

Unexplained Hyperglycaemia and Sick day rules (Manual pump)

Blood glucose above 14mmol/L and not responding to bolus corrections or feel unwell? Check ketones

If you are vomiting and unable to keep fluids down or unable to control blood glucose/ketones you must go to hospital as an emergency

MINOR ILLNESS:
Ketones below 1.5 mmol/L

Change cannula, infusion set and reservoir

- Check sensor glucose matches blood glucose
- Consider using temporary basal and increase to 130%
- Take additional corrective doses via bolus calculator if glucose is raised, even if not eating
- Usual bolus if eating carbohydrate
- Check glucose and ketones every 2 -4 hours

Sip sugar free fluids (at least 100ml/hour)

If blood ketones below 1.5 mmol/L

Continue to check glucose and blood ketones regularly until illness resolved

If blood ketones 1.5 mmol/L or above

SEVERE ILLNESS:
Ketones 1.5 mmol/L or above

Calculate Average Total Daily Dose (TDD)

Blood ketones 1.5 - 3.0 mmol/L

Give 10% of TDD of quick acting insulin using insulin pen or syringe

Change cannula, infusion set and reservoir
Use usual I:C ratio when eating
Check glucose and ketones every 2 hours

Blood ketones above 3 mmol/L

Give 20% of TDD of quick acting insulin using insulin pen or syringe

Blood ketones 1.5-3 mmol/L
Give 10% of TDD as bolus via pump every 2 hours & increase basal by 30% + usual bolus if eating (override bolus calculator)

Blood ketones above 3 mmol/L
Give 20% of TDD as bolus via pump every 2 hours & increase basal by 50% or more + usual bolus if eating (override bolus calculator)

Sip sugar free fluids (at least 100ml/hour)
Eat as normal if you are able with usual bolus
If you don't feel like eating, try to have some carbohydrate (eg.20g) with bolus insulin every 2-4 hrs

Blood ketones 1.5 - 3 mmol/L

Blood ketones above 3 mmol/L

Blood ketones below 1.5 mmol/L
Continue to check glucose and blood ketones regularly until illness resolved

If you have been trying to address hyperglycaemia for more than 4 hours with no improvement please seek help.
If you are vomiting and are unable to keep fluids down, or unable to control your blood glucose or ketones you must go to the hospital as an emergency.