



For students using the Medtronic 670G or 770G insulin pump & Guardian sensor

Note: The Medtronic 670G & 770G Guardian glucose sensor is not FDA approved to dose from. **This means that fingersticks must be used for meal dosing.**

A Continuous Glucose Monitor (CGM) measures glucose in interstitial fluid around the blood vessels every 5 minutes.

A sensor glucose is displayed on the screen of the insulin pump in a blue or grey shield

- A blue shield indicates the pump is in **Auto Mode**
- A white shield indicates the pump is in **Safe Mode**
- The shield on the pump will display arrows up or down if sensor glucose is rising or falling
- There can be a 15-20 percent difference between sensor glucose and blood glucose

Auto Mode (Blue Shield):

In Auto Mode, basal insulin is delivered based on the sensor glucose values and recent insulin delivery needs. This is referred to as Auto Basal.

- Auto Mode uses a target of 120mg/dL
- You can temporarily change the target to 150 mg/dL for exercise or other times based on the child's needs
- You must enter the carbohydrate count when eating
- You must enter a blood glucose (finger stick) when the pump notifies or alerts to stay in Auto Mode
- When a glucose is entered over 150 mg/dL, Auto Mode may recommend a correction bolus, depending on the insulin needs – you should accept the correction

Safe Basal Mode (White Shield) will activate if: A sensor glucose is not available because the pump and sensor are not communicating, or the calibration has expired

- The sensor might be reading lower than the actual glucose values
- The blood glucose is different by 35% or more
- During sensor warm up
- Auto Mode has been at the personal minimum basal delivery rate for 2.5 hours
- Auto Mode has been at the personal maximum basal delivery for 4 hours.

*When the pump is in Safe Basal - if there is an action to resolve the issue, an alert will be indicated on the pump screen. You need to respond to the alert (such as calibrate, enter new blood glucose, lost sensor alert, etc.).

Manual Mode (No Shield): In most cases we would like students to be in auto mode 80% of the time or more, but in some cases students may only be using the pump in manual mode. If this is the case it will work like a standard pump and will not vary the dose based on the sensor glucose. If using in manual mode, follow the routine pump guidelines on pages 1-5. If symptoms do not match sensor glucose, **ALWAYS** test blood glucose for treatment.

