

Treating Lows and Highs at BMC 2021

- Campers may use Dexcom or Libre values for finger stick
- A medtronic sensor can only be substituted for fingerstick when not giving insulin (Midnight, before activities, when low, etc) or mealtime when not correcting for BG (<150)
- A fingerstick is always needed when there is a suspected problem with the CGM, or camper is reporting symptoms that do not match CGM
- When correcting and/or treating lows, use the protocol with the sensor data. With rapidly changing BG (2-3 arrows), consider discussion with med staff for deviation from protocol.
- Calibrate Medtronic Sensors: before breakfast and before dinner, when BG is stable, and when requested by sensor.
- Document all sensor values used for decision-making in the camper's Diabetes Log.
- HCL=Hybrid Closed Loop=Control IQ, Medtronic 670G, or LOOP

TREATING LOWS DURING THE DAY

WITHOUT HCL: BG <100 WITH HCL: BG<80	Feed 5-30 grams (depending on age of camper), recheck in 15 min. Repeat until >100 (>80 with HCL). CGM with up arrow, may wait to feed, recheck in 15 minutes, repeat until >100 (>80 with HCL).
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TREATING LOWS AT NIGHT

WITHOUT HCL: BG <80 WITH HCL: BG<70	Mini-dose Glucagon measured with an insulin syringe, 10 units for kids and 15 units for teens. (Get from med staff who are in the bath house from 12:00- 12:30.) plus snack. IF HCL: Glucagon dose: 5 units for kids and 10 units for teens Recheck BG in 15 minutes. If BG 100 or greater , allow camper to go back to sleep. CGM with up arrow— monitor only until >100. If not above 100 after 3 rounds of glucagon+ feeding bring camper to Doc's Place with pillow and sleeping bag
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WITHOUT HCL: BG 80-100 WITH HCL: 70-100	Feed snack, recheck in 15 min., repeat until >100. Exception: CGM with up arrow—> may monitor until >100
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CGM ≤130 with down arrow	Feed snack, recheck in 15 min., repeat until no CGM down arrow and BG>100 HCL: May monitor only until no down arrow and BG >100
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BG CORRECTIONS AT CAMP

	PUMPERS	INJECTORS
PRE-MEAL	BG >100: counselor supervises correction per BW, unless*	BG>200, Camper goes first in insuline.

1-2 HRS AFTER MEALS	BG >100: counselor supervises correction per BW unless*	BG>300 , discuss correction with med staff at Doc's Place.
DURING THE NIGHT	BG >200: counselor supervises ½ correction (may give full correction if HCL) per BW unless*	BG>300 , discuss correction with med staff at Doc's Place or in bathhouse.
	*BG >250: Follow Ketone Protocol	

Hybrid Closed Loop (Medtronic 670G)

When the pump is not in Automode, getting it back into Automode will require following the prompts on the pump.

- If the pump is not in automode (blue shield), treat as no HCL
- Calibrate sensor only when indicator is yellow, red, or is requested by pump. Must wash hands first.
- Enter BG when requested by pump. May wait 15-60 minutes.
- Follow prompts from pump.
- Check pump at mealtimes and midnight to review testing indicator, ensure pump is in Automode
- If in Automode, may skip mealtime BG if sensor <150 and only giving insulin for carbs
- During the day, consider giving fewer grams for low blood sugar (5-15 g).

Hybrid Closed Loop (Tandem Control IQ)

- Check pump at meal times to ensure Control IQ is active.
- Follow prompts from pump.
- During the day, consider giving fewer grams for low blood sugar (5-15 g).

Loop (DIY)

- Check pump at meal times to ensure Loop is working (green circle).
- During the day, consider giving fewer grams for low blood sugar (5-15 g).

Pumper Ketone Checking: Bearskin Meadow Camp

Check ketones if BG 250 or greater. Pumpers only.
Consider ketone check if HCL and persistently >200

0.0 to 0.3: Normal

0.4 to 0.5: Pump probably is not working.

0.6 or higher: The infusion site or the pump is not working, the camper has not received any insulin for at least 3 hours.

What to do if blood ketones are 0.6 or higher:

1. **If in camp**, bring camper to Medical Building where a correction of 1.5 x the normal correction dose will be given by injection followed by a set change.
2. **If out of camp on a day trip**, an injection of camper's regular fast-acting insulin should be given immediately. The dose is 1.5 times the usual correction. Replace the basal every 2 hours until back into camp.
3. **If at night**, come down to the Medical Building to discuss an insulin dose to keep the camper safe until morning when a set change will be done.

“INSULINE” PROCEDURES: Bearskin Meadow Camp

The Process

Counselors supervise BG checks, accepting only the BG on the meter if the strip is still in. May substitute Dexcom or Libre reading. Medtronic does not require finger stick if <150mg/dl

1. BGs are **immediately recorded** in the logbook. **Sensors** are immediately calibrated *if indicated*.
2. **Pumpers** who have BGs of 250 or greater do ketone checking.
3. **Pumper BGs** are put through the pump's smart feature, and recommended doses are delivered with supervision and documented as **BW**.
4. Campers with **BGs** <100 (or <80 for HCL) are given 5-15 grams.
5. **Counselors help campers decide what they plan to eat**, record food and grams on their plate, and add up the grams or exchanges.
6. **Campers take their deck log page and their plate** to medical staff where a dose is calculated, and written on the log page. Shot takers go first.
7. **Campers then take their log page to the Checker** who supervises the pumpers' programming and delivering of the dose. Injectors are observed drawing-up and injecting the insulin. The checker circles the dose and keeps the log pages.
8. **Food is brought to the table when all have** received their insulin.
9. **Before the plates are put in the grey bin**, counselors and med staff identify **campers** who need more insulin or more carbs for the insulin they took.