

hypoglycaemia & diabetes

Hypoglycaemia is a condition that occurs when the blood glucose level has dropped too low, usually below 4mmol/L, although this can vary. It is important to treat hypoglycaemia quickly to stop the blood glucose level from falling even lower. It is also commonly referred to as a 'hypo', low blood glucose or insulin reaction.

What are the main causes of hypoglycaemia?

Hypoglycaemia can be caused by one or a number of events such as:

- | | |
|--------------------------------|---|
| > Delaying or missing a meal. | > Not eating enough carbohydrate. |
| > Unplanned physical activity. | > More strenuous exercise than usual. |
| > Drinking alcohol*. | > Too much insulin or diabetes tablets. |

While these are known causes of hypoglycaemia, in many cases, no specific cause can be identified.

What are the symptoms?

While symptoms vary from person to person, common feelings are:

- | | |
|---|-----------------|
| > Weakness, trembling or shaking. | > Sweating. |
| > Light headedness. | > Headache. |
| > Lack of concentration/behaviour change. | > Dizziness. |
| > Tearful/crying. | > Irritability. |
| > Numbness around the lips and fingers. | > Hunger. |

If you feel any of these symptoms, test your blood glucose level if time and circumstances permit. If you are unable to do so, treat as a 'hypo' just to be sure.

* The risk of hypoglycaemia increases, the more alcohol you drink. Refer to the *Alcohol and Diabetes* information sheet.

Hypoglycaemia is most common in people who inject insulin or are taking certain tablets to manage their diabetes. It is not a problem for those who manage their diabetes through a healthy eating plan alone.



hypoglycaemia & diabetes

How is a 'hypo' treated?

The first thing to do is to be sure you're safe. For example, if you're driving a vehicle, pull over to the side of the road. Then:

STEP 1 – Most important!

Have some easily absorbed carbohydrate, for example:

- Glucose tablets equivalent to 15 grams carbohydrate **OR**
- 6–7 jellybeans **OR**
- 1/2 can regular soft drink (not 'diet ') **OR**
- 3 teaspoons sugar or honey **OR**
- 1/2 glass fruit juice

Please Note: For those taking Glucobay® (Acarbose), hypoglycaemia must be treated with glucose.

If circumstances permit, re-test blood glucose levels to ensure they have risen above 4mmol/L. It may take 10–15 minutes to see a rise in blood glucose levels. If symptoms persist or your blood glucose level remains below 4 mmol/L, repeat Step 1.

STEP 2

If your next meal is more than 20 minutes away, you will need to eat some longer acting carbohydrate. This could be one of the following:

- A slice of bread **OR**
- 1 glass of milk or soy milk **OR**
- 1 piece of fruit **OR**
- 2–3 pieces of dried apricots, figs or other dried fruit **OR**
- 1 tub natural low fat yoghurt **OR**
- 6 small dry biscuits and cheese.

For more individualised advice, please speak to your diabetes health professional.

What happens if it's not treated?

If not treated quickly, the blood glucose level can continue to drop which may progress to:

-
- > Loss of coordination. > Slurred speech.
 - > Confusion. > Loss of consciousness/fitting.
-

You will need the help of others!

What to do if the person is unconscious, drowsy or unable to swallow:

THIS IS AN EMERGENCY!

They must not be given any food or drink by mouth.

Here's what needs to be done:

- Place the person on their side making sure their airway is clear.
- Give an injection of Glucagon if available and you are trained to give it.
- Phone for an ambulance (dial 000) stating a 'diabetic emergency'.
- Wait with the person until the ambulance arrives.
- When they regain consciousness, the person will require carbohydrate to maintain their blood glucose level.

Glucagon

Glucagon is a hormone which raises the blood glucose level and is injected in a similar way to insulin. Glucagon is recommended to reverse severe hypoglycaemia in people with diabetes. If you are able to treat your own 'hypo', you do not need Glucagon which is always given by another person. Your doctor or diabetes educator will recommend you have Glucagon on hand in case of a severe 'hypo' and will show you, your family and friends how to use it.

Hypoglycaemia unawareness

Some people feel no symptoms of a 'hypo', or only experience symptoms when the blood glucose level drops very low. This problem is more likely to occur in someone who has had diabetes for a number of years or in people who have 'hypos' frequently. People who have hypoglycaemia unawareness must check their blood glucose levels more frequently. It is strongly recommended they discuss their condition with a doctor or diabetes educator.

hypoglycaemia & diabetes

What else should I do?

- > Wear identification that says you have diabetes.
- > Make a note in your monitoring book of any 'hypos' you have and discuss it with your doctor or diabetes educator at your next visit.
- > Make sure your family, friends, co-workers, school staff and carers know how to recognise and treat hypoglycaemia.
- > Look for the cause of your 'hypo' so you can try to prevent the situation from occurring again.
- > Contact your doctor or diabetes educator if you are having 'hypos' often.
- > If on insulin or certain types of diabetes medication, always carry quick acting 'hypo' treatment with you.
- > If taking medication called Acarbose (Glucobay®), carry pure glucose with you such as glucose tablets, glucose gel or Lucozade.
- > Refer to the *Alcohol and Diabetes* information sheet for more advice about drinking alcohol and hypoglycaemia.
- > Eat carbohydrates if you are drinking alcohol.
- > Before driving a motor vehicle, test your blood glucose level and make sure it is above 4 mmol/L.



supported by **novo nordisk**®

Would you like to join Australia's leading diabetes organisation?

- > Dietary services
- > Educational literature
- > Free magazines
- > Product discounts
- > Children's services
- > Support groups

For more information phone **1300 136 588** or visit your State/Territory Organisation's website:

| | | | |
|------------|--|------------|--|
| ACT | www.diabetes-act.com.au | NSW | www.diabetesnsw.com.au |
| NT | www.healthylivingnt.org.au | QLD | www.diabetesqld.org.au |
| SA | www.diabetessa.com.au | TAS | www.diabetestas.com.au |
| VIC | www.diabetesvic.org.au | WA | www.diabeteswa.com.au |

The design, content and production of this diabetes information sheet has been undertaken by the eight State and Territory member organisations of Diabetes Australia Ltd listed below with the support of an unconditional grant from Novo Nordisk.

- > Diabetes Australia – NSW
- > Diabetes Australia – Queensland
- > Diabetes ACT
- > Diabetes SA
- > Diabetes Australia – Victoria
- > Diabetes Australia – Tasmania
- > Diabetes WA
- > Healthy Living NT

The original medical and educational content of this information sheet has been reviewed by the Health Care and Education Committee of Diabetes Australia Ltd. Photocopying this publication in its original form is permitted for educational purposes only. Reproduction in any other form by third parties is prohibited. For any matters relating to this information sheet, please contact National Publications at dapubs@tpg.com.au or phone 02 9527 1951.