

PUMPER IN THE SCHOOL!

DELTEC COZMO

An insulin pump is a device about the size of a pager that provides small amount of fast-acting insulin (**basal**) every few minutes through a small catheter under the skin. The student then takes an additional amount of insulin (**bolus**) through the pump for meals and snacks. These bolus amounts are dependent on carbohydrates, blood sugar and any exercise the student may be about to engage in. Insulin pumps help the child with diabetes to maintain a more normal lifestyle and also to gain better blood sugar control. This sheet is intended to give you the information you need to assist a child with a Deltec Cozmo insulin pump.

LOW BLOOD SUGAR

Students with a pump may go low or high just as children using insulin in the form of shots do. For details on how to handle a low for a particular student, check the diabetes care plan.

If a severe low occurs in a child using a pump, it is important for school personnel to know how to disconnect the pump from the insertion site at the skin. Have the child show you how he or she disconnects the pump (it's easy and painless) so that you will know how if an emergency arises. See care plan for how to treat a low BG.

HIGH BLOOD SUGAR

If the student has a high blood sugar (over 300), it is **VERY** important to check the urine for ketones. If a child shows positive ketones, it is a sign that the pump may not be delivering insulin and the child will need an injection of fast-acting insulin (Humalog or Novolog) using a needle and syringe. See the care plan for specifics on dosing. The pump insertion site will also need to be changed. If the child is unable to change the site his or herself, a parent will need to be called. Any time insulin is given for a blood sugar over 300 (whether by pump or syringe), blood sugar should be checked again in 1 hour.

EXERCISE

During times of vigorous exercise or contact sports, the student may choose to disconnect the pump for a short time. For this, the student needs to place the pump in a safe place. The pump should not be disconnected for longer than 1 hour. Some students choose to wear their pump during exercise. See the care plan for details about this student.

SUPPLIES FOR SCHOOL

- Freestyle strips
- Lancing device (to poke finger) and alcohol
- Glucagon (in case child passes out from a low)
- Ketostix (to check urine for ketones if BG > 300)
- Snacks (to treat low BG)
- AAA battery (the pump will alarm if the battery runs low. You will need a penny to loosen the battery cap to change out the battery.
- Insertion set (in case insertion site comes out)
- Back-up insulin (see above section on high blood sugar)

SUSPENDING THE PUMP

The student's pump should not be suspended for any reason. If the pump needs to be disconnected, simply disconnect at the site and leave the pump running.

MEAL BOLUS

At lunch, the student will need to give a bolus dose of insulin through the pump. The bolus dose is given before the meal unless there is concern the child will not eat all of the meal. In that case, the bolus is given right after the meal. *The typical student needs help remembering to give their bolus!* Missing bolus doses is the main reason for poor diabetes control in people who use pumps.

How to give a meal-time bolus using the Deltec Cozmo pump

1. **ALL** pumpers need a blood sugar check before lunch. Most kids benefit from checking their blood sugar and bolusing in the classroom. Check blood sugar using the meter attached to the pump (you must 'wake-up' the pump by pressing any button before you insert the test strip).
2. When BG result comes up, scroll down to choose 'meal bolus'. Press 'next' (If you will be bolusing **after** the meal, write down your blood sugar result and allow the child to eat lunch. After lunch, wake up the pump by pressing any button, go to the main menu, and scroll down to 'meal bolus', press 'next' and continue to #3)
3. When the 'carbohydrate' screen comes up, scroll up the total grams of carb in the meal and push 'next'.
4. 'Add correction bolus?' screen should appear. Make sure it reads 'yes' (if it reads 'no' scroll down to turn the no into a yes). Press 'next'.
5. The current blood sugar should display (if you are doing the bolus **after** the meal, you will have to manually scroll in the blood sugar since the meter will not hold the blood sugar result in the screen for more than 10 minutes after the blood sugar has been done). Press 'next'.
6. Cozmo will do the calculations for carbs and blood sugar and come up with a result (magic!) The result will be in black. At this time, if you have been instructed to lower the dose because of anticipated exercise (like PE or recess), you can scroll down to a lower bolus amount (see care plan for specifics for this child)
7. Press 'deliver'. Dose will deliver over the next minute. When the dose is delivered, the pump will beep 2 times. Voila! You are done!

Note: The pump will lower the amount that it recommends to give if another bolus has been given recently. This is a safety feature and is meant to keep the child from over bolusing. If this is happening with the student you will see the words, "reduced for insulin on board" under the suggested dose.

To learn more about the Como pump, visit the Deltec website at www.cozmore.com