

Sick day rules: how to manage Type 2 diabetes if you become unwell with coronavirus and what to do with your medication

If you become unwell with coronavirus and require advice specifically for coronavirus please refer to the following websites:

- Diabetes UK
https://www.diabetes.org.uk/about_us/news/coronavirus
- NHS <https://www.nhs.uk/conditions/coronavirus-covid-19/>

This advice is intended for the following people with Type 2 diabetes:

1. People who take tablets and/or non-insulin injectable medication
2. People who take tablets, insulin and other injectable medications

Please ensure you have access to the following at all times, not just when you become unwell:

- 1 month supply of all of your medicines
- If you normally check your blood sugar levels at home, ensure you have access to a blood glucose meter with 1 month supply of test strips and lancets
- If you have been advised to check ketones, please ensure you have access to a ketone testing system – either urine or blood.

1. Becoming Unwell

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**

2. 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

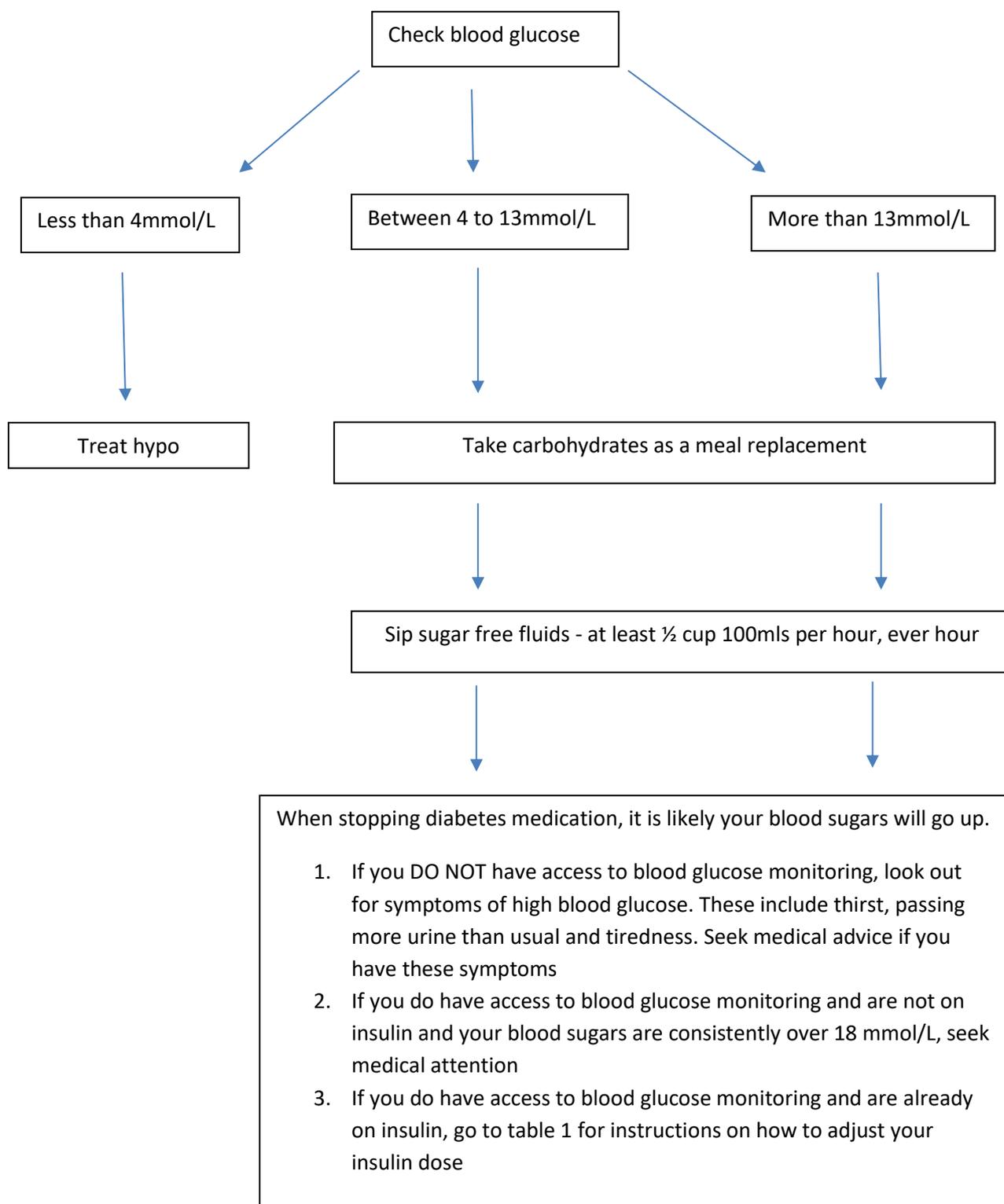
GLP-1 analogues –dehydration can make it more likely that you will develop a serious side effect.

- **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

3. 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:

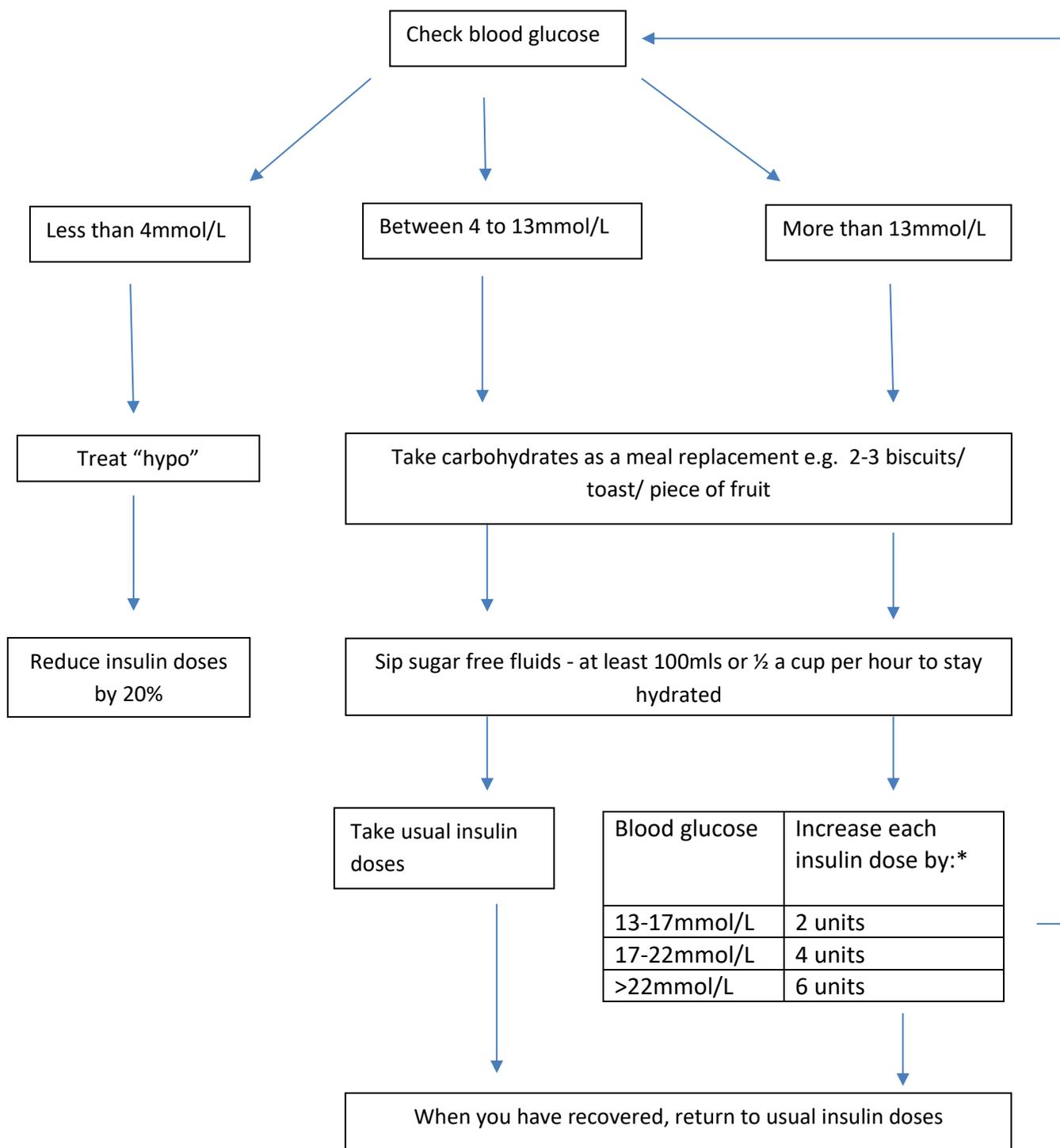
- 5 Dextrose tablets
- 5 jelly babies
- Half a can of sugary drink (non-diet)
- Fruit juice 200mls (non-diet)
- Ice cream 1 large scoop
- 5 spoonfuls sugar in warm water

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

4. 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

Key Points

- If you are unwell and have access to blood glucose monitoring, increase the frequency of checking to 2-4 hourly
- If you are unwell and do not have access to blood glucose monitoring, look for symptoms of high blood glucose and seek medical advice if you have these
- Never stop insulin
- Seek medical attention if you are unable to maintain hydrated or take carbohydrates due to vomiting
- Seek medical attention if you have persistently high or low blood glucose readings despite altering your medications
- If you have altered your medication doses, remember to change them back to their usual doses gradually when you have recovered