Q&A
MINIMED™ 780G SYSTEM

Everything you want to know about the MiniMed™ 780G system
YOUR QUESTION
How does the MiniMed™ 780G system work?

OUR ANSWER
Watch the video below to find out how the MiniMed™ 780G system works.

Introduction to MiniMed™ 780G System by Dr Ohad Cohen
YOUR QUESTION
Are the sensors the same as those used with the MiniMed™ 640G system and MiniMed™ 670G system?

OUR ANSWER
Currently, MiniMed™ 780G system uses Guardian™ Sensor 3 sensors. These sensors can also be used with previous systems generations like MiniMed™ 670G system and MiniMed™ 640G system.
For SmartGuard™ feature, there were 3 different basal targets mentioned but is there still a different one for exercise as well? Or is this not necessary if you announce you're going to do exercise?

**OUR ANSWER**

There are 3 different targets when using SmartGuard™ feature:

- 100mg/dl [5.5mmol/l]
- 110mg/dl [6.1mmol/l]
- 120mg/dl [6.7mmol/l]

There is also a set basal rate for activity called ‘Temp Target’.

- Select <Temp Target> from the <SmartGuard™> menu icon.
- This sets the target SG at 150 mg/dl [8.3mmol/l] and turns off Auto Corrections to reduce the risk of low glucose during/after activity.
- You can select the time for the Temp Target from 30 minutes to 24 hours.
In the SmartGuard™ feature is the basal rate calculated automatically?

Basal rates are calculated by the system when using the SmartGuard™ feature. Auto Basal rates are calculated by the algorithm based on many factors including your previous insulin history [past boluses and basal infusion] and your sensor glucose history.
YOUR QUESTION
Is MiniMed™ 780G system better at measuring Sensor Glucose [SG]/Blood Glucose [BG]?

OUR ANSWER
Results in terms of precision of the sensor should be equivalent to the ones obtained with MiniMed™ 670G system. The sensor is the same and the transmitter was modified only to add Bluetooth capabilities.
How long in advance would you have to announce that you are going to have a meal or do exercise?

This will depend on the insulin type you are using. We suggest delivering most insulins 10-20 minutes before eating.

If you require your glucose level to be higher before starting exercise, we suggest turning on the Temp Target feature up to one hour before exercising.

You should always check and discuss any adjustments you are making to your therapy with your healthcare team.
Do we still need to enter carbohydrates before a meal?

Yes, you do still need to carb count and announce carbohydrates ideally 10-20 minutes before you eat.
YOUR QUESTION

If you get an alert on your phone does your pump still alarm? Cancelling 2 alarms instead of 1 would be inconvenient in my opinion!

OUR ANSWER

The system has two kinds of notifications - ALERTS and ALARMS.

You can clear an alert of your phone [e.g. notification of high SG] but if the pump ALARMS it means that you are required to do something on your pump so you would need to go to the pump to take the action and clear the alarm [e.g. BG required].
From the MiniMed™ 780G system MiniMed Mobile App, can you silence alarms, do boluses, etc, or you can just visualise the pump stuff?

The MiniMed™ Mobile app is mostly to view the pump data. You can clear ALERTS from the mobile app but not ALARMS.

The MiniMed™ Mobile app also enables automatic data uploads to CareLink™ Personal every 24 hours.

It also allows you to have up to 5 Care Partners using the CareLink™ Connect app so your family, friends, loved ones can review your data and receive notifications remotely on their internet enables device.
Does it consider the delay of the insulin?

The system will use the active insulin time you have selected within the bolus wizard as well as current active insulin remaining, SG values, glucose trends and other factors to calculate insulin requirements.
Regarding the phone, you mentioned that we could pair the MiniMed™ 780G pump with MOST Android and iOS smartphones. What does that mean?

There is a list of compatible phones available here in the FAQ section:

Is the MiniMed™ 780G System compatible with my phone?

These are being updated regularly so keep checking if your phone is not currently there.
How often do you still have to give adjustment boluses yourself?

This will differ from person to person and it will also depend on whether Auto Correction is enabled or not.

If Auto Correction is enabled, the system will automatically deliver appropriate corrections every five minutes if needed. Entering accurate carbohydrates will help avoid some Auto Correction boluses. When you enter a BG the system will advise if a manual adjustment correction is needed.
YOUR QUESTION

Is it only correction boluses that are automatic?

OUR ANSWER

Yes, when using SmartGuard™ feature, only corrections boluses are automatic. You are still required to deliver the bolus for meals/carbohydrates consumed.
Are the volume settings the same as the MiniMed™ 670G system? Can you adjust the volume of the alerts and alarms?

There is a volume setting available on the MiniMed™ 780G system as there is for MiniMed™ 670G system, but the maximum volume is the same. You can make an adjustment to the volume of the alarm by selecting the <Sound and Vibration> icon in the menu.
MiniMed™ 780G system is not a fully closed-loop system. It is what is known as an advanced hybrid closed loop [AHCL] system.

Although automation includes Auto Basal and Auto Corrections you are still required to enter carbohydrates before eating. You may also need/want to manually correct at times.
When the MiniMed™ 780G system auto corrects, how does it consider when the peak effect of the insulin occurs?

The algorithm uses the Active Insulin Time parameter to determine when the peak effect occurs.
YOUR QUESTION

Is the system using a proportional-integral-derivative [PID] algorithm as I think MiniMed™ 670G system does?

OUR ANSWER

Yes, the MiniMed™ 780G system does use a PID algorithm.
YOUR QUESTION

Do we get alarms when low/high?

OUR ANSWER

The alarms will only occur if you are using sensors.

There is a default alarm at:

- 70 mg/dl [3.9mmol/l].
- 250 mg/dl [13.9mmol/l].

You cannot change these but you can add other alerts for high and lows in the <Alert Settings> menu.
YOUR QUESTION

Is it correct to say that basal insulin should be set up in the system the same as in MiniMed™ 640G system?

OUR ANSWER

You do still need to enter manual basal rates into the system because you are required to use the pump for at least 48 hours [from midnight after starting the pump] before you can enter the SmartGuard™ feature. Also, if you exit SmartGuard™ feature for any reason then it is safest to have appropriate manual basal rates available to use.
References


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. Refer to System User Guide-SmartGuard™ feature. Some User interactions are needed.