



The MiniMed™ 780G system

**What you need to know about young
children using the system**



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Purpose & Individual Healthcare Plans

Purpose

This guide is intended to help anyone caring for a young child with the basic operation of their 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 young person on the MiniMed™ 780G system should have an Individual Healthcare Plan (IHP) from their Diabetes Healthcare Professional. This should include:

- Name of device with programmed settings. Note that the pump may be operating in one of two modes (see page 7 for more information)
- A back up plan if the pump is not able to be used to deliver insulin. The following should be available should this situation arise:
 - rapid acting insulin (pens or syringes) with doses for food and for correcting high blood glucose (BG)
 - long-acting insulin pens or syringes, and dose if necessary, for prolonged stays in your care

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



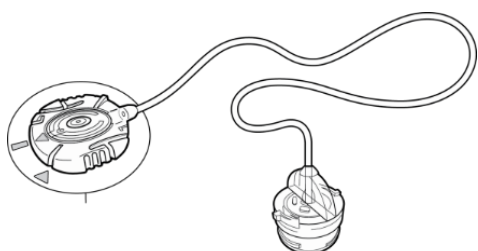
It's a good idea for every child on the MiniMed™ 780G system to have extra pump supplies:

- ✓ A spare unused AA battery
- ✓ An infusion set, reservoir and insulin if the student can change their own infusion set or change with the help of a caregiver or trained professional

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How does the Insulin Pump work?

The delivery of Insulin: 3 components



1

Infusion set

Connects the pump to the body
A small piece of adhesive holds the infusion set in place

A cannula (tiny flexible tube) sits under the skin to deliver insulin



2

Reservoir

Fits into the pump's reservoir compartment

Holds a few day's worth of insulin



3

Pump

Inside the reservoir compartment is a piston

The piston pushes insulin into the tubing, through the cannula, and into the body

A mini computer inside controls the pump to deliver insulin in very small doses, as small as 0.025 units



Please see the MiniMed™ 780G system user guide for more information



MiniMed™ 780G system

Getting to know the pump

Back

Press to return to a previous screen
Press and hold to return to the Home screen

Notification Light

Flashes when an alert or alarm is occurring



Menu

Press to get to the Menu

Press and hold to put pump into Sleep mode

Select

Press to select or confirm a value or menu option that is highlighted

Press when directions say select

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



Block mode

Block mode lets caregivers lock the pump to restrict access to critical pump features. While the pump is in Block mode, the pump automatically locks two minutes after the screen goes dark from inactivity.

To unlock the pump Press any button to wake up the pump then press . The Screen locked message appears. Press and hold .

Blocking and unblocking the Pump

To turn Block mode on or off:

1. From the Home screen, press , and then select 
2. Select Device Settings > Block Mode
3. Select Block Mode to turn the feature on or off
4. Select Save

The pump is in Block mode, but it is not yet locked.

While the pump is blocked,  appears on the Home screen.

MiniMed™ 780G system

The MiniMed™ 780G system components



Guardian™ 4
OR Simplera
Sync™ Sensor



MiniMed™
Infusion set



ACCU-CHEK® GUIDE
LINK blood
glucose meter



CareLink™
software

The MiniMed™ 780G system can be used in two different ways–

Manual Mode

Using the pump with or without the compatible continuous glucose monitor (CGM) in a traditional way, as with the previous pump systems from Medtronic

SmartGuard™ Mode

When used as a full system with the sensor the MiniMed™ 780G insulin pump automatically adjusts basal insulin every 5 minutes based on sensor glucose readings (SG). It will also automatically deliver a correction bolus to help correct a high SG reading. A child using SmartGuard™ feature may still occasionally be required to do a blood glucose (BG) check.



It is recommended that a blood glucose reading is taken at any time if symptoms are different to the sensor glucose level displayed on the pump

General information

When wearing the MiniMed™ 780G system with or without CGM, it is still important to perform certain tasks:

1. Bolus for carbs 10-20 minutes before eating

When in SmartGuard™ feature, a bolus for carbs should be delivered 15-20 minutes before each meal and snack. Giving insulin before a meal can help to avoid post-meal highs, which could lead to fewer alerts and improved Time in Range (TIR)

2. Respond to alarms and alerts

You should respond promptly to all alarms and alerts to avoid highs and lows, which could lead to more time spent in SmartGuard™ feature

3. Check glucose trends

It's reasonable you may need to check the BG from time to time if requested by the system. Occasional finger prick testing of glucose may be required



Important to know:

The MiniMed™ 780G system is a Bluetooth® enabled device.

This means that you are able to view their sensor glucose values and receive optional glucose alerts on a smartphone and

Apple® Watch using the MiniMed™ Mobile app. This data can be

shared remotely with parents or caregivers through the CareLink™

Connect app if the student's mobile device is connected to the

internet. Care partners can also follow up to 5 MiniMed™ Mobile

app users

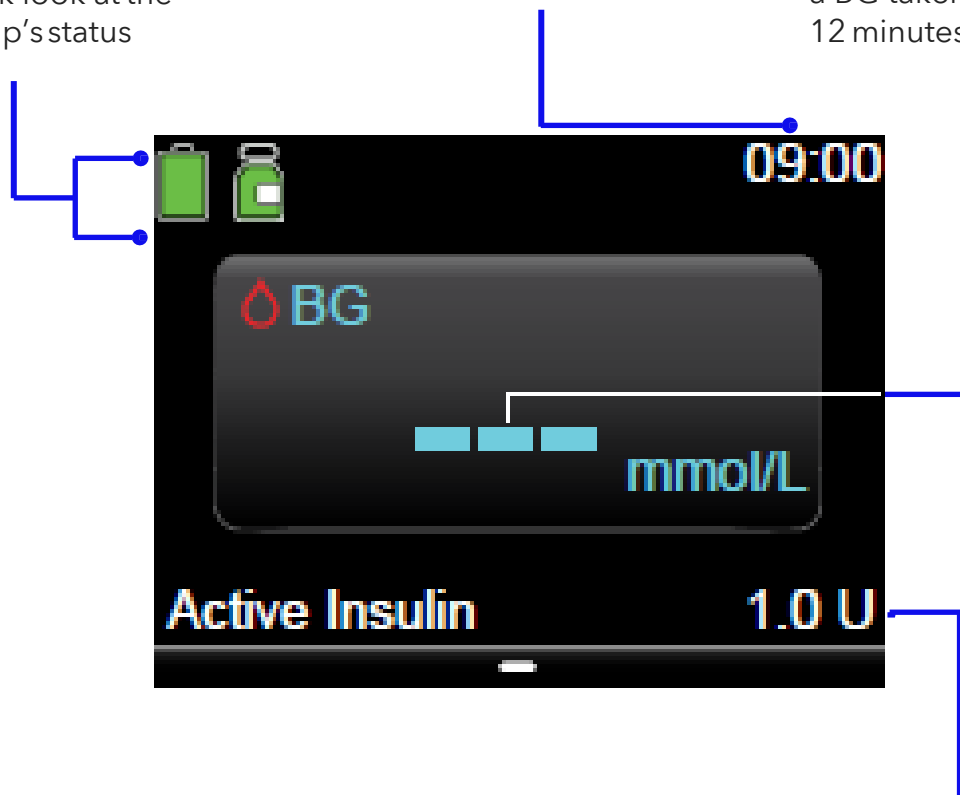


Home screen when using pump in manual mode without CGM

Status bar: provides a quick look at the pump's status

Current time

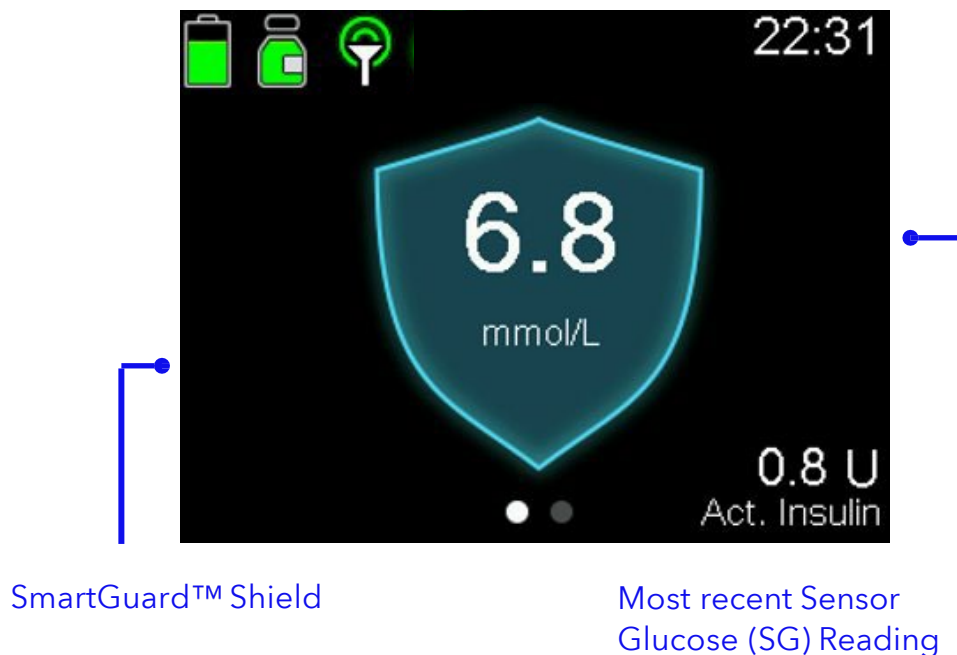
BG reading: displays a BG taken in the last 12 minutes



Active insulin: displays any insulin still active from previous boluses

- Using the pump in the traditional way
- Input carbohydrates and blood glucose readings before meals using the Bolus Wizard™ feature (see page 13 for more information)

Home screen when using CGM



SmartGuard™ Feature

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

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.

Important information about SmartGuard™ feature:

- 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
- You 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
- A child may receive an alert if the pump requires an action to be performed to enable the system to remain in SmartGuard™ feature




Please refer to the child's individual healthcare plan for further instructions on managing the SmartGuard™ feature

MiniMed™ 780G system

Blood glucose checks using the linked Accu-Chek® Guide Link® meter



When using the Accu-Chek® Guide Link meter, the blood glucose reading will automatically be sent over to the pump when you press the Send button 

1) Check BG



2) Select Yes to confirm the BG meter reading


3) **Bolus** will be highlighted. If you want to calibrate with this BG, select **Calibrate Sensor**



4) Select **Yes** to calibrate
Select **No** to not calibrate



5) If you want to give a bolus, select **Bolus**

If you do not want to give a bolus,
press  and select **Done**

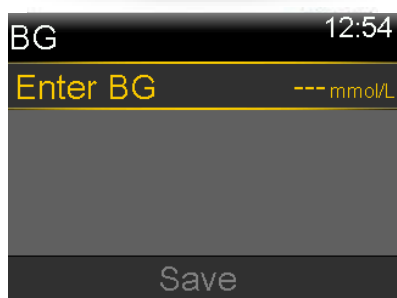
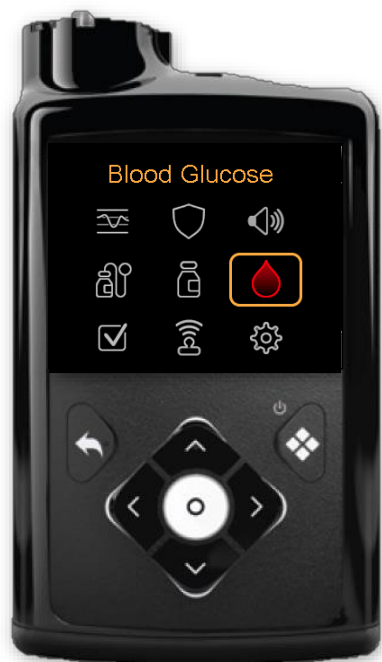




If you do not believe the meter result is accurate, do not confirm now.

Select No, wash hands, and recheck BG

Blood glucose checks with any other meter (unlinked)

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






- 1) Check BG
- 2) Select **Blood Glucose** from the main menu
- 3) **Enter BG** screen appears
- 4) Press Select
- 5) Press  or  to enter BG



If you do not believe the meter result is accurate, do not confirm now

Select No, wash hands, and recheck BG

How to deliver a bolus in SmartGuard™ feature

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



To deliver food bolus only (noBG)

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




To deliver correction bolus only (no food)

Use SG or enter BG (see p 12 and 13), but leave Carbs at 0 g

How to set a Temporary Target

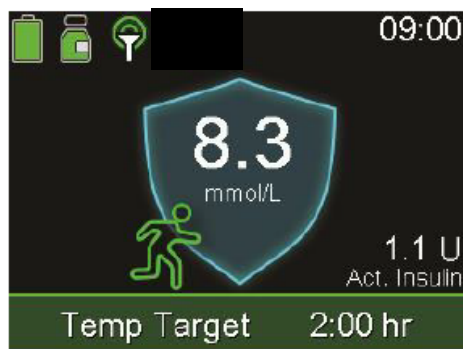
Temporary Target in SmartGuard™ feature

You may want to temporarily change the selected glucose target e.g. for physical activity. This is called Temporary Target. When in SmartGuard™ the temporary target is fixed at 8.3mmol/L. Refer to the child's care plan for details of how and when to use Temporary Target


From the Home screen, press the  button, and then select the SmartGuard™ Shield.

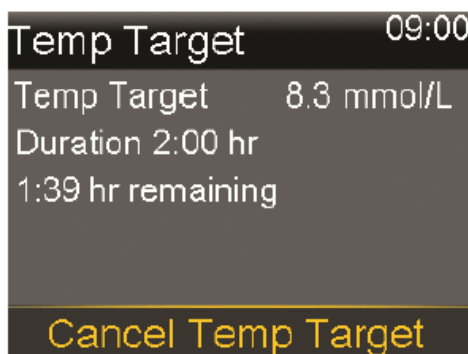
2. Select Temp Target to turn the feature on or off.
3. Set the duration, from 30 minutes to 24 hours, in 30-minute increments
4. Select Start.

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.

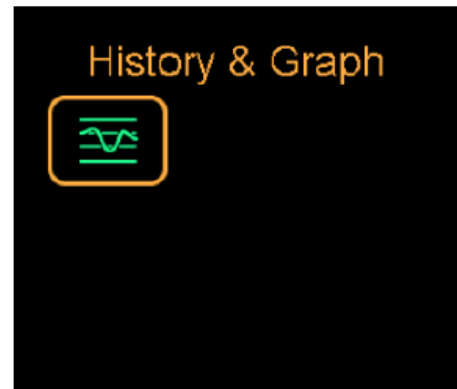


Checking last bolus and recent actions

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 bolus was delivered for a meal or snack

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



Alerts and Alarms

The pump will notify you of situations that you should be aware of:

- **Alert:** not urgent but may need your attention
- **Alarm:** situation that needs your immediate attention

This helps to ensure that you know what is occurring so that you can take action


How will the pump notify me?

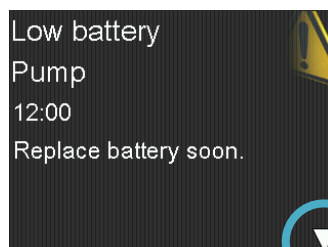
- The notification light will flash
- The pump will beep and/or vibrate
- A screen message will be displayed

Notification light



How do I clear an alert?

- Read text and take any necessary action
- Press 
- Press select to clear

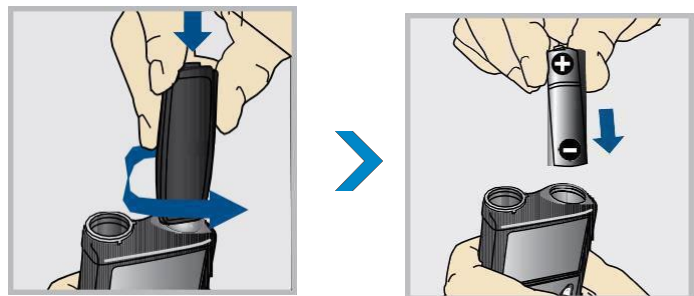



For more information
on alerts and alarms
please see the
MiniMed™ 780G
system user
guide

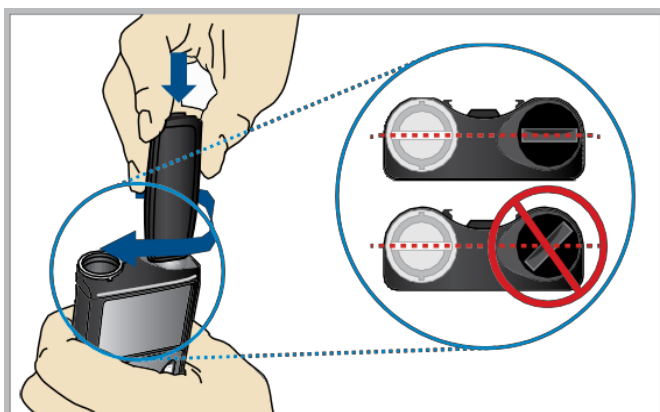
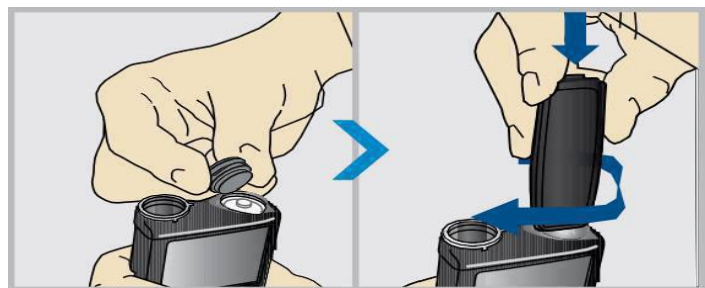
Changing the battery

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



3. Place the 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

1. Bolus for carbs before eating

Wherever possible, you should deliver a bolus for carbs before each meal and snack. Giving insulin before a meal can help avoid post-meal high glucose, which could lead to fewer alerts and improved glucose levels.

It is recommended that the [Bolus Wizard™](#) is used to calculate the required amount of insulin and that a glucose reading is entered to enable more accurate calculation of the bolus amount.

Check the [Individual Healthcare Plan](#) for the ideal length of time to bolus pre-meal.

2. Respond to alarms and alerts

You should respond promptly to all alarms and alerts to help avoid highs and lows.

3. Blood glucose testing

Blood glucose testing is required:

- To make treatment decisions when sensor glucose is unavailable, including the use of Bolus Wizard
- If the sensor glucose reading is different to symptoms
- When requested by the pump (alert or alarm)

4. Managing highs and lows

Highs and lows can still occur, so make sure to have a plan in place on how to address them.



Important safety information

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. For any urgent technical questions, please call the Medtronic 24-hour helpline:

Diabetes Helpline UK:
+44 (0)1923 205167

Diabetes Helpline Ireland:
+353 (0)15111444

For additional information & support, go to the website:

UK:
[medtronic-diabetes.co.uk](https://www.medtronic-diabetes.co.uk)

Ireland:
[medtronic-diabetes.ie](https://www.medtronic-diabetes.ie)



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