Better Pump and CGM Control

- Follow a designated meal and snack regimen. Being on a pump is not a free pass to snack and graze throughout the day
- All pumps are capable of using multiple pre-set basal rates to help meet you individual needs
- You can wear your pump while participating in most sports
- If you suspend your pump, bolus to cover the basal rate you will miss. If your blood sugar is under 120 mg/dl, you can wait 1 hour to bolus
- Do not go longer than 2-3 hours disconnected from your pump without taking insulin.

Continuous Glucose Monitors (CGM)

- Dexcom reads BG values every 5 minutes
- Libre BG reader needs to be scanned to read BG value
- Sensors may require calibration
- CGMs do not replace finger stinks using your meter. If your CGM is showing you are low you must confirm BG with a finger stick

Glucometers and CGMs test two different sources of blood glucose. Glucometers test capillary blood glucose while CGMs test interstitial fluid glucose. Capillaries are closer to the central blood stream than interstitial fluid. Therefore, glucometers will provide the most accurate blood glucose level at any single point in time. CGMs are able to provide the speed and direction in which the blood glucose is headed, but can be delayed up to 20 minutes from the central blood stream's current blood glucose level. It is very rare for capillary and interstitial fluid glucose levels to be exactly the same. CGM readings ARE FDA (Food and Drug Administration) approved to determine insulin dosing for.

It is important when treating lows to use finger sticks: to help prevent overtreatment and rebound hyperglycemia

When Should I Calibrate My Sensor?

Dexcom: Only calibrate after at least 3 consecutive readings with horizontal arrows. Anytime the blood sugar is fluctuating a greater margin of error is expected and could lead to inaccurate calibration and confusion of the device

Libre: No finger stick calibrations required. 1 hour warm up required after sensor is scanned with reader device

Medtronic Guardian: When prompted and/or every 12 hours

Insulin Pumps

- Always prime tubing before connecting a new pump cartridge to your body
- Always bolus before you eat any meal or snack
- Keep an unopened vial or pen of long acting insulin (Basaglar, Lantus, Tresiba) syringes, pen needs at your house in case you experience a pump malfunction.
- If you run out of insulin pump supplies or need to discontinue the pump, GIVE LONG ACTING INSULIN AS SOON AS POSSIBLE (see box on the bottom of the page)
- Change your pump insertion site at least every 72 hours
- Call your Endocrinologist if you do not know your insulin doses
- Check for ketones with a BG greater than 300 and or vomiting

Pump Safety

- If you are using advanced features on your pump, you still must know your ICR (Insulin to Carb ratio and your ISF (Insulin Sensitivity Factor). You may need to dose with a syringe /pen if you are having a pump issue.
- When traveling always carry extra diabetes supplies, insulin, doses and endocrinology office number

High Blood Sugar and Ketones

- Check for a pump site problem, kink, or occlusion.
- Follow your Sick Day Action Plan- PUMPs for detailed instructions
- Checking BG and ketones every 2 hours
- For moderate/Large ketones or any questions or concerns please call the endocrinology office at 314-454-6051 (day) 314-454-6000 (after hours).

Converting from a basal rate to injection

One basal rate for Lantus Dose: basal rate x 24 = Lantus dose

Multiple basal rates for Lantus dose: rate 1 x number of hours + rate 2 x number of hours + rate 3 x number of hours + (continue… if have multiple rates) = Lantus dose

Always keep a written record of your basal rates, ICR, ISF and Target doses