SCHOOL INSULIN PUMP GUIDELINES FOR CLOSED LOOP/AID PUMPS (AFTER THE ADJUSTMENT PERIOD FOR OMNIPOD DASH)

A- Shared responsibilities for a safe environment at school with an insulin pump.

PARENTS	SCHOOL
Arrange a meeting with the school (school nurse, principal, teacher, gym teacher, lunch supervisor, daycare and other responsible person for daily diabetes management) to update about the insulin pump start and/or continuous glucose monitoring system.	Identify a **minimum** of 2 school staff to be trained with the insulin pump (even if child is independent, they might need help sometimes).
Participate in the elaboration and update the care plan. We suggest you use the diabetes care plan from 'Diabetes at school' mentioned above.	**All** school staff should know the symptoms of hypoglycemia and how to treat it. Support the student by allowing blood sugar monitoring at any time or anywhere, respecting the student's wish for privacy.
Ensure child wears medical bracelet.	Have a system in place to inform all school staff which child has diabetes.
Provide and replenish diabetes and hypoglycemia treatment supplies.	Have a dedicated area for diabetes supplies.
Teach the school how to use the insulin pump.	Identify a **minimum** of 2 school staff to be trained with the insulin pump (even if child is independent, they might need help sometimes).
Before bringing child to school every day : ▪ Ensure enough insulin and battery for the day. ▪ Infusion sites changed at home every 3 days. ▪ No redness or swelling at the site. ▪ No ketones. ▪ Label all snacks and lunch with carbohydrate content. ▪ Backup plan in case malfunction at school.	Trained school staff should be available for morning snack, lunch and afternoon snack to assist with blood sugar checks and insulin bolus administration.
Provide instructions for special activities and parties.	Timely communication to parents regarding special activities and parties. Include all children in special activities and parties.
Parent available by phone in case of emergency.	Inform parents if both trained staff are unavailable for one day.
Provide Glucagon/Baqsimi and replace when expired (school and parent discretion).	
If a problem arises with the shared responsibilities, contact the diabetes nurses at the Montreal Children's Hospital for support 514-412-4400 # 22860.	

B- Regular Blood Sugar Checks

Blood sugar can be verified with Continuous Glucose Monitoring (CGM), unless:

- **No reading available on CGM and blood sugar is required (ex: during sensor warm up, signal loss, etc.)**
- **Symptoms don't match CGM reading (ex: hypoglycemia symptoms but CGM doesn't indicate hypoglycemia)**

TIME	BLOOD SUGAR CHECK	ACTIONS
Morning snack, if desired ____h____	Yes ☒	1. **If blood sugar is under 4.0 mmol/L** → treat hypoglycemia first (see **point C** below) 2. Enter carbohydrate amount eaten at snack in the pump (see **point E**) as well as the current blood sugar if result is not automatically sent to the pump **3.** Accept the bolus suggested by the pump **4.** Child eats snack
Lunch ____h____	Yes ☒	**1.** **If blood sugar is under 4.0 mmol/L** → treat hypoglycemia first (see **point C** below) **2.** **If blood sugar is 15 mmol/L or more → check for ketones (see point D below)** **3.** Enter carbohydrate amount eaten at lunch in the pump (refer to **point E and F**) as well as the current blood sugar if result is not automatically sent to the pump **4.** Accept the bolus suggested by the pump **5.** Child eats lunch
Afternoon snack, if desired ____h____	Yes ☒	1. **If blood sugar is under 4.0 mmol/L** → treat hypoglycemia first (see **point C** below) 2. Enter carbohydrate amount eaten at snack in the pump (see **point E**) as well as the current blood sugar if result is not automatically sent to the pump **3.** Accept the bolus suggested by the pump **4.** Child eats snack

C- If the result is below 4.0 mmol/L, treat the hypoglycemia:

- DO NOT LEAVE THE CHILD ALONE
- Give _____ ml of juice **or** _____
- Recheck blood sugar after 15 minutes.
- If the result is still below 4.0 mmol/L, repeat the hypoglycemia treatment and notify parents.
- Do not disconnect the pump in case of hypoglycemia
- In case of hypoglycemia and child unable to swallow, unconscious or having a seizure: administer Glucagon/Baqsimi immediately

D- If blood sugar is 15 mmol/L or more (before lunch only or for more than 4 hours):

- Blood sugar indicating 'HI' means the blood sugar is above 22 to 28 mmol/L, depending on the meter.
- Test for ketones (blood) using Precision Neo or Libre reader provided by parents.
- If ketones are positive **(0.7 or more)**, contact parents immediately.
- If ketones are negative **(0.6 or less)**, no intervention needed.

E- Steps to give an insulin bolus with the insulin pump: refer to pump booklet.

F- For children who might not eat their whole lunch:

Before eating lunch :

- Check the blood sugar before the meal and enter it in the pump, if result is not sent automatically to the pump.
- Enter the minimum amount of carbohydrates that the child will eat before the meal.
- Give insulin bolus #1 (example: 10 g of carbohydrates)

After lunch is eaten:

- Enter the remaining amount of carbohydrates eaten into the pump.
- Give insulin bolus #2 (example: full meal 40 g of carbohydrates)
  40 g – 10 g (already given) = 30 g to give after the meal

G- For physical activity that lasts more than 30 minutes and <u>that is not part of the daily</u> routine (example : gym class, going to the park, etc.):

OMNIPOD DASH ONLY

- If blood sugar is **7.9 mmol or lower** before the activity: give juice or snack (provided by parents) that contains 5, 10 or 15 grams of carbs, depending on the child's age, before starting the activity. No need to wait for blood sugar to rise above 8 mmolL to start the activity.
- Check blood sugar with glucometer if any signs/symptoms of hypoglycemia but CGM does not indicate low blood sugar.

CLOSED LOOP PUMP/AID

- Activate sport mode/temp target 1-1h30 hours before activity and run until end of physical activity.

H- Sickness

If the child becomes ill, contact the parents.

I- Alarms

If the pump beeps for an unknown alert/alarm, contact the parents for assistance.

J- Emergency kit

The child must have an “Emergency kit” at school (pump supplies, insulin (* Insulin should be kept in a refrigerator at school), insulin pen, juice or glucose tablets, snacks and batteries). Call the parents if there is a malfunction or dislodgement of the insulin pump.

K- Diabetes clinic contact info

Diabetes doctor on call (for emergencies): 514-412-4400 Ext: 53333 (ask for the pediatric diabetes doctor on call)

Diabetes nurses: 514-412-4400 ext: 22860

Ressources : https://www.diabetealecole.ca/

http://www.bcchildrens.ca/health-professionals/learning-development/resources/diabetes-at-school (anglais seulement)

https://www.cps.ca/fr/documents/position/type-1-a-lecole