

## PREGNANCY GUIDELINES

### Managing High Glucose Levels and Ketones on Hybrid Closed Loop Pumps

**Glucose greater than 13mmol/L for more than 2 hours: THINK CANNULA!**

**Blood ketones negative or trace  
Less than 1mmol/L**

**Stay in closed loop, change cannula & set**

- The system will increase basal rates and give auto-corrections to try and manage the raised glucose levels
- Check blood glucose matches sensor glucose
- Give correction if indicated by bolus wizard
- Bolus for carbohydrates as usual
- Check blood glucose and blood ketones every 2-4 hours
- Sip sugar free fluids at least 100mL an hour

**If blood ketones increase to more than 1mmol/L follow algorithm for 'ketones present'**

If you have been trying to correct high glucose and ketones for more than 4 hours with no improvement please seek medical advice: Diabetes Centre 01904 726510 or Out of Hours 111. **Vomiting, abdominal pain and being unable to keep fluids down are RED FLAGS** for which you must seek **URGENT** medical advice through the Diabetes Centre

**Blood ketones present  
Greater than 1mmol/L**

**Come out of closed loop**

**Blood ketones  
1 to 3mmol/L**

**Blood ketones  
above 3mmol/L**

Give 10% of usual Total Daily Dose (TDD) of insulin as a correction via pen or syringe injection of rapid insulin

Give 20% of usual Total Daily Dose (TDD) of insulin as a correction via pen or syringe injection of rapid insulin

**Change cannula/set**

**DO NOT RESTART CLOSED LOOP**

**Check glucose & ketones in 2 hours**

Ketones 1 to 3mmol/L  
Give 10% of TDD via pump every 2 hours & increase basal by 30% (+ usual bolus for carbohydrates)  
Override bolus calculator

Ketones above 3mmol/L  
Give 20% of TDD via pump every 2 hours & increase basal by at least 50% (+ usual bolus for carbohydrates)  
Override bolus calculator

Sip at least 100mL sugar free fluids per hour. Check glucose & ketones every 2 hours

**Once ketones less than 1mmol/L wait 4 hours after last manual (pen/syringe) injection of rapid acting insulin before restarting closed loop**