

# Hypoglycaemia in diabetes



# Hypoglycaemia



Information for children and young people

Great Ormond Street Hospital for Children NHS Foundation Trust

## Hypoglycaemia

- Hypoglycaemia or 'hypo' is the word used to describe a low blood glucose level
- The blood glucose will be 3.9mmol/l or below

## What causes hypos?

- Too much insulin
- Not enough food
- Extra activity/exercise
- Poor absorption of food
- Some medications
- Alcohol and drugs

## Symptoms

- These can be varied and people may experience very different symptoms
- Common symptoms that occur are: hunger, feeling shaky, dizzy, sweating, headache, feeling angry and looking pale
- If your blood glucose drops below 2.8mmol/l, the brain is not supplied with enough glucose and you may struggle to concentrate and/or your behaviour may change

## Notes

# How do I treat a hypo?

## The 15 Rule

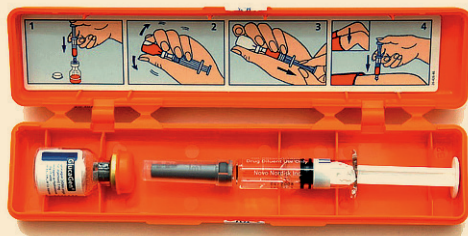
- Treat a blood glucose of 3.9mmol/l or below (even if you feel alright)
- Treatment is by taking a fast-acting carbohydrate by mouth
- Treat as soon as possible, to prevent your blood glucose dropping even further. Correct treatment will also prevent your blood levels rising too high afterwards (rebound hyperglycaemia)
- Carry hypo treatment with you at all times
- You will need about 15g of fast-acting carbohydrate, this may vary depending on your age

Fast-acting carbohydrate	Quantity	
Lucozade®	100mls	½ cup
Glucose tablets	3 – 5	1 tablet = 3g carbohydrate
Non-diet fizzy drink	150 – 200ml	1 mini-can
Fruit juice	150 – 200ml	1 small carton
Glucogel®	1 – 2 tubes	Each tube has 10g
Jelly sweets such as Haribo®, Fruit Pastilles®, wine gums	20g	1 very small packet/4-6 sweets

- Once you have treated the hypo, wait for 15 minutes and re-test. The aim is to restore the blood glucose back to a normal level, aiming to reach 5.6mmol/L.
- Chocolate, biscuits, milk, bread, cakes and fruit are not suitable hypo treatments as the glucose is absorbed too slowly. Your blood glucose could continue to drop while the food is being absorbed
- You should not need to eat more after treating your hypo. If you have a further hypo you may wish to consider eating some starchy carbohydrate.
- If this happens regularly you should contact your diabetes team as your insulin may need adjusting.
- If the hypo is just before a meal it is important to treat the hypo before eating. You may wish to consider taking insulin after eating in this situation.

## Severe hypoglycaemia

- This is uncommon
- It is when your blood glucose has dropped too low and your brain cannot work properly
- If you are conscious, then use the 15 rule
- If you are unconscious, then nothing should be put in your mouth. You should be given the glucagon injection. A parent or carer can do this or they can call an ambulance and the paramedic will be able to give it instead. Glucagon works within 10 minutes



- Once you have regained consciousness, you should eat some starchy carbohydrate.
- After having the glucagon injection there is a risk of further hypoglycaemia so you need to be reviewed at your local hospital.
- Any severe hypoglycaemia should be discussed with your specialist diabetes team to prevent it from happening again



Call our **Clinical Nurse Specialist for Diabetes** on 020 7405 9200 ext. 1597 or **Diabetes Specialist Dietitian** on 020 7405 9200 ext. 5941

The **Juvenile Diabetes Research Foundation (JDRF)** provides support and advice to families of children with diabetes. Call them on 020 7713 2030 or visit their website at [www.jdrf.org.uk](http://www.jdrf.org.uk)

**Diabetes UK** is the main support organisation in the UK for anyone affected by diabetes. Call their Careline on 0845 120 2960 or visit their website at [www.diabetes.org.uk](http://www.diabetes.org.uk)



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Great Ormond Street Hospital  
for Children NHS Foundation Trust,  
Great Ormond Street,  
London WC1N 3JH  
Tel: 020 7405 9200

[www.gosh.nhs.uk](http://www.gosh.nhs.uk)

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