

Note

- Early management of ketones prevents life threatening diabetic ketoacidosis (DKA) & hospital admission.
- **Always carry 'in date' blood ketone testing strips and Optium Freestyle meter**
- **Any time that BG is ≥ 15 → ACT IMMEDIATELY!**
- If BG is >14 mmol/l **for more than 4 hours – change the cannula and reservoir immediately**
- Blood ketones **must be checked** when:
 - BG is > 15 mmol/l, 1hr after correction dose *or*
 - BG is >14 mmol/l for more than 4 hrs *or*
 - You vomit or experience abdominal pain
- **You should notify Doctor or go to hospital** if you have followed the flowchart and your BG and ketone levels have not improved, **that is:**
 - You **have** given a correction dose via a pen or syringe
 - You **have** changed your cannula and reservoir
 - You **have** programmed a TBR of 200% for 2hrs *or*
 - You are vomiting and unable to keep fluids down *or* have concerns.

KETONE GUIDE	Blood Ketone	Urine Ketone
Normal	Below 0.6mmol/l	Negative
Trace to moderate	0.6 to 1.5 mmol/l	Trace to +
Moderate to severe	1.5 to 3.0 mmol/l	++ to ++++

Note: TIPS is **not** a 24 hr emergency service

HYPERGLYCAEMIA AND KETONE MANAGEMENT PLAN

Blood glucose ≥ 15 mmol/l - act immediately!

Check for pump alarms and connections are secure.
Give usual correction via the pump **and retest in 1 hour**

If BG has reduced
This means insulin
is being delivered

- Return to usual management
- Continue to observe BG

If BG has not reduced
This means insulin
is not being delivered

- Test for ketones
- Give correction via pen **immediately** with dose depending on ketones*

- *If ketones < 0.6 mmol/l**
- Inject **usual** correction dose via pen
 - Change cannula and reservoir **immediately**
 - Drink water
 - Test BG again in 1 **and** 2 hours

- *If ketones ≥ 0.6 mmol/l**
- Inject **double** the usual correction dose via pen
 - Change cannula and reservoir **immediately**
 - Give 200% TBR* for 1- 2 h
 - Drink water
 - Check BG in 1 **and** 2 hrs

BG should improve and blood ketones should clear