

# **Getting Started**

WITH THE MiniMed® 640G INSULIN PUMP





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# Getting Started with the MiniMed® 640G Insulin Pump

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.

During your in-person training, your trainer will build on this information and help ensure 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 insulin pump while you practice.
- It's okay if you make a mistake. If you press the wrong button, use the () 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 menu option as you practice. You will review these steps during your in-person training.

We hope you enjoy learning about your new insulin pump.



Did You Know? A complete explanation of the technical and operational aspects of your pump can be found in the *MiniMed® 640G* System User Guide.



Did You Know? An interactive online version of this training is available at www.medtronicdiabetes.com.au



**IMPORTANT** Do NOT attach the insulin pump to your body or attempt to use insulin in your pump as you use this guide to practice and learn.

Attaching and using must only be done when you receive formal training with your healthcare professional or a certified product trainer.

# 1.1 Pump Mechanics and the Delivery of Insulin

Before we begin, let's make sure you know how insulin is delivered when using an insulin pump. The parts that make up the pump's delivery system are the infusion set, the reservoir, and the pump.

# 1.1.1 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<sup>\*\*</sup>. 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.

### 1.1.2 Reservoir

The reservoir is similar to a syringe and holds 2- to 3-days supply of insulin. The reservoir fits into the pump's reservoir compartment (6). You will be replacing both the infusion set and the reservoir every 2 to 3 days.

### 1.1.3 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, sometimes as small as 0.025 units. It must be rewound each time a newly filled reservoir is placed into the reservoir compartment.



Pump

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

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

# 1.2 Pump Basics

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

# 1.2.1 The Front of Your Pump

#### O Up, O Down, C Left, and Right • Press to scroll up or down through a menu or list Press to move to desired area on the screen • Press to change the value in an area Back • Press to return to a previous screen • Press and hold to return to the starting screen, called the Home screen Back Menu Up O Select Left Right • Press to select or confirm a value or menu option that is highlighted Select Press when directions say 'select' **Notification Light** (i) Menu • Press to get to the Menu Down Notification Light

• Flashes when an Alert or an Alarm is occurring

# 1.2.2 The Bottom of Your Pump



#### US Medtronic Diabetes Helpline Telephone Number

For product assistance within Australia please use the local number to call the 24-hour helpline: 1800 777 808

# 1.2.3 The Back of Your Pump



Pump Serial and Model Number

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

# 1.2.4 Attaching the Skins

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



### 1.2.5 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.

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

- the battery cap found with the pump
- the belt clip found with the accessories
- the AA battery found with the accessories



Step 1. Place the battery into the battery compartment with the negative (flat) end going in first.



Step 2. Place the battery cap onto the pump. Use the edge of the belt clip to turn the cap to the right (clockwise) and tighten until the slot is horizontal to the pump. See image below.



**Note:** Do not undertighten or try to overtighten the battery cap. It should be aligned horizontally with the pump case as shown here.



# 1.3 Startup Wizard



The pump will power on and Startup wizard will begin.

Always look for the item on the screen that is highlighted in yellow. This is the item that can be selected. Use  $\bigcirc$  and  $\bigcirc$  buttons to highlight the item you want to choose and press the  $\bigcirc$  button to select it.





Select **12 Hour** (AM/PM) or press  $\bigcirc$  to **24 Hour** and press  $\bigcirc$ . *This example uses 12 hour.* 



The hour will be flashing. Press  $\bigcirc / \bigcirc$  to the correct hour and press  $\bigcirc$ .

The minutes will be flashing. Press  $\bigcirc / \bigcirc$  to the correct minutes and press  $\bigcirc$ .

The AM/PM will be flashing. Press  $\bigcirc / \bigcirc$  if needed and press  $\bigcirc$ .

Select Next.

Startup 3/6 Enter Date Year 2014 Month Apr Day 3, Thu Next

Select **Year**. Press to the correct year and press **O**.

Select **Month**. Press  $\bigcirc$  /  $\bigcirc$  to the correct month and press  $\bigcirc$ .

Select **Day**. Press (>) / (>) to the correct day and press (>).

Select Next.

To scroll faster, press and hold the  $\bigcirc$  or  $\bigcirc$  button.

Once you reach the correct value or item, press 💿 to select.



OK

Select **OK**.

# 1.4 Home Screen

You are now on the Home screen. The Home screen will be your starting place to access all features in the pump.

When you haven't pressed any buttons for a while, the pump screen will look dark. The pump is still on. It is just saving battery power. You can simply press any button to make the screen reappear.

The following information is displayed on the Home screen.



# Keeping the screen on longer....

Margaret noticed when she wasn't pressing buttons on her pump, the screen would turn dark. This happens to save battery life. She soon learned she could simply press any button to turn the screen back on.

**Helpful Hint:** If the pump is going into Power Save mode too quickly, the setting can be changed. You will learn how to do this on page 17.



# 1.4.1 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. You will need to 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.

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.

# 1.4.2 Status Bar

The Status Bar displays the following icons so you can quickly view important information. When using your pump, you will see 3 of these icons.



**Battery icon:** Shows the level of charge your battery has. As the battery charge decreases, the icon will become less full and change to yellow and then red.



**Reservoir icon:** Shows the approximate amount of insulin left in your reservoir. As insulin is used, the icon will become less full and change to yellow and then red.



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



### 1.4.3 Status Screens

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

- 1) Press 🔿 to highlight the **Status Bar** and press 🧿.
- 2) If prompted, press the arrow key that appears to unlock the pump.
- Press (○) to view Notifications or press (○) to highlight the status screen you wish to view and press (○).



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

**Notifications** - shows the name and times of alarms, alerts, messages, and reminders that you have received over the past 24 hours.

**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.

**Settings Review** - displays the settings you have programmed into your pump.



**Remember:** You can go back to the previous screen by pressing ( ).

# 1.5 Menu

Pressing the 📵 button will take you to the **Menu.** 



There are 9 items listed on the Menu. Each menu item contains the features and functions that pertain to that menu item. You will find the items meant to be most quickly accessible closest to the top of the Menu.

### 1.5.1 Scroll Bar

When a screen or menu has more than five lines of information, a **scroll bar** appears on the right side of the screen. Press 🚫 to scroll down and view the additional items.

On the following page, you will find a map of the basic menu. This shows you the options that you will find under each of the Menu items.



**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.

### 1.5.2 Basic Menu Map



### 1.5.3 Navigation

Press 🗐 from any screen to open the **Menu.** 

Press  $\bigcirc$  and  $\bigcirc$  to scroll through the menu items.

Press 🔘 on the desired menu item to open.

The scroll bar appears on menus to indicate when additional text is available.

Press  $\bigcirc$  to scroll down to view additional items.

Press  $\bigcirc$  to scroll back up.

Press  $\bigcirc$  to go to previous screen. Hold  $\bigcirc$  to return to the **Home** screen.



### 1.5.4 Menu Options

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

- **Suspend Delivery:** Lets you stop insulin delivery. This is commonly used when disconnecting to swim or bathe.
- Audio Options: Lets you choose audio, vibrate or both to inform you of alerts and notifications. You can also change the volume here.
- **History:** Shows information about recent insulin delivery, actions you performed on your pump, and alerts and alarms received. You can look back to previous days when necessary.
- Reservoir & Tubing: Contains steps to changing the reservoir and infusion set.
- **Insulin Settings:** Contains all features and settings that affect or change your pump's delivery of insulin. These settings help you to individualise the pump to meet your insulin needs.
- **Sensor Settings:** Contains all options related to sensor use. These are set when using continuous glucose monitoring.
- Event Markers: Lets you use your pump instead of a written log to record events such as taking an injection or exercising.
- **Reminders:** Lets you set the pump to remind you to do important routine activities such as checking BG and changing your infusion set.
- Utilities: Contains various other features and settings related to pump use.

# 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 basics first. Then learning the additional features will be much easier and more fun to do.



# 1.6 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. Examples of alerts include **Low reservoir** or **Low battery.** 

When an alert occurs:

#### **Notification Light:**

The red light on the pump will blink once followed by a pause, blink again followed by a pause. This sequence continues until the alert is cleared. The flashing pattern is shown here:

#### Audio:

Depending on your Audio Option settings, the pump emits a repeated alert tone, a continuous two-pulse vibration, or both.

#### Display:

The pump will display a notification with a yellow icon and instructions on what to do.

To address and clear the alert:

1) Read the text on the screen to understand the alert and the steps that should be taken.

2) Press 🚫 .

3) Press  $\bigcirc$  on the desired option.

Low battery Pump 00:00 Replace battery soon.	Press 😞	Low battery Pump 00:00 Replace battery soon.
		ОК

If you do not respond to an alert, the audio / vibration pattern repeats every five minutes until the alert is cleared.



# 1.7 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.** Examples of alarms are **Insulin flow blocked** and **Replace battery now.** 

When an alarm occurs:

#### **Notification Light:**

The red light on the pump will blink twice, followed by a pause, blink twice again followed by a pause. This sequence continues until the alert is cleared. The flashing pattern is shown here:

•• •• •• ••

#### Audio:

Depending on your Audio Option settings, the pump emits a repeated alert tone, a continuous three-pulse vibration, or both.



The pump will display a notification with a red icon and instructions on what to do.

To address and clear the alarm:

1) Read the text on the screen to understand the alarm and the steps that should be taken.

2) Press 🚫 .

3) Press O on the desired option.



If you do not respond to an alarm, the audio / vibration pattern repeats every minute for 10 minutes. After 10 minutes, the alarm begins to siren.

**IMPORTANT:** It is important that you are able to address an **Insulin flow blocked** alarm. This alarm means that insulin is not able to get through the tubing or cannula. If this alarm occurs, check to see if your infusion set has become dislodged or if your tubing is kinked. • If you don't detect an issue and are unable to change your reservoir and infusion set

right away, you might choose to select **Resume Basal.** If an Insulin flow blocked alarm occurs again, follow the steps on the screen. Select **Rewind** and change your reservoir and infusion set.

• If you detect an issue or if your reservoir has run out of insulin, follow the steps on the screen. Select **Rewind** to change your reservoir and infusion set.



# 1.8 Menu Options - A Closer Look

You are now ready to set a couple of the basic features within the Menu.

### 1.8.1 Audio Options

You will use Audio Options to set pump to beep (Audio), beep and vibrate (Audio & Vibrate), or just vibrate (Vibrate). If you set 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  $\bigcirc$  to the option that you prefer and press  $\bigcirc$ .

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

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

The icon shown here will display on the Status Bar on the Home screen.



### 1.8.2 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 📵 to open the Menu.
- 2) Press  $\bigcirc$  to **Utilities** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **Display Options** and press  $\bigcirc$ .

If you want to adjust the screen brightness:

- 4) Select Brightness.
- 5) Press  $\langle \rangle$  to the setting you prefer and press  $\circ$ .

To adjust the backlight:

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

**Note:** How you adjust these settings can affect battery life. For instance, increasing the Backlight time will decrease the life of your battery.

The Auto setting automatically adjusts the screen brightness to match your current environment.

# 1.9 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 injection of long-acting insulin at bedtime. Taking it at the same time every night like her doctor asked her to was difficult. She is at university and some nights she would go to bed early, others she would be at the library until late studying. Now with her pump, she doesn't have to worry about taking an injection. She is getting her basal insulin automatically 24 hours a day.



# 1.9.1 Basal Pattern Setup – One Basal Rate

Your healthcare professional will calculate the hourly basal rate or rates 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 your Basal Patterns, you will need to go to the **Insulin Settings** menu option and then to Basal Pattern Setup. There are two ways to access **Insulin Settings**:

- From the Home screen, select Basal and press Sto Insulin Settings
   OR
- 2) Press 🗐 and press 😔 to Insulin Settings

# 🗸 ) Let's Practice: Setting a Basal Pattern with one Basal Rate

Let's set a Basal pattern with a basal rate of 0.75 U/hr from 00:00 - 24:00

- 1) From the Home screen, select **Basal.**
- 2) Press  $\bigcirc$  to **Insulin Settings** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **Basal Pattern Setup** and press  $\bigcirc$  .
- 4) Select **Basal 1.**
- 5) Currently, the pump is delivering 0.000 U/hr. Select **Options.**
- Basal Pattern Setup Basal 1 0.0 ... Add New Basal 1 24 hr Total: 0.0 U Start End 00:00 24:00 0.000 Options Basal 1 Edit Copy Delete Edit Basal 1 Start 00:00 24:00 0.750 Done Basal 1 24 hr Total: 18 U

- 6) Select **Edit.**
- Press O on the time segment. The **End** time will be flashing. Since you are setting only one basal rate for all 24 hours, the End time does not need to be changed.

This basal

delivers 18 U

over 24 hours.

Start

00:00

24:00

Save

0.750

pattern

- 8) Press (O).
- 9) Press 🔿 to 0.750 and press 🔘.
- 10) Select Done.
- 11) Verify that **Basal 1** is entered correctly.

If NO changes need to be made:

12) Select Save.

#### If changes need to be made:

- 12) Press 🕤.
- 13) Press 🔿 press 🔘. Repeat Steps 8-11.
- 14) Select Save.

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



### 1.9.2 Basal Pattern Setup – Changing a Basal Rate

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

- 1) From the Home screen, select **Basal.**
- 2) Press  $\bigcirc$  to **Insulin Settings** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **Basal Pattern Setup** and press  $\bigcirc$ .
- 4) Select **Basal 1.**
- 5) Select **Options.**
- 6) Select Edit.
- 7) Press O on the time segment.
- 8) Select **End** time.
- 9) Press 🛇 to change 0.750 to 0.900.
- 10) Select **Done.**
- 11) Verify that **Basal 1** is entered correctly.
- 12) Select Save.

### 1.9.3 Basal Pattern Setup – Multiple Basal Rates

After you start using your insulin pump, your glucose readings 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 parts of the day or night.

# Having more than one basal rate....

When Jessica was taking insulin injections, 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.

For example, your healthcare professional has reviewed your BG readings and has determined that this basal rate works well part of the day, but that you need a lower basal rate, 0.650 U/hr, between the hours of 08:00 and 18:00.

Your basal pattern would look like this:



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



Let's Practice: Setting Multiple Basal Rates

- 1) From the Home screen, select **Basal**.
- 2) Press  $\bigcirc$  to **Insulin Settings** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **Basal Pattern Setup** and press  $\bigcirc$ .
- 4) Select **Basal 1.**
- 5) Select **Options.**
- 6) Select **Edit.**
- 7) Press O on the time segment.

The 0.900 basal rate will now need to end at 08:00 since this is the time that your basal rate needs to decrease.

- 8) Press 🔿 to 08:00 and press 🔘.
- 9) Press O again as this basal rate will stay the same.

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 18:00 and will need to be changed to 0.065.

- 10) Press (O) to change **End** time.
- 11) Press 🔿 to 18:00 and press 🔘.
- 12) Press 🔿 to 0.650 and press 🧿.

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

- 13) Press O to change **End** time.
- 14) Press 🔿 to 24:00 and press 🧿.
- 15) Press 🔿 to 0.900 and press 🔘.
- 16) Select **Done**.
- 17) Verify that **Basal 1** is enteredcorrectly. Press to view all basal rates.
- 18) Select Save.



Edit Ba	isal 1	
Start	End	U/hr
00:00	08:00	0.900
08:00	08:30	
	Done	

Start	End	U/hr
00:00	08:00	0.900
08:00	18:00	0.650
18:00	18:30	
	Done	

Edit Basal 1		
Start	End	U/hr
00:00	08:00	0.900
00:80	18:00	0.650
18:00	24:00	0.900
	Done	

Basal 1		
24 hr To	tal: 19.1 U	
Start	End	U/hr
00:00	08:00	0.900
08:00	18:00	0.650
Save		

scroll bar

# Let's Practice: Changing Multiple Basal Rates

Now change the 08:00 to 18:00 basal rate to 08:00 to 17:30 and change to 0.700 U/hr.

- 1) From the Home screen, select **Basal**.
- 2) Press  $\bigcirc$  to **Insulin Settings** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **Basal Pattern Setup** and press  $\bigcirc$ .
- 4) Select **Basal 1.**
- 5) Select **Options.**
- 6) Select **Edit.**
- 7) Press  $\bigcirc$  to the 08:00 to 18:00 time segment and press  $\bigcirc$ .
- 8) Press  $\bigcirc$  to 17:30 and press  $\bigcirc$ .
- 9) Press (→ to 0.700 and press (○). Notice the start time of the 3rd time segment changed to 17:30.
- 10) Press O to change **End** time.
- 11) Press 🔿 to 24:00 and press 🔘.
- 12) Press 🔿 to 0.900 and press 🔘.
- 13) Select **Done**.
- 14) Verify that **Basal 1** is entered correctly. Press  $\bigcirc$  to view all basal rates.
- 15) Select **Save.**

Edit Ba	isal 1	
Start	End	U/hr
00:00	08:00	0.900
08:00	17:30	0.700
17:30	24:00	0.900
	Done	

Basal 1	10711	1
Start	End	U/hr
00:00	08:00	0.900
08:00	17:30	0.700
	Save	

### 1.9.4 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 24:00.



**Note:** Creating a new basal pattern will not result in it automatically becoming the active pattern.

### 1.9.5 Select Basal Pattern

Once multiple basal patterns are set, you can then select the basal pattern you wish to be active.

- 1) From Home Screen, select **Basal.**
- 2) Select Basal Patterns.
- 3) Select the Basal Pattern you wish to be active.
- 4) Select Begin.



0.900

0.700

0.900

0.900

Day Of	i i i i i i i i i i i i i i i i i i i	08:28
24 hr To	tal. 8.325	U
Start	End	Rate (U/hr)
00:00	18:30	0.350
18;30	19:00	0,450
	Begir	1

# **1.10** Bolus Wizard<sup>™</sup> Calculator

Calculating how much bolus insulin to give can be challenging. When using the Bolus Wizard<sup>™</sup>, all you will need to do is enter your current BG reading along with the amount of carbs you are about to eat.

Once you do this, the Bolus Wizard<sup>™</sup> uses the individual settings provided by your health care professional to estimate your bolus amount. Because these settings are specific to you, you can rely on it to calculate the precise amount of bolus insulin you need for your food and BG. This can help you better control your glucose levels (refer to page 69 for details on setting up the Bolus Wizard™).

### 1.10.1 Using the Bolus Wizard<sup>™</sup> Calculator

Here you can see the Bolus Wizard<sup>™</sup> calculation screen and a short description of the steps below:



estimated amount of insulin to be delivered.

You will learn more about using the Bolus Wizard<sup>™</sup> at your in-person training. There, your trainer will help you program your individual settings and have you practice giving boluses using this feature.

# Using the Bolus Wizard<sup>™</sup>....

Larry is so excited that his insulin pump has made his glucose management easier. Before his pump he had to try to calculate on his own how much insulin he needed. Now, his meter sends his BG to his pump, he enters his carbs, and the pump delivers the bolus.

Helpful hint: After you begin pump therapy, testing your BG two hours after meals will help you determine if your Bolus Wizard<sup>™</sup> settings are correct. If your BG is too high or too low, your healthcare professional can help you adjust your settings to help you achieve better glucose control.



# ight) 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 6.9 mmol/L and 35 grams of carb (refer to page 69 for details on setting up the Bolus Wizard<sup>™</sup>).



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

- 1) From the Home screen, select **Bolus.**
- 2) Select Bolus Wizard.

Bolus Wizard now appears. You can also give a Manual Bolus from here.

- 3) If using the compatable Bayer® meter, BG will be on screen. If not, select **BG.**
- Press or or to enter current BG, and press o.
  Active Ins. adjust. is the active insulin from previous boluses that is being adjusted (subtracted) from the correction dose.
- 5) Select Carbs.
- 6) Press 🔿 to enter the amount of carbs you are eating and press 🗿.
- 7) Select Next.
- 8) Select **Deliver Bolus.**

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



13:10

13:11

0.40

-0.3

0.0

0.1

13:13

0.40

-0.30

2.30 2.40

13:15

2.4

Bolus

Active Insulin

**Bolus Wizard** 

Manual Bolus Insulin Settings

Bolus Wizard

Active Ins. adjust.

Bolus Wizard

Active Ins. adjust.

Carbs 35

Bolus Wizard

6.9 mmest

**O**<sub>0</sub>

Next

6.9 mmos/L

Next

BG

BG

Carbs

Bolus

BG

Bolus

Bolus

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

- only grams of carb if you finished your meal, but are eating additional carbs.
- only a BG value if you tested 2 hours after your meal to see if you needed a bolus.



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



**Deliver Bolus** 



**Note:** You will receive messages when you enter a BG below 3.9 mmol/L or above 13.9 mmol/L. 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

This example shows giving a bolus for a BG value of 14.7 mmol/L.

- 1) From the Home screen, select **Bolus.**
- 2) Select **Bolus Wizard.**
- 3) If using the compatable Bayer meter, BG will be on screen. If not, select **BG.**
- 4) Press  $\bigcirc$  or  $\bigcirc$  to enter current BG, and press  $\bigcirc$ .
- 5) Press  $\bigcirc$  to **Next** and press  $\bigcirc$ .
- 6) The High BG message will appear. Read text and press  $\bigcirc$ .
- 7) Continue reading text and take appropriate action to prevent DKA.
- 8) Select **OK.** For more information on addressing Alerts, see page 15.
- 9) Select **Deliver Bolus.**





Next

3.2

Bolus







**Note:** You can learn how to give the other types of boluses in the *Additional Features* section.

# 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. She stops the delivery of the bolus so that she does not receive the insulin that is no longer needed right now.

**Helpful hint:** Always check the Bolus Stopped screen to see how much of the bolus was delivered before it was stopped, so you know how much insulin you received.



### 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) With **Bolus** highlighted, press O.
- 2) Press  $\bigcirc$  to 1.5 U and press  $\bigcirc$ .
- 3) Select **Deliver Bolus.**
- 4) Select Stop Bolus.
- 5) Press  $\bigcirc$  and select **Yes** to stop bolus delivery.
- 6) Review **Bolus Stopped** screen to see how much of the bolus was delivered.
- 7) Select Done.

### 1.10.2 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.



#### Let's Practice: Checking Last Bolus

- 1) From the Home screen, press  $\bigcirc$  to the **Status Bar** and press  $\bigcirc$ .
- 2) 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 this guide.

Quick Status	13:38
Last bolus	2.800 U (N)
	13:32
	May 1
Last BG	14.7 mmol/L
	13:36
	May 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 🗐 .
- 2) Press  $\bigcirc$  to **History** and press  $\bigcirc$ .
- 3) Press  $\bigcirc$  to **Daily History** and press  $\bigcirc$ .
- 4) Press O on the day you would like to review.

Daily History	19:50
Bolus (N) 0.500 u	15:32
Bolus (N) 1.000 u	14:07
Bolus (N) 0.500 u	11:55
Fri, Mar 30	•



**Did You Know?** You can use the  $\bigcirc$  and  $\bigcirc$  arrows to move from day to day. You can also see further details by pressing  $\bigcirc$  on any item listed.

# 1.11 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 **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.





- Let's Practice: Resume Basal Insulin Delivery
- 1) Select **Resume.**
- 2) Press  $\bigcirc$  and select **Yes** to resume insulin delivery.

A confirmation screen appears.

The original Home screen returns.

Remember: 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.



# 1.12 Charging the CONTOUR® NEXT LINK 2.4 Meter

This CONTOUR® NEXT LINK 2.4 meter from Bayer is the only blood glucose (BG) meter able to communicate wirelessly with your MiniMed® 640G 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

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

- 1) Remove the cap with  $\left( \mathbb{P}^{\mathbf{A}}_{\mathbf{A}} \right)$  on it 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.



- 3) 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 your meter.

You will connect your pump and meter at your in-person training. Steps to do this can be found in the Training Handouts section on page 66. 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.

# 2.1 Introduction to Medtronic CareLink® Personal Software

Medtronic CareLink® Personal software is a web-based program that is provided free of charge. This software allows you to upload the data from your pump and glucose meter to a secure website and organise it into easy-to-read reports and charts. These reports provide an overview of how insulin, food intake and exercise affect you 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 Medtronic CareLink® Personal account so you can upload your pump and meter every 2 to 3 days after you start using your pump. With your permission, your healthcare professional can then access your information and have you adjust your pump settings as needed.

# Using Medtronic CareLink® software....

Julia uploads her pump and meter information to Medtronic 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.



Follow these steps to set up your Medtronic CareLink® Personal account prior to your in-person training:

- 1. Go to http://carelink.minimed.eu
- 2. Click 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. Click the **Submit** button.

When uploading information from your pump to Medtronic CareLink® Personal, you will use the Bayer® meter as the communication device from the pump to your computer.

USB connector used for Medtronic CareLink® upload



CONTOUR® NEXT LINK 2.4 Meter

You will learn more about using Medtronic CareLink® software at your in-person training.
# Connecting the MiniMed® 640G Insulin Pump & Section 3 | the Contour® Next LINK 2.4 Meter



The search may take up to 2 minutes.

## 4.1 Giving a Remote Bolus

Once your pump and meter are connected, you have the option of delivering a manual bolus through the meter without accessing the pump.

- 1) Press
- 2) Select **Utilities.**
- 3) Select **Remote Bolus.**
- 4) Select **On.**

You can now follow these steps to deliver a bolus:

 If you have just tested, press **Bolus** on the meter while the test result is displayed
 OR

From the menu, press **Bolus.** 



If you have a Preset Bolus set in your pump, it can be also be delivered from the meter.\*

- 3) Use the ▲ button to set the bolus amount. In this example, a 0.250 U bolus has been set.
- 4) Press **Yes** to send the bolus to your pump.
- 5) A confirmation screen appears on the meter.
- 6) The bolus delivery appears on the pump as it is delivering.

\*For more detail on this feature see your meter guide. Visit www.medtronic-diabetes.com.au for more support using CareLink®.















### 5.1 Reservoir & Tubing

The MiniMed<sup>®</sup> 640G uses the same infusion sets and reservoirs as previous Medtronic Paradigm<sup>™</sup> insulin pumps. If you were using a Medtronic pump, much of this process will be the same. However, *please follow these steps* as there are a few very important changes.

If you have not used a Medtronic pump or would like more detail, please use the Quick Reference Guide to changing your infusion set or see pages 71-82 if using the Sure-T<sup>®</sup> or mio<sup>®</sup> infusion sets.



**IMPORTANT:** Remember to always remove current reservoir and infusion set before rewinding the pump.



#### **Changing Reservoir and Infusion Set**

- 1) Press 🗐.
- 2) Select **Reservoir & Tubing.**
- 3) Select New Reservoir.
- 4) Remove the used infusion set from your body.
- 5) Remove the empty reservoir from the pump.
- 6) Select **Rewind.**

You will see this screen while the pump is rewinding. The pump will beep and/or vibrate when rewind is complete.





![](_page_38_Picture_17.jpeg)

![](_page_38_Picture_18.jpeg)

Complete these steps just like you have done in the past.

- 1) Fill the reservoir with insulin.
- 2) Connect the infusion set tubing to the reservoir.
- 3) Press Next.
- 4) Place the newly filled reservoir into the pump and lock.
- 5) Select **Next**.

![](_page_39_Picture_7.jpeg)

DO NOT CONNECT TO

Next

BODY

i

**IMPORTANT:** Pay close attention to these next steps.

First, you will **Load Reservoir.** This moves the piston to the bottom of the reservoir:

- 6) Select **Load** and keep holding O until the checkmark appears.
- 7) Select Next.

Then you will **Fill Tubing.** This moves insulin through the end of the tubing.

8) Select **Fill** and keep holding O until you see drops at the end of the tubing.

![](_page_39_Picture_15.jpeg)

![](_page_39_Picture_16.jpeg)

9) Press  $\bigcirc$  and select **Next.** 

To finish, insert infusion set and fill the cannula:

10) Prepare and insert the infusion set into the body.

![](_page_40_Picture_4.jpeg)

**Remember:** Always rotate your site when you change your infusion set.

- 11) You will now fill the cannula.
- 12) Select Fill.

If you use a steel needle set (for example, the Medtronic Sure-T<sup>®</sup> infusion set), select **Done.** Otherwise, proceed to step 11.

- 13) Select Fill Amount.
- 15) Select Fill Now.

The pump will remember the Fill amount you enter.

The Home screen will show the cannula fill. If for any reason you need to stop filling, for example, you realised you used the wrong amount, select **Stop Fill.** 

#### Your infusion set change is now complete.

Fill Tubir	ng
DO NOT	CONNECT TO
BODY	
Hold Fill u	ntil drops appear.
Then sele	ct Next
Fill	Next

Done if not needed.		
Fill	Done	
Fill Cannula		
1. Verify Fill amou 2, Select Fill Now ready. Select Bac	unt. when :k to cancel.	
Fill amount	0.300 u	
Fill No	W	
<u>Ha</u> (	13:58	
Fill Cannula	0.050	
Total:	0.300	
Stop Fil	ling	

ill Cannula?

Insert infusion set into body Select Fill to fill cannula or

### **Additional Features**

You have now learned the features that are necessary to use your pump. There are, however,

additional features that you may already use on your current pump and others that are new that you might find helpful.

This section will discuss the additional menu options and features that are available on your new insulin pump.

## 6.1 History

The History option allows you review information from previous days. This section will look more closely at what items can be found here.

To access History:

- 1) Press 🗐.
- 2) Press  $\bigcirc$  to **History** and press  $\bigcirc$ .

![](_page_41_Picture_10.jpeg)

When you select the Menu item, you will see the following items. By selecting each item, you will see the following information:

#### 6.1.1 Summary

- Shows the Total Daily Dose of insulin delivered
- Provides a summary of the total Basal insulin delivered, total Boluses given, total carbs, descriptions of boluses given and BGs recorded
- You can look at one day or an average of 7, 14, or 30 days

#### 6.1.2 Daily History

- List of actions you performed or event entries that you made, for example, BG readings, bolus deliveries, temp basals, etc.
- You can scroll left and right to move to previous or next day

#### 6.1.3 Alarm History

- Lists Alarms and Alerts that occurred during each day
- You can scroll left and right to move to previous or next day

### 6.2 Manual Bolus

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

- 1) From the Home screen, select **Bolus**.
- 2) Press  $\bigcirc$  to 1.0 u and press  $\bigcirc$ .
- 3) Select **Deliver Bolus.**

4) Confirmation that Bolus has started will appear.

The Home screen will show the amount as it is being delivered. Notice that **Stop Bolus** also now appears.

Once the bolus has finished delivering, the pump will return to the normal Home screen.

![](_page_42_Picture_9.jpeg)

## 6.3 Insulin Settings

1.

Insulin Settings menu contains features and settings that affect or change your pump's delivery of insulin. We previously went to Insulin Settings to access **Bolus Wizard Setup** and **Basal Pattern Setup** (Refer to page 67-69 for details). We will now look at the additional items found in this menu.

**IMPORTANT:** You should practice using the following features BEFORE you start using insulin in your new pump. If you are already using the pump, DO NOT deliver any boluses or change insulin delivery until necessary to do so. ALWAYS disconnect your pump while you practice using these new features.

#### 6.3.1 Max Basal

Before you continue, you may need to change your Max Basal amount. Max Basal is the maximum amount of basal insulin that can be delivered in one hour. Check your current pump settings. If your Max Basal is an amount other than 2.0 u/hr, follow these steps to change:

- 1) Press 🗐.
- 2) Select Insulin Settings.
- 3) Select Max Basal/Bolus.
- 4) Select Max Basal.

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

Max Basal/Bolus		
Max Basal	2.00 U/hr	
Max Bolus	10.0 u	

![](_page_43_Picture_9.jpeg)

#### **IMPORTANT:**

Changes to your Max Basal or Max Bolus should only be made in consultation with your healthcare professional.

### 6.3.2 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) From the Home screen, select **Basal.**
- 2) Press  $\bigcirc$  to **Insulin Settings** and press  $\bigcirc$ .
- 3) Press 🛇 to **Basal Pattern Setup** and press 🔘 .

![](_page_44_Picture_6.jpeg)

Choose one of these two options:

#### Add a New Basal Pattern

- 4) Press 😔 and select Add New
- 5) Select a name
- 6) Enter times and basal rates for the additional pattern.
  - OR

#### Copy and Edit an Existing Basal Pattern

- 4) Select **Basal 1** or another currently programmed Basal Pattern.
- 5) Select **Options.**
- 6) Press 🛇 to **Copy.** This copies the basal pattern that you have programmed and allows you to make the necessary changes.
- 7) Select name for this Basal Pattern.
- 8) Press 🔿 to **Edit.**
- 9) Continue by making the necessary changes to the programmed basal rates. To change active basal pattern, see Basal Patterns on page 18.

#### Additional Options from Basal on Home Screen

You have selected **Basal** on the Home screen to access **Insulin Settings** and setup your basal patterns. Let's take a look at the other options found here.

#### 6.3.3 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 2 hours.

- 1) From the Home screen, select **Basal**.
- 2) Select Temp Basal.
- 3) Press  $\bigcirc$  to set duration and press  $\bigcirc$ .
- 4) Select **Next**.
- 5) Select Percent.
- 6) Press 🔿 or 🛇 to enter the percent of current basal rate desired.

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

7) Select **Begin.** 

The Home screen now reads **Basal (T)** to indicate that you have a Temp Basal active.

Select **Basal (T)** 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.

![](_page_45_Picture_19.jpeg)

Basal

![](_page_45_Picture_20.jpeg)

## 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.

![](_page_46_Picture_3.jpeg)

### Let's Prace

#### Let's Practice: Canceling 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) From the Home screen, select **Basal (T)**.

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 has now returned to **Basal**.

![](_page_46_Picture_11.jpeg)

## 6.4 Preset Insulin Settings

### Using a Preset Temp Basal...

Janya uses the same Temp Basal every time she takes her favorite exercise class. Now instead of programming the Temp Basal before every class, she can simply start the Preset Temp that she has programmed.

![](_page_47_Picture_4.jpeg)

#### 6.4.1 Preset Temp Setup

Like a Temp Basal, a Preset Temp Basal is used to increase or decrease your current basal insulin amount. When the same Temp Basal is required on a frequent basis, you can set a Preset Temp Basal for that amount and duration. The Preset Temp Basal can then simply be started when the basal rate change is needed.

![](_page_47_Picture_7.jpeg)

#### ) Setting a Preset Temp Basal

- 1) Press 🗐.
- 2) Select Insulin Settings.
- 3) Select Preset Temp Setup.
- 4) Select Add New.
- 6) Press 😔 and select **Percent** to set percent of current basal rate you wish to receive.

Select **Type** to change to Rate if you prefer to set the number of units to be delivered.

- 7) Select **Duration** and press 🔿 to the length of time you wish the Temp Basal to be active.
- 8) Select Save.

![](_page_47_Picture_18.jpeg)

![](_page_47_Picture_19.jpeg)

![](_page_48_Figure_1.jpeg)

### 6.4.2 Preset Bolus

A Preset Bolus can be set and used for bolus amounts that you give repeatedly. For example:

- you might use for your meal boluses if you give set insulin doses.
- you might set this for commonly eaten items that you know the carb content and how much insulin you need.

### **Using Preset Bolus...**

Ana uses the Bolus Wizard to give her boluses. But she knows that every morning, it calculates 1.7 u for her latte. She set up a Preset Bolus for 1.7 u and finds it easier to give her bolus this way.

![](_page_48_Picture_8.jpeg)

![](_page_49_Picture_1.jpeg)

#### Setting a Preset Bolus

- 1) Press 🗐.
- 2) Select Insulin Settings.
- 3) Select Preset Bolus.
- 4) Select Add New.
- 6) Select **Bolus.**
- 7) Press 🔿 to enter the desired units and press (O).
- 8) Select **Type** if you want to set as Square or Dual Wave.

A Preset Bolus can also be set to deliver as a Square or Dual Wave bolus.

![](_page_49_Picture_12.jpeg)

#### **Giving a Preset Bolus**

When you are ready to use your Preset Bolus:

- 1) From the Home screen, select **Bolus**.
- 2) Select **Preset Bolus.**
- Select the Preset Bolus you wish to start.
- 4) Select **Deliver Bolus.**

![](_page_49_Picture_19.jpeg)

![](_page_49_Picture_20.jpeg)

D aller

Preset Bolus now appears on the Bolus screen.

09.11

Dolus	
BG	
Active Insulin	<b>0.6</b> u
Bolus Wizard	
Manual Bolus	
Preset Bolus	
Preset Bolus	09:12
BG	mmovL
Active Insulin	0.5
Snack N	2.50

![](_page_49_Picture_22.jpeg)

### 6.5 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 🗐.
- 2) Select Insulin Settings.
- 3) Select Max Basal/Bolus.
- 4) Select Max Bolus.
- 5) 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**.
- 6) Select Max Bolus.
- 7) Press  $\bigcirc$  or  $\bigcirc$  to enter number of units and press  $\bigcirc$ .
- 8) Select Save.

![](_page_50_Picture_11.jpeg)

![](_page_50_Picture_12.jpeg)

#### **IMPORTANT:**

Changes to your Max Basal or Max Bolus should only be made in consultation with your healthcare professional.

## 6.6 Advanced 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.

The 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.

![](_page_51_Picture_4.jpeg)

#### Turning Dual and Square Wave Bolus On

To use either of these bolus options, it must first be turned on.

- 1) Press 🗐.
- 2) Select Insulin Settings.
- 3) Select **Dual/Square Wave.**
- 4) Select **Dual Wave** to turn **On** if desired.
- 5) Select **Square Wave** to turn **On** if desired.
- 6) Select **Save.**

![](_page_51_Picture_13.jpeg)

Save

**Normal Bolus** 

9 ÅM

10 AM

8.0u - 7.5 Units

8 ÅM

6.0u

4.0u

2.0u

#### 6.6.1 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 carbohydrate but high in fat.
- when snacking on small amounts of carb over 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 30 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.

You will be unable to deliver a Square bolus if the Bolus Wizard has estimated a bolus for a high BG, since that insulin is needed right away.

![](_page_51_Figure_21.jpeg)

## Using a 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.

![](_page_52_Picture_3.jpeg)

![](_page_52_Picture_4.jpeg)

### ) Giving a Square Wave Bolus

This example will show a Square Wave bolus using the Bolus Wizard with a BG value of 5.7 mmol/L and 41 grams of carb.

- 1) From the Home screen, select **Bolus**.
- 2) Select Bolus Wizard.
- 3) Enter BG and Carbs.
- 4) Select Next.
- 5) Press  $\bigcirc$  and  $\bigcirc$  to **Square** and press  $\bigcirc$ .

Bolus Wizard	09:16
Bolus	2,70
Duration	2:00 hr
Deliver I	Bolus

Next	
Bolus	2.7
Carbs 41	2.70
Active Ins. adjust	0.0
BG 5.7 mmovL	0.00
Bolus Wizard	09:15

![](_page_52_Picture_14.jpeg)

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

**Bolus (S)** will appear on the Home screen until bolus delivery is complete.

![](_page_53_Picture_2.jpeg)

#### Select **Bolus (S)** and:

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

![](_page_53_Picture_7.jpeg)

#### 6.6.2 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 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 foods 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.

![](_page_53_Figure_15.jpeg)

## X Giving a Dual Wave Bolus

This example will show a Dual Wave bolus using the Bolus Wizard with a BG value of 7.3 mmol/L (131 mg/dL) and 63 grams of carb.

- 1) From the Home screen, select **Bolus**.
- 2) Select **Bolus Wizard.**
- 3) Enter BG and Carbs. Notice in this example, the total bolus for BG is 0.6U and 4.2U for carbs.
- 4) Select Next.

![](_page_54_Figure_7.jpeg)

**Deliver Bolus** 

50 %

50 %

**Deliver Bolus** 

7.3 mmote

0.300

4.200

4.5

4.2

2.1

2.1

2:30+

Bolus Wizard

Dual

**Bolus Wizard** 

Bolus

Now

Square

Duration

Bolus (Dual)

Stop Bolus Basal

Total

Bolus

5) Press  $\bigcirc$  to **Dual** and press  $\bigcirc$  .

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

- 7) Select **Duration.**
- 8) Press 🔿 to desired time and press 🗿.
- 9) Select **Deliver Bolus.**

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

**Bolus (Dual)** will appear on the Home screen while the Now portion is delivering.

![](_page_54_Picture_16.jpeg)

Select **Bolus (D)** and:

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

## Using a 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.

### 6.6.3 Bolus Increment

The Bolus Increment determines the number of decimal places a bolus will be set or calculated. You will notice the bolus increment:

- in the amount that a bolus is increased or decreased with each button press when setting a Manual or Preset Bolus (this does not apply to Easy Bolus).
- on the Bolus Wizard details screen in the number of decimal points used to calculate the bolus.

![](_page_55_Picture_11.jpeg)

**Note:** Changing this setting may be most helpful if you give small boluses.

![](_page_55_Picture_13.jpeg)

### Setting the Bolus Increment

If you need to use a Bolus Increment other than 0.1 U, follow these steps to change:

- 1) Press 🗐.
- 2) Select Insulin Settings.
- 3) Select Bolus Increment.
- 4) Select Increment.
- 5) Press  $\bigcirc$  to change **Increment.** Increment can be set to 0.1 u, 0.05 u, or 0.025 u
- 6) Select Save.

![](_page_55_Picture_22.jpeg)

![](_page_55_Picture_23.jpeg)

![](_page_55_Picture_24.jpeg)

### 6.7 Easy Bolus

The Easy Bolus allows you to give a bolus using the  $\bigcirc$  button on your pump. You determine the bolus amount by the number of times you press  $\bigcirc$ .

This feature may be beneficial if you:

- are giving manual boluses for meals.
- want to be discreet when bolusing.
- want to confirm a bolus amount using beep or vibrate.

Before using the Easy Bolus, you must turn the feature On and select the increment. The increment is the amount that each press of the  $\bigcirc$  button represents. It will be important that you remember what this increment is - it will determine how much bolus you are giving. For example, if the increment is set at 0.5u, and you need a 3.0 unit bolus, you will need to press  $\bigcirc$  6 times to get to 3.0 units.

## Using the Easy Bolus...

Marten prefers to use the Easy Bolus when he is in a meeting and having a snack. This allows him to be more discreet.

![](_page_56_Picture_10.jpeg)

![](_page_56_Picture_11.jpeg)

#### Setting up the Easy Bolus

- 1) Press 🗐.
- 2) Select Insulin Settings.
- 3) Select Easy Bolus.
- 4) Select **Easy Bolus** to turn **On.**
- 5) Press  $\bigcirc$  to **Step Size** and press  $\bigcirc$ .
- 6) Press 
   ♦ to change increment to desired units.
   This example shows the Step Size at 1.0 υ. Each press of the 
   button will represent 1.0 υ
- 7) Select Save.

![](_page_56_Picture_20.jpeg)

![](_page_57_Picture_1.jpeg)

#### **Giving an Easy Bolus**

 With the pump in Sleep mode, hold for about 1 second. Your pump sounds a tone or vibrates and the Easy Bolus screen appears.

![](_page_57_Picture_4.jpeg)

![](_page_57_Picture_5.jpeg)

**Note:** If the pump does not sound a tone or vibrate, you may not be in Sleep mode. Hold the menu key for about 2 seconds and then hold 🙆 again.

- Press O the number of times needed to set your bolus based on the increment that you chose.
   Your pump sounds a tone or vibrates for each button press.
   In this example using an increment of 1.0 u, O was pressed 3 times.
- When your desired bolus amount is set, press and hold for about 1 second to confirm the amount. The pump repeats a tone or vibrate for each increment. Count to ensure the amount is correct.

![](_page_57_Picture_9.jpeg)

4) Is the amount correct?

Yes: hold  $\bigcirc$  for about 1 second to deliver the bolus.

No: press  $\bigcirc$  to cancel and return to Step 1 to start again.

![](_page_57_Picture_13.jpeg)

**IMPORTANT:** Pressing  $\bigcirc$  during any part of this process, cancels the Easy Bolus. You will hear three tones signifying a bolus has not been given.

### 6.8 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 when you are not responding to hypoglycaemia.

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 hypoglycaemia 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 23:00. At about 22:00 each evening you do a BG check and check your pump (buttons would be pressed). You usually get up at 07:00 and eat breakfast around 08:00 What happens if:

- Auto Suspend is set for 8 hours: Alarm would go off at 06:00 if no buttons had been pressed. Since you don't get up until 07:00, this could be a nuisance.
- Auto Suspend is set for 12 hours: Alarm would go off at 10:00 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 16:00 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.

![](_page_58_Picture_9.jpeg)

- Setting Auto Suspend
- 1) Press 🗐.
- 2) Select Insulin Settings.
- 3) Select Auto Suspend.
- 4) Select **Alarm** to turn **On.**
- 5) Press  $\bigcirc$  to **Time** and press  $\bigcirc$ .
- 6) Use ⊘ or ⊘ to change number of hours. This example shows Auto Suspend set at 12 hours.
- Auto Suspend Suspends insulin delivery if no button press within specified time Alarm Time 12:00 hr Save

7) Select Save.

## Using Auto Suspend...

Thomas is a runner and finds the days he runs, he is more prone to hypoglycaemia at night. He often sets a temp basal, but when 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.

![](_page_58_Picture_21.jpeg)

## 6.9 Bolus Speed

The Bolus Speed determines how long it takes to deliver a Normal bolus. The **Standard** rate delivers at 1.5 units per minute, the **Quick** rate delivers 15 units per minute.

This setting is really a personal preference. You might consider changing to the quick rate if you regularly take larger boluses.

![](_page_59_Picture_4.jpeg)

#### Setting the Bolus Speed

- 1) Press 🗐.
- 2) Select Insulin Settings.
- 3) Select **Bolus Speed.**
- 4) Select speed that you want to be active.
- 5) Press  $\bigcirc$  to **Save** and press  $\bigcirc$ .

![](_page_59_Picture_11.jpeg)

![](_page_59_Picture_12.jpeg)

## Setting Bolus Speed...

Antonio often gives boluses of 20 or 25 units. He has his Bolus Speed set on Quick so it doesn't take as long for his bolus to be delivered.

![](_page_59_Picture_15.jpeg)

## 6.10 Event Markers

Event Markers let you record when certain events related to your diabetes control occur.

You can use Event Markers to record:

- **BG:** a BG value when not using the Bolus Wizard<sup>™</sup>
- Injection: the amount of insulin taken by injection
- Carbs: the amount of carbs eaten when not using the Bolus Wizard  $^{\scriptscriptstyle \mathrm{M}}$
- **Exercise:** the length of time you exercised so you can better see the effect it had on your glucose readings
- Other: for example a hypoglycaemic event or other diabetes medications taken

![](_page_60_Picture_9.jpeg)

### Marking an Event

- 1) Press 🗐.
- 2) Select Event Markers.
- 3) Select the desired event.
- 4) Select the additional information requested.
- 5) Press  $\bigcirc$  to the correct amount and press  $\bigcirc$ .
- 6) Select Save.

Event Markers	12:03	
BG	4	
Injection	Ť.	
Food	71	
Exercise	ġ.	
Other		

## Using Event Markers...

Kylie exercises regularly. She likes to be able to see how it affects her glucose levels. She enters an exercise event marker when she begins exercise. These markers then appear on her Medtronic CareLink® reports helping her and her healthcare professional better understand if she needs to make different insulin adjustments during this time.

![](_page_60_Picture_20.jpeg)

## 6.11 Reminders

Reminders can be set to alert you of important information or to do routine activities. There are several reminders that can be set as shown in the Reminders menu seen here.

### 6.11.1 Personal Reminder

Similar to an alarm clock, you can set the pump to beep or vibrate (depending on your Audio Settings) at any time that you choose. It could be set to remind you to do a BG Check, to take Medication, or any other reason you desire.

![](_page_61_Picture_5.jpeg)

#### Setting a Personal Reminder

- 1) Press 🗐.
- 2) Select **Reminders.**
- 3) Select Personal.
- 4) Select **Add New.**
- 5) Select the desired name.
- 6) Select **Time.**
- 7) Use  $\bigcirc$  and  $\bigcirc$  arrows to desired time and press  $\bigcirc$ .
- 8) Select Save.

### 6.11.2 Bolus BG Check Reminder

Turning Bolus BG Check on, gives you the option to set a reminder when you give a bolus. This can be helpful to remember to test, for example, 2 hours after your meal, or 1 hour after a correction bolus.

![](_page_61_Picture_17.jpeg)

#### **Turning Bolus BG Check On**

- 1) Press 🗐.
- 2) Select **Reminders.**
- 3) Select Bolus BG Check.
- 4) Select **Reminder** to turn **On.**
- 5) Press  $\bigcirc$  and select **Save.**

![](_page_61_Picture_24.jpeg)

![](_page_61_Picture_25.jpeg)

Reminders

Bolus BG Check

Missed Meal Bolus Low Reservoir Set Change

Personal

![](_page_61_Figure_26.jpeg)

Now you are able to set a reminder each time you deliver a bolus. The **BG Check** screen will display on your pump after the bolus is delivered, asking you when you want to be reminded.

![](_page_62_Picture_2.jpeg)

#### Setting a Bolus BG Check Reminder

- 1) Press  $\bigcirc$  to desired time and press  $\bigcirc$ .
- 2) Select **OK.**

If you don't want to receive a reminder after the bolus,

- 1) Press (O) (on the dashes).
- 2) Select OK.

![](_page_62_Picture_9.jpeg)

## Using Bolus BG Check...

When Andrea first started using her pump, she set a Bolus BG Check reminder for 2 hours after each meal bolus. She and her healthcare professional then made adjustments to her Carb Ratio and now she feels confident she is getting the correct amount of insulin for the food she eats.

![](_page_62_Picture_12.jpeg)

### 6.11.3 Missed Meal Bolus Reminder

The Missed Meal Bolus reminder will alert you if you do not give a bolus during your normal meal/snack times. For example, you typically eat lunch at noon, but you are often busy at work and forget to bolus. You could set this reminder for 11:00 – 13:00. If you give a bolus between this time, no alert will sound. However, if you don't give a bolus during this time, you would be notified. If you did eat and forgot to bolus, you could then test your BG and give a correction bolus if necessary.

![](_page_62_Picture_15.jpeg)

#### Setting a Missed Meal Bolus Reminder

- 1) Press 🗐.
- 2) Select **Reminders.**
- 3) Select Missed Meal Bolus.
- 4) Select Add New.
- 5) Select Start Time.
- 6) Enter time and press (O).
- 7) Select **End Time.**
- 8) Enter time and press  $\bigcirc$ .
- 9) Select Save.

![](_page_62_Picture_26.jpeg)

### 6.11.4 Low Reservoir Reminder

The Low Reservoir reminder notifies you when the number of units left in your reservoir reaches the amount you set here. The default setting for this reminder is 20 units, meaning you will get a Low reservoir alert when you have 20 units remaining in your reservoir, and again when half of that amount (10 units) is left. You can set the number of units according to your individual needs.

## Using Low Reservoir Reminder...

Gorge's meal boluses are usually between 15 and 20 units. He increased his Low Reservoir reminder amount to 40 units. If he receives his reminder after he leaves for work, he knows he still has enough insulin for his lunch, a snack, and his basal needs.

![](_page_63_Picture_5.jpeg)

![](_page_63_Picture_6.jpeg)

#### Setting a Low Reservoir Reminder

- 1) Press 🗐.
- 2) Select **Reminders.**
- 3) Select Low reservoir.
- 4) Press  $\bigcirc$  to **Units** and press  $\bigcirc$ .
- 5) Press  $\bigcirc$  or  $\bigcirc$  to desired units and press  $\bigcirc$ .
- 6) Select Save.

![](_page_63_Picture_14.jpeg)

![](_page_63_Picture_15.jpeg)

**Note:** Low Reservoir Warning can be set in either Units or Time. We generally recommend choosing Units. Time left is only based on basal insulin per hour. If a bolus is given, the amount of time left can decrease more quickly than anticipated.

Sei

Re

Tin

### 6.11.5 Set Change Reminder

The Set Change reminder will remind you when your infusion set is due to be changed. You can set it for either 2 or 3 days. When turned on, you will receive a message when either 48 hours (2 days) or 72 hours (3 days) have passed since your last change.

![](_page_64_Picture_3.jpeg)

- 6) Change days if desired and press (O).
- 7) Select Save.

onange	
minder	<u>Or</u>
ne	3 days
Save	
0010	

#### 6.11.6 Turning Reminders Off

Any reminder that is set can be changed, turned off, or deleted at any time. This is done by simply going back into the reminder and selecting the desired option.

### 6.12 Utilities

The remaining features that have not yet been discussed and are found in the Utilities menu. To access the Utilites menu:

- 1) Press 🗐.
- 2) Select **Utilities.**
- 3) Select the desired menu item.

See below for a brief description of each.

### 6.12.1 Airplane Mode

Airplane Mode temporarily stops wireless communication between your pump and connected devices. This can be used during airline travel when you are instructed to turn off wireless devices. You will learn more about this feature when using continuous glucose monitoring.

### 6.12.2 Time & Date

You may need to change the Time and Date on your pump, for example, when you are traveling to different time zones or for daylight savings time changes. It is very important that the time and date are always correct so that basal rates deliver properly and Medtronic CareLink<sup>®</sup> uploads are correct.

Time & Date	
Time	08:08
Time Forma	t 24 hr
Date	Apr 1, 2014
1	
Sa	ve

### 6.12.3 Block

The Block feature allows caregivers, such as parents of a young child, to restrict access to critical pump settings and functions. When Block is on, the child is unable to do things like give a bolus or change a basal rate. Features that cannot be accessed will be in grey and are unselectable. Anytime a bolus needs to be given or a temp basal started, for example, Block will need to be turned off. It can then be turned back on.

![](_page_65_Picture_14.jpeg)

**Note:** You can choose to use the Remote Bolus feature when the Block feature is on.

### 6.12.4 Remote Bolus

Remote Bolus must be on if you want to give boluses remotely from your CONTOUR® NEXT LINK 2.4 meter. See page 36 for more information on giving a remote bolus.

#### 6.12.5 Self Test

The Self Test checks to see that the display, notification light, vibration and tone are all working properly. This test is in addition to the routine tests that the pump runs. If an error message is displayed at the end of the test or you observe the pump not behaving as indicated, contact the 24-hour helpline on 1800 777 808 (tollfree within Australia on landlines) or your local representative.

### 6.12.6 Carb Unit

Carb Unit lets you change from using **Grams** to using **Exchanges** when entering food into the Bolus Wizard<sup>™</sup> and using Event Markers.

Notice that the active selection is marked with a checkmark.

### 6.12.7 Manage Settings

Manage Settings lets you save, restore, clear active insulin, or clear all settings. When you select Manage Settings, you will see the screen shown here. Hold the  $\bigcirc$  and  $\bigcirc$  buttons together to access.

- **Save Settings:** do this any time new settings are entered or settings are changed.
- **Restore Settings:** use this to restore the settings you have saved; can be used if the pump is asking you to re-enter your settings.
- **Clear Active Insulin:** you can only use this option **once**. It needs to be done before first using the pump with insulin to clear active insulin from practice boluses that were given.
- Clear All Settings: never clear unless directed to do so by your healthcare professional.
- Settings History: lists the times you have saved, restored or cleared your settings.

#### 6.12.8 Sensor Demo

Sensor Demo shows you samples of alerts and graphs that you would hear and see if using continuous glucose monitoring.

### 6.12.9 Language

Allows you to select the language of your choice.

![](_page_66_Picture_16.jpeg)

![](_page_66_Picture_17.jpeg)

![](_page_66_Picture_18.jpeg)

## **Training Supplementary Materials**

This section contains handouts that you can refer to during or after training. The Quick Reference Guides can be used when performing the most common tasks with your pump. These tasks are related to:

- Basal Rates and Patterns
- Bolus Wizard<sup>™</sup> calculator
- Changing the Quick-set<sup>™</sup> Infusion Set
- Changing the mio<sup>®</sup> Infusion Set
- Connecting Your Pump and Meter

Feel free to tear these Quick Reference Guides out and keep them in a place where they are easily accessible.

#### Change a Basal Rate

- 1. From Home Screen, select **Basal**.
- 2. Select Insulin Settings.
- 3. Select Basal Pattern Setup.
- 4. Select the basal pattern you wish to edit.
- 5. Select Options.
- 6. Select **Edit**.
- 7. Press () on the time segment.
- 8. Press 🔘 on **End** time.
- 9. Press ⊘ or ⊘ to change **U/h** and press ⊘.
- 10. Select Done.

Insulin Settings Bolus Wizard Setup Basal Pattern Setup Preset Temp Setup Preset Bolus Setup Dual/Square Wave

![](_page_68_Picture_13.jpeg)

![](_page_68_Picture_14.jpeg)

00:00 24:00 0.600

![](_page_68_Picture_15.jpeg)

-		
Basal 1		
24 hr To	tal: 14,4 U	
Start	End	Ú/hr
00.00	24:00	0,600

Basal

Basal 1

**Ourrent Rate** 

#### **Review Basal Patterns**

- 1. From Home screen, select **Basal**.
- 2. Select Basal Patterns.
- 3. Select the basal pattern you wish to review.
- 4. Review basal rates.

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

5. Select OK.

Temp Basal	
Basal Patterns	
Insulin Settings	5
Basal Patterns	08:14
Basal 1	14.4 . 🗸
Basal 1	08:17
24 hr Total: 14.4 l	I (Active)

#### 24 hr Total: 14 4 U (Active) Start End Rate (U/hr) 11:30 12:00 0.500 12:00 24:00 0.600

#### Add a Basal Rate to a Basal Pattern

- 1. From Home Screen, select **Basal**.
- 2. Select Insulin Settings.
- 3. Select Basal Pattern Setup.
- 4. Select the Basal pattern you are adding a rate to.
- 5. Select **Options**.
- 6. Select Edit.
- 7. Press () on the time segment.
- 8. Enter the new **End** time (this is the same as the start time of the basal rate you are adding) and press ().
- Press () if U/hr is not changing. (Press () or () to change value if necessary and press ().
- 10. Press () on the new time segment.
- Press to enter the new End time and press .
   Press to enter the
- basal rate and press (). 13. Continue adding end
- times and basal rates if necessary.
- 14. Select **Done**.

![](_page_68_Picture_41.jpeg)

![](_page_68_Picture_42.jpeg)

Edit Basal 1			
Start	End	U/hr	
00:00	04:00	0.600	
04:00	04:30		
	Done		

Edit Basal 1			
Start		U/hr	
00:00	04:00	0.600	
04:00	24:00	0.900	
Done			

Edit Basal 1			
Start	End	Ulhr	
00:00	04:00	0,600	
04:00	24:00	0.900	
Done			

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

Basal 1		
24 hr Total: 20:4 U		
Start	End	U/hr
00:00	04:00	0,600
04:00	24:00	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).

Basal

Basal 1

Current Rate

Temp Basal

Basal Patterns

Insulin Settings

Temp Basal

Duration

Temp Basal

Гуре

Percent

Active Insulin Bolus

Review

Nex

Rate

Percent

Begin

Basal (T)

60

#### Set Temp Basal Rate

- 1. From Home Screen, select **Basal**.
- 2. Select Temp Basal.
- 3. Press ⊘ to set duration and press ⊘.
- 4. Select Next.
- 5. Select Percent.
- 6. Press ⊘ or ⊘ to enter the percent of current basal rate desired.

NOTE: If you choose to use Rate, select **Type**, and you can then enter the U/hr desired.

7. Select Begin.

NOTE: The Home screen reads Basal (T) since you have a Temp Basal active. Select **Basal (T)** to review the details of the active Temp Basal. When the Temp Basal. When the Temp Basal is complete, the basal will automatically return to the regularly programmed basal rate.

#### **Cancel Temp Basal Rate**

If you ever set a Temp Basal and decide you do not need it, it can be cancelled.

1. From Home Screen, select **Basal (T)**.

## 2. Select Cancel Temp Basal.

NOTE: Basal rate has now returned to the currently programmed rate.

![](_page_69_Picture_18.jpeg)

![](_page_69_Picture_19.jpeg)

#### 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

- 1. From Home Screen, select **Basal**.
- 2. Select Insulin Settings.
- 3. Select Basal Pattern Setup.
- 4. Select **Add New**.
- 5. Select the name you would like to use.
- 6. Enter the basal rates needed for this pattern.

7. Select Save.

Select Name Basal 2 Workday Day Off Sick Day Day Off

Basal Pattern Setup

Add New

20.4 11

Basal 1

![](_page_69_Picture_30.jpeg)

NOTE: The Basal pattern that your pump is currently using has a check mark next to it.

ern Setup		
20.4 . 🗸		
8.325 0		
Add New		

#### **Select Basal Pattern**

Once multiple basal patterns are set, you can then select the basal pattern you wish to be active.

- 1. From Home Screen, select **Basal**.
- 2. Select Basal Patterns.
- 3. Select the Basal Pattern you wish to be active.
- 4. Select Begin.

![](_page_69_Picture_39.jpeg)

Day Of		08:28
24 hr To	tal: 8.325	U
Start	End	Rate (U/hr)
00:00	18:30	0.350
16:30	19:00	0.450
Begin		

### Turning Bolus Wizard<sup>™</sup> On and Setup

This feature should be set up in consultation with your healthcare professional.

1. 2. 3. 4.	Press (a). Select Insulin Settings. Select Bolus Wizard Setup. Select Bolus Wizard.	Bolus Wizard Setup Bolus Wizard (m Carb Ratio Insulin Sensitivity Factor BG Target Active Insulin Time	16. Select <b>Next</b> .	Edit Sensitivity 2/4 Start End mmol/L.per U 00:00 24:00 2,8 Next
5. 6.	Press	Bolus Wizard The following values are needed for Bolus Wizard setup: Carb Ratio, Insulin Sensitivity, BG Target, Active Insulin Next	17. Review the description of BG Target and select <b>Next</b> .	BG Target 3/4 BG Target is the value your blood glucose level will be corrected to.
7.	Review the description of Carb Ratio and select <b>Next</b> .	Carb Ratio 1/4 Carb Ratio is the amount of carbs covered by 1 unit of insulin Next	<ul> <li>18. Press (a) on the time segment.</li> <li>19. If you have only one BG Target range, press (a).</li> </ul>	Edit BG Target 3/4 Start End Lo-Hi (mmol/L) 00:00 24:00
8.	Press () on the time segment.	Edit Carb Ratio 1/4 Start End g/U 00:00 24:00	<ul> <li>20. Press  or  to enter the Lo target and press .</li> <li>21. Press  or  to enter the .</li> </ul>	Edit BG Target 3/4 Start End Lo-H (mmd/L) 00:00 24:00 5.6 - 5.6
9.	If you have only one Carb Ratio, press O.		Hi target and press <sup>(</sup> ). 22. Select <b>Next</b> .	Next
10	. Use ⊘ or ⊘ to enter Carb Ratio and press ⊚. . Select <b>Next</b> .	Edit Carb Ratio 1/4 Start End g/U 00:00 24:00 15 Next	23. Review the description of Active Insulin Time and select <b>Next</b> .	Active Insulin Time 4/4 Active Insulin Time is the length of time bolus insulin lowers glucose levels Next
12	Review the description of Sensitivity Factor and	Sensitivity 2/4 Insulin Sensitivity Factor (Sensitivity) is the BG emount	24. Select <b>Duration</b> .	Active Insulin Time 4/4 Duration 6:00 ∞
13	Press () on the time segment.	reduced by 1 unit of insulm. Next	25. Use ⊘ or ⊘ to enter Active Insulin Time and press ⊚.	Save
14	If you have only one Sensitivity Factor, press ©.	Edit Sensitivity 2/4 Start End mmol/L per U 00:00 24:00	26. Select Save.	Active Insulin Time 4/4 Duration 5:00 m
15	Use ⊘ or ⊘ to enter Sensitivity Factor and press ◎.		is now complete.	Save

Deliver Food and Correction Bolus	Review Bolus History
<ol> <li>Test BG. Select Bolus. Select Bolus Wizard.</li> <li>If using linked meter, BG is on screen. If not, select BG. Use or or to enter BG and press o.</li> </ol>	<ol> <li>Press (a).</li> <li>Select History.</li> <li>Select Daily History.</li> <li>Select the day you want to view.</li> </ol>
<ol> <li>Select Carbs.</li> <li>Use  to enter grams of carb and press O.</li> <li>Select Next.</li> <li>Bolus Wizard 14:03</li> <li>BG 7.0 minor 0.5.</li> <li>Active Ins. adjust 0.0.</li> <li>Carbs 35. 2.3.</li> <li>Bolus 2.8</li> <li>Next</li> </ol>	<ul> <li>5. You will see bolus deliveries listed in the history.</li> <li>5. You will see bolus deliveries listed in the history.</li> <li>5. You will see bolus (N) 0.500 u 15.32</li> <li>6. Bolus (N) 1.000 u 14.07</li> <li>7. Bolus (N) 0.500 u 11.55</li> <li>6. Fri, Mar 30 ►</li> </ul>
6. Select Deliver Bolus. Bolus Wizard 14.04 Bolus 2.8 u	Edit Bolus Wizard™ Settings
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.	<ol> <li>From Home screen, press Bolus.</li> <li>Select Insulin Settings.</li> <li>Select Bolus Wizard Setup.</li> <li>Insulin Settings Basal Pattern Setup Preset Temp Setup Preset Bolus Setup Dual/Square Wave</li> </ol>
Deliver Correction Bolus – no food	4. Select the setting to be Bolus Wizard Setup
<ol> <li>Test BG. Select Bolus. Select Bolus Wizard.</li> <li>If using linked meter, BG is on screen. If not, select BG. Use ◊ or ◊ to enter BG and press ◊.</li> </ol>	<ul> <li>5. Select Edit.</li> <li>6. Press ⊙ on the time segment. Press ∧ or ∨ to change the times and/or values.</li> <li>7. Select Save</li> </ul>
<ol> <li>Press</li></ol>	Review Bolus Wizard <sup>™</sup> Settings
NOTE: In this example, there was active insulin to adjust – it was subtracted from the correction dose.	<ol> <li>From Home screen, press</li></ol>
Deliver Food Bolus – no correction	Octurige meview
<ol> <li>Select Bolus. Select Bolus Wizard.</li> <li>Press  to Carbs and press  O. Press  to enter grams of carb and press  O.</li> <li>Bolus Wizard 14.13 BG</li></ol>	<ol> <li>Press  to scroll through the list of settings.</li> <li>Settings 14.11</li> <li>Insulin Settings - Bolus Wizard On Current Carb Ratio 15 g/U Current</li> <li>Sensitivity 2.8 mmol/L per U</li> </ol>
3. Select Next.Bolus Wizard14.134. Select Deliver Bolus.Bolus1.20	
NOTE: Active Insulin is never	

**Deliver Bolus** 

adjusted (subtracted) from a

food bolus.
## Changing the MiniMed® Sure-T® Infusion Set Section 7.3 | with the MiniMed® 640G Insulin Pump





## Section 7.3 | Changing the MiniMed® Sure-T® Infusion Set with the MiniMed® 640G Insulin Pump



the reservoir to expel any air. Turn plunger slightly anti-clockwise to loosen it. Firmly press insulin cartridge onto blue transfer guard. Hold the reservoir and cartridge at eye level and using a pencil, push down on the rubber stopper of the cartridge to fill the reservoir.

#### CONNECT RESERVOIR TO INFUSION SET

You will place the reservoir connector onto the end of the infusion set to the filled reservoir.

#### **Top of Reservoir**



Open infusion set packaging and connect the infusion set to the newly filled reservoir. Make sure both the top of the reservoir and the connector are dry before connecting them. Liquid can temporarily block the vents on the tubing connector.

**Tubing Connector** 

#### Connector



Gently push connector onto reservoir. Turn clockwise until locked. You will hear a click.

#### If using insulin cartridge, skip to Step 6.



Wipe vial with alcohol. Place vial on table. Firmly press the blue transfer guard onto vial.



Push and hold plunger down.



- Plunger

With your thumb still on the plunger, flip over so vial is on top. Release thumb and pull plunger down to fill with insulin.





If needed, pull plunger back down to amount of insulin needed for 2-3 days.



To avoid getting insulin on the top of the reservoir, turn vial over so it is upright. Hold transfer guard and turn reservoir counter-clockwise and remove from transfer guard.

Plunger

3.



If you see air bubbles, tap reservoir to move them to top. Push plunger just a bit to move them into tubing.



Twist plunger counter-clockwise to loosen and remove.

Continued on next page



**IMPORTANT:** If insulin or any liquid gets inside the tubing connector, it can temporarily block the vents that allow the pump to properly fill the infusion set. This may result in the delivery of too little or too much insulin, which could cause hypoglycaemia or hyperglycaemia.

### Changing the MiniMed® Sure-T® Infusion Set Section 7.3 | with the MiniMed® 640G Insulin Pump



down adhesive to secure set in place.

90 degree angle. Smooth

site. Place in a convenient location near insertion site. Ensure tubing between the two sites is not tight.

#### PLACE RESERVOIR INTO PUMP

Now place the filled reservoir into the reservoir compartment of the pump.





Place reservoir into pump.



Fill Cannula? 1 Insert infusion set into body 2. Select Fill to fill cannula or Done if not needed. Fill Done



Remove backing from the adhesive surrounding the needle.



#### **FILL CANNULA**

When using a Sure-T Infusion Set you are not required to fill the canula. Please select "Done".



Select Done.

Your infusion set change is now complete!

Notes

### Changing the MiniMed® mio® Infusion Set Section 7.4 | with the MiniMed® 640G Insulin Pump



Before you begin, please note that it is not recommended that you change your infusion set just prior to bedtime.

Changing your set during the day may reduce the risk of unexplained highs and no delivery alarms while sleeping. Please refer to the MiniMed<sup>®</sup> mio<sup>®</sup> Infusion Set User Guide for more details.

To change your MiniMed® mio® infusion set, you will need to organise the following supplies:

Alcohol swabs/

skin antiseptics

Sharps bin





Reservoir (with blue Transfer Guard)

### **START HERE:**

Wash your hands.

Press (

for 1 hour)



MiniMed<sup>®</sup> mio<sup>®</sup>

infusion set







Remove the infusion set you have been using by loosening the adhesive and pulling away from body.







#### If using insulin cartridge, skip to Step 6.



Wipe vial with alcohol. Place vial on table. Firmly press the blue transfer guard onto vial.



Push and hold plunger down.



Plunger

With your thumb still on the plunger, flip over so vial is on top. Release thumb and pull plunger down to fill with insulin.





If needed, pull plunger back down to amount of insulin needed for 2-3 days.



To avoid getting insulin on the top of the reservoir, turn vial over so it is upright. Hold transfer guard and turn reservoir counter-clockwise and remove from transfer guard.



**IMPORTANT:** If insulin or any liquid gets inside the tubing connector, it can temporarily block the vents that allow the pump to properly fill the infusion set. This may result in the delivery of too little or too much insulin, which could cause hypoglycaemia or hyperglycaemia.



Free tubing from slot. Gently unwind tubing in counter clockwise direction.

Connector



Gently push connector onto reservoir. Turn clockwise until locked. You will hear a click.



If you see air bubbles, tap reservoir to move them to top. Push plunger just a bit to move them into tubing.



Twist plunger counter-clockwise to loosen and remove.

Continued on next page

Plunger

## Section 7.4 | Changing the MiniMed® mio® Infusion Set with the MiniMed® 640G Insulin Pump



#### New Reservoir **PLACE RESERVOIR** 3. Place reservoir into pump **INTO PUMP** and lock. DO NOT CONNECT TO Now place the BODY filled reservoir into the reservoir Next compartment of the pump. Place reservoir into pump. Drops at end of tubing 1. Load Reservoir oad Reservoir Fill Tubing DO NOT CONNECT TO Select Load and Complete BODY hold Until complete DO NOT Hold Fill until drops appear. DO NOT CONNECT TO CONNECT TO Then select Next, 0.0 BODY BODY Next Load FIII Nex Ne Select Fill and keep Select Load and keep When you see this screen, holding (O) until you holding 👩 . select Next. see drops at the end of tubing, then let go.



Gently peel paper to expose adhesive.



Turn over and hold by the lined ridges on the sides.



With other hand pull up on center of serter until it clicks and locks into place.

6.



Choose an insertion site from the shaded areas shown here. Wipe with alcohol or other antiseptic.



Place against prepared site on body. Press the round indentations on each side of serter to insert needle.

Continued on next page

# Changing the MiniMed® mio® Infusion Set Section 7.4 | with the MiniMed® 640G Insulin Pump





The Home screen displays the insulin as it fills the cannula.



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

Your infusion set change is now complete!









Medtronic Diabetes 24-hour toll free helpline (Australian landlines): **1800 777 808** 

#### www.medtronic-diabetes.com.au

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Please note: In contacting the Diabetes Toll Free, your personal and health information may be disclosed to an operator located outside Australia. ^Components sold separately. Automated insulin delivery is made possible through combining Medtronic insulin pump and continuous glucose monitoring technology.

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