

Paediatrics

Patient Information Leaflet (PL)

Sick Day Rules for Children with Diabetes



Children with diabetes should not experience more illness or infections than their siblings or peers without diabetes. However, it is likely that any illness will have an impact on diabetes control. In general, illnesses associated with a temperature will cause the blood glucose levels to rise. Many families notice that insulin requirements increase a few days before their child has symptoms of an illness, and that this increased requirement persists several days after the illness has stopped.

Alternatively, illnesses where there is diarrhoea or vomiting are likely to cause the blood glucose level to drop and there is often difficulty in maintaining adequate carbohydrate intake. These problems may lead to a need for a reduction in the insulin dosage.

General principles

- Never stop administering insulin
- The insulin dose may need to be increased or decreased depending on the glucose and ketone level
- Encourage fluids to prevent dehydration
- Increase the frequency of monitoring of both blood glucose and blood ketone levels. High blood glucose levels and ketones are an indication that more insulin is needed

Ketones are very dangerous!

Ketones are acids which can quickly make your child feel very unwell. They may make them vomit or they may become breathless. If ketones persist your child may develop Diabetic Ketoacidosis (DKA). DKA may cause them to become extremely unwell and may require urgent hospital treatment. Ketones may still be produced when your child is ill, even if the blood glucose levels are low, therefore always check for ketones, regardless of their blood glucose level.

As previously stated the first rule is never stop administering insulin, even if your child is not eating (if not eating see dietary management below).

What else do I need to do?

Test the blood glucose and blood ketones levels more often than usual. Check this every two to four hours.

If blood glucose levels are high and ketones are present (greater than 0.6mmol/l) the body does not have enough insulin. It is important to encourage your child to drink more. A combination of having high blood glucose levels, are high temperature and ketones will increase the risk of your child becoming dehydrated. Increase intake of sugar-free fluids. Aim for approximately five pints of liquid, especially water, a day. This is approximately one glass every hour. If they cannot manage a whole glass at once take regular sips.

How much insulin should I take?

- If the blood glucose level is less than 14mmol/l, give the usual insulin amount and remember to check blood ketone levels.
- If the blood glucose level is higher than 14mmol/l extra insulin is required. If you have been given a correction factor or are using a bolus advisor meter (Expert) follow this advice. If you are at all unsure please contact PDSNs for help.

Remember to check for blood ketones if blood glucose levels are rising.

Dietary Management

Children and young people may not feel like eating when they are unwell. This does not matter – continue to give quick acting boluses of insulin for any carbohydrate eaten or drunk if their blood glucose levels are within or above their target range and/or to correct high blood glucose levels.

If your child is vomiting they are advised to eat a light diet e.g. toast or crackers. If blood glucose levels are dropping or are low because of nausea and/or vomiting or refusal to eat, encourage your child to have drinks containing glucose. Some examples are below, aim for 20 grams per hour.

Each of these contains 10 grams of carbohydrates:

Fruit juice (unsweetened)	1 small glass (100ml)
Lucozade	50mls
Coca Cola (not diet)	150mls
Lemonade (fizzy/sweetened)	150mls
Ice cream	1 briquette/scoop
Jelly (ordinary)	2 tablespoons
Yoghurt (fruit)	½ small carton (60mgms)
Ice lollies/pops	

Please contact the Diabetes team or use your red box access if experiencing any of the following:

- Unable to keep fluids down
- Persistent vomiting
- Persistent diarrhoea
- Unexpected or unexplained high blood glucose levels with ketones
- If your child develops abdominal pain, becomes short of breath or drowsy
- Your child is not improving or becoming drowsy
- Blood glucose levels stay high, even after treatment, or they are low
- You are unsure of how much insulin or fluid to give your child
- You are worried and need advice

Diabetic Ketoacidosis (DKA)

- The symptoms of ketoacidosis are thirst and passing large amounts of urine, followed by abdominal pain, sickness, vomiting, drowsiness and heavy laboured breathing.
- It is very important to prevent DKA happening. Never miss out insulin injections especially when your child is unwell. If DKA develops, it must be recognised and treated quickly.
- **Ketoacidosis is a serious condition. You must seek medical help if your child develops the symptoms of DKA.**

Contact the PDSNs on 01908 996 522 for support and guidance. However if the PDSN is not available you should ring Ward 4 on 01908 996 367 and speak to the Nurse in charge.

We ask for information about you so that you can receive proper care and treatment. This information remains confidential and is stored securely by the Trust in accordance with the provisions of the Data Protection Act 2018/GDPR. Further guidance can be found within our privacy notice found on our Trust website: www.mkuh.nhs.uk

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