Managing Hyperglycaemia and/or Sick-days on an Insulin Pump

For Baker IDI Clients

On a pump, a blood glucose level greater than 13 mmol/L is considered high (hyperglycaemia) and should be managed.

Possible causes:
- Interrupted insulin flow e.g. air bubbles, line kinks, empty reservoir
- Insufficient basal or bolus insulin
- Illness
- Exercise (high intensity)
- Stress, excitement

It is important to troubleshoot to identify and manage any pump delivery problems (see troubleshooting section). If however, you have established that there is no obvious delivery problem, then you need to manage your high BGL by following the hyperglycaemia management steps below.

1. Enter your BGL into the pump to receive a correction

2. Re-test your BGL, 1-2 hours later.

3. If your BGL is less than 13 mmol/L, or has reduced, then your pump is working and you should continue pump therapy.

4. If your BGL is NOT less than 13 mmol/l, or has NOT reduced, then check for blood ketones at this point.

5. If blood ketones are 0.6 mmol/l or less, then give an insulin pen correction dose as per the amount that your pump calculator recommends.
   - Change your cannula and reservoir.
   - Continue to re check your BGLs to ensure that your BGLs are reducing. Do NOT enter a BGL for a further correction for the next 3 hours *(your pump does not know that you have had this correction and therefore does not allow for it in its calculations).*
6. If blood ketones are more than 0.6 mmol/L, then give an insulin pen correction dose of 10% of your pump total daily dose (this is a larger dose than what your pump calculator would have recommended and is required to rid your body of ketones. Your total daily dose can be found in your pump).
   - Change your cannula and reservoir.
   - Continue to re check your BGLs to ensure that your BGLs and ketones are reducing.
   - Do NOT enter a BGL for a further correction for the next 3 hours.

7. Continue the above process as required, however if your BGLs and ketones are not reducing after x3 corrections, then contact your physician for assistance.

Note:
- During periods of illness (sick-days), you should check your BGLs more frequently, as it is common for levels to rise at this time.
- Remember to also check for blood ketones if unwell, regardless of your BGL. Ketones can occur with normal BGLs during periods of illness.