Endo/Diabetes Clinic – Frequently Asked Questions

School Nurses and/or trained unlicensed staff

Please make sure to review student's detailed school orders for school year 2023-2024 as many of these protocols are covered in full.

Hypo- and Hyperglycemia Protocol

HYPOGLYCEMIA- Glucose Below 70 or Symptomatic with Glucose Between 70 – 90

Student is Conscious:

1. Give fast acting Carbohydrate (Juice, glucose tabs, skittles, etc)

Age	<6 years	6-10 years	> 10 years
Recommended carb	5-10 grams	10-15 grams	15-20

2. Observe for 15 minutes.
3. Retest blood glucose or recheck sensor glucose:
   - If less than 70 mg/dl or still symptomatic with blood sugar between 70-90, repeat sugar source at the same dose.
   - If over 70 mg/dl and next meal or snack in >2 hours give 10-15 grams of carb + fat/protein (granola bar, crackers + cheese, fruit + nut butter, etc) with no Insulin.
   - If BG >70 mg/dl and next meal/snack is within 2 hours, no carb + fat/protein snack needed.
4. Contact On-Call Endocrinology MD (858-576-1700, Press 0) AND parent if 3 or more low treatments given back to back in a single episode.
5. If three or more episodes occur in one week at the same time period, ask the parent to reach out to clinic for a full blood sugar review. Provide the parent with school blood glucose trends to review with clinic.

Student is or Becomes Unconscious, Seizes, or is Unable to Swallow:

1. Call 911
2. Give 1 dose of glucagon
   - Baqsimi 3 mg (ages 4 and up)
   - *(given only by trained staff; causes nausea/vomiting - place on their side after administration)
3. Notify On-Call Endocrinology MD (858-576-1700, Press 0) AND parent.

HYPERGLYCEMIA- Glucose Above 300 via CGM for >3 hours or Finger Stick >300 OR Student is Feeling Ill (with or without hyperglycemia)

Check Urine or Blood Ketones:

Student Feels Okay and Ketones Negative:

1. Give water as needed
2. Plan to give insulin to correct blood sugar at next meal if still indicated.
   **Please see "Blood Glucose Testing, Insulin Administration, and Other" section for more information on correction doses.*
3. Student okay to return to class and stay at school.

Student Feels Okay and/or Ketones Trace - Small:

1. Give water
2. Plan to give insulin to correct blood sugar at next meal if still indicated.
   **Please see "Blood Glucose Testing, Insulin Administration, and Other" section for more information on correction doses.*
3. All voids need ketone testing until ketones negative
4. Student okay to return to class and stay at school

Student Feels Sick and/or Ketones Moderate – Large:

1. Notify On-Call Endocrinology MD (858-576-1700, Press 0) to obtain verbal instruction, then notify parent.
2. Give 6-8oz. of water, if able to tolerate & keep the student monitored in the health office until parent arrives. Student MUST go home and cannot remain in school.
   **Please note, student should be resting. Exercise is not an appropriate treatment for moderate-large ketones.*

If three or more hyperglycemia episode occur in one week at the same time period, ask the parent to reach out to clinic for a full blood sugar review. Provide the parent with school blood glucose trends to review with clinic.

If at any time student vomits and become lethargic, and/or has labored breathing CALL 911

Pump Failure Instructions

Pump Failure or Pump Site Failure (or student is taking a pump break):

- If pump controller fails at school, inform parent and check ketones, give manual injection for all corrections and carbohydrates..
- If pump site fails (ex: hyperglycemia section, page 2), student or parent to change infusion set. If unavailable, give manual injections.

Calculating insulin dose for manual injection:

1. Use insulin to carb ratio (ICR) for meals and snacks- found in their pump settings.
2. Calculate blood glucose correction dose using equation below - Target & Correction Factor found in their pump settings.
3. ***Corrections only to be given every 3 hours while on manual injections.**

$$\frac{\text{Current Glucose} - \text{Target Glucose}}{\text{Correction factor or sensitivity}} = \text{correct insulin dose}$$

4. Add together for total injection dose (carb insulin+ correction insulin= total dose)

- Example:
  -Carbs for lunch: 40 grams
  -Insulin to carb ratio: 10
  -Carb insulin = 4 units

  -Current glucose = 180
  -Target glucose = 120
  -Correction factor = 50

  $\frac{180-120}{50} = 1.2$

  - Correction insulin = 1.2 units
  - Total injection bolus for lunch = 5.2 units, round down to 5 units

Rounding Rule

Rounding Insulin Doses: *These guidelines are from ADA which doesn't use blood sugar to determine rounding..*

- If student has **half unit** pens or syringes: Round down for < 0.25 or < 0.75 and round up for ≥ 0.25 or ≥ 0.75
- If student has **whole unit** pens or syringes: Round down for < 0.5 and round up for ≥ 0.5

**For example: If the dose comes out to 8.63 units and the student has half unit pens, round DOWN to 8.5. If you get 8.63 units and the student has whole unit pens, round UP to 9 units*