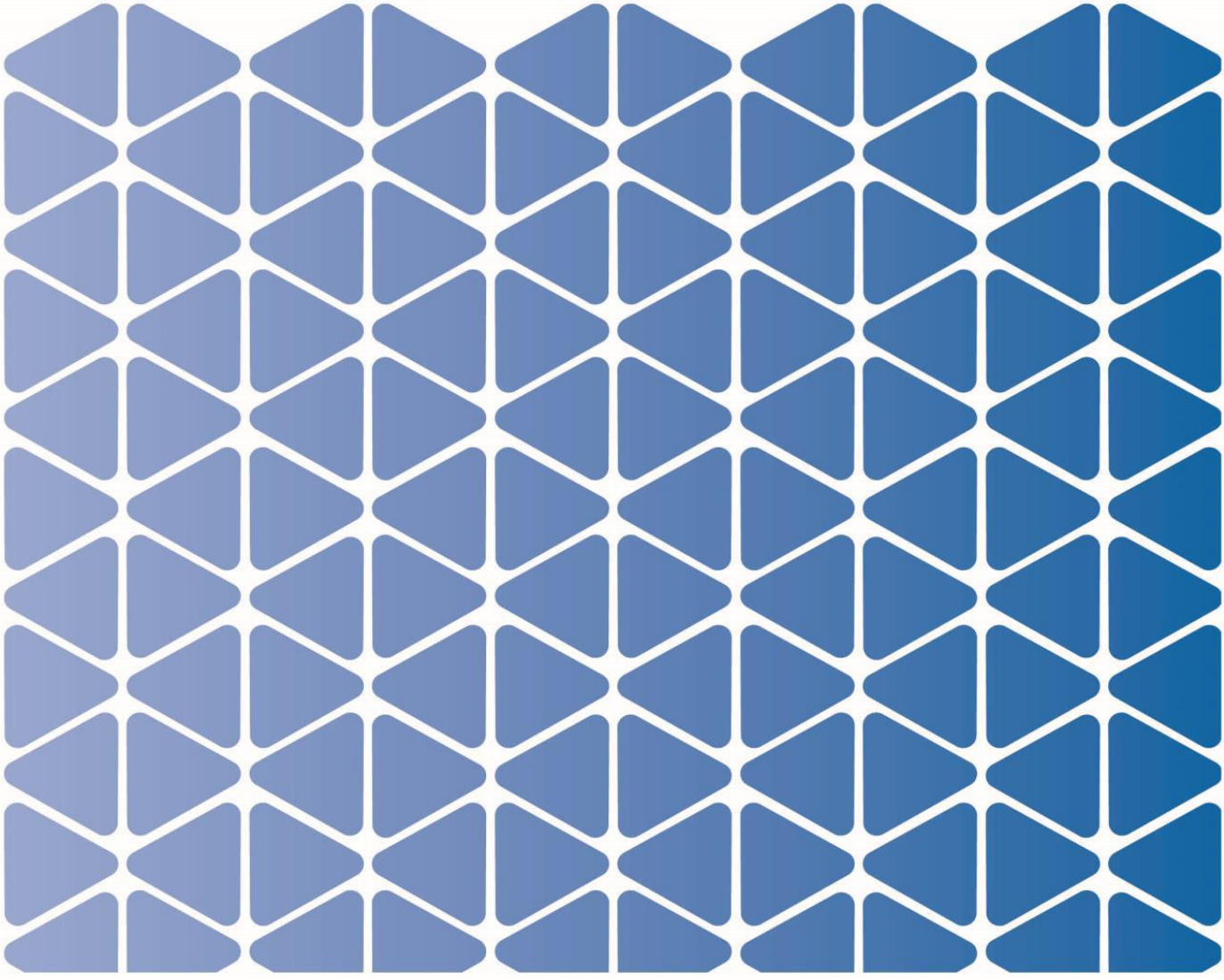
PATIENT INFORMATION

HYPOGLYCAEMIA
INITIAL ADVICE ON HOW TO TREAT LOW BLOOD GLUCOSE LEVELS



Hypoglycaemia initial advice

Hypoglycaemia (hypo) is caused by an imbalance between insulin dose, food consumed and exercise. A hypo occurs when the blood glucose level falls below **4 mmol/l.**

This is only initial advice on hypo treatment, you will be given further information on treatment of moderate and severe hypoglycaemia.

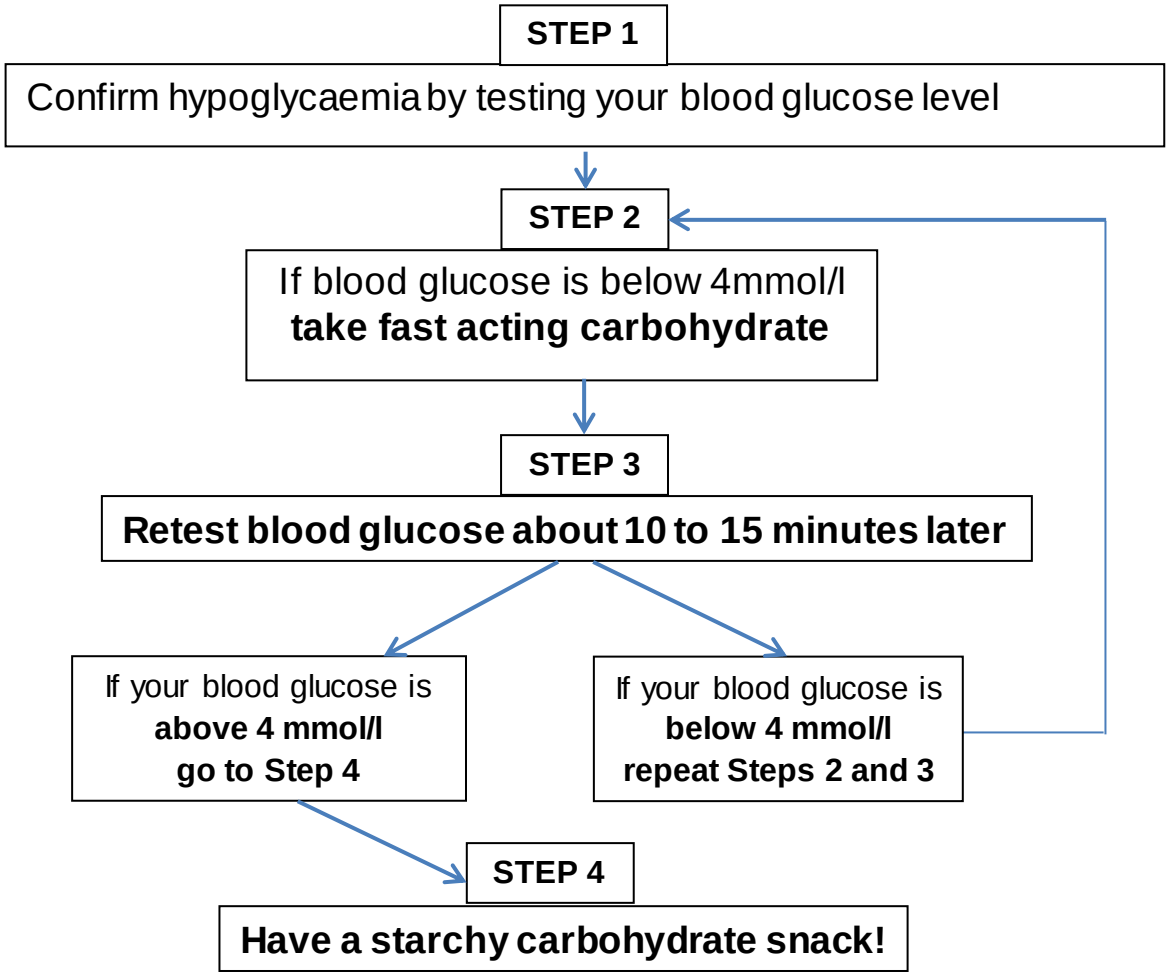
Common warning signs can be:



- Feeling hungry or tummy feels “funny”
- Shakiness or dizziness or feels “wobbly”
- Tiredness
- Sweating or clammy
- Headache
- Pale with glazed eyes
- More moody or quiet than usual
- A change in behaviour or more irritable than usual
- Confused or unable to speak properly

Hypos can occur with changes such as increased insulin dose, increased activity levels or reduced carbohydrate intake**.** Hypos can also be more likely during stress, illness or hot weather.

Treating hypos



Treating hypos step by step

STEP 1: Confirm hypoglycaemia by testing the blood glucose level
(always wash and dry hands before testing blood glucose levels)

STEP 2: If blood glucose is below 4 mmol/l take fast acting carbohydrate

Immediately take 5 to 15 grams fast acting carbohydrate, which will work quickly to raise your blood glucose level by approximately 2 - 4 mmol/l.
The amount of carbohydrate required depends on the size of the child / young person.

As a guide, use approximately:

- for children less than 4 years old, use 5g fast acting carbohydrate
- for children 4 to 11 years old, use 10g fast acting carbohydrate
- for children 11 years old and above, use 15g fast acting carbohydrate

The amount of glucose needed for hypo treatment can calculated more accurately by giving 0.3g of glucose per kilogram of body weight, for example a child weighing 30 kg will need about 9 g of glucose and a 50 kg child will need about 15g of glucose.

It is important to check nutritional labels located on your products, values below are approximate:

Drinks for hypo treatment	**Carbs per 100ml**	**Volume needed to approximately provide:**		
		5g carbs	**10 g carbs**	**15g carbs**
Coca cola	10.6g	50 ml	100 ml	150 ml
Pepsi	11.6g	45 ml	90 ml	130 ml
Dr Pepper	4.9g	100 ml	200 ml	300 ml
Iron Bru	4.8g	105 ml	210 ml	315 ml
Sprite (not good for hypos)	3.3g	150 ml	300 ml	450 ml
Fanta	4.6g	110 ml	220 ml	330 ml
Oasis	4.1g	120 ml	240 ml	360 ml
Schweppes Lemonade	4.2g	120 ml	240 ml	360 ml
Tango	4.3g	115 ml	230 ml	345 ml
Appletiser	10.5g	50 ml	100 ml	150 ml
Ribena (ready to drink)	4.6g	110 ml	220 ml	330 ml
Ribena squash diluted 1 part with 4 parts water	4.6g	110 ml	220 ml	330 ml
Lucozade energy	8.9g	55 ml	110 ml	165 ml
Lucozade sport	6.4g	80 ml	160 ml	240 ml
Lucozade sport lite (not good for hypos)	2g	-	-	-
Powerade	4.1g	120 ml	240 ml	365 ml
Apple juice*	11.4g*	45 ml	90 ml	135 ml
Orange Juice*	10.6g*	50 ml	100 ml	150 ml
Other carbs for hypo treatment	**Per portion**			
Glucojuice per bottle	15g	1/3 bottle	2/3 bottle	Full bottle
Glucogel 1 tube	10g	½ tube	1 tube	1 ½ tube
1 x GlucoTabs tablet	4g	1	2	3
1 x Dextro energy tablet	3g	1.5	3	5
1 x Lucozade energy tablet	2.6g	2	4	6
Haribo fun size packet	12g	½ pack	1 pack	1 ½ pack
1 x jelly Bassetts Jelly Baby	5g	1	2	3

***You may need more fruit juice when treating a hypo, as compared to other cold drinks**

Other foods when treating hypos:

Chocolate, milk and other foods containing fats are not recommended for treating hypos, as they do not act fast enough, it takes a lot longer to break them down into glucose. When treating hypos with pure fruit juice you may need double the carbohydrate amount to get the same effect as with other treatments.

STEP 3: Re-test blood glucose about 10 to 15 minutes later

It is important to re-test blood glucose level 10 to 15 minutes after the initil treatment to make sure that the glucose level has increased.

- If blood glucose is **still below 4 mmol/l repeat Step 2 and 3:** have more fast acting carbohydrate and re-test blood glucose 10 to 15 minutes later. Repeat these steps every 15 minutes until blood glucose is above 4mmol/l.

- When your blood glucose is **above 4 mmol/l go to Step 4,** as below.

STEP 4: Have a starchy carbohydrate snack

Once blood glucose is above 4 mmol/l choose one of the following options:

- A starchy snack of no more than15g carbohydrate:

  -1 digestive biscuits / 2 plain biscuits / oat-based cereal bar
  -1 slice toast
  -1 piece of fresh fruit (e.g medium apple or small banana)
  -1 glass of milk / 1 cup of yoghurt

- Alternatively you can wait for your meal if it is due within the next half an hour.

- If hypo is just before meal time (when insulin is usually given) the hypo should be treated first and once the blood glucose is > 4.0 mmol/L, mealtime insulin should be given as usual.

- If blood glucose is high following treatment of hypo, do not give a correction dose.

Note: If recurrent episodes of hypoglycaemia are experienced contact diabetes team to review insulin doses.

<u>Causes of hypoglycaemia:</u>

A hypoglycaemic episode is caused by an imbalance between insulin and glucose. It is important to establish the cause of the hypoglycaemia.

Causes include:

Extra or more than usual exercise (Hypoglycaemia may occur 2-12 hours later)
Too much insulin
Missed/delayed meal
Illness
Alcohol ingestion

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PET@nhs.net

Opening times:

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.