A guide to understanding the basics when supporting a child on insulin pump therapy.
Introduction and checking sugar levels

My name is ___________________________. My child ___________________________ was diagnosed with type 1 diabetes _____ years ago.

We use the following devices to help manage their diabetes:

- Insulin pump
  The pump delivers insulin to my child through a small tube attached to their body.
- Blood glucose (BG) meter
  The meter allows my child to test their glucose, if needed.
- Continuous glucose monitor (CGM)
  The CGM tracks my child’s sugar levels and sends readings to the pump every 5 minutes.
- Smartphone and/or watch
  Mobile apps allow my child and I to view their sugar and insulin levels in real time.

Checking sugar levels with a blood glucose meter

If my child expresses or is displaying symptoms that are different than their CGM reading, please test their glucose using a blood glucose meter.

To check a BG level using a BG meter

1. Wash hands
2. Insert test strip into meter
3. Draw blood from a fingertip using lancing device
4. Apply blood to test strip and wait for reading
5. Check glucose levels

<table>
<thead>
<tr>
<th>Low</th>
<th>In Range</th>
<th>High</th>
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</thead>
<tbody>
<tr>
<td>&lt;70 mg/dL</td>
<td>70-180 mg/dL</td>
<td>&gt;180 mg/dL</td>
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Managing low glucose

My child could experience a low glucose (hypoglycemia) while at school.

For children living with diabetes, glucose is considered low when it falls below 70 mg/dL.

Common symptoms
Some common signs of a low glucose are:
Lethargy, dizziness, cold sweats, lack of focus/confusion, feeling faint

My child’s symptoms
I’ve also identified these symptoms as indicating a low glucose for my child:

___________________________________________
___________________________________________.

Low glucose can be very dangerous if untreated. For low glucose (hypoglycemia) below 70 mg/dL, please treat my child with fast-acting carbs as outlined below and then notify the school nurse.

☐ My child has a CGM to monitor their sugar levels and is using SmartGuard™ technology.

1. Have my child consume 5-10 g of fast-acting carbs* (for example, 2 oz. juice or 2 glucose tabs).
2. Wait 15 minutes and check my child’s glucose again.
3. If still below 70 mg/dL, repeat steps above every 15 minutes until they’re back in range.

*Note: SmartGuard™ technology delivers less insulin before and during lows, so my child will need less sugar when treating lows.

☐ My child uses a BG meter to check their sugar levels and/or is using Manual Mode.

1. Have my child consume 15 g of fast-acting carbs (for example, 4 oz. juice or 3-4 glucose tabs).
2. Wait 15 minutes and check my child’s glucose again.
3. If still below 70 mg/dL, repeat steps above every 15 minutes until they’re back in range.

If my child experiences an extreme low and is unable to eat or drink, glucagon can be given by injection or by using nasal spray. Always connect with the school nurse if this occurs.
Managing high glucose

Because my child does not produce insulin, they can experience high glucose (hyperglycemia) while at school.

For children living with diabetes, glucose is considered high when it rises above 180 mg/dL.

Common symptoms
Some common signs of a high glucose are:
Excessive thirst, frequent urination, nausea, headache, fatigue

My child’s symptoms
I’ve also identified these symptoms as indicating a high glucose for my child:
___________________________________________
___________________________________________.

Whenever my child eats a snack or meal, their glucose may rise. Insulin should be given before eating to help keep their sugar levels in range. Giving insulin for food is often referred to as a “bolus.” It’s best to bolus about 15 minutes before my child begins eating. For step-by-step instructions for how to bolus, refer to page 7 of the School Nurse Guide.

High glucose is most common after meals and can be dangerous if left untreated. If my child is experiencing any unexplained sugar levels above 180 mg/dL, please connect with the school nurse to determine what is needed to correct the high glucose.

Additional instructions for my child:
___________________________________________
___________________________________________.
Exercise

Physical activity can also impact my child’s sugar levels. While everyone is different, aerobic activities (such as running or cycling) are more likely to lead to a low glucose, and anaerobic activities (such as weightlifting) are more likely to lead to a high glucose.

I’ve found this activity _______________________________ (noun) makes my child go ________________________________ (adjective).

Before starting any physical activity (such as recess, sports, or gym class), please work with my child to either:

- Enable their Temp Target
- Disconnect from their pump

Enable their Temp Target

This changes my child’s SmartGuard™ target from 100, 110, or 120 mg/dL to 150 mg/dL for the duration of the activity.

It’s best to start the Temp Target 1-2 hours before beginning the activity and stop it immediately afterward.

Refer to page 10 of the School Nurse guide if you need instructions on how to set and cancel a Temp Target.

Disconnect from their pump

My child removes their pump and will not receive any insulin during physical activity.

In the event my child is disconnected from their pump for physical activity, it’s important to Suspend All Delivery to make sure the pump doesn’t continue giving insulin.

This setting should be used any time my child needs to be disconnected from their pump – even if it’s for a short period of time.

Refer to page 11 of the School Nurse Guide for steps on how to suspend insulin delivery.
Please note: If the pump is more than 8 feet away from the CGM for longer than 30 minutes, a Lost sensor signal alert will appear. Also, while the insulin delivery is suspended, the pump will beep and/or vibrate (depending on the audio settings) every 15 minutes to indicate insulin is not being delivered.

If you’re unsure what to do in any situation, please connect with the school nurse. If you have any questions, you can call ☑️ / text ☑️ me at _________________________ (number).

If you cannot reach me,
please contact ______________________ (name & relation) at _________________________ (number) or dial 911.
MiniMed™ 780G system with SmartGuard™ technology with Guardian™ 4 sensor

The MiniMed™ 780G system is intended for continuous delivery of basal insulin at selectable rates, and the administration of insulin boluses at selectable amounts for the management of type 1 diabetes mellitus in persons seven years of age and older requiring insulin as well as for the continuous monitoring and trending of glucose levels in the fluid under the skin. The MiniMed™ 780G System includes SmartGuard™ technology, which can be programmed to automatically adjust insulin delivery based on the continuous glucose monitoring (CGM) sensor glucose values and can suspend delivery of insulin when the SG value falls below or is predicted to fall below predefined threshold values.

The Medtronic MiniMed™ 780G System consists of the following devices: MiniMed™ 780G Insulin Pump, the Guardian™ 4 Transmitter, the Guardian™ 4 Sensor, One-press serter, the Accu-Chek™ Guide Link blood glucose meter, and the Accu-Chek™ Guide Test Strips. The system requires a prescription from a healthcare professional.

The Guardian™ 4 Sensor is intended for use with the MiniMed™ 780G system and the Guardian™ 4 transmitter to monitor glucose levels for the management of diabetes. The sensor is intended for single use and requires a prescription. The Guardian™ 4 sensor is indicated for up to seven days of continuous use.

The Guardian™ 4 sensor is not intended to be used directly to make therapy adjustments while the MiniMed™ 780G system is operating in manual mode. All therapy adjustments in manual mode should be based on measurements obtained using a blood glucose meter and not on values provided by the Guardian™ 4 sensor. The Guardian™ 4 sensor has been studied and is approved for use in patients ages 7 years and older and in the arm insertion site only. Do not use the Guardian™ 4 sensor in the abdomen or other body sites including the buttocks, due to unknown or different performance that could result in hypoglycemia or hyperglycemia.

WARNING: Do not use the SmartGuard™ feature for people who require less than 8 units or more than 250 units of total daily insulin per day. A total daily dose of at least 8 units, but no more than 250 units, is required to operate in the SmartGuard™ feature.

WARNING: Do not use the MiniMed™ 780G system until appropriate training has been received from a healthcare professional. Training is essential to ensure the safe use of the MiniMed™ 780G system.

WARNING: Do not use SG values to make treatment decisions, including delivering a bolus, while the pump is in Manual Mode. When the SmartGuard™ feature is active and you are no longer in Manual Mode, the pump uses an SG value, when available, to calculate a bolus amount. However, if your symptoms do not match the SG value, use a BG meter to confirm the SG value. Failure to confirm glucose levels when your symptoms do not match the SG value can result in the infusion of too much or too little insulin, which may cause hypoglycemia or hyperglycemia.

Pump therapy is not recommended for people whose vision or hearing does not allow for the recognition of pump signals, alerts, or alarms. The safety of the MiniMed™ 780G system has not been studied in pregnant women, persons with type 2 diabetes, or in persons using other anti-hyperglycemic therapies that do not include insulin. For complete details of the system, including product and important safety information such as indications, contraindications, warnings and precautions associated with system and its components, please consult https://www.medtronicdiabetes.com/important-safety-information#minimed-780g and the appropriate user guide at https://www.medtronicdiabetes.com/download-library.