

Discharge package for type 2 diabetes from ED/AMU

Diabetes UK has useful resources for information on how to manage diabetes. We have created a list of links to advice on managing diabetes at home with the support of family, friends, neighbours.

If you are unable to access the links, please ask a member of your support network to help with this.

What is diabetes?

Diabetes is a serious condition where your blood glucose level is too high. There are two main types, type 1 and type 2. They are different conditions, but they are both serious. There are some other rarer types of diabetes too.

When you have type 1 diabetes, you cannot make any insulin at all. If you have type 2 diabetes the insulin you make either does not work effectively, or you cannot produce enough of it.

In both types of diabetes, because glucose cannot get into your cells, it begins to build up in your blood. Too much glucose in your blood causes a lot of different problems.

Over a long period of time, high glucose levels in your blood can seriously damage your heart, your eyes, your feet and your kidneys. These are known as the complications of diabetes.

But with the right treatment and care, people can live a healthy life and there is much less risk that someone will experience these complications.

Get more information on living with diabetes by following the links below:

What is Diabetes? – For patients newly diagnosed with type 2 diabetes:
<https://www.diabetes.org.uk/diabetes-the-basics/what-is-type-2-diabetes>

For more information to help you live well with diabetes and manage your diabetes:
<https://www.mydesmond.com/home/>

If you need a code to get access, email: MyDESMOND@uhl-tr.nhs.uk

How to inject insulin

If you need to inject insulin, please see the guidelines below of how to do this safely.

If you would like more information you can click on the link below:

<https://www.diabetes.org.uk/guide-to-diabetes/managing-your-diabetes/treating-your-diabetes/insulin>

1. Wash and dry your hands.
2. Choose where you are going to inject – you are looking for fatty tissue so the main injection sites are your stomach (in a semi-circle under your belly button), sides of your thighs and your bum. It is vital that you choose a different spot each time – at least 1cm or half an inch from where you last injected. If not, hard lumps can appear that will stop your body absorbing and using the insulin properly.
3. Attach the needle to your pen – removing the outer and inner caps – and dial up two units of insulin. Point your pen upwards and press the plunger until insulin appears from the top of the needle. This is known as priming and helps regulate your dose by removing any air from the needle and cartridge.
4. Dial your dose and make sure the spot you are injecting is clean and dry.
5. Insert the needle at a right angle (90° angle). You might want to gently pinch the skin before injecting. Press the plunger until the dial goes back to 0.
6. Count to 10 slowly to give the insulin time to enter your body before removing the needle.
7. Throw away the needle using your needle clipper or sharps bin. Your healthcare team will tell you how to get rid of the bin safely when full.

Hypoglycaemia – symptoms and management

Diabetes UK:

<https://www.diabetes.org.uk/guide-to-diabetes/complications/hypos/having-a-hypo>

What is a 'hypo'?

- Hypos are the most common side effect of taking insulin.
- Hypos are when your blood sugar is low (usually below 4mmol/L) and they are very common when you take insulin.
- This can happen if the balance of diabetes medication you take (especially insulin), food you eat and physical activity you do sometimes is not right. Not everyone with diabetes will have hypos.
- They can be caused by taking too much insulin.
- If you are having a lot of hypos, you may be on the wrong dose of insulin and you should speak to your healthcare professional.
- A hypo can happen quickly. So it is important you know what the signs are and what to do if you are having a hypo.

Please see the flowchart below which summarises how you can manage hypoglycaemia at home.

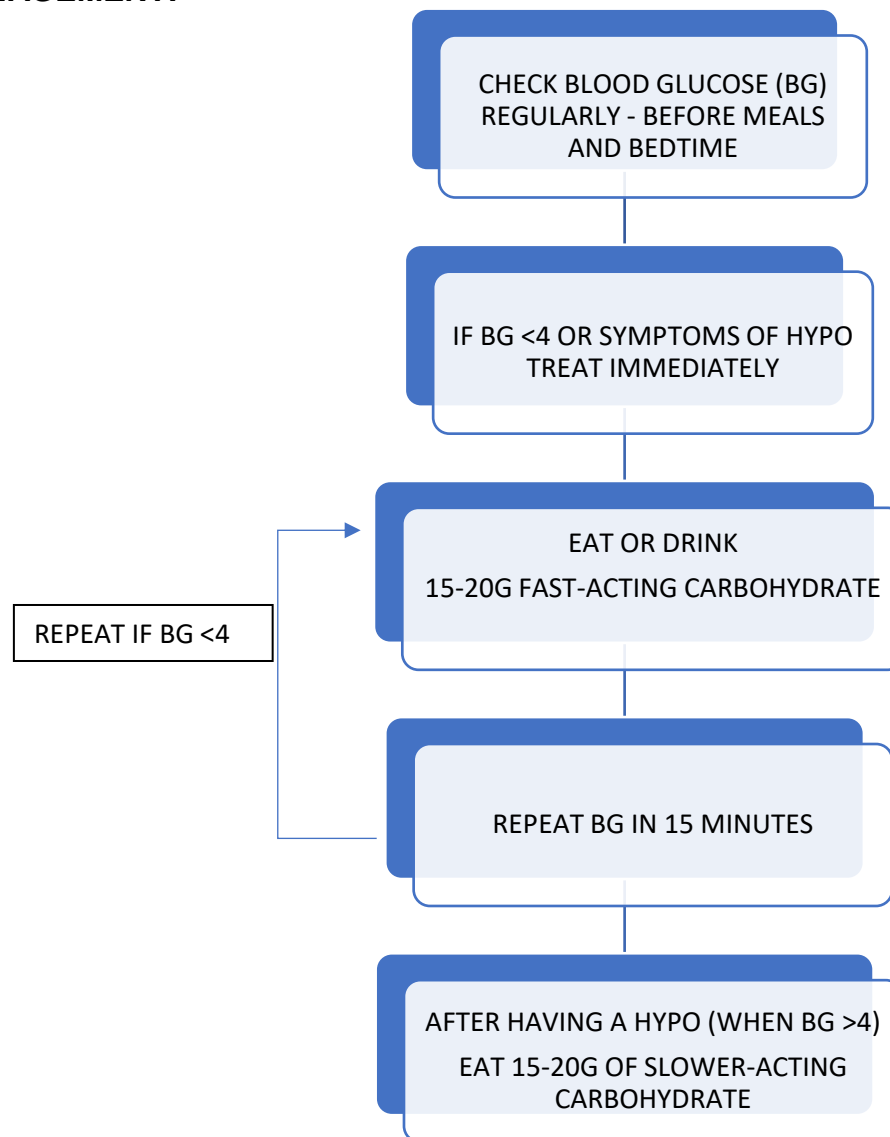
What to do when someone is having a severe hypo

It is important that your family and friends know what to do if you have a severe hypo and become unconscious. They should not try to give you any food or drink because you won't be able to swallow. They will need to help you very quickly.

They need to:

- put you into the recovery position (on your side, with your head tilted back and knees bent)
- give you a glucagon injection – if there is one and someone knows how to use it
- call an ambulance – if you do not have a glucagon injection or if you have not recovered 10 minutes after the injection.

HYPOGLYCAEMIA MANAGEMENT:



SYMPTOMS OF HYPOS:

TREMBLING + SHAKY	HEADACHE
SWEATING	LACK OF CONCENTRATION
ANXIOUS OR IRRITABLE	PALPITATIONS
GOING PALE	LIPS FEELING TINGLY
BEING HUNGRY	FEELING TEARFUL
TIREDNESS	BLURRED SIGHT

FAST ACTING CARBOHYDRATE

- three glucose or dextrose tablets
- five jelly babies
- a small glass of a sugary (non-diet) drink
- a small carton of pure fruit juice
- two tubes of a glucose gel such as GlucoGel®.

SLOWER ACTING CARBOHYDRATE

- sandwich
- piece of fruit
- bowl of cereal
- glass of milk
- Or it could be your next meal, if it's due

How to keep yourself well during period of illness

If you develop Coronavirus symptoms or any other illness, it is likely to affect your blood sugars. While you are unwell it is VERY likely that your blood glucose will increase even if you are eating less than usual.

If you already have access to blood glucose monitoring, increase the frequency of checking your blood glucose every 2 to 4 hours.

Ensure you:

- **Stay hydrated:** drink at least ½ cup (100mls) of water (you can also drink any other sugar free drink) every hour
- **Do not fast:** maintain carbohydrate intake
- **If you are unable to eat or drink or are vomiting, replace meals with sugary fluids or ice cream**
- **Never stop insulin:** you may have to adjust the dose
- You may need to stop taking some medications during the period you are unwell (see below for specific advice)
- If you are worried about other symptoms not related to your diabetes, please seek medical advice from NHS 111 in the first instance
- **Seek medical attention if you are unable to control your blood glucose (persistently over 18mmol/L) or unable to stay hydrated due to vomiting**

1. For people who take tablets or non-insulin injectable medications for diabetes

You may find that because of reduced appetite or inability to eat your usual meals, these tablets may cause low sugars.

Some of the tablets (oral hypoglycaemic agents) will need to be stopped during the period you are unwell, and this may cause your blood sugar to go up.

If you have access to blood glucose monitoring, increase the frequency of monitoring to 2 - 4 hourly.

If you DO NOT have access to blood glucose monitoring, look out for symptoms of high blood glucose. These include thirst, passing more urine than usual and tiredness. Seek medical advice if you have these symptoms.

If you are taking any of the following diabetes medications, you need to stop them when you are sick.

Restart when you are well (normally after 24 to 48 hours of eating and drinking normally). When you restart your medicine, just take them as normal

Metformin – dehydration can make it more likely that you will develop a serious side effect called lactic acidosis

Sulfonylureas – if you are unable to eat or drink, it will be more likely that you develop low blood glucose (hypos)

- **Examples:** names ending with 'ide' such as gliclazide, glibenclamide, glipizide

If you are eating and drinking normally and blood sugars are high continue to take Sulfonylureas

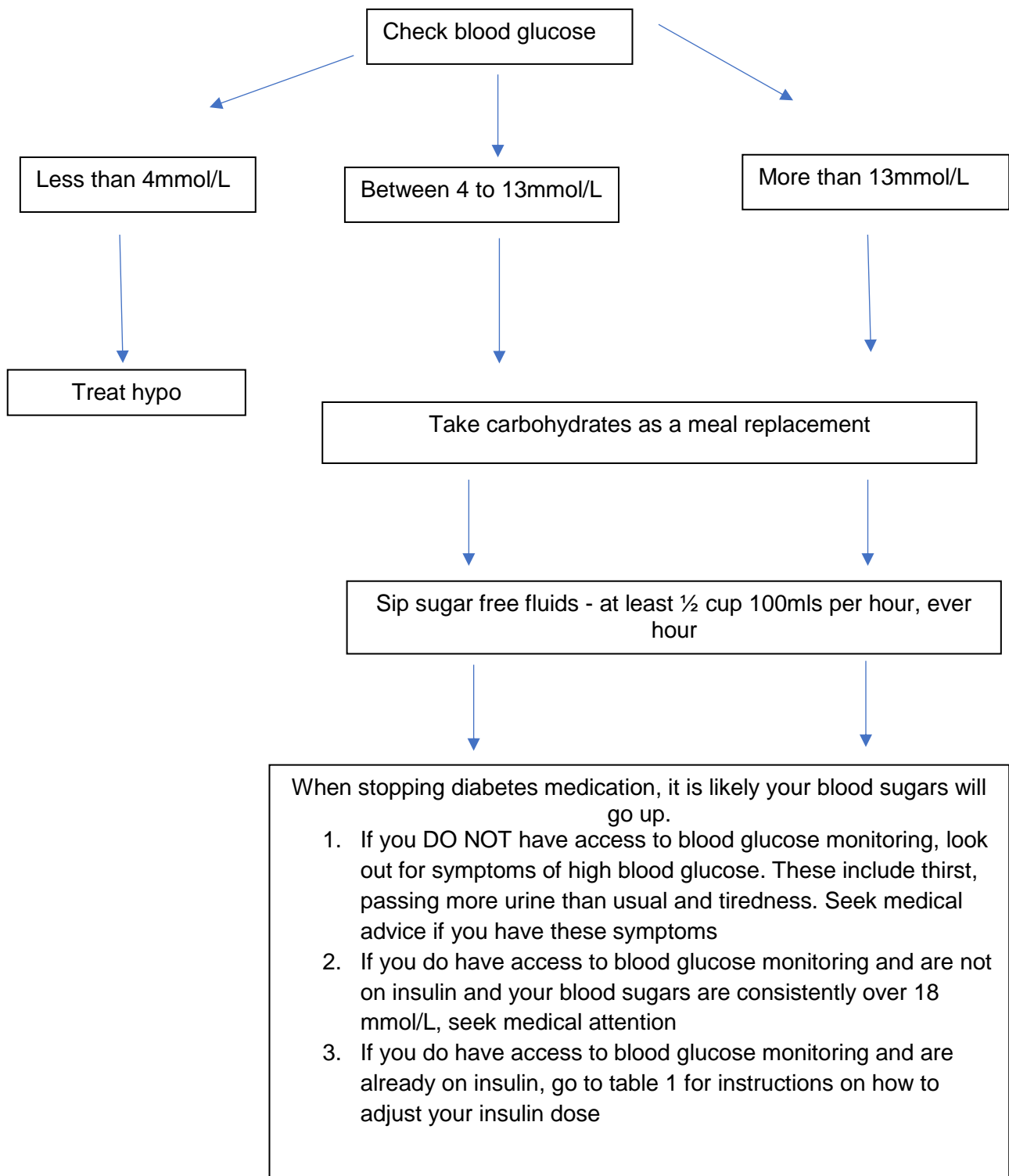
GLP-1 analogues –dehydration can make it more likely that you will develop a serious side effect.

- **Examples:** names ending with 'tide' such as exenatide, dulaglutide, liraglutide, lixisenatide and semaglutide

SGLT2 inhibitors – dehydration can make it more likely that you will develop a serious side effect called ketoacidosis.

- **Examples:** names ending with 'flozin' such as canagliflozin, dapagliflozin, empagliflozin and ertugliflozin

What to do if you are on medications other than insulin for your diabetes, depending on your blood sugars



Seek medical attention if low blood glucose levels persist despite changes and you are unable to stay hydrated or take carbohydrates due to vomiting

2. For People who take tablets, other injectable medications and insulin

Advice for insulin dosing depends on what type of insulin you take

Table 1

Background Insulin (given once or twice daily)	Twice daily Mixed Insulin	Ultra-long acting Insulin
Insulatard	Novomix 30	Toujeo
Humulin I	Humalog Mix 25	Tresiba
Insuman Basal	Humalog Mix 50	
Lantus	Humulin M3	
Abasaglar		
Semglee		
Levemir		

Treating low blood glucose

If your blood glucose is less than 4mmol/L (hypo), treat with eating or drinking 15-20g fast acting carbohydrate. Examples of fast acting carbohydrate include:

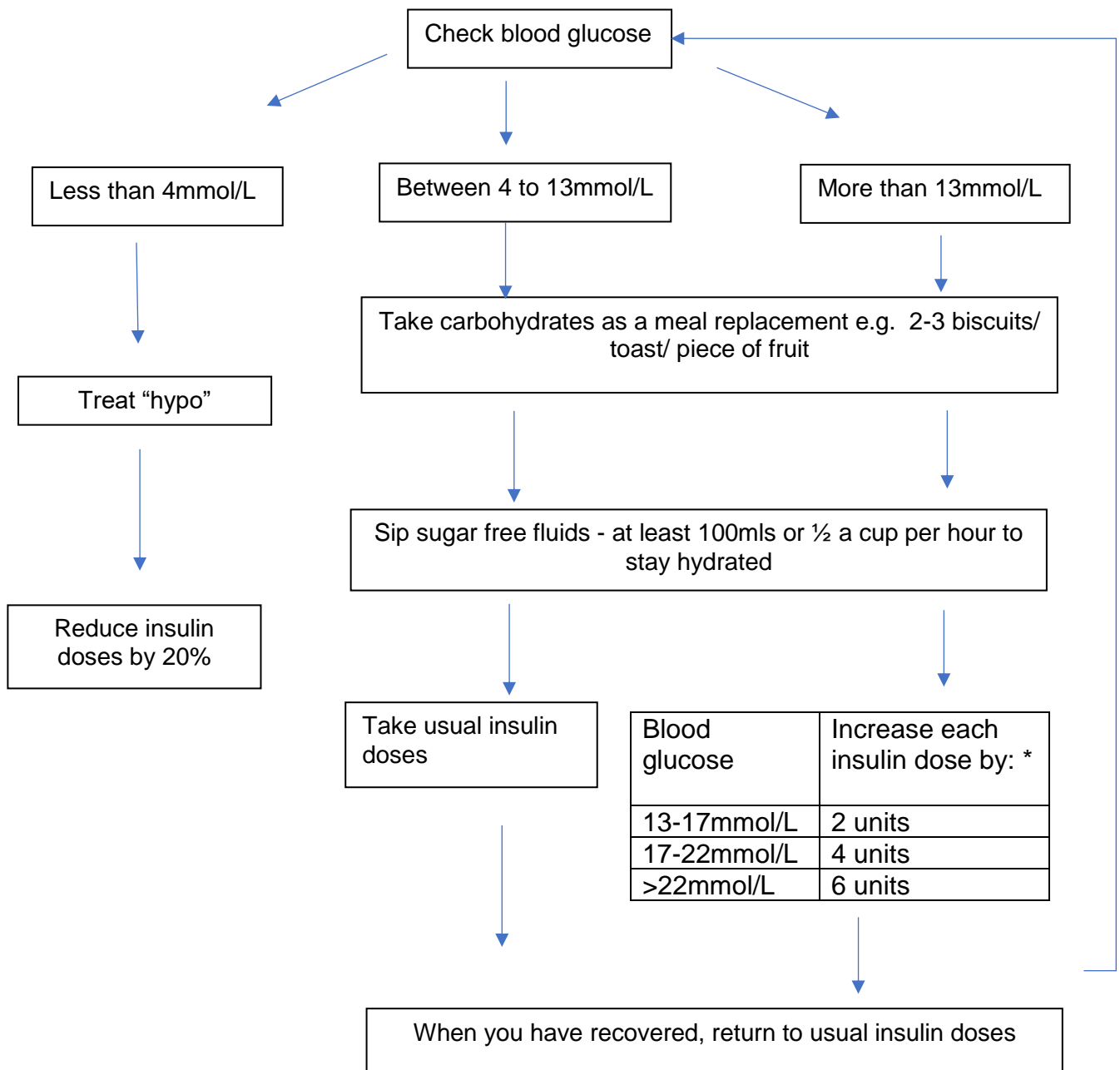
- 5 Dextrose tablets
- 5 jelly babies
- Half a can of sugary drink (non-diet)
- Fruit juice 200mls (non-diet)
- Ice cream 1 large scoop
- 5 spoonfuls sugar in warm water

After treating the hypo, try to eat 15-20g of slower acting carbohydrate. Examples of slower acting carbohydrate include:

- Sandwich
- Piece of fruit
- Bowl of cereal
- Glass of milk 200mls

Seek medical attention if low blood glucose levels persist despite changes and you are unable to maintain hydrated or take carbohydrates due to vomiting

What to do with your insulin, depending on your blood sugars



***If you are on a mixed insulin and have had to increase the dose according to table one on page 2, eat or drink sufficient carbohydrates to prevent low blood glucose (hypos)**

Seek medical attention if low blood glucose levels persist despite changes and you are unable to maintain hydrated or take carbohydrates due to vomiting

3. Other medications

If you are taking any of the following diabetes medications, you need to **stop** them when you are sick.

ACE inhibitors – these medicines are used for heart conditions, high blood pressure and for kidney protection. If you are dehydrated, these medicines can stop your kidneys working properly.

- **Examples:** names ending in '*pril*' such as ramipril, lisinopril, perindopril, captopril

ARBs - these medicines are used for heart conditions, high blood pressure and for kidney protection. If you are dehydrated, these medicines can stop your kidneys working properly.

- **Examples:** names ending in '*sartan*' such as candesartan, irbesartan, losartan, valsartan

Diuretics – these medicines are used for excess fluid and high blood pressure and are sometimes called 'water pills'. These medicines can make dehydration more likely.

- **Examples** include bendroflumethiazide, furosemide, indapamide, bumetanide.
- If you are taking more than two tablets a day of either bumetanide or furosemide, please seek medical advice before stopping

NSAIDs – these are anti-inflammatory pain killers. If you are dehydrated, these medicines can stop your kidneys working properly.

- **Examples** include ibuprofen, naproxen