

iLet Insulin Pump

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Websites

For more information:

- iLet (www.betabionics.com)
- Diabetes Resources (www.myschoolnurse.net)



Simulator Apps

Simulator apps for practice. This does not control the insulin pump.

BetaBionics iLet Simulator: Able to access from phone or computer

deploy-react-simapp.s3-website.us-east-2.amazonaws.com



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iLet



- Different from all other Automated insulin pumps
- Must have Dexcom G6 or Dexcom G7 to use this insulin pump
- Will not function without a CGM
- Determines 100% of all insulin doses
- Algorithm communicates with the CGM to make all insulin dosing decisions- no carb ratios, no correction formulas, and no basal rates programmed
- Ease the burden of carbohydrate counting
- Must be “carb aware” to estimate carbs in a meal (Usual, More, or Less)
- Need to announce a meal before eating if possible
- Touch screen
- Tubing
- Rechargeable battery – charging pad. If battery dies, then the pump will not function



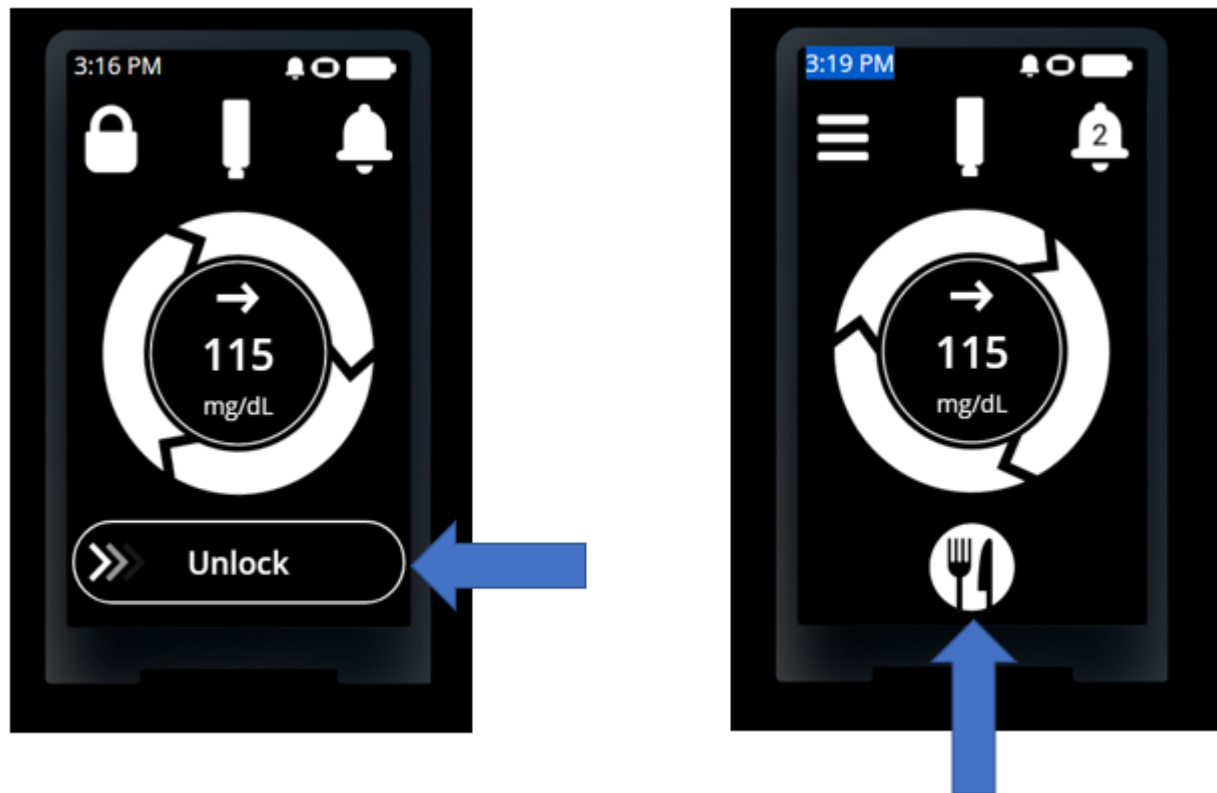
iLet School Information



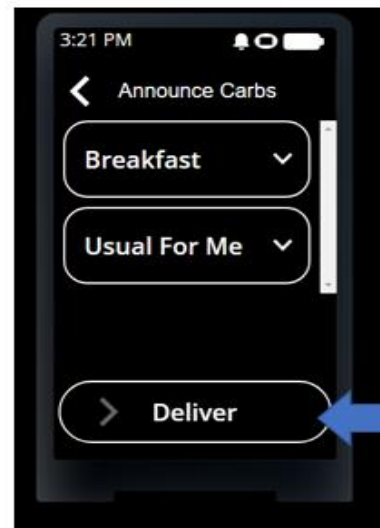
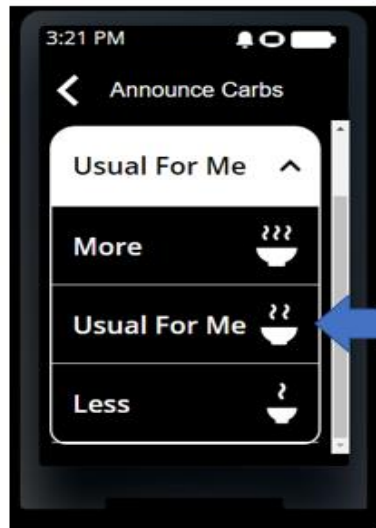
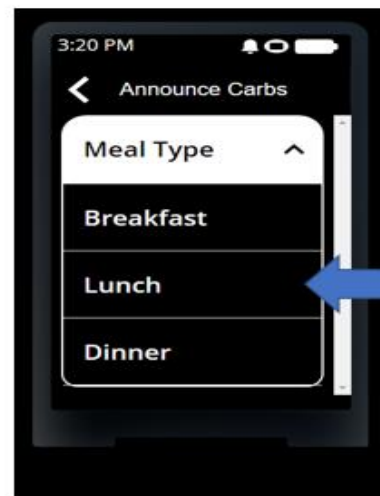
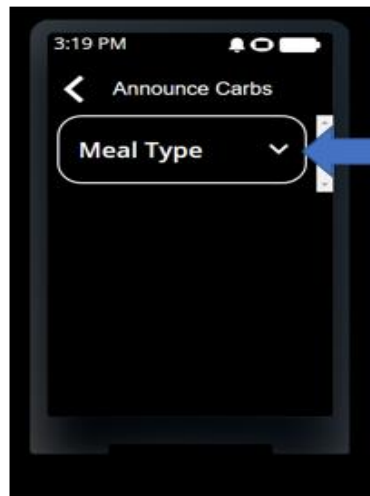
- Announce a meal as “**Usual for me**” before eating
- This is listed on the Prescriber Authorization Form
- If it has been longer than 30 minutes since the student started eating, then **DO NOT** announce the meal
 - If a meal is announced more than 30 minutes after eating, this could cause a low – let the algorithm take care of the hyperglycemia
- For snacks, choose the meal (Breakfast, lunch, or dinner) closest to the snack time and choose “**Less than**” to dose
- If less than 15 grams of carbohydrates you do not have to announce because the algorithm will recognize the glucose rise and start to deliver insulin to help
- Continue to wear the pump with activity
- The algorithm should recognize impending hypoglycemia and reduce or pause insulin delivery
- Treat hypoglycemia if needed



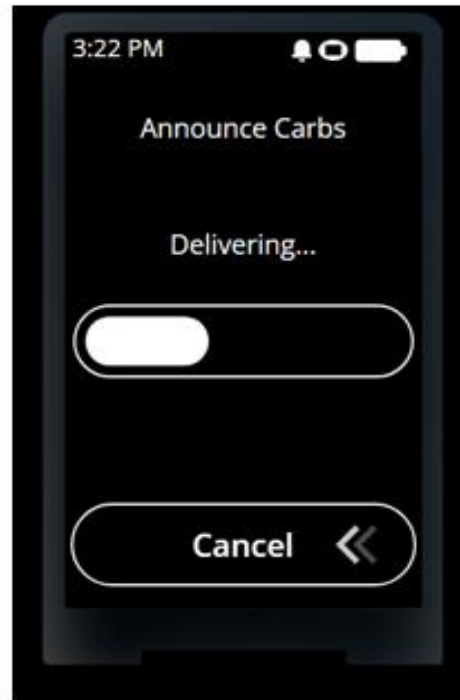
Bolus Dosing



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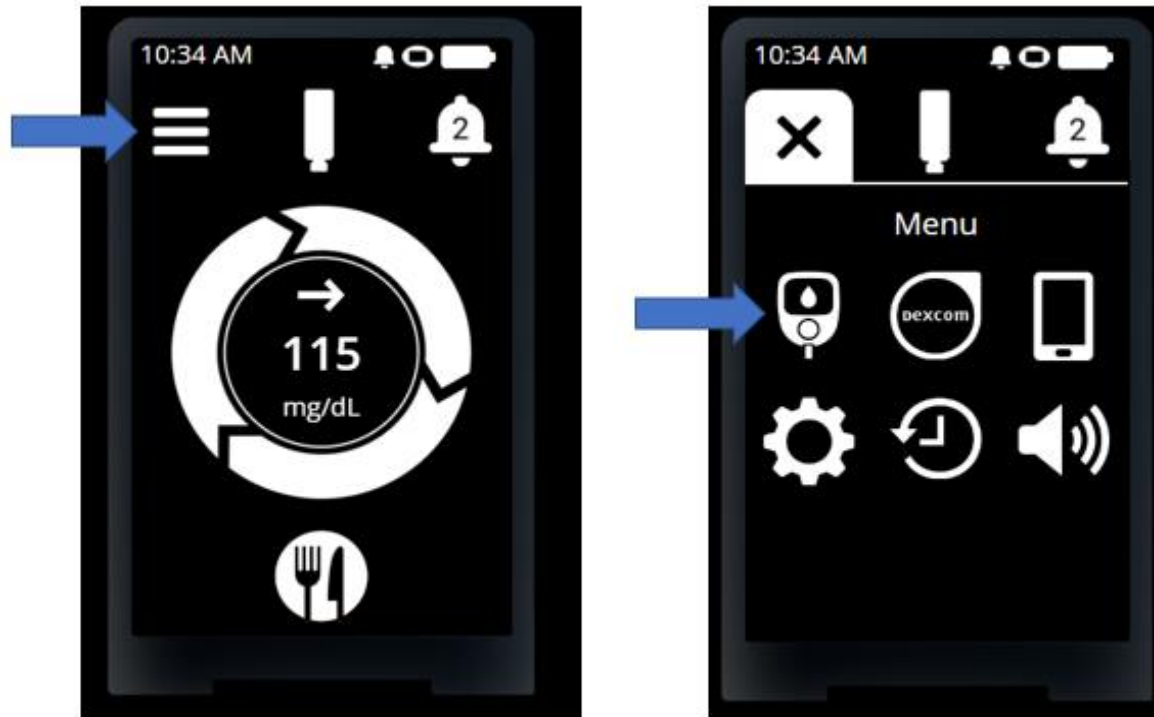
iLet School Information



- If no Dexcom, then the pump will go into “BG run mode”
- Max of 72 hours – You will be alerted to enter in a blood glucose manually, if you do not, then the pump will shut down and turn off – No insulin delivery at this point
- Follow the “pump failure” section on the PPA – you will have a carb ratio and correction formula (Must wait 3 hours between correction doses if back on injections)
- The student will bring a copy of the iLet Ketone Action Plan
- Basal insulin dose(Long Lasting) also listed. The parent is not required to leave this insulin
- The nurse can call family to see if they are able to come give the long lasting dose, within an hour of pump failure
 - If they are unable, then follow the PPA orders for carb ratio and correction formula



How to Enter a Glucose for BG- Run Mode



iLet School form

PRESCRIBER AUTHORIZATION STUDENT INFORMATION

Student's Name:
Date of Birth:
Age:
Allergies:

Pump Therapy- Ilet Bionic Pancreas

START DATE: 9/27/2023

STOP DATE: ***

Name of Medication: Insulin (***)

Dosage: Meal Announcement

MEAL TYPE	MEAL SIZE
Breakfast	Usual for me
Lunch	Usual for me
Dinner	Usual for me
Snack- Choose Meal type "Lunch"	Less

- Do Not Announce Meal if the meal or snack you are eating has less than one quarter (25%) of the carbs in your Usual for me meal, you do not need to announce
- Meals should be announced right before the student eats
- If it has been more than 30 minutes since the student starting eating DO NOT announce food.

Pump Failure:

For pump failure (remove pump and resume insulin injections)

Notify caregiver(s) so long acting insulin can be administered

The rapid acting insulin may be administered by syringe injection for insulin to carbohydrate ratio and correction factor doses.

Remember you must wait 3 hours between correction factor dose administrations but give meal dose as scheduled.

Student does not need to go home (unless he/she meets criteria in the Diabetes Medical Plan)

Name of Medication: Insulin (***)

Bolus Ratio **Time Ratio**

1 unit per *** grams of carbohydrate before breakfast

1 unit per *** grams of carbohydrate before lunch

1 unit per *** grams of carbohydrate before dinner

1 unit per *** grams of carbohydrate before snack

Give Correction Factor every 3 hours

Blood sugar - $\frac{(***)}{(***)} = x \text{ units}$

Basal Insulin Dose (If available)





Name of Medication: Insulin (***)

Dosage: *** unit(s); Route: Subcutaneous one dose as soon as possible after pump failure



iLet Ketone Action Plan




Ketone Action Plan

Test your BG and ketones if:	
you are nauseous, vomiting or have diarrhea.	
you think your infusion set is not working.	
your CGM glucose has been above 300 mg/dL for 90 minutes.	 High Glucose Glucose has been above 300 mg/dL for more than 90 minutes
your CGM glucose is above 400 mg/dL.	

Always keep these supplies with you:

- Glucose meter and strips
- Urine ketone strips OR blood ketone meter and strips
- Extra CGM sensor
- Extra infusion set and cartridge
- Insulin vial and syringe, or insulin pen and pen needle

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<p>ZONE 1</p> 	<p>Urine Ketones: Negative</p> <p>OR</p> <p>Blood Ketones: less than 0.6 mmol/L</p>	<p>Check to make sure:</p> <ul style="list-style-type: none"> • your iLet is charged, has insulin, and is displaying CGM values. • your infusion set is in place and not leaking. <p>Continue to monitor your BG:</p> <ul style="list-style-type: none"> • If your BG is still high after 90 minutes, check ketones again.
<p>ZONE 2</p> 	<p>Urine Ketones: Trace - Moderate</p> <p>OR</p> <p>Blood Ketones: 0.6 - 2.5 mmol/L</p>	<p>1. CHANGE your iLet infusion set.</p> <p>2. DRINK extra fluids.</p> <p>3. RECHECK BG and ketones in 90 minutes.</p> <ul style="list-style-type: none"> • If BG is less than 180 mg/dL and ketones are in ZONE 1, you do not need to do anything else. • If BG is more than 180 mg/dL and ketones are not in ZONE 1, GO TO ZONE 3.
<p>ZONE 3</p> 	<p>Urine Ketones: Large</p> <p>OR</p> <p>Blood Ketones: 2.5 mmol/L or higher</p>	<p>CALL YOUR HEALTHCARE PROVIDER IMMEDIATELY!</p> <p>If your healthcare provider has told you to take an Insulin Injection, it is important to follow these steps:</p> <ol style="list-style-type: none"> 1. DISCONNECT from the iLet at the time of the injection. Give the injection of rapid acting insulin as instructed by your healthcare provider. 3. DRINK extra fluids. 4. RECHECK BG and ketones in 90 minutes. <ul style="list-style-type: none"> • If BG is less than 180 mg/dL and ketones are in ZONE 1, CHANGE your iLet infusion set and RECONNECT to the iLet. • If your BG is more than 180 mg/dL and ketones are not in ZONE 1, CALL YOUR HEALTHCARE PROVIDER, GO TO THE EMERGENCY ROOM, OR CALL 911.



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iLet Ketone Action Plan

- The iLet ketone action plan is currently being formatted and will be included in the Medical Management Plan once it is updated
- Until then, when the student receives training we will send the Ketone Action Plan from iLet to include with their school orders

Things to Know:

- If the CGM reading is above 300mg/dL for 90 minutes or above 400mg/dL at any point assume the site is not working correctly!
- Contact the family to come change the site/ if student is marked “independent” have them change the site
- If you disconnect and give a correction dose via injection, then the pump must stay disconnected for 90 minutes
- If after this time the BG is less than 180mg/dL and ketones negative then reconnect to the iLet

