



# TREATING HYPOGLYCAEMIA IN CHILDREN AND YOUNG PEOPLE WITH DIABETES (HYBRID CLOSED LOOP INSULIN SYSTEM)

# What is hypoglycaemia?

Hypoglycaemia or "hypo" means that your blood glucose level (blood sugar) is less than 4.0 mmol/l. Some people call this "going low". It is normal to have a hypo now and again. Hypos make different people feel different things. This is your body's way of warning you that your blood glucose is too low. You will need to act straightaway.

Here is a list of some of the things that children and young people with hypoglycaemia may feel or signs that other people may notice:

- Tired
- Confused
- Difficulty concentrating
- Moody
- Dizzy
- Tingling lips
- Hungry
- What causes a hypo?
  - Too much insulin
  - Increased activity levels
  - Inaccurate carb counting
  - Insulin taken at the wrong time

- "funny" tummy
- Weak and "shaky"
- Fuzzy vision
- Hot and sticky
- Heart beats quickly
- Look pale
- Dark rings beneath eyes
- Fasting
- Alcohol
- Hot weather
- Hot bath or shower

# What should I do if I am hypo?

If your glucose level is under 4.0 mmol/l, this means you are having a hypo. It is important to treat your hypo **straightaway**. There are 3 easy steps to follow which will make you feel better.



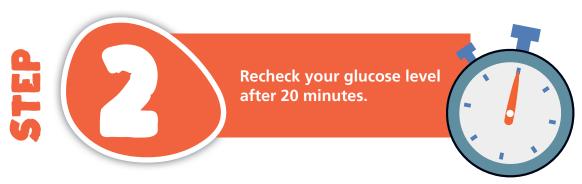
You will need to have fast-acting carbohydrate food or drink immediately. The amount that you need depends on how old you are.

See the table below for examples:

	Under 5 years old (2-3g carbohydrate)	5-10 years old (5g carbohydrate)	Over 10 years old (7g carbohydrate)
Lucozade	30ml	55ml	85ml
Lucozade Sport	45ml	85ml	125ml
Lift Fast Acting Glucose Shot	10ml	20ml	30ml
Lift Fast Acting Glucose Chew	1	1-2	2
Dextrose Tablets	1	2	3
Fruit juice	25ml	50ml	75ml
Coca Cola*	25ml	50ml	75ml
Haribo – Starmix Treat Size Bag	2 sweets	4 sweets	1/2 bag (5 sweets)
Wine gums/Fruit Pastilles	1	2	3
Skittles	3	6	8
Starburst	1	1-2	2
Cola Bottles	1	2	3
Jelly Babies	1	1	2

<sup>\*</sup>The carbohydrate content of other fizzy drinks may be different, so check the label.





If your sensor glucose level is still below 4.0 mmo/l, you will need to confirm this reading with a blood glucose check. If your blood glucose is still below 4 mmol/l repeat steps 1 and 2. If your blood glucose level is above 4 mmol/l remember that there is usually a delay between your sensor glucose level and blood glucose reading.

If your blood glucose level is below 4.0 mmol/l after 3 attempts of fast-acting carbohydrate treatment, contact the Children's Diabetes Service for advice. (The telephone numbers for urgent advice are at the end of the leaflet.)

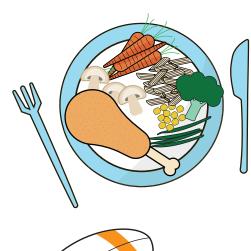
## What if my hypo is just before a meal?

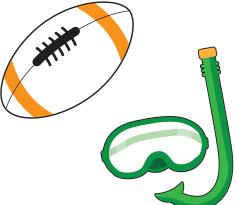
If you have a hypo just before a meal, take your usual fast-acting carbohydrate (step 1). Once the glucose level is above 4mmol/l, give your insulin bolus for the meal.

## How can I avoid having a hypo?

It is normal to have a hypo now and again, but here are some things you can do to make sure that you don't have too many:

- Make sure you eat regular meals.
- Think about whether you need extra carbohydrate or a higher target glucose level when doing sports and physical activity.
- If you feel hypo, don't ignore it. Check your glucose level.
- Always carry fast-acting carbohydrate foods so that you are prepared.
- Try to accurately carbohydrate count your meals so that you give the right dose of insulin.
- Give your mealtime bolus 10-15 minutes before eating





## **Key Points**

- A hypo is a blood glucose level under 4.0 mmol/l.
- Hypos need to be treated straightaway.
- Most hypos can be easily treated with fast-acting carbohydrate.
- If you are having more than 2-3 hypos a week, or you have noticed hypos occurring at the same time every day, please contact the diabetes team for advice.

## **Further information**

## www.DigiBete.org

Watch the film on how to treat hypoglycaemia.

## **Contact details for urgent advice**

### Children's Diabetes Service

Telephone: 07970 357818

(Monday to Friday 8.00am to 6.00pm)

Ward 32, BRI

Telephone: 01274 382311

(6.00pm to 8.00am weekends and bank holidays)

Email: slh.diabetesteam@bthft.nhs.uk

Website: www.bradfordhospitals.nhs.uk/nutrition-and-dietetics/

#### People with hearing and speech difficulties

You can contact us using the Relay UK app. Textphone users will need to dial 18001 ahead of the number to be contacted.

#### **Accessible Information**

If you need this information in another format or language, please ask a member of staff.

#### **Smoking**

Bradford Teaching Hospitals NHS Foundation Trust is a smoke-free organisation. You are not permitted to smoke or use e-cigarettes in any of the hospital buildings or grounds.

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