



# THE MINIMED™ 780G SYSTEM

## Guide for Schools





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## PURPOSE AND INDIVIDUAL HEALTHCARE PLANS

### Purpose

This guide is intended to help schools with the basic operation of a student's MiniMed™ 780G system. Please note that this booklet does not cover all aspects of insulin pump therapy and continuous glucose monitoring (CGM). It is written for people with some experience with this technology.

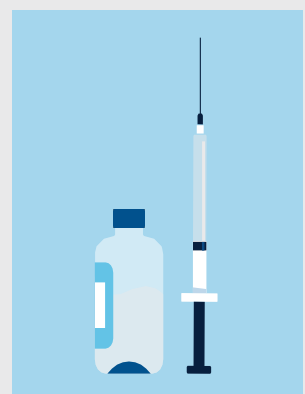
### Individual Healthcare Plans



Every student on the MiniMed™ 780G system should have an Individual Healthcare Plan (IHP) from the student's healthcare professional. This should include:

- Name of device with programmed settings. Note that the pump may be operating in one of two modes. See next page for more information.
- A back up plan if the pump is not able to be used to deliver insulin with:
  - rapid-acting insulin pens or syringes, and doses for food and for correcting high blood glucose (BG)
  - long-acting insulin pens or syringes, and dose if necessary, for prolonged stays at school

The responsibilities of the parents/guardians and the school should also be established.



## The MiniMed™ 780G system components



It's a good idea for every student on the MiniMed™ 780G system to have extra pump supplies –

A spare unused AA battery

An infusion set, serter, reservoir and insulin if the student can change their own infusion set or change with the help of a caregiver or trained professional.

The MiniMed™ 780G system can be used in two different ways – Manual Mode and SmartGuard™ Mode.

**Manual Mode** is using the pump with or without a continuous glucose monitor (CGM) in a traditional way, as with the previous pump systems from Medtronic.

**SmartGuard™ Mode** the system automatically adjusts basal insulin every 5 minutes based on sensor glucose (SG) readings. It also can automatically deliver a correction

bolus to help correct a high SG reading. A student using SmartGuard™ Mode may still occasionally be required to do a Blood Glucose check.

# UNDERSTANDING THE MINIMED™ 780G SYSTEM

## Manual Mode

Using the pump in a traditional way,

- Basal rates are pre-programmed.
- Bolusing can be done with the Bolus Wizard™ feature or with manual boluses.
- May be used with or without CGM.

### Manual mode No CGM



### Manual Mode with CGM



## SmartGuard™ Mode

Controlled by a SmartGuard™ algorithm that self-adjusts basal insulin based on sensor glucose readings.

- Basal insulin is automatically adjusted every 5 minutes.
- May deliver a bolus automatically if the SmartGuard™ feature determines that a correction bolus is necessary
- Bolusing before meals using the Bolus Wizard™ feature is necessary.
- CGM is required.

### SmartGuard™ Mode

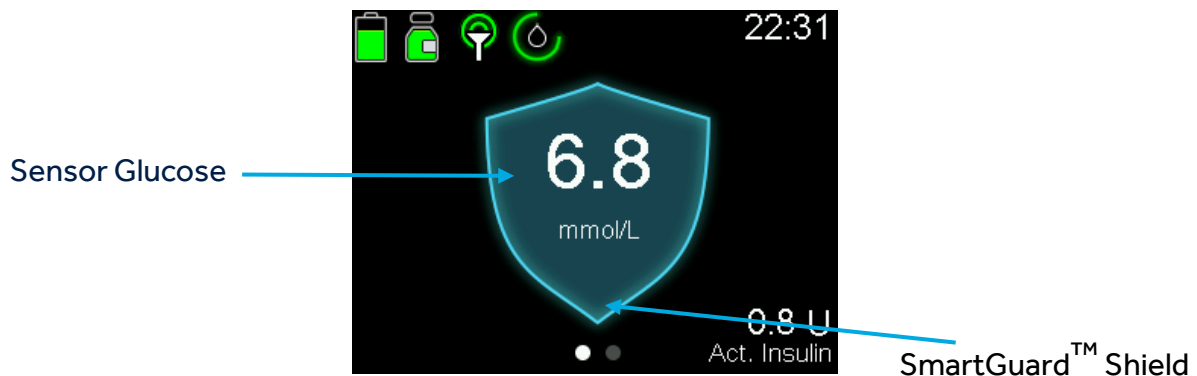


## Important information about SmartGuard™ Mode:

- Basal insulin is delivered based on Sensor Glucose (SG)
- SmartGuard™ mode uses a sensor glucose target of 5.5, 6.1 or 6.7 mmol/L. This is decided by the clinical team
- A student can temporarily change the target to 8.3 mmol/L, like for example, exercise. This is referred to setting a Temporary Target
- Carbs must be entered into bolus option of the pump before meals
- BG checks are necessary at least every 12hrs to calibrate the sensor
- A student may receive an alert if the pump requires an action to be performed to enable the system to remain in SmartGuard™ mode

## How to tell when the Minimed™ 780g has the Smartguard™ feature activated

When the pump is using the SmartGuard™ feature, the Home screen displays a shield with the current SG level.



## A STUDENT'S RESPONSIBILITIES WHEN IN SMARTGUARD™ MODE

### **1. Bolus for carbs before eating**

When in SmartGuard™ Mode, a student must bolus for carbs before each meal and snack. Giving insulin before a meal can help students avoid post-meal high BGs, which could lead to fewer alerts and improved glucose control. Check the Individual Healthcare Plan for the ideal length of time to bolus pre-meal.

### **2. Respond to alarms and alerts**

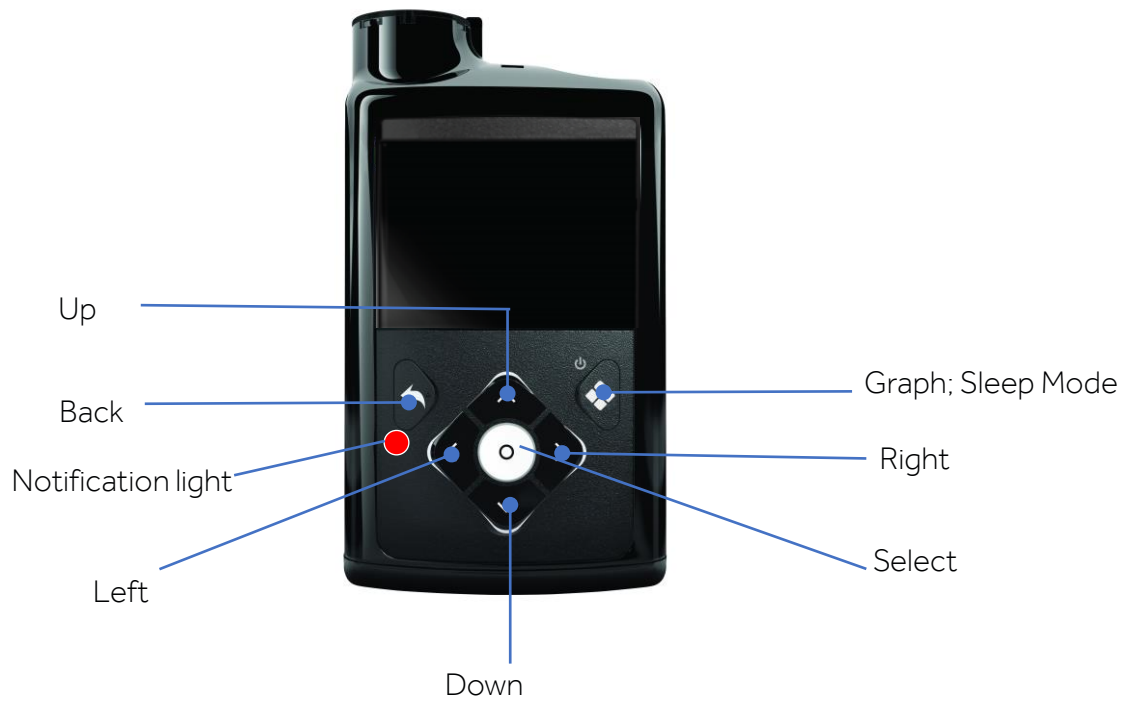
Students should respond promptly to all alarms and alerts to help avoid highs and lows, which could lead to more time spent in target range.

### **3. Check BG if required**

Occasional fingerstick testing of glucose levels may be required




## PUMP BUTTONS




## Backlight

When you are not pressing buttons on the pump, you will notice that the Backlight will soon turn off. The pump is still on; it is just saving battery life. You can simply press any button to make the screen reappear.

## Blood Glucose testing with the Accu-Chek Guide Link meter

The Accu- Chek Guide Link meter can be used for blood glucose testing and by pressing the  Back button the results are quickly sent to the pump.

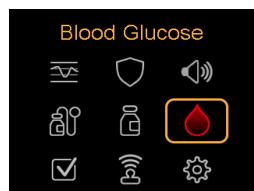
If  is not pressed there will be a delay in the display of the BG result on the pump.

**Send button**  
Press to send BG result immediately to the pump




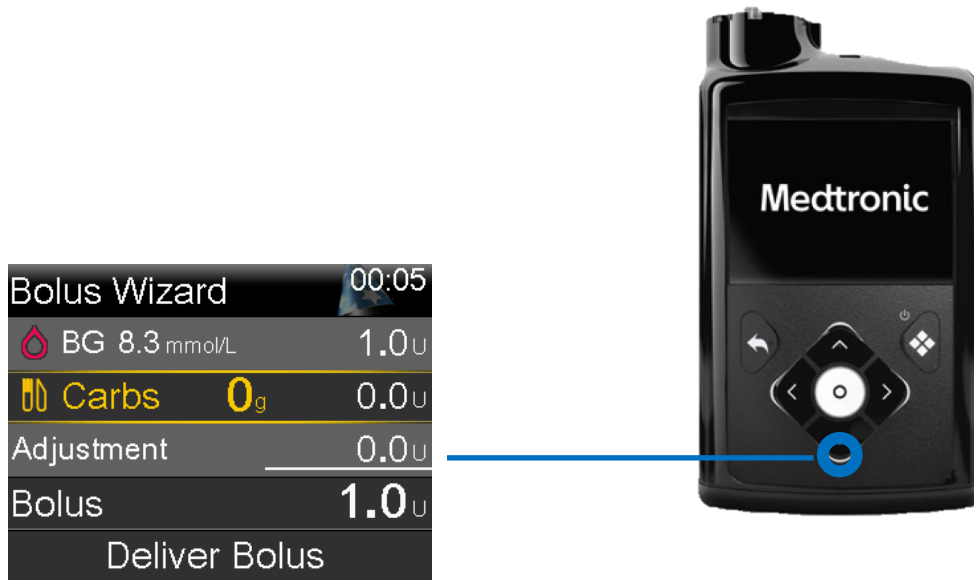
## Blood Glucose testing with any other meter



If you are using a different blood glucose meter you can manually input the glucose reading into the pump by the following steps



## HOW TO BOLUS IN SMARTGUARD


1. Enter BG into pump if required. If no BG is required, the current sensor glucose value will be available within the bolus wizard screen
2. Press the  arrow to access the Bolus Wizard™ feature

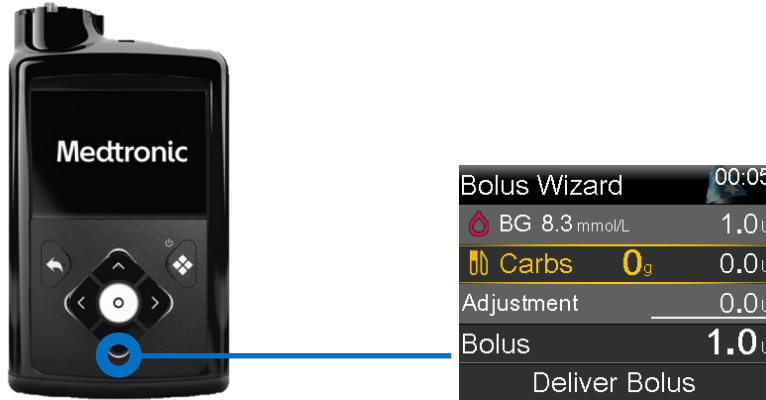



3. Enter the carbs by using the  arrow and confirm by pressing 
4. Review the bolus amount and select Deliver Bolus
5. The Home screen appears showing the bolus being delivered

## USING THE PUMP IN MANUAL MODE

To deliver correction and food bolus

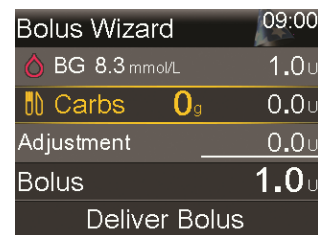
1. Enter BG into pump. if not using linked meter follow earlier steps via the BG Icon
2. Press the  arrow to access the Bolus Wizard™ feature



3. Enter the carbs by using the  arrow and confirm by pressing select
4. Review the bolus amount and select Deliver Bolus
5. The Home screen appears showing the bolus being delivered

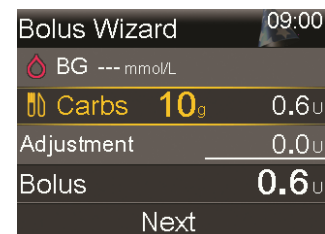
### To deliver correction bolus only (no food)

Enter BG as steps above however leave Carbs at 0g



### To deliver food bolus only (no BG)


As steps above however leave BG ---mmol/L and just enter carbs



## TEMPORARY TARGET IN SMARTGUARD™ MODE

A student may want to temporarily change their selected glucose target eg. For physical activity. This is called temporary target. When in SmartGuard™ the temporary target is fixed at 8.3mmol/L.


### To set a temp target:

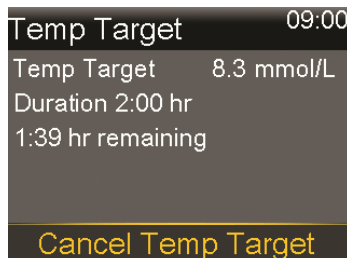
1. From the Home screen, press the  button, and then select the Smartguard™ Shield .
2. Select Temp Target to turn the feature on or off.
3. Set the duration, from 30 minutes to 24 hours, in 30-minute increments
4. Select Start.

The screen shows a Temp Target Started message, and then changes to the Home screen, where a banner shows the remaining temp target time.




### To cancel a temp target:

1. From the Home screen, press  and then select the Smartguard™ shield
2. Select Cancel Temp Target.

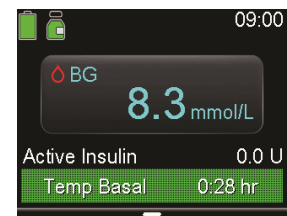
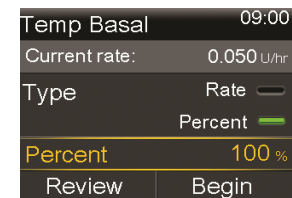
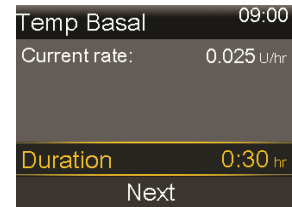


## TEMPORARY BASAL IN MANUAL MODE

### To start a temp basal rate:


1. From the Home screen, press 
2. Select Basal > Temp Basal.
3. Set the Duration, as per individual care plan instruction.
4. Select Next.
5. Select Type to select Rate or Percent.
6. Depending on the type selected, do one of the following:
  - Enter a percentage, as per individual care plan instructions.
  - Enter a basal rate.
7. Select Review to review the temp basal setting.
8. Select Begin to start the temp basal rate.

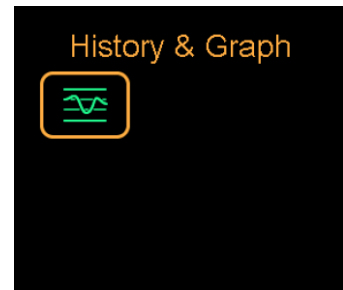
The Temp Basal banner appears on the Home screen during delivery



## CHECKING LAST BOLUS AND RECENT ACTIONS

There may be times when you need to see the time or amount of the last bolus that was given. For example, you may want to check to make sure a student took a bolus at lunch. You may also want to review the last several boluses that were delivered. For example, a parent might want to know the boluses their child gave throughout the day. You can see the last several boluses delivered in Daily History.

1. Press the select button 
2. Choose the History and graph icon
3. Go into history
4. Select daily history
5. Select date you wish to review



## Alarms and Alerts

Here are some common alarms and alerts you might see on a student's pump

Read and address the alert

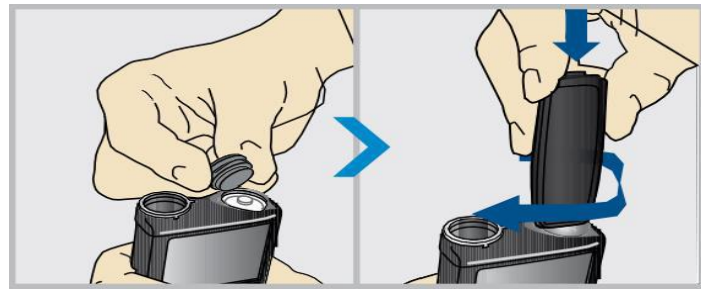
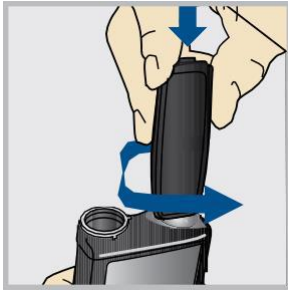


In both of these examples, entering a BG manually or with the linked meter will address and clear the alert.



## CHANGING THE BATTERY

The pump is powered by a AA battery. A brand-new lithium, alkaline, or fully charged rechargeable battery can be used.

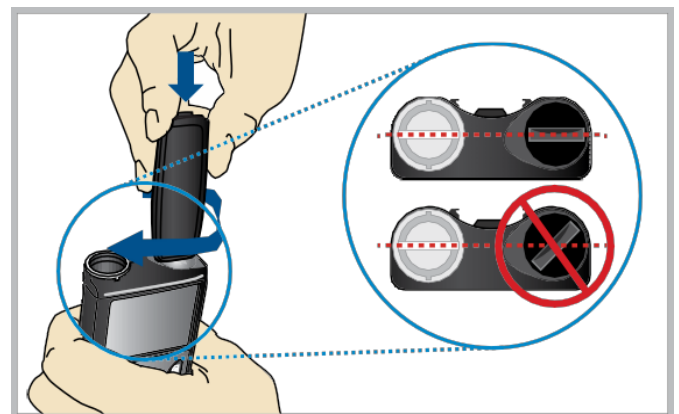


1. Unscrew the battery cap using the bottom edge of the belt clip. (Or use a thick coin.)

2. Insert battery with negative (flat) end going in first.

3. Place battery cap into the pump and use the edge of the belt clip to screw the cap back on.

Do not under-tighten or try to over-tighten the battery cap. It should be aligned horizontally with the pump case as shown here.





## Things to remember

The MiniMed™ 780G system with SmartGuard™ technology can help keep your students' glucose levels in target range.

More time spent in target range may help your student live a healthier life and focus on learning!

Things to remember in SmartGuard Mode:

- A student must bolus before meals, and respond to alarms and alerts
- Highs and lows can still occur, so make sure to have a plan in place on how to address them.



**For any urgent technical questions, please call the Medtronic 24-hour helpline  
at **01932 205 167** in the UK,  
or **01 5111444** in the ROI**

**For additional information & support,  
go to [www.medtronic-diabetes.co.uk](http://www.medtronic-diabetes.co.uk) in the UK, or  
<https://www.medtronic-diabetes.ie/> in the ROI**

## IMPORTANT SAFETY INFORMATION

**WARNING:** Medtronic performed an evaluation of the MiniMed™ 780G system and determined that it may not be safe for use in children under the age of 7 because of the way that the system is designed and the daily insulin requirements. Therefore, this device should not be used in anyone under the age of 7 years old. This device should also not be used in patients who require less than a total daily insulin dose of 8 units per day, because the device requires a minimum of 8 units per day to operate safely

See the device manual for detailed information regarding the instructions for use, indications, contraindications, warnings, precautions, and potential adverse events. For further information, contact your local Medtronic representative