# GETTING STARTED WITH MINIMED® 670G NSULIN PUMP



Medtronic



## The MiniMed<sup>®</sup> 670G Insulin Pump

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## Getting started with the MiniMed<sup>®</sup> 670G Insulin Pump

## Section 1: Welcome

Welcome! We are glad that you have chosen insulin pump therapy and are excited for you to begin using your insulin pump.

Whether you've chosen pump therapy because of its convenience, the flexibility it provides, or to help improve your glucose control, your pump will be a valuable tool in helping to manage your diabetes.

This guide provides step-by-step instructions on the basic operation and programming of your pump. Using your pump to complete each practice exercise will help you become comfortable with the basics and prepare you for your in-person training. The information is presented in an order that will build your skills and knowledge.



**Note:** Did you know that a complete explanation of the technical and operational aspects of your pump can be found in the *MiniMed® 670G System User Guide*?

During your in-person training, your trainer will build on this information and help ensure that you are confident to begin pump therapy.

Here are some quick tips to keep in mind as you work through this information:

- Be sure you are not attached to your new insulin pump while you practice.
- If you press the wrong button, press the ( button to go back to the previous screen and try again.
- If you do not touch a button for 15 seconds, the pump screen will turn dark. Press any button and the pump screen will return.
- Avoid the Reservoir & Tubing screen until you have completed all practice necessary to feel comfortable using this insulin pump.

We hope you enjoy learning about your new insulin pump.



WARNING: Do not insert the reservoir until you have been instructed to do so by your healthcare professional and have received formal training with a certified product trainer. Attempting to use insulin in your pump before you have received training may result in the delivery of too little or too much insulin, which can cause hyperglycemia or hypoglycemia.

## Section 2: Pump mechanics and the delivery of insulin



### Infusion set

The infusion set consists of tubing (1) that carries insulin from the pump to you. On one end of the tubing is the reservoir connector (2) that attaches to the reservoir which holds the insulin. On the other end is the insertion site section (3) that attaches to you.

The insertion site section has a small insertion needle that places a tiny flexible tube called a cannula (4) into your body\*\*. Once the infusion set is inserted, you remove the needle, leaving just the cannula behind. A small piece of adhesive (5) holds the infusion set in place. Replace the infusion set every 2 to 3 days. Insulin is not labeled for more than three days when it is used in an infusion set.

### Reservoir

The reservoir fits into the pump's reservoir compartment (6). Replace your reservoir and infusion set at the same time.

### Pump

Inside the pump, at the bottom of the reservoir compartment, is a piston. The piston acts like the plunger rod on a syringe, pushing up on the bottom of the reservoir, moving insulin into the tubing, through the cannula, and into your body.

The piston is controlled by a mini computer inside the pump that's able to deliver insulin in very small doses, as small as 0.025 units. **It must be rewound each time a newly filled reservoir is placed into the reservoir compartment.** 

<sup>\*</sup>Quick-set® infusion set shown in illustration.

<sup>\*\*</sup>Some infusion sets do not use a cannula but have a small needle that remains inserted in the body.

## Section 3: Pump basics

Before inserting the battery or pressing any buttons, let's take a closer look at your pump.

### The front of your pump

### $\bigcirc$ Up, $\bigcirc$ Down, $\bigcirc$ Left, and $\bigcirc$ Right

- Press to scroll up or down through a menu or list.
- Press to move to the desired area on the screen.
- Press to change the value in an area.
- Press to unlock your pump when it has been in Sleep mode.

### 🖲 Back

- Press to return to a previous screen.
- Press and hold to return to the starting screen, called the Home screen.

### O Select

- Press to select or confirm a value or menu option that is highlighted.
- Press when directions say select.
- Press to access the menu when you are on the Home screen.



### 🖾 Graph

- Press to show the SG graph when you are on the Home screen.
- Press to return to the Home screen when you are on the SG graph.
- Press and hold to put the pump into Sleep mode.

### Notification light

• Flashes when an alert or an alarm is occurring.

### The bottom of your pump



Medtronic Diabetes 24 Hour HelpLine telephone number

For product assistance, call this number to be routed to your local support team.

### The back of your pump



## Pump serial and model number

You may need to provide these numbers if you call for assistance.

### Attaching the Skins

You have received skins to attach to the back of the pump and the front of the pump clip. You can find these with the accessories. In addition to personalizing the look of your pump, skins provide additional protection against surface scratches. Apply the skins using the instructions provided with them.



### Inserting the battery

Your insulin pump is powered by a AA battery. A lithium, alkaline, or rechargeable AA battery can be used. The battery you place into your pump should always be new or fully charged.



**Note:** Lithium batteries have been shown to have the longest battery life. Batteries should be stored at room temperature, not in the refrigerator or other cold locations.

To insert the battery and get started, you will need the:

- Battery cap found with the pump
- Pump clip found with the accessories
- AA battery found with the accessories





- 1 Place the battery into the battery compartment with the negative (flat) end going in first.
- 2 Place the battery cap onto the pump. Use the edge of the pump clip to turn the cap to the right (clockwise) and tighten until the slot is horizontal to the pump. See the following image.



**CAUTION:** Do not undertighten or overtighten the battery cap. Overtightening the battery cap can cause damage to your pump case. Undertightening the battery cap will prevent the pump from recognizing the new battery. Turn the battery cap clockwise until the cap is aligned horizontally with the pump case, as shown in the example to the right.



## Section 4: Startup Wizard





**Note:** To scroll faster, press and hold the  $\bigcirc$  or  $\bigcirc$  button. Once you reach the correct value or item, press  $\bigcirc$  to select.

## Section 5: Home screen

You are now on the Home screen. The Home screen is your starting point. The following information is displayed on the Home screen.



### **Status icons**

The Status icons can provide a quick look about the status of the pump. When using your pump, you will see the following icons:

### Battery icon:

- The color and fill of the battery icon indicate the charge level of your pump battery.
- When your battery is full, the icon is solid green .
- As your battery life is used, the icon changes from solid green in the following order
- When your battery is low, the icon has a single red bar . When you battery needs to be replaced immediately, the icon is solid black with a red outline .

#### Reservoir icon:

- Approximately 85%–100% of the reservoir remains.
- Approximately 71%–84% of the reservoir remains.
- Approximately 57%–70% of the reservoir remains.
- Approximately 43%–56% of the reservoir remains.
- Approximately 29%–42% of the reservoir remains.
- Approximately 15%–28% of the reservoir remains.
- Approximately 1%–14% of the reservoir remains.
- 📠 The reservoir remaining amount is unknown.

Audio icon: Shows the audio mode that you are using: audio , vibrate (), or audio and vibrate ().

**Note:** There will be times when you will need additional status information than is indicated by the status icons. For instance, the Reservoir icon may indicate your reservoir is getting low on insulin, but you may need to know exactly how many units are left. Additional information can be found in the status screens, in *Menu options on page 10*.

### Unlocking the pump

After the Backlight has been off for a few minutes, the pump goes into Sleep mode and the pump is locked. When you begin using your pump again, you will see a screen like the one shown here when you leave the Home screen. Press the arrow key that is highlighted to unlock the pump. This confirms you are reading the screen and the button presses are not accidental.

If the wrong arrow key is pressed, you will see the screen here.

Select **OK** to return to the Home screen and try again. If you press the Back ( button, you will be taken to the current Home screen.

You can press and hold 🖾 if you wish to put the pump into Sleep mode and keep it locked when you are not using it. Doing this can also help save battery life.

### Backlight

When you are not pressing buttons on your 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.





## Section 6: Menu

There are seven items on the main menu. Each menu item contains the features and functions that pertain to that menu item.

From the Home screen, press  $\bigcirc$  to go to the menu.



### **Menu options**

Here you see a brief summary of the information found within each menu item.

Bolus	Lets you to choose between Bolus Wizard®, Manual Bolus, or Preset Bolus. You can also access your Delivery Settings from here.
Enter BG	You can manually enter a BG reading from this screen.
Basal	Lets you switch to a Temp Basal or a Preset Temp basal rate, or change to a different Basal Pattern. You can also access your Delivery Settings from here.
Audio Options	Lets you choose audio, vibrate, or both to inform you of alerts and notifications. You can also change the volume here and go to the Alert Silence screen.

Status	Status screens let you view information about Auto Mode readiness; notifications you have received in the last 24 hours; Quick Status, including your last bolus, last BG entry, current basal rate, and estimated reservoir volume and battery status; pump status including estimated reservoir volume, when it was started, time left, and pump serial number; sensor status, including last calibration and next calibration due; and settings review, which includes your current pump settings.
Suspend Delivery	Lets you stop all insulin delivery. This is commonly used when disconnecting to swim or bathe.
Options	Lets you select SmartGuard®, History, Reservoir & Tubing, Delivery Settings, Event Markers, Reminders, and access the Utilities menu.
Utilities	Lets you select Sensor Settings, Airplane Mode, Display Options, Time & Date, Remote Bolus, Block, Self Test, Manage Settings, Sensor Demo, Device Options, and Language.



**Note:** You will not be using all of these options right away. We will focus on the ones that you will need to get started.

## The Menu...

When Lisa first started on her pump, she didn't know if she could ever learn how to use all the features the pump had available. But, she just focused on the basics first, and then she started learning the additional features that she found helped her the most.

**Helpful hint:** Take some time to get comfortable with the basics first. Then learning the additional features will be much easier and more fun to do.



## Getting started | Menu

#### MAIN MENU

Bolus Bolus Wizard Manual Bolus Preset Bolus		Bolus Enter BG Basal Audio Options Status Suspend Delivery Options
Delivery Settings		Manual Mode
		Bolus
2		Enter BG
Basal	<u>∱</u>	Basal
Temp Basal Prosot Tomp		Audio Options
Basal Patterns		Status
Delivery Settings		Suspend Delivery
		Options
Options SmartGuard	Delivery Settings	► Calibration
<ul> <li>Auto Mode</li> <li>Auto Mode (On/Off)</li> <li>Auto Mode BG Alert (On/Off)</li> <li>High Setup</li> <li>Alert before high (On/Off)</li> <li>Time before high</li> <li>Alert on high (On/Off)</li> <li>Rise Alert (On/Off)</li> <li>Rise Limit</li> <li>Low Setup</li> <li>Alert on Low (On/Off)</li> <li>Alert on Low (On/Off)</li> <li>Suspend before Low (On/Off)</li> <li>Suspend on Low (On/Off)</li> <li>Suspend on Low (On/Off)</li> <li>Resume basal alert (On/Off)</li> <li>Snooze</li> <li>High Snooze</li> <li>Low Snooze</li> <li>High Snooze</li> <li>Low Snooze</li> <li>History</li> <li>Sensor Glucose Review</li> <li>ISIG History</li> <li>New Reservoir</li> <li>Fill Cannula</li> </ul>	<ul> <li>Bolus Estimate Setup</li> <li>Carb Ratio</li> <li>Bolus Wizard (On/Off)</li> <li>Insulin Sensitivity Factor</li> <li>BG Target</li> <li>Active insulin time</li> <li>Basal Pattern Setup</li> <li>Preset Temp Setup</li> <li>Preset Bolus Setup</li> <li>Dual/Square Wave</li> <li>Bolus Increment</li> <li>Max Basal/Bolus</li> <li>Easy Bolus</li> <li>Auto Suspend</li> <li>Bolus Speed</li> <li>Event Markers</li> <li>BG</li> <li>Injection</li> <li>Food</li> <li>Exercise</li> <li>Other</li> <li>Reminders</li> <li>Personal</li> <li>Bolus BG Check</li> <li>Missed Food Bolus</li> <li>Low Reservoir</li> </ul>	Utilities Sensor Settings Sensor (On/Off) Sensor Connections Calibrate Sensor Airplane Mode Display Options Brightness Backlight Time & Date Remote Bolus Block Self Test Manage Settings Save Settings Restore Settings Clear All Settings Clear All Settings Clear Ative Insulin Settings History Sensor Demo Device Options Manage Devices Connect Device Language

## Getting started | Menu

#### MAIN MENU

Bolus 10 Enter BG 0 Temp Target 2 Audio Options 2 Status 10 Suspend Delivery 0 Options 3 C	0	Bolus
		BG
Auto Modo		Carbs
Bolus		Enter BG
Enter BG		BG Entry
Temp Target	0	Temp Target 💦
Audio Options		Duration
Status		Cancel lemp larget
Suspend Delivery		Audio Options
		Alert Silence Options High Alerts Only High & Low Alerts All Sensor Alerts Duration Audio (on/off) Vibrate (on/off) Volume (-/+)
		Status
		Auto Mode Readiness Notifications Quick Status Pump Sensor Settings Review
	$\bigcirc$	Suspend Delivery

## Section 7: Main menu items—a closer look

Now you are ready to set some basic features found within the Menu.

### **Audio Options**

You will use Audio Options to set the pump to beep (Audio), vibrate (Vibrate), or beep and vibrate (Audio and Vibrate). If you choose Audio or Audio and Vibrate, you can also increase or decrease the Volume.



### Let's practice:

- 1) Press 🔘 to open the Menu.
- 2) Press  $\bigcirc$  to **Audio Options** and press  $\bigcirc$ .
- 3) Press  $\bigotimes$  to the option that you prefer and press  $\bigcirc$ .

If you choose Audio, you are able to adjust the volume.

- 4) Press  $\bigcirc$  to **Volume** and press  $\bigcirc$ .
- 5) Press  $\bigcirc$  or  $\bigcirc$  to the desired volume and press  $\bigcirc$ .
- 6) Select **Save**.

**Note:** You can have both Audio and Vibrate on at the same time.

The icon shown here will display on the Home screen.

Audio Optic	ons		
Alert Silenc	e Optior	າຣ	
Audio		On	• •
Vibrate	{⊂	S Off	
Volume	_	3 +	
S	ave		

On displays when option is selected.

### **Display Options**

Display Options allows you choose the brightness of your pump screen. This is also where you go to change the amount of time your pump stays on before it goes into Power Save mode.



### Let's practice:

- 1) Press (O) to open the Menu.
- 2) Press  $\bigcirc$  to **Options** and press  $\bigcirc$ .
- Press  $\bigotimes$  to **Utilities** and press  $\bigcirc$ . 3)
- Press  $\bigotimes$  to **Display Options** and press  $\bigcirc$ . 4)

If you want to adjust the screen brightness:

- Select Brightness. 5)
- Press  $\bigcirc$  or  $\bigcirc$  to the setting you prefer and press  $\bigcirc$ . 6)



**Note:** The Auto setting automatically adjusts the screen brightness to match your current environment. Your pump arrives set to Auto.

To adjust the backlight:

- 7) Select Backlight.
- Press  $\bigcirc$  or  $\bigcirc$  to the setting you prefer and press  $\bigcirc$ . 8)
- Select Save. 9)



Note: How you adjust these settings can affect battery life. Increasing the Backlight time will decrease the life of your battery.

## Section 8: Basal Patterns

Remember, your body needs insulin so glucose can be moved into your cells providing energy for your body. Insulin is needed 24 hours a day, even between meals and during the night. This is called basal insulin. The pump supplies basal insulin by delivering small amounts throughout each hour, every hour of the day and night. This allows for insulin to be increased and decreased to adjust for your body's needs.



Basal insulin amounts must be programmed into your pump. This is done by setting a basal pattern. A basal pattern consists of one or more basal rates being delivered over the course of 24 hours.

## Before her pump...

Lynn always had to remember to take her shot of long-acting insulin at bedtime. Taking it at the same time every night like her doctor asked her to was difficult. She is in college and some nights she would go to bed early, others she would be at the library until late studying. Now that her doctor has prescribed a pump, she doesn't have to worry about taking a shot. She is getting her basal insulin automatically 24 hours a day.



### Basal Pattern Setup—One Basal Rate

Your healthcare professional will calculate the hourly basal rate or rates that are best for you to use when you start on your pump. You may simply start with a basal pattern that has only one basal rate. The pump will deliver that exact basal amount evenly over each hour, 24 hours a day.

For example, if your starting basal rate is 1.0 unit, your pump would deliver one unit of insulin throughout each hour. This means you would receive a total of 24 units of basal insulin every 24 hours. To set Basal Patterns, go to **Delivery Settings**.

- 1) Press 🔘 to open the Menu.
- 2) Press 🛇 to highlight **Basal**. Press 🔘.
- 3) Press  $\bigcirc$  to highlight **Delivery Settings**. Press  $\bigcirc$ .



**Note:** You can also access Delivery Settings from the Options menu.



**WARNING:** The following are some examples of basal rates for you to practice entering while learning how to use your pump. You will need to work with your healthcare professional to get your personal basal rates. Do not use these practice basal rates for your therapy. Attempting to use these settings in your pump could result in the delivery of too little or too much insulin, which can cause hyperglycemia or hypoglycemia.



### Let's Practice: Setting a Basal Pattern that has only one basal rate

Let's set a basal pattern with a basal rate of 0.750 U/hr from 12:00A–12:00A

- 1) Press 🔘 to open the Menu.
- 2) Press  $\bigcirc$  to **Basal** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **Delivery Settings** and press  $\bigcirc$ .
- 4) Press 🛇 to **Basal Pattern Setup** and press 🔘.

5) Select **Basal 1**.

6) Select **Options**.

Basal	9:00 AM
Basal 1	
Current Rate:	0.000 U/hr
Temp Basal	
Basal Patterns	
<b>Delivery Settings</b>	

DeliverySettings 👘 🕌	
Bolus Estimate Setup	
Basal Pattern Setup	
Preset Temp Setup	
Preset Bolus Setup	
Dual/Square Wave	



Basal 1				
24 hr Total: 0.0 U				
Start	End		U/hr	
12:00 A	12:0	0 A	0.000	
Options		οĸ	/Begin	

7) Select **Edit**.

- 8) Press O on the time segment. The **End** time will be flashing.
- 9) Since you have only one basal rate, you do not need to change the **End** time. Press O on the 12:00A.
- 10) Press 🔿 to enter 0.750 and press 🔘.

11) Select Done.

- 12) Verify that the basal pattern is entered correctly. Make sure the 24 hr Total is accurate.
- 13) If no changes need to be made, select Save.

If changes need to be made, press (5) to return to the Edit Basal 1 screen.

- 14) Press  $\bigcirc$  and  $\bigcirc$  to edit the time segment.
- 15) Select Done.
- 16) When finished, select **Save**.

This basal rate amount entered, 0.750 units per hour in this example, will automatically be delivered throughout each hour continuously from one day to the next.

Basal 1	
Edit	
Сору	
Delete	



Edit Basal 1			
Start	End	U/hr	
12:00 A	12:00 A	0.750	
Done			

Edit Basal 1		
Start	End	U/hr
12:00 A	12:00 A	0.750
	Done	





Note: This basal pattern delivers 18 U over 24 hours.



### Basal Pattern Setup—Changing a Basal Rate

When you check your blood glucose (BG) as instructed, the BG readings will help you and your healthcare professional determine if your basal pattern needs to be changed. If your glucose levels are running too high or too low, this basal amount may need to be changed.

## ) Let's Practice: Changing a Basal Rate

Change the **Basal 1** basal rate from 0.750 to 0.900 U/hr.

- 1) Press 🔘 to go to the Menu.
- 2) Press  $\bigcirc$  to **Basal** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **Delivery Settings** and press  $\bigcirc$ .
- 4) Press 🛇 to **Basal Pattern Setup** and press 🔘.
- 5) Select **Basal 1**.
- 6) Select **Options**.
- 7) Select Edit.
- 8) Press 🔘 on the time segment.
- 9) Press 📎 to **Rate** and do not select it.
- 10) Press  $\bigcirc$  to change 0.750 to 0.900 and press  $\bigcirc$ .
- 11) Select Done.



- 12) Verify that **Basal 1** is entered correctly.
- 13) Select Save.

### 24 hr Total: 21.6 U Start End U/hr 12:00 ∧ 12:00 ∧ 0.900 Save

Basal 1

### Basal Pattern Setup—Multiple Basal Rates

After you start using your insulin pump, your glucose reading will help you and your healthcare professional determine if your basal pattern needs to be changed. Not only might you need to increase or decrease your current rate, you may also need to add basal rates to give you different amounts of basal insulin during certain times of the day or night.

## Having more than one basal rate... When Jessica was taking shots, her BG readings were always high in the morning. If she increased her nighttime insulin, then she would have low BGs later in the day. Now that she has her pump, it is set to deliver more insulin in the early morning so her BGs aren't high when she wakes up, and less insulin later in the day when she doesn't need as much.

**Helpful hint:** Most people need more than one basal rate to get the best control with their pump. Work with your healthcare professional to get your basal rates adjusted correctly when you start on pump therapy.



In this example, a healthcare professional reviewed the BG readings and has determined that one basal rate works well for part of the day, but the basal rate needs to be lowered to 0.650 units per hour between the hours of 8:00A and 6:00P.





Now, let's make the changes to the basal pattern.

Let's Practice: Setting Multiple Basal Rates

- 1) Press 🔘 to go to the Menu.
- 2) Press  $\bigcirc$  to select **Basal** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **Delivery Settings** and press  $\bigcirc$ .
- 4) Press 🛇 to Basal Pattern Setup and press 🔘.
- 5) Select **Basal 1**.
- 6) Select **Options**.
- 7) Select Edit.
- 8) Press  $\bigcirc$  on the time segment.

The 0.900 basal rate will now need to end at 8:00A since this is the time that your basal rate needs to decrease.

- 9) Press 🔿 to 8:00A and press 🔘.
- 10) Press 🔘 again as this basal rate will stay the same.

Edit Basal 1		
Start	End	U/hr
12:00 A	12:00 A	0.900
Done		

Edit Basal 1		
Start	End	U/hr
12:00 A	8:00 A	0.900
8:00A	8:30 A	
	Done	

You can see you are automatically asked to enter the end time of the second basal rate. This basal rate will need to end at 6:00P and will need to be changed to 0.650.

- 11) Press () to change the **End** time.
- 12) Press  $\bigcirc$  to 6:00P and press  $\bigcirc$ .
- 13) Press 🔿 to 0.650 and press 🔘.

You can now enter the next end time. You will need to enter 12:00A to complete the full 24 hours.

- 14) Press (O) to change the **End** time.
- 15) Press 🔿 to 12:00A and press 🔘.
- 16) Press 🔿 to 0.900 and press 🔘.
- 17) Select **Done**.
- 18) Verify that **Basal 1** is entered correctly. Press 🛇 to view all the basal rates.
- 19) Select **Save**.

Edit Basal 1		
Start	End	U/hr
12:00 A	8:00 A	0.900
8:00 A	6:00 P	0.650
6:00 P	6:30 p	
	Done	

Edit Basal 1		
Start	End	U/hr
12:00 A	A:00 A	0.900
8:00A	6:00 P	0.650
6:00 P	12:00 A	0.900
Done		

Basal 1			
24 hr Total: 19.1 U			
Start	End	U/hr	
12:00 A	8:00 A	0.900	Î
A:00A	6:00 P	0.650	
Save			

### Let's Practice: Changing Multiple Basal Rates

Now change the 8:00A to 6:00P basal rate to 8:00A to 5:30P and change to 0.700 U/hr.

- 1) Press 🔘 to go to the Menu.
- 2) Press  $\bigcirc$  to select **Basal** and press  $\bigcirc$ .
- 3) Press 🛇 to **Delivery Settings** and press (O).
- 4) Press 🛇 to **Basal Pattern Setup** and press O.
- 5) Select **Basal 1**.
- 6) Select **Options**.
- 7) Select **Edit**.
- 8) Press  $\bigcirc$  to the 8:00A to 6:00P time segment and press  $\bigcirc$ .
- 9) Press  $\bigcirc$  to 5:30P and press  $\bigcirc$ .
- 10) Press 🔿 to 0.700 and press 🗿. Notice the start time of the 3rd time segment changed to 5:30P.
- 11) Press () to change the **End** time.
- 12) Press 🔿 to 12:00A and press 🗿.
- 13) Press 🔿 to 0.900 and press 🔘.
- 14) Select **Done**.
- 15) Verify that the **Basal 1** is entered correctly. Press 🛇 to view all the basal rates.
- 16) Select **Save**.

Edit Basal 1			
Start	End	U/hr	
12:00 A	8:00 A	0.900	
A:00A	6:00 P	0.650	
6:00 P	12:00 A	0.900	
Done			
_			

Edit Basal 1		
Start	End	U/hr
12:00 A	8:00 A	0.900
8:00 A	5:30 p	0.700
5:30 P	12:00 A	0.900
Done		

Basal 1			
24 hr Total: 19.7 U			
Start	End	U/hr	
12:00 A	8:00 A	0.900	ľ
8:00 A	5:30 <sub>P</sub>	0.700	
	Save		

### Basal Pattern Setup—Removing Basal Rates

There may be times when you have basal rates entered that need to be removed. This is done by simply changing the end time of the last basal rate that you need to 12:00A.



### Let's Practice: Removing Basal Rates

- 1) Press 🔘 to go to the Menu.
- 2) Press  $\bigcirc$  to **Basal** and press  $\bigcirc$ .
- 3) Press 🛇 to **Delivery Settings** and press 🔘.
- 4) Press  $\bigotimes$  to **Basal Pattern Setup** and press  $\bigcirc$ .
- 5) Select **Basal 1**.
- 6) Select **Options**.
- 7) Select **Edit**.
- 8) Press O on the 12:00A to 8:00A time segment.
- 9) Press 🛇 to 12:00A and press 🔘.
- 10) Press 🔘 again as this basal rate will stay the same. Notice that all other basal rates have been removed.
- 11) Select Done.
- 12) Verify that **Basal 1** is entered correctly.
- 13) Select Save.



Basal 1			
24 hr Total: 21.6 U			
Start	End	U/hr	
12:00 A	12:00 A	0.900	
Save			
-			

### **Suspend Delivery**

Remember your pump is delivering basal insulin throughout every hour of the day. Although you should never stop this insulin delivery for more than an hour or so, there will be times when you will want to manually suspend, or stop delivery, and disconnect from your pump. This is done using the manual Suspend Delivery feature. Using Suspend Delivery stops all insulin delivery. The most common reasons to manually suspend delivery might include bathing and water activities. Infusion sets are designed so you can easily disconnect from your pump and leave it in a safe place. Talk with your healthcare professional about a plan including BG checks and possible correction boluses when disconnecting and reconnecting your pump.

## Suspending the pump...

Danielle doesn't like her pump to be attached to her when she is swimming, so she disconnects it. She always manually suspends her pump so that insulin isn't delivered while the pump is not attached to her.

**Helpful hint:** While the pump is suspended, it will beep and/or vibrate every 15 minutes to remind you it is in suspend.





### Let's practice: Placing the pump in manual suspend

- 1) Press 🔘 to open the Menu.
- 2) Press  $\bigotimes$  to highlight Suspend Delivery.
- 3) Select Suspend Delivery.
- 4) Press  $\bigcirc$  and select **Yes** to suspend delivery.





A confirmation screen appears.

Notice that the Home screen has changed. The pump will beep and/or vibrate every 15 minutes while the pump is manually suspended.

WARNING: When delivery is resumed, basal insulin will begin to deliver again. The pump will not deliver any of the basal insulin you missed while the pump was suspended.

If you manually suspend delivery while a bolus is delivering, the bolus delivery will stop. When you resume delivery, the remainder of the bolus will not be delivered.

Let's practice: Resuming basal insulin delivery

1) Press 🔘 to open the Menu.



Delivery Suspended Successfully

**Delivery Suspended** 

ă (

**O**BG

Active Insulin

9:00

0.0 U

mg/dL



2) Select **Resume Delivery**.

## Getting started | Basal Patterns

3) Press  $\bigcirc$  and select **Yes** to resume insulin delivery.

A confirmation screen appears.

The Home screen appears.



	9:00 AM
<b>6</b> BG	
	mg/dL
Active Insulin	1.0 U

## Section 9: Giving boluses

A bolus is given for two reasons: to cover food that contains carbohydrate or to correct glucose levels that are above your target range. Giving a bolus will be one of the most common things you do with your pump. Instead of having to take shots at meals, or between meals if your glucose is too high, you can program your pump to give the insulin. When using the pump, you are able to give precise bolus amounts.

## Giving a bolus...

Susie finds it easier to bolus on her pump than it was to give an injection at her meals. When she went out to eat, she would sometimes forget to take her insulin along. Now it is always with her.



### Giving a manual bolus

When giving a manual bolus, you simply enter the amount of bolus insulin that you think you need for the carbohydrates you are eating, or to lower your BG if it is high.



**WARNING:** Make sure you are NOT connected to the pump while you are giving practice boluses.

- 1) Press 🔿 to open the Menu.
- 2) Select **Bolus**.
- 3) Press 🔿 to 1.0 u and press 🔘.
- 4) Select **Deliver Bolus**.



## Getting started | Giving boluses

5) Confirmation that the Bolus has started will appear.

The Home screen will show the amount as it is being delivered. Once the bolus has finished delivering, the pump will return to the normal Home screen.

Notice there is **Active Insulin** now displayed. Active insulin is insulin from boluses that is still working to lower blood glucose levels. Each time you give a bolus, it is added to the active insulin amount. As time passes, the amount will decrease. You will learn more about active insulin during your training.

Sto	nnina	а	bolus	that	vou	have	started
JU	pping	α	Duius	that	you	nave	Starteu

There may be times when you need to stop your bolus. Perhaps you realized you entered the wrong amount, or you get a phone call and cannot eat right now as planned. Go to the Main Menu to find the **Stop Bolus** option.

- 1) Press 🔘 to open the Menu.
- 2) Select Stop Bolus.

3) Press  $\bigcirc$  and select **Yes**.

Stop Bolus	Õ
Enter BG	
Basal	Ē,
Audio Options	б
Status	
Suspend Delivery	





Active Insulin

mg/dL

1.0 U



Bolus 1.0 U started

- 4) Review the **Bolus Stopped** screen to see how much of the bolus was delivered.
- 5) Select **Done**.



**Note:** The **Bolus Stopped** screen will show you how much of the bolus insulin was delivered before it was actually stopped.

Bolus Sto	pped	9:00 AM
Delivered	0.250 o <sup>.</sup>	f 1.000 U
	Done	

## Stopping a Bolus...

Karen gives a bolus for lunch, but before she can begin eating, the phone rings. It's her cousin calling long distance, so Karen knows this phone call will take a while. She decides to wait to eat until after the call so she stops the bolus.

**Helpful hint:** Always check the Bolus Stopped screen to see how much insulin you received before the bolus was stopped. Depending on the amount, you may decide you need to eat something so you do not experience a low blood glucose.





### Let's practice: Stopping a bolus

Give a manual bolus of 1.5 units and stop the bolus once it has started to deliver.

- 1) Press 🔘 to open the Menu.
- 2) Select Bolus.
- 3) Press 🔿 to 1.5 u and press 🔘.
- 4) Select **Deliver Bolus**.
- 5) Press (O) to open the menu, then select **Stop Bolus**.
- 6) Press  $\bigotimes$  and select **Yes** to stop delivery.
- 7) Review the **Bolus Stopped** screen. How much of the bolus was delivered?
- 8) Select Done.
# **Bolus Wizard**

Calculating how much bolus insulin to give can be challenging. When using the Bolus Wizard, you will enter your current BG reading along with the amount of carbs you are about to eat. Once you do this, the Bolus Wizard uses the individual settings provided by your healthcare professional to calculate your bolus amount.

By counting carbs and using the Bolus Wizard, you are able to give the right amount of insulin for your food and correction bolus. This can help to keep your glucose levels better controlled.

WARNING: The following are some examples of Bolus Wizard settings for you to practice entering while learning how to use your pump. You will need to work with your healthcare provider to get your personal Bolus Wizard settings. Do not use these practice Bolus Wizard settings for your therapy. Attempting to use these settings in your pump could result in the delivery of too little or too much insulin, which can cause hyperglycemia or hypoglycemia.

### **Bolus Wizard Setup**

To use the Bolus Wizard, you must first enter your personal settings from your healthcare professional. You will need your Carb Ratio, Sensitivity Factor, BG Targets, and your Active Insulin Time to complete the setup. If you do not have your personal settings yet, you may practice with the practice settings in the examples below. Be sure your personal settings are entered before actually using the Bolus Wizard for your therapy.



Let's Practice: Entering Bolus Wizard settings

- 1) Press (O).
- 2) Select **Options**.
- 3) Select **Delivery Settings**.
- 4) Select Bolus Estimate Setup.
- 5) Select **Bolus Wizard** to turn it on.



Bolus Estimate Setup Carb Ratio Bolus Wizard Insulin Sensitivity Factor BG Target Active Insulin Time

# Getting started | Giving boluses

- 6) Press  $\bigotimes$  to continue reading text.
- 7) Select Next.
- 8) Review the description of Carb Ratio and select Next.

- 9) Press O on the time segment.
- 10) If you have only one Carb Ratio, press O.

If you have more than one Carb Ratio, press  $\bigcirc$  or  $\bigcirc$  to enter the time that your Carb Ratio ends and the second begins and press  $\bigcirc$ .

If you have more than one Carb Ratio, continue by entering your time segments and Carb Ratios until all are entered.

*This example shows only one Carb Ratio of 15. Enter this practice Carb Ratio, or if you know your personal Carb Ratio, enter it now.* 

- 12) Select Next.
- 13) Review the description of Sensitivity Factor and select **Next**.



Next

Bolus Wizard

Carb Ratio 1/4

setup:

insulin.

The following values are

needed for Bolus Wizard

Carb Ratio, Insulin Sensitivity, BG Target, Active Insulin Next

Carb Ratio is the amount of carbs covered by 1 unit of

Edit Carb Ratio 1/4			
Start	End	g/U	
12:00 A	12:00 A	15	
Next			

## Sensitivity 2/4

Insulin Sensitivity Factor (Sensitivity) is the BG amount reduced by 1 unit of insulin.

Next

- 14) Press O on the time segment.
- 15) If you have only one Sensitivity Factor, press O.

If you have more than one Sensitivity Factor, press  $\bigcirc$  or  $\bigcirc$  to enter the time that your Sensitivity Factor ends and the second begins and press  $\bigcirc$ .

If you have more than one Sensitivity Factor, continue by entering your time segments and Sensitivity Factors until all are entered.

This example shows only one Sensitivity Factor of 50. Enter this practice Sensitivity Factor, or if you know your personal Sensitivity Factor, enter it now.

Edit Sensitivity 2/4 Start End mg/dL per U 12:00 A 12:00 A ---



- 17) Select Next.
- 18) Review the description of BG Target and select Next.

- 19) Press O on the time segment.
- 20) If you have only one BG Target range, press O.

If you have more than one BG Target range, press  $\bigcirc$  or  $\bigcirc$  to enter the time that your BG Target range ends and the second begins and press  $\bigcirc$ .

### BG Target 3/4 BG Target is the value your blood glucose level will be corrected to.



Next

- 21) Press  $\bigcirc$  or  $\bigcirc$  to enter the Lo target and press  $\bigcirc$ .
- 22) Press  $\bigcirc$  or  $\bigcirc$  to enter the Hi target and press  $\bigcirc$ .

If you have more than one BG Target Range, continue by entering your time segments and Lo and Hi targets until all are entered.

This example shows only one BG Target Range of 100–100. Enter this practice BG Target Range, or if you know your personal Bolus Wizard BG Target Range, enter it now.

- 23) Select Next.
- 24) Review the description of Active Insulin Time and select **Next**.

#### 25) Select Duration.

26) Press ⊘ or ⊘ to enter the **Duration** of your Active Insulin Time and press ⊙.

This example shows an Active Insulin Time of 4:00 hours. Enter this practice Active Insulin Time, or if you know your personal Active Insulin Time, enter it now.

27) Select Save.

#### The Bolus Wizard setup is now complete.

Now that you have completed the initial setup, you can see that the individual settings are now accessible menu items. If you need to make a change to any of these settings, you can press down to the setting, select it, and make the necessary changes.







Save



# Using the Bolus Wizard

Before we start, let's take a look at the Bolus Wizard entry screen.





### Let's practice: Food and correction bolus

Now you are ready to practice giving a bolus. This example shows giving a bolus for a BG and carbs. In this example we will use a BG value of 124 mg/dL and 35 grams of carbs.

- 1) Press (O).
- 2) Select **Bolus**.
- 3) Select Bolus Wizard.
- 4) Select **BG**.
- 5) Press  $\bigcirc$  or  $\bigcirc$  to enter the current BG, and press  $\bigcirc$ .

**Active Ins. adjust.** is the active insulin from previous boluses that is being adjusted (subtracted) from the correction dose.

- 6) Select Carbs.
- 7) Press 🔿 to enter the amount of carbs you are eating and press (O).
- 8) Select Next.

Bolus	9:00 AM
BG	mg/dL
Active Insulin	<b>0.3</b> U
Bolus Wizard	
Manual Bolus	
Delivery Settings	

Bolus V	Vizard	9:00 AM
bg <b>1</b>	24 mg/dL	0 <b>.</b> 4u
Active In	s. adjust.	-0.3u
Carbs	Og	<b>0.0</b> u
Bolus		<b>0.1</b> u
	Next	

Bolus Wizard	9:00 AM
BG <b>124</b> mg/dL	0.4
Active Ins. adjust.	-0.3
Carbs <b>35</b> <sub>9</sub> _	2 <b>.</b> 3
Bolus	<b>2.4</b>
Next	

9) Select **Deliver Bolus**.



124

mg/dL



**Note:** The BG value entered appears on the home screen and will remain here for 12 minutes.

There may be times you enter either a BG value or carbs. For example, you would enter:

- only grams of carbs if you finished your meal, but are eating additional carbs
- only a BG value if you tested two hours after your meal to see if you needed a correction bolus

# Let's practice: Food bolus with no BG

- 1) Press (O).
- 2) Select **Bolus**.
- 3) Select **Bolus Wizard**.
- 4) Press  $\bigotimes$  to **Carbs** and press  $\bigcirc$ .
- 5) Press 🔿 to enter the amount of carbs you are eating and press (O).
- 6) Select **Next**.
- 7) Select **Deliver Bolus**.

Bolus	9:00 AM
BG	mg/dL
Active Insulin	<b>0.0</b> U
Bolus Wizard	
Manual Bolus	
Delivery Settings	

Bolus Wizard	9:00 AM
BGmg/dL	<b>0.0</b> u
Active Ins. adjust.	<b>0.0</b> u
Carbs <b>32</b> 。	<u>2.1</u> u
Bolus	<b>2.1</b> 0
Next	



**Note:** You will receive messages when you enter a BG below 70 mg/dL or above 250 mg/dL. These prompt you to take appropriate steps to treat as instructed by your healthcare professional. You will see an example in the next practice exercise.

# ) Let's practice: Correction bolus with no food

- 1) Press (O).
- 2) Select **Bolus**.
- 3) Select **Bolus Wizard**.
- 4) If using the compatible meter, BG will be on screen. If not, select **BG**.
- 5) Press  $\bigcirc$  or  $\bigcirc$  to enter the current BG, and press  $\bigcirc$ .
- 6) Press  $\bigotimes$  to **Next** and press  $\bigcirc$ .
- 7) The High BG message will appear. Read the text and press  $\bigcirc$ .

- 8) Continue reading the text and take appropriate action to prevent DKA.
- 9) Select **OK**.

Bolus	9:00 AM
BG	mg/dL
Active Insulin	<b>0.0</b> U
Bolus Wizard	
Manual Bolus	
Delivery Settings	

Bolus Wizard	9:00 AM
BG <b>264</b> mg/dL	3 <b>.</b> 2u
Active Ins. adjust.	<b>0.0</b> u
Carbs <b>0</b> g	<u>0.0</u> υ
Bolus	<b>3.2</b> 0
Next	





10) Select **Deliver Bolus**.





### Status

There will be times when you need information about your pump status. For example, the status icon on your Home screen shows you if the insulin in your reservoir is getting low, but you may need to know exactly how many units are left. This information can be found in the Status screens.

1) From the Home screen, press O.

- 2) Press 😔 to highlight **Status**.
- 3) Press O to select **Status**.







Here you can see the status information that can be found when you select each menu item:

Auto Mode Readiness	Displays messages and information letting you now whether or not you are ready to enter into Auto Mode.	
Notifications	Shows the names and times of alarms, alerts, messages, and reminders that you have received over the past 24 hours. To see more alerts and alarms, go to History in Utilities.	
Quick Status	Provides a current summary of pump information including the last bolus you delivered, the last BG entered, and your current basal rate.	
Pump	Provides detailed information about your pump, including the date you last changed the reservoir, and the number of units left in it.	
	Provides detailed information about your sensor, including when the next calibration due, the sensor life, and the transmitter battery status.	
Sensor Note: This information is only available after the sensor feature has been turned on.		
Settings Review	Displays the current settings you have programmed into your pump.	
Note: You can go back to the previous screen by pressing 🕥.		

# **Checking last bolus**

There may be times when you need to see the time or amount of the last bolus that was given. For example, you may not remember if you took a bolus at lunch and want to check to make sure. You can see the last bolus delivered in the **Quick Status** screen.



3) Press  $\bigcirc$  to **Quick Status** and press  $\bigcirc$ .

The (N) behind the Last bolus amount means the bolus was delivered as a normal bolus. There are additional ways to give a bolus which you will learn about later in your training.

Quick Status	9:00 AM
Last bolus	2.800 U (N)
	9:02 AM
	Jan 1
Last BG	265 mg/dL
	9:03 AM
	Jan 1

# **Checking bolus history**

You may also want to review the last several boluses that were delivered. For example, a parent might want to view the boluses their child gave throughout the day. You can see the last several boluses delivered in Daily History.



### Let's practice: Checking bolus history

You can see the last several boluses you delivered in **Daily History**.

- 1) Press (O).
- 2) Press  $\bigcirc$  to **Options** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **History** and press  $\bigcirc$ .
- 4) Press  $\bigcirc$  to **Daily History** and press  $\bigcirc$ .
- 5) Press  $\bigcirc$  on the day you would like to review.

Daily History	9:00 AM
Bolus (N) 0.050 U	3:32 РМ
Bolus (N) 0.100 U	2:07 PM
Bolus (N) 0.050 U	11:55 AM
🧹 🛛 Fri, Mar 30	



**Note:** You can press the  $\bigcirc$  and  $\bigcirc$  arrows to move from day to day. You can also see further details by pressing  $\bigcirc$  on any item listed.

# Section 10: Using the CONTOUR®NEXT LINK 2.4 meter

The CONTOUR NEXT LINK 2.4 meter is the only meter able to communicate wirelessly with your MiniMed® 670G insulin pump. This can make your diabetes management easier by automatically sending your BG meter readings over to the pump. This is especially helpful when using the Bolus Wizard and the Event Marker options.



Review the parts of your meter here:

### **CONTOUR NEXT LINK 2.4 Meter**

## **Charging your meter**

Your meter has a permanent rechargeable battery. *It is important that you charge the meter prior to your in-person training.* To charge your meter:

- 1) Remove the cap to reveal the USB connector.
- 2) Plug the USB connector into a computer.\*\*

The computer must be ON and not in sleep, hibernate, or power save mode.



- The meter will briefly display Do Not Test—charging and the test strip port light will flash. You cannot do a blood glucose test while the battery is charging.
- 4) When charging is complete, the test strip port light will turn off. You can then unplug the meter.

You will connect your pump and meter at your in-person training. Steps on how to connect your pump and meter are in *Training handouts on page 80*. For more information on using your meter, see the User Guide found in the meter box.

\* The CONTOUR NEXT LINK 2.4 meter only works with CONTOUR®NEXT glucose testing strips.

\*\*If you would prefer not to charge your meter using your computer, you can purchase a compatible outlet charger by calling Ascensia Customer Service.

# Introduction to CareLink® Personal software

CareLink Personal software is a web-based program that is provided free of charge by Medtronic. This software allows you to upload the data from your pump and glucose meter to a secure website and organize it into easy-to-read reports and charts. These reports provide an overview of how insulin, food intake, and exercise affect your glucose control.

Reviewing the data on these reports allows you and your healthcare professional to identify glucose patterns and trends so you can determine if any pump settings need to be adjusted.

You will need to set up your CareLink Personal account so you can upload your pump and meter every two to three days after you start using your pump. You and your healthcare professional will be able to review your information and adjust your pump settings as needed.

If you are not currently using CareLink Personal software, you can follow these steps to set up your account:

- 1) Go to www.medtronicdiabetes.com/carelink.
- 2) Select the **Sign Up Now** button.
- 3) Choose your country and language.
- 4) Read and **Accept** the Terms of Use and Privacy Statement.
- 5) Create a Username and Password and enter all required information.
- 6) Select **Submit**.

You will learn more about using CareLink software at your in-person training.

When uploading your information from your pump to CareLink software, you will use the meter as the communication device from the pump to your computer.

# Using CareLink software...

Julia uploads her pump and meter information to CareLink Personal before each visit with her doctor. She has given him access to her reports so he can review them, saving a great deal of time during her office visit. Her doctor has the information he needs to make adjustments to her pump settings.



# Section 11: Frequently asked questions

As with learning anything new, you typically have questions. Here is a list of commonly asked questions. You may wish to make a note of any additional questions you may have to ask your Certified Product Trainer.

# Where should I wear my pump?

Where and how to wear the pump is a commonly asked question among new pump users. Most individuals find that wearing an insulin pump presents no problem and that it can be worn in a variety of ways. It typically takes only a day or two to find the ways that work best for you. Below are just a few ideas to help get you started.

- Use the clip that comes with your pump and clip it to a waist band or belt
- Place the pump (with or without the clip) into the pocket of your pants
- Keep it in your shirt pocket
- Slip it into your bra with the screen facing away from your skin
- Use the longer tubing lengths and place the pump in your sock

## Where can I put the pump when I sleep?

- Clip it to the waist of your pajama pants
- Clip it onto your pajama top or in a pocket
- Place it next to you in the bed, under your pillow, or on the bedside table

Medtronic Diabetes offers accessories that can add to the convenience of wearing, protecting, and concealing your pump. Refer to the accessories catalog or to the accessories information found on our website at www.medtronicdiabetes.com.

# What about intimacy?

What to do with the pump during intimate moments is another question that is frequently asked. An open discussion with your partner usually resolves any concerns you may have. Some individuals simply choose to leave the pump in place. Others choose to use the longer tubing which allows them to place the pump well out of reach. Another idea is to temporarily disconnect from the pump and tubing. Just remember that disconnecting from the pump for long periods of time can result in high glucose levels that could lead to DKA (diabetic ketoacidosis). So, always be sure you reconnect the pump afterwards.

Talk to your healthcare professional about a plan including BG checks and possible correction boluses when disconnecting and reconnecting to your pump.

# Should the pump be removed for X-rays, CT scans, and MRIs?

**WARNING:** Do not expose your pump to MRI equipment, diathermy devices, or other devices that generate strong magnetic fields (for example, x-ray, CT scan, or other types of radiation). The strong magnetic fields can cause the devices to malfunction and result in serious injury. If your pump is exposed to a strong magnetic field, discontinue use and contact the 24 Hour HelpLine for further assistance. Magnetic fields, and direct contact with magnets, may affect the accurate functioning of your system, which may lead to health risks such as hypoglycemia or hyperglycemia.

Cannula infusion sets such as the Quick-Set<sup>®</sup>, Silhouette<sup>®</sup>, and Mio<sup>®</sup> can be left in place during the procedure. However, infusion sets that use a needle instead of a cannula to infuse insulin such as the Sure-T<sup>®</sup>, must be removed prior to the procedure.

Do not expose your sensor or transmitter to MRI equipment, diathermy devices, or other devices that generate strong magnetic fields. Exposure to a strong magnetic field has not been evaluated and can cause the device to malfunction, result in serious injury, or be unsafe. If your sensor or transmitter are inadvertently exposed to a strong magnetic field, discontinue use and contact the 24 Hour HelpLine for further assistance.



# What do I need to know about traveling with my insulin pump?

### **Going through Airport Security**

You can wear your insulin pump while going through an airport metal detector. If you are asked to go through a full body scanner, you must remove your insulin pump and CGM (sensor and transmitter). **To avoid removing your devices, you may request an alternative screening process**.





**WARNING:** Do not send your devices through the x-ray machine as the radiation can make your pump nonfunctional or damage the part of the pump that regulates insulin delivery, possibly resulting in over delivery and hypoglycemia.

Print and complete the information on an airport emergency card to carry with you.

Notify security screeners that you have diabetes, that you are wearing an insulin pump and are carrying supplies with you. If there is any question, ask that they visually inspect the pump rather than removing it from your body. Remember, you may ask for a private screening if removal or lifting of clothing is required to display your pump.

If you encounter difficulty, ask to speak with the TSA ground security commissioner or their international equivalent. The American Diabetes Association (ADA) asks that you also contact them at 1.703.549.1500 ext. 1768 should you encounter any problems.

### **General Travel Tips**

• Pack extra supplies including reservoirs, infusion sets, batteries and ketone strips. Keep your supplies, insulin and a prescription with you, just in case your luggage is lost or your insulin becomes denatured. The TSA requires that lithium batteries be kept in their original packaging and with you in your carry-on baggage.



**WARNING:** Never store insulin in checked luggage as it may be exposed to extreme temperatures. Extreme heat or cold can cause insulin to lose its effectiveness which could result in hyperglycemia.

- Pack glucose tablets or carbohydrate for treatment of low glucose. In case flights are delayed or canceled, pack extra food that is easy to carry, such as nutrition bars.
- If you travel outside the continental United States, you may want to take advantage of Medtronic's travel loaner plan. This program allows you to take a "back-up" insulin pump with you when you travel.



### **Always Be Prepared**

When flying in an airplane, it is important that you stay connected to your pump and check your blood glucose more frequently. The routine hassle of travel, including stress, changes in time zones, schedules and activity levels, meal times and types of food, can all affect your diabetes control. Be extra attentive to your BG readings, and be prepared to respond if needed.



When traveling, make sure that you have backup syringes, vials of insulin or insulin pens (rapid-acting and long-acting insulin), and instructions from your healthcare provider should you need to return to insulin injections if your pump stops working.

Because travel rules are subject to change, it is advisable to check with the Transportation Safety Administration (TSA) before traveling. They can also provide current information about traveling with your other diabetes supplies (lancets, syringes etc.) You can find TSA information at http://www. tsa.gov/traveler-information/passengers-diabetes or by calling 1-866-289-9673. International passengers should consult their individual air carriers for international regulations. For more information on traveling with a pump, go to: http://www.medtronicdiabetes.com/ customer-support/traveling-with-an-insulin-pumpor-device

# When should I call the 24 Hour HelpLine?

Medtronic Diabetes provides a 24 Hour HelpLine that is staffed with highly trained and skilled service technicians. These technicians are available to assist you with any technical issues or questions that you may have regarding the operation of your pump.

- You are concerned that the pump is not functioning properly.
- You are reading about a pump function in the User Guide that you do not understand and need assistance.
- Your pump has alarmed and you have followed the instructions to clear the alarm and it alarms again.

The number for the 24 Hour HelpLine is located on the bottom of your pump.



# When should I call my healthcare professional?

Consult your healthcare professional about when, how often, and under what circumstances you should contact them. Typically, they will review your glucose information more frequently when you first start on pump therapy. This allows them to adjust and fine-tune your pump settings. Once adjusted, most healthcare professionals ask that you maintain a routine follow-up schedule. Examples of other situations that you should notify your healthcare professional about are:

## Hypoglycemia (BG less than 70 mg/dL)

- Any severe hypoglycemic event that requires another person's assistance to treat the low; or any event that results in loss of consciousness.
- Frequent hypoglycemia
- Hypoglycemia that occurs around the same time each day or that routinely occurs after certain activities (such as vacuuming or washing the car)
- Hypoglycemia that occurs after or during exercise

# Hyperglycemia (BG above your maximum target range or above 250 mg/dL)

- Hyperglycemia that is frequent or persistent
- Hyperglycemia that is accompanied by nausea or vomiting
- Hyperglycemia and positive ketones
- Hyperglycemia that occurs around the same time each day or routinely after a certain event (such as eating).

As always, when low or high blood sugars occur, follow the guidelines provided in the Safety Rules Quick Reference Guide in the Training Handouts section of this guide.



# Section 12: Additional features for experienced users

You have learned the features that are necessary to use your pump. There are additional features that you might find helpful. This section will discuss some additional menu options and features that are available on your insulin pump. Refer to the 670G User Guide for information about additional features and complete instructions for use.

# Dual/Square Wave Bolus

The practice boluses that were given earlier were delivered as **Normal** boluses; that is, as a single immediate dose of insulin. This is the type of bolus you would typically use to cover normal food intake and to correct a high BG.

This pump also lets you deliver bolus insulin as a Dual Wave or Square Wave bolus. These can help better match the effects food has on your glucose levels.





### Turning Dual and Square Wave Bolus on

- 1) Press (O).
- 2) Select **Options**.
- 3) Select **Delivery Settings**.
- 4) Select **Dual/Square Wave**.
- 5) Select **Dual Wave** to turn **On** if desired.
- 6) Select Square Wave to turn **On** if desired.
- 7) Select Save.

### **Square Wave**

A Square Wave bolus delivers a bolus over an extended period of time. This can be helpful:

- to match delayed food digestion due to gastroparesis.
- for meals very low in carbohydrates but high in fat.
- when snacking on small amounts of carbs over a period of time, for example, at a reception.





When setting a Square Wave bolus, you will need to determine the duration that you want the bolus to deliver (30 minutes to 8 hours in 15 minute increments). This will vary depending on you individually, as well as the situation for which the Square Wave bolus is being used. Frequent glucose testing should be done until you and your healthcare professional have determined the best use for you.

Correction boluses calculated by the Bolus Wizard cannot be delivered as a Square Wave bolus since that insulin is needed right away.

# Using Square Wave Bolus...

Sarah eats at her desk at work and it takes her a while to finish because she often gets distracted. She delivers her lunch bolus as a Square Wave over 45 minutes to help make sure her insulin doesn't start to work before her carbs are digested.





### Giving a Square Wave Bolus

This example will show a Square Wave bolus using the Bolus Wizard with a BG value of 103 mg/dL and 41 grams of carbs.

- 1) Press O.
- 2) Select Bolus.
- 3) Select Bolus Wizard.
- 4) Enter BG and Carbs.
- 5) Select Next.
- 6) Press  $\bigcirc$  and  $\bigcirc$  to **Square** and press  $\bigcirc$ .

Bolus Wizard	9:00 AM
BG <b>103</b> mg/dL	<b>0.0</b> U
Active Ins. adjust.	<b>0.0</b> U
Carbs <b>41</b> <sub>9</sub> _	<u>2.7</u> u
Bolus	<b>2.7</b> υ
Next	





- 7) Select **Duration**.
- 8) Press  $\bigcirc$  to desired time and press  $\bigcirc$ .
- 9) Select **Deliver Bolus**.

K

Active Insulin

Time Remaining

Bolus Menu

Bolus



**Note:** A **Square Bolus** banner will appear on the Home screen until bolus delivery is complete.

From the menu, select **Bolus** and you will see the following options:

- review bolus status, then press 🕥 to return to the menu.
- select Stop Bolus to stop delivery.
- select **Bolus Menu** to deliver a normal bolus while the square is delivering.

# **Dual Wave**

A Dual Wave Bolus combines the Normal and the Square Wave bolus. It delivers part of the bolus as a Normal Bolus (now) and part as a Square (over time).

A Dual Wave bolus can be helpful for meals high in both carbs and fat. Fat delays the digestion of carbs, meaning glucose doesn't enter the bloodstream right away. Giving some insulin as a normal bolus covers any immediate glucose rise. Giving the rest over time as a Square helps to match the delayed glucose rise.

When setting a Dual Wave bolus, you will need to determine:

- the percentage / amount of insulin you want delivered immediately and how much over time.
- the duration of time over which you want the Square portion delivered.

This will vary depending on you individually, as well as the types of food that are in the meal for which the Dual Wave bolus is being used. Frequent glucose testing should be done until you and your healthcare professional have determined the best use for you.



### Giving a Dual Wave bolus

This example will show a Dual Wave bolus using the Bolus Wizard with a BG value of 131 mg/dL and 63 grams of carbs.



9:00

0.4 U

9:00

1:59 hr

103 mg/dL

0.025 of 2.700 U

Square Bolus

Stop Bolus



- 1) Press (O).
- 2) Select **Bolus**.
- 3) Select **Bolus Wizard**.
- 4) Enter BG and Carbs. Notice in this example the total bolus for BG is 0.6 U and 4.2 U for carbs.
- 5) Select Next.
- 6) Press 🔿 to **Dual** and press 🗿.

delivered as Square if needed.

9) Press  $\bigcirc$  to desired time and press  $\bigcirc$ .

Select **Duration**.

10) Select **Deliver Bolus**.



7)

8)

**Note: Square** is not an option since a correction bolus was estimated so some insulin is needed now.

Select the Now/Square field and press  $\bigcirc$  or  $\bigcirc$  to change the

amount of the bolus that is delivered **Now** and the amount

Bolus Wizard 29:00 Bolus 4.8 u Dual Square Deliver Bolus

Next

Bolus Wizard

BG **131** mg/dL

Active Ins. adjust.

Carbs 63

Bolus

0**.**6u

0**.**0u

4**.**2u

**4.8**ι

Bolus Wizard		9:00 AM
Bolus		<b>4.8</b> ∪
Now	56 %	<b>2.7</b> υ
Square	44 %	<b>2.1</b> ∪
Duration		2:30 hr
Deliver Bolus		



**Note:** Bolus for carbs is divided 50% Now/50% Square. Bolus for BG is added to Now.



**Note:** A **Bolus (D)** banner that displays the bolus delivery progress will appear on the Home screen while the Now portion is delivering.



**Note:** A **Dual Bolus** banner will appear on the Home screen until the Square delivery is complete.





From the menu select **Bolus** and you will see the following options:

- review bolus status, then press 🕥 to return to the menu.
- select **Stop Bolus** to stop delivery.
- select **Bolus Menu** to deliver a normal bolus while the square is delivering.

# Using Dual Wave bolus...

When William ate pizza, his glucose level would be good for a while, but then 3 or 4 hours later it would be high. Now he uses a Dual Wave bolus to help reduce these post-meal highs.





# Temp basal

This feature lets you immediately increase or decrease your basal insulin for the period of time (duration) that you set. It is often used for exercise and sick days.

A Temp Basal can be set in either:

- **Percent:** delivers a percent of the current basal rate.
- Rate: delivers the amount that you enter.

A Temp Basal can be set to deliver more or less than your current basal rate. It can be set in any 30 minute increment for up to 24 hours.



## Let's practice: Setting a Temp Basal

This example will show setting a Temp Basal to deliver 60% of the current basal rate for the next two hours.

- 1) Press (O).
- 2) Select **Basal**.
- 3) Select Temp Basal.
- 4) Press  $\bigcirc$  to set duration and press  $\bigcirc$ .
- 5) Select Next.
- 6) Select **Percent**.
- Press or or to enter the percent of the current basal rate desired and then press o.





Temp Basal	9:00 AM
Current rate:	<b>0.500</b> U/hr
Туре	Rate 🛑
	Percent 💳
Percent	80 %



**Note:** If you choose to use Rate, press  $\bigcirc$  to Type and press  $\bigcirc$ . You can then enter the U/hr you want delivered.

8) Select **Begin**.

The Home screen displays a **Temp Basal** banner to indicate that you have a Temp Basal active.

9:00  $\triangleleft$ **b**BG mg/dL Active Insulin 0.0 U 1:59 hr Temp Basal Bolus Ē Enter BG Cancel Temp Basal Ğ. Audio Options Status Ë

From the menu select **Cancel Temp Basal** to review the details of the active Temp Basal.

When the Temp Basal delivery is complete, the basal will automatically return to the regularly programmed basal rate.

# Using a Temp Basal...

Patricia loves to work in her garden. She often finds, however, that her glucose levels run lower when she does. Now she uses a temp basal rate to decrease the amount of insulin she gets while she is working. This helps keep her glucose levels from dropping too low.



Suspend Delivery



### Let's practice: Cancelling a Temp Basal

If you need to return to your regularly programmed basal rate before your Temp Basal is completed, you can cancel it.

- 1) Press (O).
- 2) Select Cancel Temp Basal.



3) You can see the details about the Temp Basal. Select **Cancel Temp Basal**.

If you decide not to cancel, just press 🕥.

You can see that the Home screen no longer displays the Temp Basal banner.

Temp Basal	9:00 AM	
80%	0.500 U/hr	
Duration 0:00 hr		
1:55 hr remaining		
Cancel Temp Basal		

# Adding new or copying Basal Patterns

You may be using additional Basal Patterns. These are Basal Patterns set to account for days that require different basal amounts. For example, a pattern might be used for weekends because a person is less active than they are during the week. When setting an additional pattern, you can simply enter the basal rates into a new pattern, or you can copy and then make edits to a Basal Pattern that is already set. To enter another Basal Pattern, follow these steps:

- 1) Press (O).
- 2) Select **Basal**.
- 3) Press  $\bigcirc$  and select **Delivery Settings**.
- 4) Press 🛇 and select **Basal Pattern Setup**.

### Choose one of these two options:

#### How to add a new Basal Pattern

- 5) Press  $\bigcirc$  and select **Add New**.
- 6) Select a name.
- 7) Enter times and basal rates for the additional pattern.
- 8) Select **Done** and press O.
- 9) Press O to save.

### How to Copy and Edit an existing Basal Pattern

- 5) Select **Basal 1** or another currently programmed Basal Pattern.
- 6) Select **Options**.
- 7) Press  $\bigcirc$  to **Copy**. This copies the Basal Pattern that you have programmed and allows you to make the necessary changes.
- 8) Select name for this Basal Pattern.
- 9) Press 🔿 to **Edit**.
- 10) Continue by making the necessary changes to the programmed basal rates. To change active Basal Pattern, see *Select the Basal Pattern you want to make active. on page 59.*
- 11) Select **Done** and press O.
- 12) Press O to save.

Basal Pattern Setup		
Basal 1 20.4 ∪ ✓		
Add New		

# Basal Patterns Review

You will use the Basal Patterns option to do two things:

- Review the Basal Patterns that are currently set up.
- Choose the Basal Pattern that you wish to be active.

### ) Let's practice: Reviewing Basal Patterns

- 1) Press (O).
- 2) Select **Basal**.
- 3) Select Basal Patterns.

4) Select the Basal Pattern you wish to review.

### 5) Review basal rates.



**Note:** If you see a scroll bar on the right, press  $\bigotimes$  to see all basal rates in the Basal Pattern.

6) Select **OK**.

Bolus	Ō
Enter BG	
Basal	Ğ.
Audio Options	б
Status	
Suspend Delivery	

Basal	9:00 AM
Basal 1	
Current Rate:	0.900 U/hr
Temp Basal	
Preset Temp	
Basal Patterns	



Basal 1		9:00 AM
24 hr Total: 19.25 U		(Active)
Start	End R	ate (U/hr)
12:00 A	4:00 A	0.650
4:00 A	6:00 A	0.900
	OK	



Let's practice: Changing which Basal Pattern is active

- 1) Press (O).
- 2) Select **Basal**.
- 3) Press 🛇 to **Basal Patterns** and press O.
- 4) Select the Basal Pattern you want to make active.



**Note:** The checkmark indicates which Basal Pattern is active.

5) Select **Begin**.

6)	Repeat step 1 through step 3 to see that the active Basal
	Pattern has changed.

Basal Patte	ns <sup>9:00</sup>
Basal 1	19.25 u 🗸
Day Off	17.4 <sub>U</sub>

Day Off		9:00 AM
24 hr Total: 17.4 U		
Start	End	Rate (U/hr)
12:00 A	12:00	A 0.725
Begin		

Basal Pattei	rns <sup>9:00</sup>
Basal 1	19.25 <sub>U</sub>
Day Off	17.4 u 🗸

# Max Basal/Max Bolus

## Max Basal

Max Basal is the maximum amount of basal insulin that can be delivered in one hour. Before you practice setting your Basal Patterns, you may need to change your Max Basal limit. Check your Max Basal setting on the pump you are currently using for your therapy. If your Max Basal is an amount other than 2.0 U/hr, follow these steps to change:

- 1) Press (O).
- 2) Select **Options** or **Basal**.
- 3) Select **Delivery Settings**.
- 4) Select Max Basal/Bolus.
- 5) Select Max Basal.

- A screen will appear to ensure you are entering a value that has been determined by you and your healthcare professional. If this change has been recommended by your healthcare professional, press () and select **Continue**.
- 7) Select Max Basal.
- 8) Press  $\bigcirc$  or  $\bigcirc$  to enter number of U/hr and press  $\bigcirc$ .
- 9) Select Save.

Delivery Settings Preset Temp Setup Preset Bolus Setup Dual/Square Wave Bolus Increment Max Basal/Bolus





Save

# **Max Bolus**

Before you continue, you may need to change your **Max Bolus** amount. Max Bolus is the maximum amount that can be given by any one bolus. Check your current pump settings. If your Max Bolus is an amount other than 10.0 U, follow these steps to change:

- 1) Press (O).
- 2) Select **Options** or **Bolus**.
- 3) Select **Delivery Settings**.
- 4) Select Max Basal/Bolus.
- 5) Select Max Bolus.

- A screen will appear to ensure you are entering a value that has been determined by you and your healthcare professional. If this change has been recommended by your healthcare professional, press () and select **Continue**.
- 7) Select **Max Bolus**.
- 8) Press  $\bigcirc$  or  $\bigcirc$  to enter number of units and press  $\bigcirc$ .
- 9) Select **Save**.

Delivery Settings Preset Temp Setup Preset Bolus Setup Dual/Square Wave Bolus Increment <u>Max Basal/Bolus</u>







# Auto Suspend

Auto Suspend is a safety feature that sounds an alarm and stops all insulin delivery if you do not press any buttons for the number of hours that you set. It is meant for situations where you are not responding to hypoglycemia.

Auto Suspend is most useful if you live or travel alone. It is important to use if you have difficulty responding appropriately to lows, have hypoglycemia unawareness, if you are susceptible to lows due to alcohol intake, or have a history or fear of lows at night.

Auto Suspend should be set based on your schedule. Let's say you typically go to bed about 11:00P. At about 10:00P each evening you do a BG check and check your pump (buttons would be pressed). You usually get up at 7:00A and eat breakfast around 8:00A. What happens if:

- Auto Suspend is set for 8 hours: Alarm would go off at 6:00A if no buttons had been pressed. Since you don't get up until 7:00A, this could be a nuisance.
- Auto Suspend is set for 12 hours: Alarm would go off at 10:00A if no buttons had been pressed. You should have been up by now and given a bolus. If in a dangerous situation, receiving this alarm and stopping insulin could be very helpful.
- Auto Suspend is set for 18 hours: Alarm would go off at 4:00P if no buttons have been pressed. You should have been up and given bolus several hours ago. If in a dangerous situation, you may want to be alarmed and have delivery stopped sooner.

Choose the number of hours that seems right for you.



### **Setting Auto Suspend**

- 1) Press (O).
- 2) Select **Options**.
- 3) Select **Delivery Settings**.
- 4) Select Auto Suspend.
- 5) Select **Alarm** to turn **On**.
- 6) Press  $\bigcirc$  to **Time** and press  $\bigcirc$ .
- 7) Press ⊘ or ⊘ to change number of hours. This example shows Auto Suspend set at 12 hours.
- 8) Press (O).
- 9) Select Save.

# Using Auto Suspend...

Thomas is a runner and finds the days he runs, he is more prone to hypoglycemia at night. He often sets a temp basal, but using Auto Suspend, he sleeps even more confidently because he knows his pump will stop delivering insulin and alarm if he isn't waking up when he should. Suspends insulin delivery if no button press within specified time. Alarm On Time 12:00 hr Save

Auto Suspend



# Training handouts

# **Training Handouts**

This section contains handouts that you can use during or after your training.

- Safety Rules Quick Reference Guide
- Alerts
- Alarms
- Basal Quick Reference Guide
- Bolus Wizard Quick Reference Guide
- Changing the Quick-set infusion set
- Connecting the pump and meter

Feel free to remove these handouts and keep them in a place where they are easily accessible.

# **Glucose Monitoring**

### Schedule for adjusting pump settings

When first starting pump therapy or any time pump settings need adjusting:

- Check your blood glucose (BG):
  - When you wake up
  - Before each meal
  - 2 hours after each meal
  - Bedtime
  - Mid-sleep or every 3–4 hours during sleep
- Do not eat between meals.

Checking BGs at these times provides the information needed to adjust and fine-tune pump settings as directed by your healthcare professional.

# **Treating Low Blood Glucose Levels**

#### How to treat mild/moderate lows

#### 15–15 Rule

If BG drops below 70 mg/dL:

- 1. Eat 15 grams of fast-acting carbohydrate.
- 2. Re-check BG in 15 minutes.
- 3. If BG is still below 70 mg/dL, repeat Steps 1 & 2 every 15 minutes until BG is within range.

#### Items that contain 15 grams:

- 3 to 4 glucose tablets
- 5 jelly beans
- 4 oz juice or soda (not diet)
- 8 oz milk (low or non-fat)
- 1 Tbsp sugar or honey

If BG is lower than 50 mg/dL, start treatment by eating 20 to 30 grams of carbohydrate or as otherwise directed by your healthcare professional.



#### Schedule for routine monitoring

Once your pump settings are adjusted correctly and your glucose levels are stable, establish a routine that includes always checking your BG:

- When you wake up
- Before each meal
- Bedtime
- Occasionally mid-sleep
- Test more frequently during travel, times of stress, and illness



#### How to treat a severe low

Keep a Glucagon Emergency Kit on hand in case a severe low occurs. Glucagon can be given by injection to raise glucose levels if you are unable to eat or drink to treat a low, or if you are unconscious.



A family member, co-worker, or friend should be instructed on how to give glucagon.



**Note:** If you are using continuous glucose monitoring (CGM), do not rely on sensor glucose values for making treatment decisions or the Suspend on low feature to prevent or treat a low blood glucose.

# Safety Rules Quick Reference Guide

# **Treating High Glucose Levels**

### General Guidelines: If BG is high but is lower than 250 mg/dL

- Enter the BG reading into your pump. 1.
- 2. Allow the Bolus Wizard® feature to calculate the correction bolus amount.
- Confirm the bolus amount and select Deliver Bolus. 3.
- Recheck your BG in one hour and again each hour until 4. your BG is back within target range.

#### Never ignore high BG readings. Always consult the Bolus Wizard to see if a correction bolus should be taken.

#### General Guidelines: If BG is higher than 250 mg/dL, check for ketones If ketone test is negative: If ketone test is positive: 1. Enter BG into pump/consult Bolus Wizard to see if Take correction dose using a syringe. 1. correction dose is needed. 2. • Use pump to give correction dose 3. Troubleshoot pump. 2. Recheck BG in 1 hour 4

- If BG is starting to decrease, continue to monitor until normal.
- If BG is same or higher:
  - Give correction dose using a syringe.
  - Change infusion site, infusion set, reservoir, and insulin.
  - Continue to check BG every hour until BG returns to normal.

- Change infusion site, infusion set, reservoir, and insulin.
- Check BG every 1 to 2 hours. Give correction boluses as needed.
- 5. Drink non-carbohydrate fluids.
- 6. If BG continues to rise or if you have moderate to high ketones, nausea, vomiting, or difficulty breathing, notify physician or go to the nearest emergency room.

# **DKA Prevention**

### **Sick day Guidelines**

#### Illness and/or infection usually cause BGs to run higher than normal. Therefore, the risk of developing DKA is increased when you are ill.

Because DKA symptoms are similar to flu and stomach virus symptoms, check your BG and monitor for ketones often during illness.

- Check BG every 2 hours or as directed by your healthcare professional.
- Check urine or blood for ketones as directed by your healthcare professional.
- · Immediately check ketones if you have nausea, vomiting, or abdominal pain.

• Notify doctor if ketones are positive, if you are unable to keep food down, or if no improvement within a few hours. Give a correction dose of insulin with a syringe according to your healthcare professional's recommendations and change infusion set and reservoir.

### **Check for ketones**

Follow the instructions in your ketone testing kit.



Unexplained highs that do not decrease with a correction bolus may be caused by a dislodged or kinked infusion set or a weak vial of insulin.
### Alerts

An alert makes you aware of a situation that may need your attention. When an alert occurs, you should check to see what your pump is telling you.

Alert	When alert occurs	Steps to take	
Examples of alerts include	<b>Notification Light:</b> The red light on the pump will blink once followed by a	To address and clear the alert:	
Low reservoir, Low battery	pause, blink again followed by a pause. This sequence continues until the alert is cleared. The flashing pattern is shown here:	1) Read the text on the screen to understand the alert and the steps that should be taken.	
	<b>Audio:</b> Depending on your Audio Option settings, the pump emits a	2) Press 📎.	
	repeated alert tone, a continuous two- pulse vibration, or both.	3) Press O on the desired option.	
	<b>Display:</b> The pump will display a notification with a yellow icon and instructions on what to do.	OK	

The audio / vibration pattern repeats every 5 minutes or every 15 minutes (depending on the alert ) until the alert is cleared.

### Alarms

When an alarm occurs, something has been detected that is preventing insulin from being delivered. You are not getting insulin. It is important that you address an alarm right away.

Alarm	When alarm occurs	Steps to take
Examples of alarms include	<b>Notification Light:</b> The red light on the pump will blink twice, followed by	To address and clear the alarm:
Insulin flow blocked and Replace battery now.	a pause, blink twice again followed by a pause. This sequence continues until the alert is cleared. The flashing pattern is shown here:	1) Read the text on the screen to understand the alarm and the steps that should be taken.
	<b>Audio:</b> Depending on your Audio Option settings, the pump emits a	2) Press 📎.
	repeated alert tone, a continuous three- pulse vibration, or both.	3) Press O on the desired option.
	<b>Display:</b> The pump will display a notification with a red icon and instructions on what to do.	Resume Basal Rewind

The audio / vibration pattern repeats every minute for 10 minutes if the alarm is not cleared. **After 10 minutes, the alarm begins to siren.** 

**Note:** An Insulin flow blocked alarm occurs when insulin cannot be pushed through the tubing or cannula. If this alarm occurs, make sure your reservoir is not empty and check the tubing for kinks, knots or other obvious blockages.

- If you detect an issue and are able to resolve it, check BG and select Resume Basal
  If an Insulin flow blocked alarm occurs again, follow the steps on the screen and
  select Rewind to change your reservoir and infusion set.
- If you are unable to detect an issue, follow the steps on the screen and select **Rewind** to change your reservoir and infusion set.

# Basal Quick Reference Guide

Cł	nange a basal rate		Re	viewing Basal Patterns	
1.	From the Home screen, press $\bigcirc$ .		1.	From the Home screen, press $\bigcirc$ .	
2.	Select <b>Basal</b> .	Bolus     Image: Constraint of the second seco	2.	Select <b>Basal</b> .	Bolus     Image: Constraint of the second seco
3.	Select <b>Delivery Settings</b> .	Basal 9:00 Basal 1 Current Rate: 0.500 u/m Temp Basal Basal Patterns Delivery Settings	3.	Select <b>Basal Patterns</b> .	Basal 9:00 Basal 1 Current Rate: 0.900 u/m Temp Basal Preset Temp Basal Patterns
4.	Select <b>Basal Pattern Setup</b> .	Delivery Settings A Bolus Estimate Setup Basal Pattern Setup Preset Temp Setup Preset Bolus Setup Dual/Square Wave	4.	Select the Basal Pattern you wish to review.	Basal Patterns 9:00 Am Basal 1 19,25 ⊍ ✔
5.	Select the Basal Pattern you wish to edit.	Basal Pattern Setup Basal 1 12 ⊔ ✓	5.	Review basal rates.	Basal 1 9:00 AM 24 hr Total: 19.25 U (Active)
6	Select Ontions	Add New	No	ote: If you see a scroll bar on	Start End Rate (U/hr)
о. 7	Select Edit		rat	e light, press 🕑 to see all basal res in the Basal Pattern.	4:00 A 6:00 A 0.900
8.	Press 🔘 on the time segment.	Edit Basal 1	6.	Select <b>OK</b> .	ŬŔ
9.	Press 🔘 on <b>End</b> time.	Start End U/hr 12:00 ∧ 12:00 ∧ 0.500	Ad	ld a basal rate to a Basal Pa	ittern
10.	Press 🔿 or 🛇 to change <b>U/hr</b>		1.	From the Home screen, press $\bigcirc$ .	
	and press ().	Done	2.	Select <b>Basal</b> .	Bolus 🕺
11.	Select <b>Done</b> .	Edit Basal 1 Start End U/hr 12:00 △ 12:00 △ 0.550			Basal     ▷       Audio Options     ♂       Status     ☐       Suspend Delivery     □
		Done	3.	Select <b>Delivery Settings</b> .	Basal 9:00 M
12.	Review rates and select <b>Save</b> .	Basal 1 24 hr Total: 13.2 U Start End U/hr 12:00 ∧ 12:00 ∧ 0.550			Current Rate: 0.500 um Temp Basal Basal Patterns Delivery Settings
		Save	4.	Select <b>Basal Pattern Setup</b> .	Delivery Settings A Bolus Estimate Setup Basal Pattern Setup Preset Temp Setup Preset Bolus Setup Dual/Square Wave

# Basal Quick Reference Guide

Basal Pattern Setup

Add New

12:00 A 4:00 A 0.650

Done

End

4:30 A

4:00 A

Done

12 u 🗸

Ll/hi

U/hr

0.650

asal 1

Edit Basal 1

Edit Basal 1

Start

Start

12:00 A

12:00 A

4:00 A

dit Basal 1

4:00 A 12:00 A

Start

- 5. Select the Basal Pattern you are adding a rate to.
- Select Options. 6.
- Select Edit. 7.
- Press  $\bigcirc$  on the time segment. 8.
- Enter the new End time (this is 9. the same as the start time of the basal rate you are adding) and press  $\bigcirc$ .
- 10. Press () if **U/hr** is not changing (Press 🔿 or 🛇 to change value and press (O).
- 11. Press 🔘 on the new time segment.
- 12. Press 🔿 to enter the new **End** time and press 🔘.
- 13. Press 🔿 to enter the new **Basal** Rate and press (O).
- 14. Continue adding end times and basal rates if necessary.
- 15. Select Done.



- 16. Review basal rates.
- 17. Select Save.

Basal 1		
24 hr Tot	al: 20.6 U	
Start	End	U/hr
12:00 A	4:00 A	0.650
4:00 A	12:00 A	0.900
	Save	

### Temporary (Temp) basal rate

This feature lets you immediately increase or decrease your basal insulin for the period of time (duration) that you set. It is often used for exercise and sick days. A Temp Basal can be set in either Percent (delivers a percent of the current basal rate) or by Rate (delivers the amount that you enter).

#### Setting a Temp Basal 1. From the Home screen, press 🔘 2. Select Basal. Bolus Enter BG Basal Audio Options Status Suspend Delivery 3. Select Temp Basal. Basal Basal 1 Current Rate: Temp Basal Preset Temp Basal Patterns 4. Press 🔿 to set duration and Temp Basal press (O). Select Next. 5. Duration Next 6 Select Percent. Temp Basal Press $\bigotimes$ or $\bigotimes$ to enter the 7. Туре percent of current basal rate Percent = desired and press $\bigcirc$ . Percent Review Begin Note: If you choose to use Rate, Temp Basal press $\bigotimes$ to Type and press $\bigotimes$ . Туре Percent Select Begin. 8 Rate 0.200 Review Begin The Home screen displays a **Temp** ē < **Basal** banner to indicate that you have a Temp Basal active. Active Insulin From the menu select Cancel Temp Basal to review the details of the Bolus active Temp Basal. Enter BG Cancel Temp Basal Audio Options Status Suspend Delivery When the Temp Basal is complete, the basal will automatically return to the regularly programmed basal rate.

Ë

2:00

Rate

Rate

mg/dL

0.0 U

首

9:00

70

# Basal Quick Reference Guide

### Cancel Temp Basal rate

If you need to return to your regularly programmed basal rate before your Temp Basal is completed, you can cancel it.

- 1. From the Home screen, press 🔘.
- 2. Select Cancel Temp Basal.



0.500 U/hr

Temp Basal

1:55 hr remaining

Cancel Temp Basal

3. You can see the details about the Temp Basal.

#### Select Cancel Temp Basal.

If you decide not to cancel, just press (

You can see that the Home screen no longer displays the Temp Basal Banner.

#### **Multiple Basal Patterns**

Setting multiple Basal Patterns helps you more easily accommodate routine schedule changes that cause different basal needs (for example, weekday vs. weekend; day vs. night shift).

### Set an additional Basal Pattern

- From the Home screen, press O.
- 2. Select **Basal**.



Basal Basal 1

Temp Basal

Basal Patterns

9:00

5.

- 3. Select **Delivery Settings**.
- 4. Select Basal Pattern Setup.

#### 5. Select Add New.



- 6. Select the name you would like to use.
- 7. Enter the basal rates needed for this pattern.

#### 8. Select Save.

**Note:** The Basal pattern that your pump is currently using has a checkmark next to it.



# Day Off 24 hr Total: 17.7 U Start End U/hr 12:00 ∧ 6:00 ∧ 0.650 6:00 ∧ 6:00 ₽ 0.750 Save

Basal Patterr	n Setup
3asal 1	12 u 🗸
Day Off	17.7 <sub>U</sub>
Add I	Vew

### How to change which Basal Pattern is Active

- 1. From Home screen, press 🔘.
- 2. Select **Basal**.

Bolus	Õ
Enter BG	
Basal	Ğ.
Audio Options	
Status	Ë
Suspend Delivery	

#### 3. Select Basal Patterns.

4. Select the Basal Pattern you

**Note:** The checkmark indicates which Basal pattern is active.

wish to be active.

Select Begin.

Dasal I	
Current Rate:	0.900 U/h
Temp Basal	
Preset Temp	
Basal Patterns	

Basal



Day Off 9:00 24 hr Total: 17.4 U Start End Rate (U/hr) 12:00 ∧ 12:00 ∧ 0.725 Begin

# Bolus Wizard® Quick Reference Guide

### **Entering your Bolus Wizard settings**

Using either your most recent CareLink Personal settings report or your completed Setting Guide with your settings, follow these steps to enter your Bolus Wizard settings into your new pump.

- 1. From the Home screen, press O.
- 2. Select Options.
- 3. Select Delivery Settings.
- 4. Select Bolus Estimate Setup.
- 5. Select **Bolus Wizard** to turn on.
- 6. Press ⊗ to continue reading text.
- 7. Select Next.
- 8. Review the description of Carb Ratio and select **Next**.
- 9. Press 🔘 on the time segment.
- 10. If you have only one Carb Ratio, press O.

If you have more than one Carb Ratio, press  $\bigcirc$  or  $\bigcirc$  to enter the time that your Carb Ratio ends and the second begins and press  $\bigcirc$ .

11. Press ⊘ or ⊘ to enter the **g/U** of your Carb Ratio and press ⊘.

If you have more than one Carb Ratio, continue by entering your time segments and Carb Ratios until all are entered.

12. Select Next.









Edit Carb Ratio 1/4 Start End g/U 12:00 A 12:00 A 15 Next

- Review the description of Sensitivity Factor and select Next.
- 14. Press  $\bigcirc$  on the time segment.
- 15. If you have only one Sensitivity Factor, press O.

If you have more than one Sensitivity Factor, press 🐼 or 😒 to enter the time that your Sensitivity Factor ends and the second begins and press 🔘.

 Press (◊) or (◊) to enter the mg/dL per U of your Sensitivity Factor and press (◊).

> If you have more than one Sensitivity Factor, continue by entering your time segments and Sensitivity Factors until all are entered.

- 17. Select Next.
- 18. Review the description of BG Target and select **Next**.
- 19. Press  $\bigcirc$  on the time segment.
- 20. If you have only one BG Target Range, press O.

If you have more than one BG Target Range, press  $\bigcirc$  or  $\bigcirc$  to enter the time that your BG Target Range ends and the second begins and press  $\bigcirc$ .



Sensitivity 2/4



Edit Sensitivity 2/4				
Start	End	mg/dl	_ per U	
12:00 A	12:00	) a	50	
	Ne>	đ		

BG Target 3/4 BG Target is the value your blood glucose level will be corrected to. Next

Edit BG Target 3/4 Start End Lo-Hi (mg/dL) 12:00 ∧ 12:00 ∧ ----

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# Bolus Wizard® Quick Reference Guide

- 21. Press ⊘ or ⊘ to enter the **Lo** target and press ⊘.
- 22. Press (◇) or (◇) to enter the **Hi** target and press (◎).

If you have more than one BG Target Range, continue by entering your time segments and Lo and Hi targets until all are entered.

- 23. Select Next.
- 24. Review the description of Active Insulin Time and select **Next**.

25. Select Duration.

- Press or or to enter the Duration of your Active Insulin Time and press o.
- 27. Select Save.

The Bolus Wizard setup is now complete.



Duration

Edit BG Target 3/4

12:00 A 12:00 A 100 - 100

Next

Active Insulin Time 4/4

Active Insulin Time is the length of time bolus insuli lowers glucose levels.

Start

End Lo-Hi (mg/dL)

omplete.

### Deliver food and correction bolus

- 1. Test BG.
- 2. Press 🔘.

Select Bolus > Bolus Wizard.

3. If using linked meter, **BG** is on screen. If not, select **BG**.

Press  $\bigotimes$  or  $\bigotimes$  to enter BG and press  $\bigotimes$ .

- 4. Select Carbs.
- 5. Press  $\bigotimes$  to enter grams of carbs and press  $\bigotimes$ .

Bolus	9:00 AM
BG	mg/dL
Active Insulin	0.0 U
Bolus Wizard	
Manual Bolus	
Delivery Settings	
B 1 144 1	0.00

Save



6. Select **Next**.

Bolus Wizard	9:00 AM
BG <b>126</b> mg/dL	0 <b>.</b> 5u
Active Ins. adjust.	0 <b>.</b> 0u
Carbs 35	2.3u
Bolus	<b>2.8</b> u
Next	

7. Select Deliver Bolus.

Note: Active Ins. adjust. is the active insulin from previous boluses that is adjusted (subtracted) from the correction dose. In this example, there was no active insulin to subtract.



#### Deliver correction bolus—no food

- 1. Test BG.
- 2. Press 🔘.

Select Bolus > Bolus Wizard.



**1.7** 

0.0

1.1

Bolus Wizard

BG **187** mg/dL

Active Ins. adjust.

Carbs

Bolus

**0**<sub>a</sub>

3. If using linked meter, **BG** is on screen. If not, select **BG**.

Press  $\bigotimes$  or  $\bigotimes$  to enter BG and press  $\bigotimes$ .

- 4. Press 🛇 to Next.
- 5. Select Deliver Bolus.



**Note:** In this example, there was active insulin to adjust—it was subtracted from the correction dose.

Deliver food bolus—no correction			
1.	Press 🔘.	Bolus	9:00 AM
	-	BG	
	Select <b>Bolus &gt; Bolus Wizard</b> .	Active Insulin	0.0 ∪
		Bolus Wizard	
		Manual Bolus	
		Delivery Setting	s

### Bolus Wizard® Quick Reference Guide

- 2. Press  $\bigotimes$  to **Carbs** and press  $\bigotimes$ .
- 4. Select Next.
- 5. Select Deliver Bolus.





History

Summary

Daily History Alarm History

**Note:** Active Insulin is never adjusted (subtracted) from a food bolus.

1. Press 🔘.

Select **Options > History**.

- 2. Select Daily History.
- 3. Press () on the day you would like to review.

Note: You can press the 🔇 and 🕥 arrows to move from day to day. You can also see further details by pressing 🔘 on any item listed.

					_
Daily	Hist	ory		9	:00 AM
Bolus	(N) C	0.050	U	3:32	РM
Bolus	(N) C	0.100	U	2:07	PM
Bolus	(N) C	0.050	U	11:55	AM
4	Eri	Ma	r 30		N.

### **Edit Bolus Wizard settings**

1. Press 🔘.

Select Options > Delivery Settings > Bolus Estimate Setup.

2. Select the setting to be changed.

3. Select Edit.

- Press 
   <sup>O</sup> on the time segment. Press 
   <sup>O</sup> or 
   <sup>O</sup> to change the times and/or values.
- 5. Select Save.

Bolus Estimate Setup					
Basal Pattern Setup					
Preset Temp Setup					
Preset Bolus Setup					
Dual/Square Wave					

Delivery Settings



### **Review Bolus Wizard settings**

1. Press O.

Select Status > Settings Review.

2. Press  $\bigotimes$  to scroll through the list of settings.





Remove the infusion set you have been using by loosening the Remove infusion set from Remove reservoir from Reservoii 4. eservoir & Tubing 🗸 Select New Reservoir. eservol Cannula .....  $\dot{\mathbf{m}}$ Select Reservoir & Tubing. servoir & Tubing **Delivery Settings** Event Markers Reminders Options istory  $\sim$ Wash your hands. Press 🔘

START HERE:

7

adhesive and pulling away from body.

Select Options.













nsulin as it fills the cannula.

ł 0.025 0.300

have verified the Fill amount on the previous Note: Select Stop Filling if you need to stop, is incorrect. This should rarely happen if you for example, if you notice the **Total** amount screen.

Your infusion set change is now

**complete!** 

### Connecting the pump and meter

BUGUBGE

Deutsch

Español

Connect to a

MiniMed Pump?

соппест то ритр

connect to pump <u>Select "Conn</u>ect

Device" on your Pump.

CONNECT TO PUMP

evice Options

onnect Device

Manual Connect

Auto Connect

OK

Skip

OK

<u>Go Back</u>

Manual Connect

Huto Connect

- 1. Hold the Menu button until the meter turns on.
- 2. Scroll to your language and press **OK**. Press **OK** to confirm.
- Press OK when asked Connect to a MiniMed<sup>™</sup> Pump?
- 4. Press OK.
- 5. Press Auto Connect.

### Put the meter down and pick up your pump.

- 6. Press 🔘.
- 7. Select Options.
- 8. Select Utilities.
- 9. Select Device Options.
- 10. Select Connect Device.
- 11. Select **Auto Connect** on your pump.
- 12. Press 🚫.
- 13. Press 📎.
- 14. Select Continue.

Place the meter and pump next to each other.



New Device

below when ready.

See User Guide to connect new device. Select Search

15. Select **Search** on your pump.

- 16. Select **Search** on your meter. The search may take up to 2 minutes.
  - 17. Check to see that the Device SN (serial number) on the pump screen matches the Device SN on the meter.
- 18. If they match select **Confirm** on the pump.
- 19. Check to see that the SN on the back of the pump matches the SN now on the meter screen.
- 20. Select **Next** on the meter.



HIGH AND LOW ALERTS

Setup is complete.

Insert strip to start a

Accept

Change

Accept

Change

High: 250 mg/dL

Low: 70 mg/dL

TARGET

Fasting:

O 70 - 130

test.

- Press Always.\*
   Then press OK.
- 23. Select the desired **Date** Format.
- 24. Press **OK**. If time and date are not correct you must change them on the pump.
- 25. Press Accept to select AutoLog is Off. AutoLog allows you to mark a test result as Before Meal, After Meal or Fasting.\*
- 26. Accept or Change High and Low Alerts.\*
- 27. Accept or Change the Target Range.\* Press Accept again to confirm.
- 28. Setup is now complete and you are ready to use the meter.

\*For more detail on this feature see your meter guide.



### Medtronic



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