

## FAQs for School Nurses

### **1. What should I do if I think a student's pump is not working properly? Should I still give a bolus through the pump?**

If the pump is not functioning either because it has physically broken or the pump site has fallen out or otherwise failed, the student is not receiving insulin through the pump which is an urgent concern. The student will need to receive insulin through injections until the issue with the pump is fixed.

Make sure to have back up insulin pens and pen needles or vials with syringes on hand.

In the event of a pump site failure, the student will need to take rapid acting insulin by injection until the pump site is replaced.

Make sure to have updated insulin pump settings on file.

### **2. How do you calculate an insulin dose with ratios?**

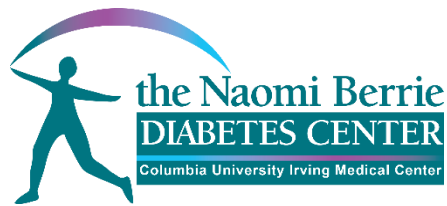
To calculate an insulin dose using rapid acting insulin see below dose calculation worksheet.

If your student is using an insulin pump, please follow the pump recommended dose after entering the blood sugar and/or carb count into the pump. Note: If you double check the pump recommended dose by hand, you may calculate a slightly higher or lower dose. This is because the pump factors into the equations components such as insulin on board or reverse corrections. You should follow the pump recommendations.

### **3. What supplies should I keep in my office?**

Berrie Center clinicians recommend having the following items on hand at all times:

- Blood glucose meter and test strips
- Infusion set or pod
- Rapid acting insulin pen or vials + pen needles
- Insulin syringe
- Long acting insulin
- Alcohol Pads
- Batteries for pump
- Rapid acting carb treatments for lows (juice, glucose tablets, etc)
- Ketone strips
- Glucagon or Baqsimi or Gvoke



#### **4. When should I have the student check ketones?**

The Berrie Center clinicians advise to check urine for ketones when the blood glucose is elevated two times in a row when checked 3+ hours apart despite corrections (may use a cutoff of 250mg/dL for pump users or 300mg/dL for students on injections).

Also, check for ketones when a student has a blood sugar greater than 250 and any symptoms of diabetic ketoacidosis (DKA) including thirst or a very dry mouth, frequent urination, nausea, vomiting, or difficulty breathing, for example. DKA is very serious. Call the student's diabetes team immediately if a student has moderate or large ketones.

#### **5. What is the best way to treat low blood glucose?**

In general, a low blood sugar is a value under 70 mg/dl (80mg/dL for children ages 5 and under). The rule of thumb for children is to treat the low blood sugar with 15 grams of rapid acting carbohydrate then repeat the blood sugar check in 15 minutes. Examples of treatments include 4 ounces of juice, 3-4 Starbursts or glucose tabs. If the blood sugar is still low after 15 minutes, repeat the treatment.

#### **6. What is the new form of glucagon?**

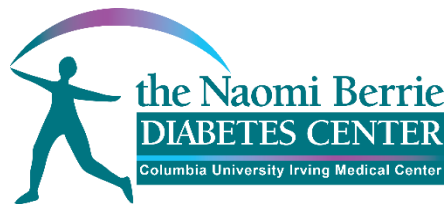
The FDA recently approved Baqsimi, a nasally administered glucagon, for the treatment of severe hypoglycemia in people with diabetes four years and older. Baqsimi is administered like a nasal spray and comes in a single-use dispenser that requires just 3 steps to use: (i) remove the device from tube; (ii) insert tip of device into one nostril; (iii) push plunger all the way in to administer dose. Baqsimi does not require inhalation, meaning that it can be successfully administered by another person if the receiver is unconscious. The treatment is needle-free and comes ready-to-use, requiring no mixing or preparation.

#### **7. How can I help a student with exercise planning?**

Exercise is crucial for overall wellbeing, physically and mentally at every stage of life. The best way to assess a student's response to activity is to keep good records. The student should check frequently during prolonged exercise as per their Diabetes Medication Administration Form.

As a rule, a cardio type workout (walking, running, riding a bike), helps muscles use glucose without insulin. To prevent hypoglycemia (a low glucose), insulin adjustments might need to be made. The student may need to lower insulin or increase carbohydrate consumption around the time of activity.

Strength-training activities, such as High-Intensity Interval Training (HIIT) may cause a rise in glucose towards the end of the activity period. This is due, in part, to an increased release from the liver due to a stress response.



The parents and/or guardians should then consider meeting with a diabetes educator for help to individualize the insulin regimen. This is individualized treatment, so discuss with the family whether your student needs a snack before exercise.

**8. Can parents have input on medication management throughout the school day?**

Under the law, parents and/or guardians of children with diabetes have the right to request adjustments to insulin dosing during the school day. The Berrie Center helped modify a policy that gives parents and guardians a role in treatment decisions during school hours. The New York State Department of Education has the guidelines posted here: <http://www.p12.nysed.gov/sss/schoolhealth/schoolhealthservices/>. More information is on our site at: <http://www.nbdiabetes.org/news/berrie-center-families-and-clinicians>.

**9. My student has been having a lot of high and/or low blood sugars. I think the student's insulin doses might need to be changed. What should I do?**

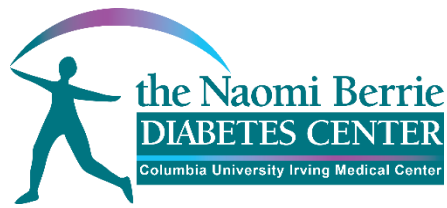
You can help by telling the family your concerns about the blood sugars. Advise them to reach out to their diabetes team to discuss making adjustments to the child's insulin doses. Keeping blood sugar records or uploading insulin pumps regularly can help improve glycemic control.

**10. My student is using a continuous glucose monitor (Dexcom, Freestyle Libre, Guardian, etc). What should I be doing differently compared to a student who does finger sticks to check blood sugar?**

You should have an addendum with instructions on the use of continuous glucose monitors (CGMs) at school. The Berrie Center provides an addendum with instructions. Please follow the instructions on that addendum.

Some CGMs are FDA approved for readings to be used for treatment decisions. This means students will not need to do finger stick blood sugars except in a few situations. Other CGMs are not approved for this indication and require finger sticks at all times for treatment decisions.

Please refer to the manufacturer's guidelines when to do a finger stick with your student's specific CGM.



### **11. How many carbohydrates should I allow the student to eat?**

There is no specific, prescribed diet for people with type 1 diabetes. Children with diabetes can eat a normal, healthy diet like most children. The only exception is to avoid liquid sugars like regular soda, juice, and other drinks sweetened with sugar. These drinks should be used only for treating low blood sugars. Carbohydrates are a healthy part of all diets, and children need to eat some carbohydrates to encourage growth and development.

Some families may have carbohydrate goals or limits for their children, however there is not a set rule limiting carbohydrate intake for children with type 1 diabetes. You can ask the family if they have any guidelines for carb intake at school.

### **12. When should I call the Berrie Center?**

We are available 24 hours a day 7 days a week for true emergencies that need immediate attention at 212-851-5494.

Examples of emergency situations are:

- Vomiting/ill appearing child
- Moderate to large ketones in the urine/blood
- Error in insulin dosing
- Low blood sugars that are not responding to glucose tabs, juice, or if glucagon is needed

For non-urgent concerns, you may call the Berrie Center during office hours 9:00am – 5:00pm, Monday through Friday at 212-851-5494.