

Prepump Class

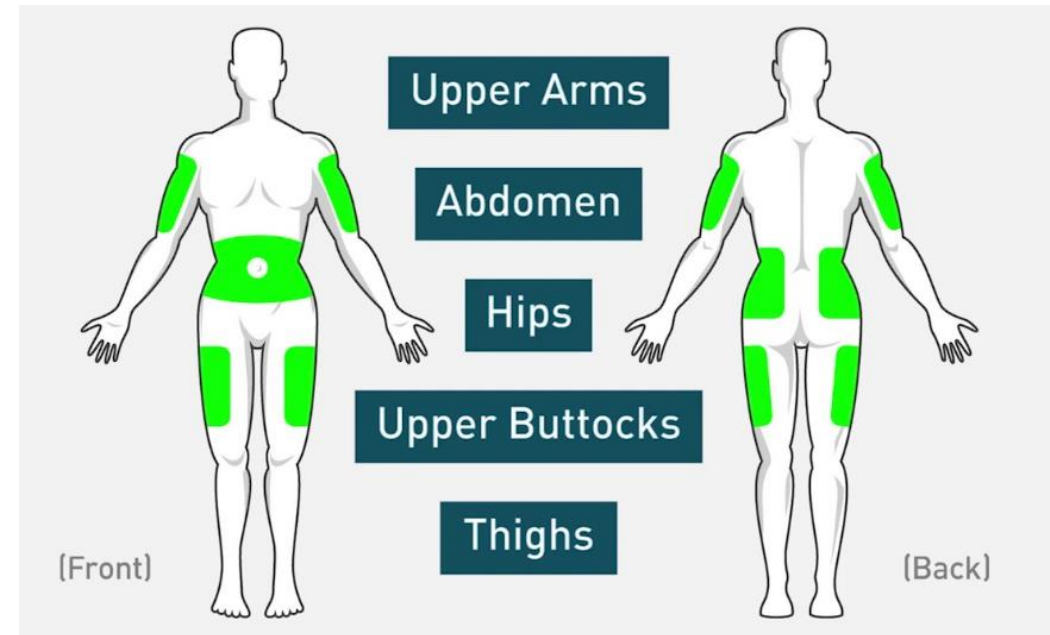
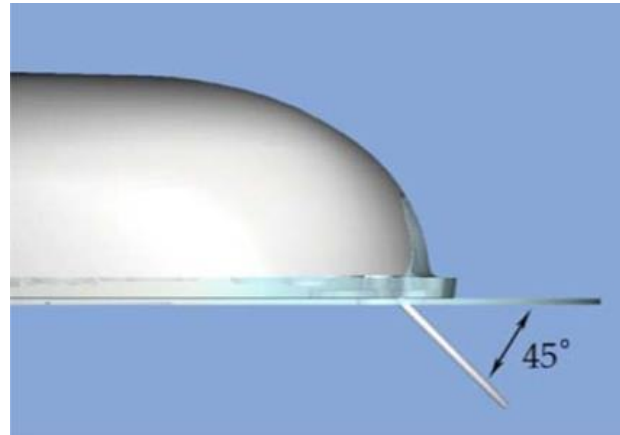
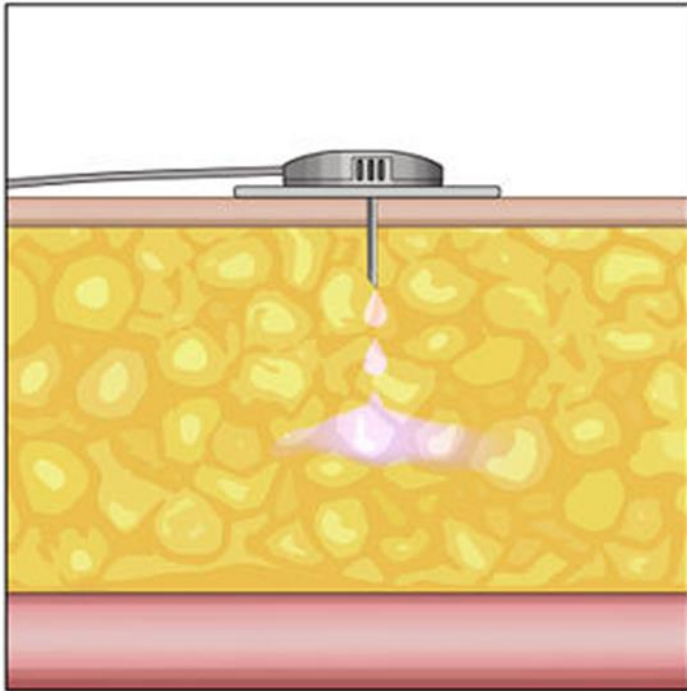


Agenda

- How is your diabetes going?
- What sensor are you using?
- How does a pump work?
- What are the features of different pumps and why are they important?
- What is the best pump for you?
- What is the process for getting an insulin pump?



How Does a Pump Deliver Insulin



How does a Pump Work?

An Insulin Pump mimics a normal pancreas by delivering short acting insulin in **2** ways:

1. **Basal insulin** – a dynamic delivery of insulin given by the pump throughout the day/night. This is your background insulin that keeps your blood sugar stable overnight and in between meals. This replaces your long acting insulin (Lantus/Levemir).
2. **Bolus insulin** - The extra insulin you deliver when you eat or to correct a high blood sugar



Bolus Menu Definition

- **Carbohydrate Ratio**
 - How many grams of carbohydrates per 1 unit of insulin
- **Sensitivity/Correction Factor**
 - How much 1 unit of insulin will lower your blood sugar
- **Blood Sugar Target**
 - Target range for insulin given– used in bolus calculation as well as a goal for where blood sugar should be with automation
- **Active Insulin**
 - How much insulin is already working in your body
 - Ability to keep track of insulin onboard



Blood Sugars >300 mg/dL with Insulin Pump

(High blood sugar for 2-3 hours and not sure why?)

CHECK URINE KETONES



Ketones: Negative →

- Bolus using pump
- Recheck glucose/ketones in 2 hours
- If Blood sugar still >300 mg/dL, change infusion set/pod

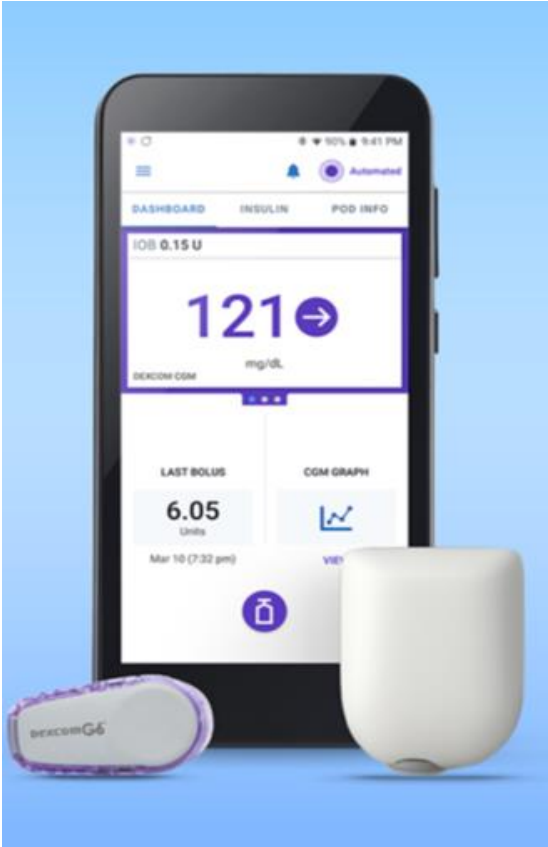
Ketones: Trace or Small →

- Bolus using pump
- Recheck blood sugar in **1 HOUR**
 - If blood sugar doesn't drop by **AT LEAST 30 points AND ↓ CGM**, change infusion set/pod!
- Recheck glucose/ketones every 2 hours and correct using your pump
- **DRINK WATER (8-10 oz/hour)**

Ketones: Moderate or Large →

- Give injection with PEN or Syringe-**DOUBLE THE CORRECTION ONCE**
- Change infusion set/pod
- Recheck glucose/ketones every 3 hours and correct with PUMP until ketones clear
- **DRINK WATER (8-10 oz/hour)**

Features of each Insulin Pump



Omnipod 5

- Approved for kids ages 2 and up
- Uses a customizable glucose target, from 110 mg/dL to 150 mg/dL in 10 mg/dL increments.
- Must be using the dexcom app (not receiver) for technology to work.
- Currently compatible with Samsung S10-S23
- Projected to be compatible with iOS in first quarter of 2024

3 Simple Parts

To the Omnipod 5 Automated Insulin Delivery System



Omnipod 5 App*

Take full control of the Pod from the Omnipod App on a compatible smartphone* or use the free controller, provided at no additional cost with your first prescription.

*For a list of compatible smartphone devices visit omnipod.com/compatibility.

Pod

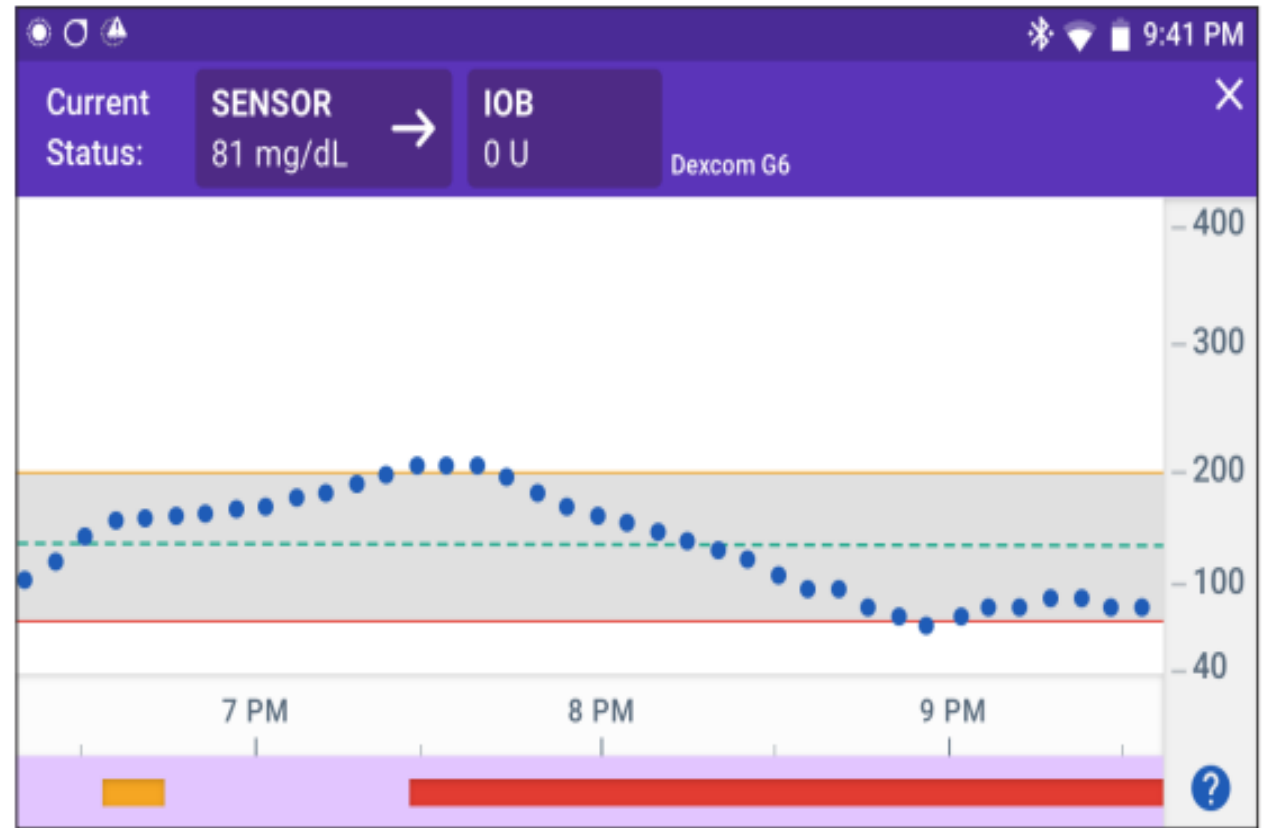
Tubeless, wearable and waterproof, the state-of-the-art Pod, with built in SmartAdjust™ technology, sits right on your body and automatically adjusts insulin delivery for up to 3 days or 72 hours.

Dexcom® G6 CGM System

Continuously sends glucose readings to the Pod, so you can get real-time data without the fingersticks*. Dexcom G6 is sold separately.

*Fingersticks required for diabetes treatment decisions if symptoms or expectations do not match readings.

Omnipod 5





Tandem T-Slim Pump



T-Connect App



Tandem T-slim Pump






- Software based platform that can be updated remotely during warranty
- Integration with **Dexcom G6, Dexcom G7 and Freestyle Libre sensors**
- Rechargeable battery
- Water resistant up to 3 feet for 30 minutes
- Control IQ technology available for ages 5 and up, using >10 units of insulin/day or weighing >55 lbs



Control IQ:







How Does Control-IQ Technology Work?







Control-IQ™ technology is designed to help increase time in range (70–180 mg/dL)* using Dexcom G6 continuous glucose monitoring (CGM) values to predict glucose levels 30 minutes ahead and adjust insulin delivery accordingly, including delivery of automatic correction boluses (up to one per hour).

		Control-IQ	Sleep Activity	Exercise Activity
 Delivers	Delivers an automatic correction bolus if sensor glucose is predicted to be above ___ mg/dL	180	---	180
 Increases	Increases basal insulin delivery if sensor glucose is predicted to be above ___ mg/dL	160	120	160
 Maintains	Maintains active Personal Profile settings when sensor glucose is between ___ - ___ mg/dL	112.5 - 160	112.5 - 120	140 - 160
 Decreases	Decreases basal insulin delivery if sensor glucose is predicted to be below ___ mg/dL	112.5	112.5	140
 Stops	Stops basal insulin delivery if sensor glucose is predicted to be below ___ mg/dL	70	70	80

*As measured by CGM.

Control-IQ Technology Pump Icons

Symbol	Meaning
	Control-IQ technology is on but not actively increasing or decreasing basal insulin delivery.
	Control-IQ technology is increasing basal insulin delivery.
	Control-IQ technology is decreasing basal insulin delivery.
	Control-IQ technology has stopped basal insulin delivery.
	Control-IQ technology is delivering an automatic correction bolus (or an automatic bolus).
	The Sleep Activity is enabled.

Symbol	Meaning
	Control-IQ technology is delivering the normal Personal Profile basal rate.
	Control-IQ technology is increasing basal insulin delivery.
	Control-IQ technology is decreasing the basal insulin delivery.
	Basal insulin delivery is stopped and a basal rate of 0 u/hr is active.
	Control-IQ technology is delivering an automatic correction bolus.
	The Exercise Activity is enabled.

Tandem Mobi:

- controlled from iPhone
- Dexcom G6 integration until late 2024
- holds up to 200 units
- as little as 5" of tubing
- uses Control IQ technology
- water resistant (IP28)
- wireless charging



BENEFITS

Tandem Mobi Value

FOR PATIENTS

- **Wearability** – Users decide how and where they have the freedom to disconnect
- **Greater discretion** thanks to impressively small size and multiple wear options
- **Tandem Mobi** is the only automated insulin delivery system fully controllable via a mobile app¹



FOR PROVIDERS

- Powered by **Control-IQ technology** — the same AID system on the t:slim X2 pump
- Designed to **reduce patient burden**
- **Choice** of pump therapy solutions to best meet user needs
- More than **150 million** patient days using Control-IQ technology on the t:slim X2 pump¹

Additional Features:



5-inch Tubing
Option



Wireless
Charging



200-Unit
Cartridge



Remote Software
Updates*



Water-Resistant
(IP28)[†]



LED Status
Indicator

Tandem Mobi



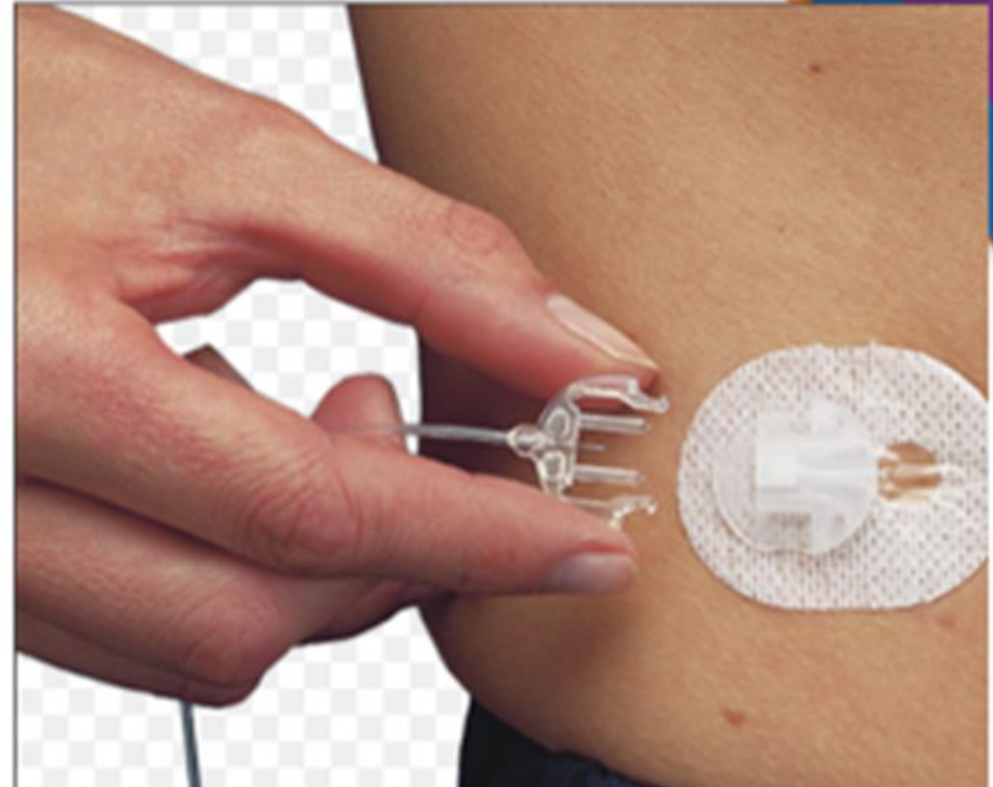
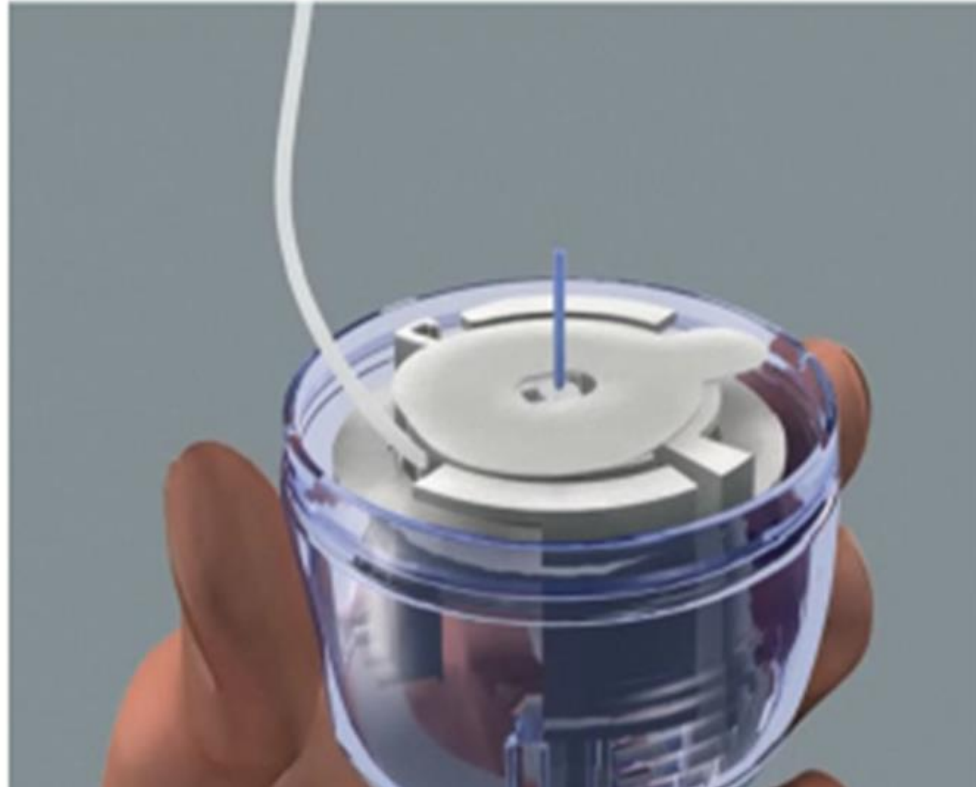
Life is Better With Options

Make diabetes management fit your lifestyle:

- Compatible with all of our [infusion sets](#), including a new 5-inch tubing option designed to be worn with the adhesive sleeve
- Compatible with Dexcom G6 CGM sensor (Dexcom G7 expected Quarter 2, 2024)*
- Easily disconnect for showering, sports, or other activities. Reconnecting is a snap.



Infusion Sets:



Medtronic 780G with Guardian 4 Sensor

MiniMed™ 780G system

The only system with meal detection technology* that provides automatic adjustments and corrections† to sugar levels every 5 minutes⁵

Extended infusion set

The first and only infusion set designed for up to 7 days of wear time^{1,2,3}

96% fewer injections with EIS & MiniMed™ 780G system than MDI^{1^}

MiniMed™ Mobile app

Glucose levels, pump information, and insulin data on a phone or Apple Watch

95% time spent in SmartGuard™ technology⁴

Guardian™ 4 sensor

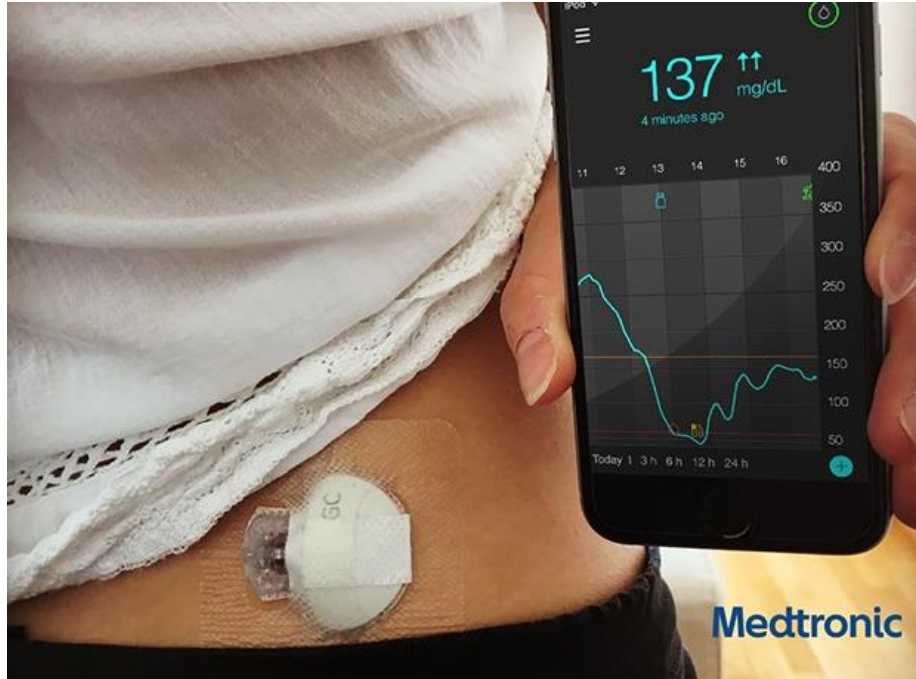
No fingersticks with SmartGuard™ technology^{***}

Decreased alarms and alerts^{**}



Smart devices sold separately

Pump Components



Smartguard

What is meal detection technology and how does it work?

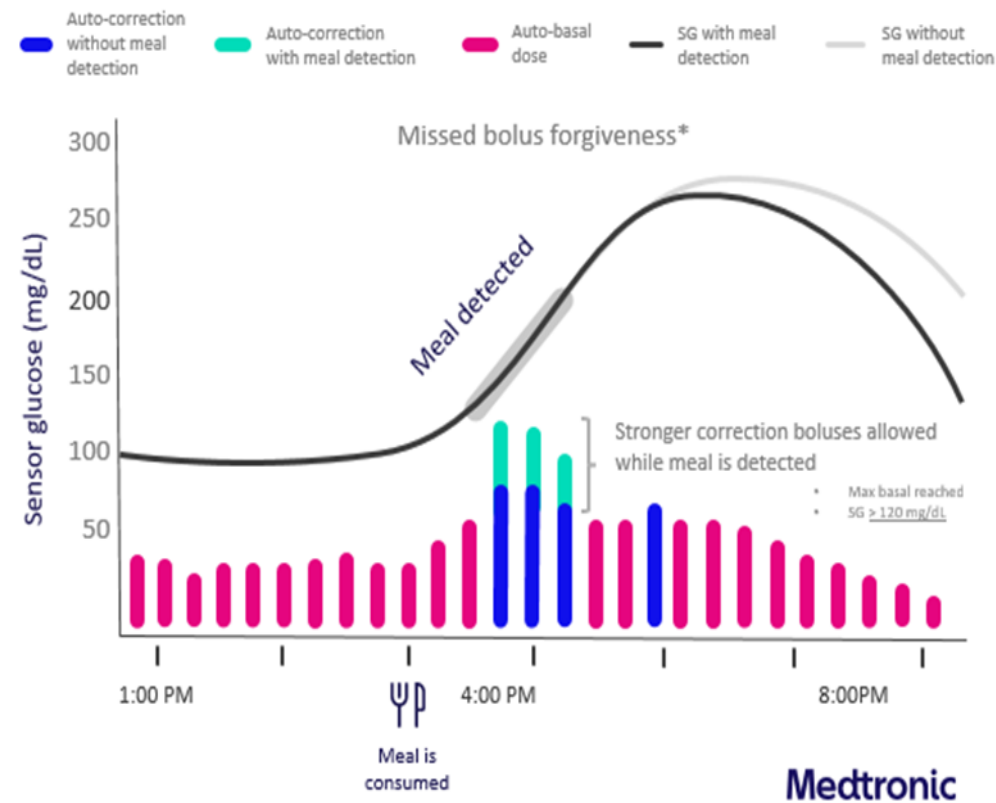
The system uses current and past sensor glucose (SG) trends to detect a missed meal bolus*.

If the system detects a meal based on the SGs rising rate of change, it can automatically deliver stronger correction doses while SG values are rising, up to every 5 minutes.

* Taking a bolus 15 – 20 min before a meal helps to keep blood sugar levels under control after eating.
† Refers to auto correct, which provides bolus assistance. Can deliver all correction doses automatically without user interaction, feature can be turned on and off.

‡ Refers to SmartGuard™ technology. Individual results may vary.

The only system with meal detection technology* that automatically adjusts and corrects† every five minutes‡



Medtronic Extended infusion set and reservoir

96% fewer injections with 7 day infusion set & MiniMed™ 780G system than injections

The first and only infusion set designed for up to 7 days of wear



1. Chattaraj S, et al. The Medtronic extended-wear infusion set: Determining mechanisms of action. As presented at the 14th International Conference on Advanced Technologies & Treatments for Diabetes; June 2-5, 2021.
2. Chattaraj S, et al. Study of insulin stability impact on pump therapy: Test model development. Diabetes. 2020;69 [Supplement 1]:013-P
3. Zhang G, et al. Assessment of adhesive patches for an extended-wear infusion set. Diabetes. 2020;69 [Supplement 1]:986-P

BetaBionic Pump







iLet®
A fully automated
bionic pancreas

CAUTION: The iLet® bionic pancreas is an investigational device limited by childrenwithdiabetes.com (United States) law to investigational use. Not available for sale.

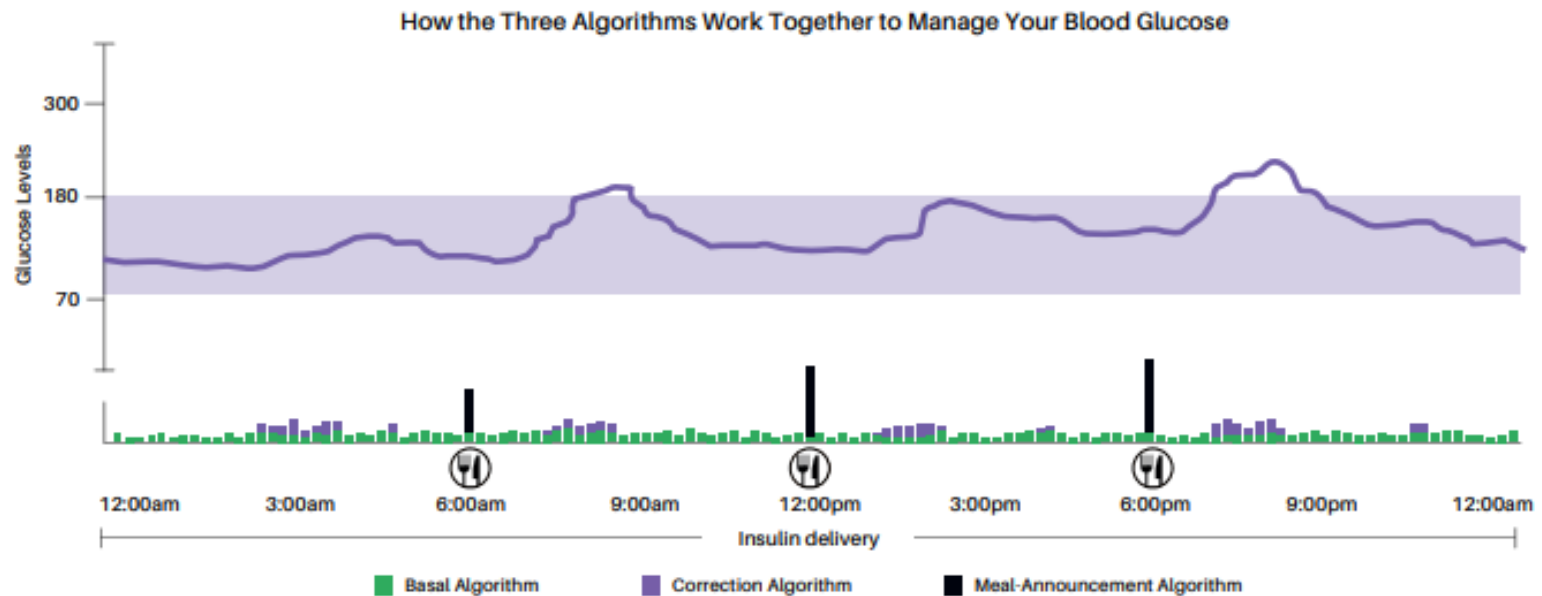
- no carb counting or correcting
- announce meals as “usual”
- “less than” or “more than”
- works with Dexcom G6 or G7 sensor
- just a weight needed for setup
- holds 180 units
- water resistant
- approved for ages 6 and up
- Has a target adjustment for activity
- can use Humalog, Novolog or Fiasp

Meal Announcements

Meal Size Guide:

Carb Amount	Example	
Usual for me Carb Amount		This is the usual amount of carbs you would typically eat for that meal type.
More Carb Amount		This is around 50% more carbs than your Usual for me meal (1.5 times as many carbs as your Usual for me meal).
Less Carb Amount		This is around half as many carbs than your Usual for me meal (50% of your Usual for me meal).
DO NOT ANNOUNCE		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.

The algorithm



- Even when you use the Meal Announcement, **your blood glucose levels could rise above 250 mg/dl** for a few hours. You'll need to be comfortable with letting the iLet regulate your blood glucose.
- **Your blood glucose levels could drop below 70 mg/dl or 54 mg/dl**, especially during or soon after exercise.

What's Next:

Call the endocrine office or send a MyChart with your insulin pump decision

Pump Start-schedule once you receive call that your pump is being shipped

2-3 days Pump follow up-infusion set change, download review and pump changes

2 week download review by phone

