blood glucose remains below 4mmol/l after 3 attempts of Stage 1 treatment - seek medical advice.

Once your blood glucose is 4mmol/l or above go to Stage 2.

Stage 2

Take 15-20g of slower-acting carbohydrate, such as **one** of the following:

- a medium / large portion of fruit eg one banana or an apple.
- a medium slice of bread or toast.
- a small bowl of cereal.
- a cereal bar.
- a glass of milk (300-400ml)
- your next meal if that's due.

Stage 2 of hypo treatment is important to stop your blood glucose from dropping too low again, but be careful not to overtreat your hypo.

Overtreating hypos

This means that you have taken more carbohydrate than you need to treat your hypo. This will result in your blood glucose level going too high.

What else should I do?

- Tell the people around you what is happening.
- If you are unsure – do a blood test. However, if you don't have your meter with you, go ahead and treat it anyway
- If you feel really unwell – treat the hypo first, then do a blood test afterwards.
- Always carry ID to let other people know you have diabetes.
- Do not take insulin for the carbohydrate eaten to treat a hypo.
- Once you have treated a hypo and your blood glucose has returned to 4mmol/l or above, you should take your insulin/diabetes medications as usual.

What happens if a hypo is not treated?

If you delay treatment you may become confused or lose consciousness. This is referred to as a severe hypo.

How is severe hypoglycaemia treated?

Other people may need to help you. Make sure your family and friends know what to do:

- Glucose gels such as Glucogel / Glucoboost may be used if you are unable to swallow but are still conscious.
- Glucose gels should not be given by mouth if you are unconscious.
- If you are unconscious your family or friends should call an ambulance or give an injection of glucagon (if they have been shown how to do so).
- Once conscious, you must eat some slower-acting carbohydrates (see Stage 2).

How can I prevent a hypo?

- Test your blood glucose regularly.
- If you are more active than usual, have extra carbohydrate to eat or reduce your insulin.
- Avoid drinking alcohol on an empty stomach, or drinking too much and have a starchy carbohydrate snack before bed (eg toast/cereal)
- Ensure you are giving the correct insulin or diabetes medication dose at the recommended time and remember to rotate your injection sites.

Always carry hypo treatment with you so that you are able to treat hypos quickly.

If you are having lots of hypos it is important to discuss this with your diabetes nurse or doctor to review your treatment as you may need less insulin, or fewer diabetes tablets.

Driving and diabetes

If you take insulin or diabetes medication that puts you at risk of hypos, it is important to ensure that you:

- check your blood glucose level before driving and every two hours thereafter
- do not drive if your blood glucose is less than 5mmol/l – have a small starchy snack first, such as a portion of fruit or two plain biscuits
- always carry hypo treatment in the car.

If you have a hypo whilst driving you must:

1. Stop the car as soon as possible.
2. Remove the keys from the ignition.
3. Move into the passenger's seat if it is safe to do so.
4. Check your blood glucose level. If you are using a Flash / Continuous Glucose Monitoring system, you must undertake a finger prick test.
5. Treat the hypo as advised in this booklet.

Do not drive for at least 45 minutes after you have recovered from the hypo, as your reactions will be slower.

What does the law say?

- **If you are a Group 1 vehicle driver (cars/motorbikes)** – you must:
 - have adequate awareness of hypoglycaemia
 - notify the DVLA and not drive if you have had more than one episode of severe hypoglycaemia (requiring the assistance of another person) while awake in the last 12 months.
- **If you are a Group 2 vehicle driver (LGV/PVC/lorries/buses)** – you must:
 - have full awareness of hypoglycaemia
 - notify the DVLA and not drive following all episodes of severe hypoglycaemia (requiring the assistance of another person) including episodes while you are asleep.

Unrecognised hypoglycaemia

Sometimes people who have had diabetes for a long time discover that they are having a hypo when they test their blood glucose level (ie it is below 4mmol/l) but they feel well and do not have any symptoms. This is called unrecognised hypoglycaemia or loss of hypo awareness. This is potentially very dangerous and could lead to the loss of your driving licence. If you think that this applies to you, it is essential that you contact your diabetes nurse as there are steps you can take to help restore your awareness of hypos.

Contact us

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Further information

If you would like more information about diabetes, you may find it useful to join or visit the web site of Diabetes UK:

Address: Diabetes UK
10 Parkway
London
NW1 7AA

Tel: 020 7424 1000

Careline: 0345 123 2399

Website: www.diabetes.org.uk

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

