Roche

User's Manual

Accu-Chek® Aviva Insight Diabetes Manager

ACCU-CHEK®

Contents

1 Understanding Your Diabetes Manager

1.1 Introduction

Read this User's Manual carefully before you use your Accu-Chek Aviva Insight diabetes manager. To use it correctly and dependably, you need to understand the meter's operation, screen displays and all individual features.

If you have any questions, contact one of our customer support and service centres. A listing is at the back of this User's Manual.

1.1.1 Intended Use

The Accu-Chek Aviva Insight diabetes manager is indicated for the treatment of insulin-requiring diabetes and for the quantitative measurement of glucose in fresh, capillary whole blood.

The Accu-Chek Aviva Insight diabetes manager is intended for the quantitative measurement of blood glucose. The Accu-Chek Aviva Insight diabetes manager is intended for self-testing, outside the body (in vitro diagnostic use), by people with diabetes as an aid in monitoring the effectiveness of glucose control. The Accu-Chek Aviva Insight diabetes manager is meant for use with the Accu-Chek Aviva test strip. Testing site includes traditional fingertip site. The Accu-Chek Aviva Insight diabetes manager is also indicated for the management of diabetes by calculating an insulin dose or carbohydrate intake based on user entered data.

Suitable for self-testing

Included:

- **Accu-Chek Aviva Insight diabetes manager with rechargeable battery and activation chip**
- **USB cable**
- **Power adapter with plug**

Not included:

- **Accu-Chek Aviva test strips**
- **Accu-Chek Aviva control solution**

⚠ WARNING

Any object coming into contact with human blood is a potential source of infection (see: Clinical and Laboratory Standards Institute: Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline – Fourth Edition; CLSI document M29-A4, May 2014).

1.1.2 Important

- This Accu-Chek Aviva Insight diabetes manager requires Accu-Chek Aviva test strips.
- If you have followed the steps in this User's Manual but still have symptoms that do not seem to match your test results, or if you have questions, talk to your healthcare professional.

NOTE

- This User's Manual shows sample screens. The screens in this manual may look slightly different from the screens on the meter. If you have any questions about the meter screens, contact Roche.
- On the meter screens, the activation chip is referred to as a code chip. Code chip and activation chip are interchangeable and mean the same thing.
- Blood glucose is sometimes shortened to bG, but it means the same thing.

1.2 About This User's Manual

To help you fully benefit from your Accu-Chek Aviva Insight diabetes manager (hereafter referred to as the meter), the functions and features of this product are assigned as Basic and Optional.

- Basic functions are essential for the intended purpose of this product and it is highly recommended to learn how to use them before you start using this product.
- Optional functions help you get the maximum benefit from this product. Together with your healthcare professional you can choose to learn about and use these features at your own discretion and your own pace.

This User's Manual includes the following for the appropriate and convenient use of the meter:

⚠ WARNING

A Warning is safety information that requires your careful attention and informs you about risks to your health. Neglecting this information may lead to life-threatening situations.

NOTE

A Note contains important information relating to the efficient and smooth operation of the meter.

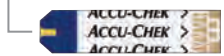
1.3 The Accu-Chek Aviva Insight Diabetes Manager at a Glance

1	**Power Button**	Turns the meter on or off. See the **Turning the Meter On or Off and Power Management** section in this chapter.
2	**Lanyard Attachment Point**	Location for attaching a lanyard.
3	**Micro USB Connector**	Plug the smaller end of the USB cable into this connector to recharge the battery or to communicate with a PC.
4	**Memory Expansion Port**	Holds a memory card which contains software for the meter. The Accu-Chek Aviva Insight diabetes manager does not include a memory card unless it is part of the Accu-Chek Insight diabetes therapy system. Do not remove the memory card. Roche will not replace a removed memory card.
5	**Touchscreen Display**	Touchscreen with a colour display for navigating through meter menus and for viewing information.
6	**Volume Buttons**	Changes the volume of a message, for example a Reminder. To mute the sound, press the Volume Down button until the sound is completely off.
7	**Test Strip Slot**	Location for inserting the test strip for blood glucose testing and control testing.

8	**Activation Chip**	The meter is provided with a black activation chip. Do not remove it. If the activation chip is missing, contact Roche.
9	**Battery Door**	Only remove the battery door to replace the battery. See the **Changing the Battery** section in the **Care and Maintenance** chapter in this User's Manual.

NOTE

The meter is already coded and comes with a pre-inserted black activation chip. You never need to change this activation chip even if you use test strips from boxes that contain another activation chip.



Test Strip
Yellow Window - Touch blood drop
or control solution here.

Metallic End - Insert this end into the meter.

Test Strip Container
(for example)

Control Solution Bottle
(for example)

1.4 Home Screen

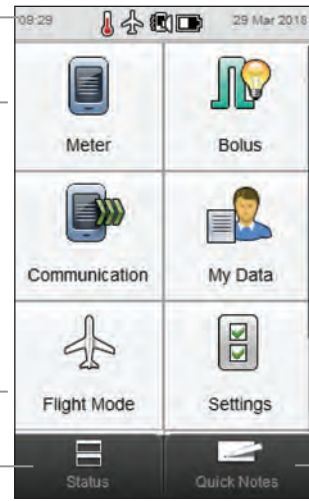
Home screen refers to the screen that is displayed when the meter is powered on. Home screen can be either the Main Menu or Status screen. To change the Home screen default, see the **Home Screen Default** section in the **Changing Meter Settings** chapter in this User's Manual.

1.4.1 Main Menu Screen

Title Bar
Displays meter information. See the following table.

Menu Selections

Go to Status Screen
See the **Status Screen** section in this chapter.



Scroll Bar
Appears when there is more information than fits on the screen.

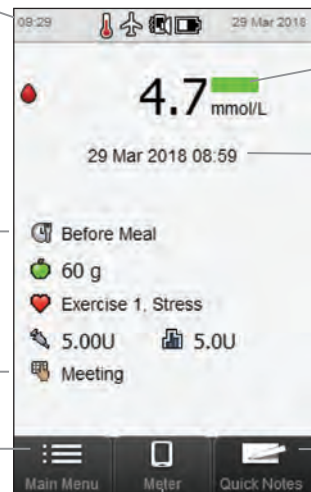
Go to Quick Notes Screen
See the **Quick Notes Screen** section in this chapter.

The **Title Bar** shows the time of day and date. In addition, the following icons may be displayed.

Icon	Name	Description
	Sound / Vibrate	Displayed when both sound and vibrate are turned on.
	Sound	Displayed when only sound is turned on.
	Vibrate	Displayed when only vibrate is turned on.
	Flight Mode	Displayed when flight mode is turned on.
	Battery	Displays the current battery charge condition.
	Temperature	Displayed when the meter's temperature is outside of the allowable temperature for performing a blood glucose test.

1.4.2 Status Screen

The Status screen displays information for the most recent valid blood glucose test.



Title Bar
Displays meter information.

Blood glucose result with colour status bar

Last blood glucose test date and time

Additional information
See the next page.

Go to Main Menu
See the **Main Menu Screen** section in this chapter.

Go to Quick Notes
See the **Quick Notes Screen** section in this chapter.

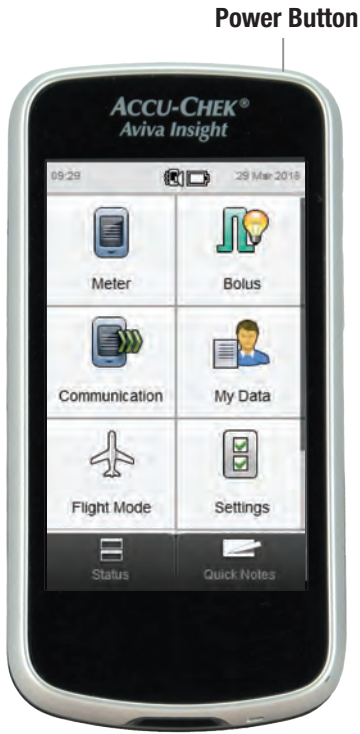
Go to Meter Menu

Additional Information

The following shows possible additional information and is stored in the electronic logbook with the blood glucose test:

- Meal time icon with description (for example, Before Meal)
- Carbohydrates icon with the carbohydrate amount (for example, 60 g), or the carbohydrates accepted icon or carbohydrates not accepted icon may be displayed
- Health event icon with description (for example, Exercise 1)
- Type of bolus icon with the total bolus insulin amount (for example, Pen/Syringe Bolus 5.00 U)
- Basal insulin icon with the basal insulin value (for example, 5.0 U)
- Note icon with note text (for example, Meeting)

1.5 Turning the Meter On or Off and Power Management



Turn meter on	Press and release the power button. If the battery power is extremely low, the meter does not turn on. Charge the battery.
Turn meter off	Press and release the power button. The meter requires about 2 seconds to fully power off.
Reset the meter	Press and hold the power button for at least 5 seconds until the meter screen goes blank. Release the power button. The power up cycle can take a minute or more. Resetting the meter does not require you to remove the battery.

NOTE

Reset the meter if the display freezes or does not respond. Make sure the battery is charged.

Power Management

When the meter is on and the touchscreen is not touched, the meter automatically dims the brightness of the display after 15 seconds and completely powers off after 2 minutes, unless you are performing either a blood glucose test or a control test. To conserve battery power, turn the meter off when you have finished rather than utilising the automatic power off feature. For more information on conserving battery power, see the **Power-Saving Tips** section in the **Care and Maintenance** chapter in this User's Manual.

The meter has a rechargeable battery. The battery icon on the Main Menu and the Status screens shows the battery power level or the charging status.

The following table shows the different states of battery power level:

	Full Charge	Partial Charge	Low Charge
Power level icon			
Charging status icon			
Battery charging screen			

When the battery power level is low, the meter displays a message to recharge. Allowing the battery to fully drain reduces the ability of the battery to hold its charge. It is recommended that you recharge the battery on a regular basis, for example, once every day. Keeping the meter plugged in to charge does not harm the battery. Included with the meter is a USB cable and a power adapter to be used for recharging the battery. See the **Charging the Battery** section in the **Startup** chapter in this User's Manual.

The rechargeable battery has a limited number of charge cycles. If you notice that the meter must be charged more often than it did when it was new, you may need to change the battery. See the **Changing the Battery** section in the **Care and Maintenance** chapter in this User's Manual.

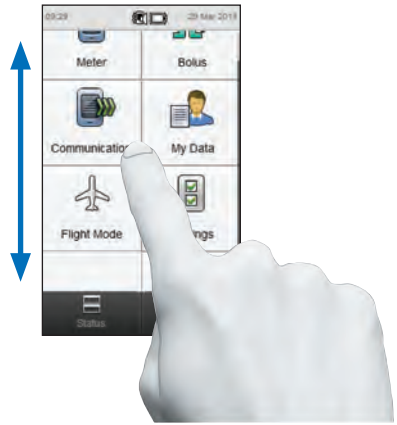
1.6 Navigation

The meter has a full-colour display utilising touchscreen technology.

Making a Selection

Press a selection until it is highlighted in blue, then release. To help you know when a selection is made, set up the touchscreen to emit a tone, vibrate, or do both. See the **Touchscreen: Tone, Vibration** section in the **Changing Meter Settings** chapter in this User's Manual.

Scrolling the Screen



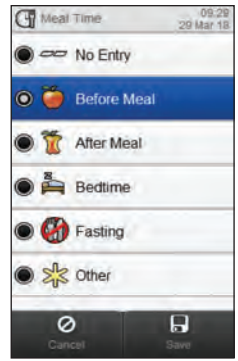
Press and hold your finger anywhere in the middle of the screen and then move your finger up or down to scroll the screen.

Setting a Value

Select the value to be changed (Hour is selected).

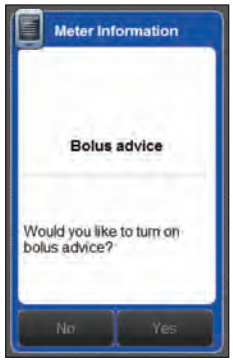
Press and release + to increase, or press and release - to decrease. Press and **hold** + or - to change the value quickly.

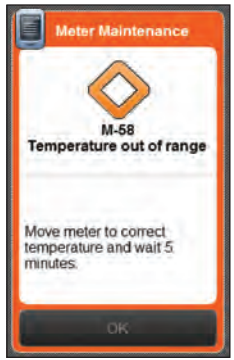
Choosing from a List



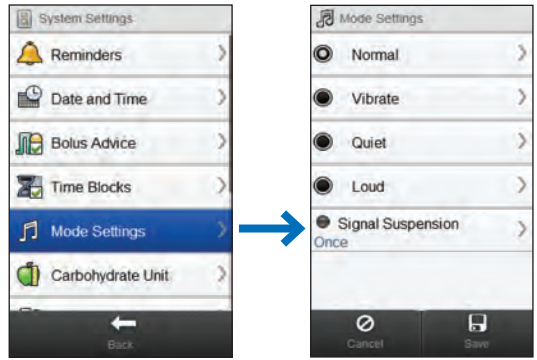
Select an item on the list. The radio button on the left side of the screen indicates the choice (Before Meal is chosen).

Message Screens



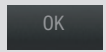
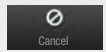
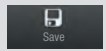
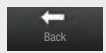


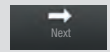
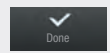
When a message screen appears, the selection choice (for example, No, Yes and OK) is shaded and is inactive for 3 seconds. This prevents accidental confirmation of the message before you read it.



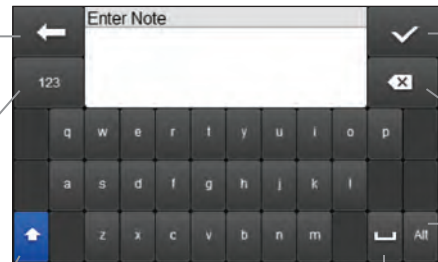
The › symbol on the right side of the screen indicates the selection displays another screen.

Navigation Selections

	The screen displayed requires your acknowledgement (for example, confirm the M-58 Temperature out of range message).
	Leave an activity without completing the action (for example, do not change the date in the meter).
	Save settings or data.
	Return to the previous screen without saving any settings or data.

	Proceed to the next screen without saving settings or data. Next is used when there are multiple steps or screens (for example, the Setup Wizard for setting up the meter). The settings or data remain available when Back is used and are saved once Done is selected.
	Save settings or data. Done occurs at the end of a series of screens (for example, the Setup Wizard for setting up the meter), or on a screen which has multiple entries (for example, Bolus Input).

Keyboard



Return to the previous screen without saving

Change between a keyboard with letters and a keyboard with numbers, punctuation and characters

Change between lowercase letters and capital letters

Save and return to the previous screen

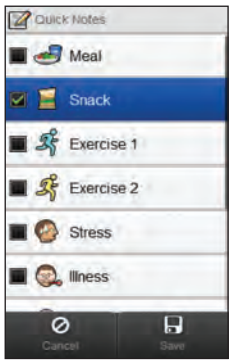
Backspace to erase

Change between a keyboard with letters and a keyboard with additional selections

Insert a space

1.7 Quick Notes Screen

An event (for example, Snack) may have an impact upon your blood glucose results or collected data. The Quick Notes feature is a convenient way to record events as they occur and are useful during data analysis. A Quick Notes record is not linked to a blood glucose result, nor does it influence the data used in calculating bolus advice.



Choose up to four events. Scroll the screen for more choices. Select Save to store a Quick Notes record to the logbook with the current date/time stamp.

You are able to change the event choices for a saved Quick Notes record by selecting it in the logbook. You are also able to type a note to save with a Quick Notes record. See the **The Logbook** section in the **My Data** chapter in this User's Manual.

1.8 Using the Test Strips

- Use only Accu-Chek Aviva test strips.
- Use the test strip immediately after removing it from the test strip container.
- Do not apply blood or control solution to the test strip before you insert it into the meter.
- Close the test strip container tightly immediately after removing a test strip to protect the test strips from humidity.
- Store the unused test strips in their original test strip container with the cap closed.
- Check the use by date on the test strip container. Do not use the test strips after that date.
- Store the test strip container and meter in a cool, dry place such as a bedroom.
- Refer to the test strip package insert for test strip storage and system operating conditions.

⚠ WARNING

Do not store test strips in high heat and moisture areas (bathroom or kitchen)! Heat and moisture can damage the test strips.

NOTE

The meter is already coded and comes with a pre-inserted black activation chip. You never need to change this activation chip even if you use test strips from boxes that contain another activation chip.

1.9 Summary of Features

- The status screen gives you quick access to information about your most recent blood glucose test.
- Bolus advice is optional and it calculates an insulin bolus for you that is customised to the time of day and your changing situations.
- Daily time blocks allow you to divide a day into different time periods and can be adjusted to fit your lifestyle.
- Data management:
  - Electronic logbook containing the record of each blood glucose result, including meal time, carbohydrates, health events, bolus, basal and notes.
  - View, modify or add information to the logbook.
  - View data (for example, blood glucose test averages) in a graph or table format for a specified time period (for example, the last 30 days).
  - Transfer data between devices, such as the meter and a computer.

- Reminders:
  - Alarm clock reminders for when to test throughout the day
  - Reminders for testing after a high blood glucose result, after a low blood glucose result, or after a meal
  - Appointments with your healthcare professional or for a laboratory test
  - Unique tones for different reminders
- Health events can be selected to indicate how you are feeling or what you are doing that might affect your blood glucose level. You have the option of setting a percentage for each health event which adjusts the bolus advice recommendation if you set up bolus advice.
- Hypo (low) and hyper (high) blood glucose limits that best fit your needs. Whenever a blood glucose result is above or below this range, the meter displays a warning.
- Full-colour visual display utilising touchscreen technology.

2 Startup

2.1 Before You Get Started

Before you can use the meter, it must be prepared as follows:

1

Remove and discard the tab from the back of the meter. Continue to the next section, **Charging the Battery**.

2.2 Charging the Battery

Charge the battery by plugging the USB cable into either a power outlet or a computer. Use the USB cable and USB power adapter supplied with the meter to avoid problems when charging the battery. The preferred charging method is to use a power outlet since this is faster and takes about 3.5 hours to charge a fully drained battery. Charging the meter from a computer takes much longer. Use a power outlet if the battery is extremely low on power or has not been charged for a while.

NOTE

- Allowing the battery to fully drain reduces the ability of the battery to hold its charge. It is recommended that you recharge the battery on a regular basis, for example once every day. Keeping the meter plugged in to charge does not harm the battery.
- A blood glucose test cannot be performed while the meter is plugged in.

Charging the Battery Using a Power Outlet

1

Clear Plastic Cover

Release Button

If the power adapter is already assembled, proceed to Step 4.

To assemble the power adapter, remove the clear plastic cover by pressing the centre of the release button. Slide the clear plastic cover off in the direction of the arrow.

2

Slide on the pronged plug where the clear plastic cover was located until it firmly clicks into place. Do not try to force the pronged plug. It only goes on one way.

3

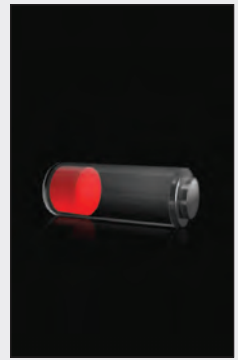
Plug the larger end of the USB cable into the power adapter.

4

Plug the smaller end of the USB cable into the meter.

5

Plug the power adapter into a power outlet. If the battery is extremely low on power, the meter does not turn on for a number of minutes.



When the connection is successful, the meter displays the battery charging screen for 3 seconds.

The next screen (either the Main Menu or Status screen) displays the battery icon in charging mode.

6

When the battery icon is shown as fully charged, you can unplug the meter.

Charging the Battery Using a Computer

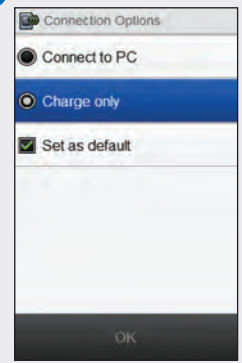
1

Plug the smaller end of the USB cable into the meter.

2

Plug the larger end of the USB cable into an available USB port on the PC. If the battery is extremely low on power, the meter does not turn on. Charge the battery using a power outlet.

3



Choose Charge only. As an option, choose Set as default to keep this screen from appearing each time you connect the USB cable to a PC. Select OK.

NOTE

- The Connection Options screen does not appear if Set as default was chosen previously.
- To remove the default, go to the Main Menu and select Communication > Settings. Choose Prompt upon USB connect. Select Save.

NOTE

The PC must be turned on and not in sleep or standby mode to charge the battery.

When the connection is successful, the meter displays the battery charging screen for 3 seconds.

The next screen (either the Main Menu or Status screen) displays the battery icon in charging mode.

NOTE

The computer is not charging the battery if the meter does not display the battery charging screen or the battery charging icon, or if the Information screen Recharge meter soon is displayed. Charge the battery using a power outlet.

4

When the battery icon is shown as fully charged, you can unplug the meter.

2.3 Setup Wizard

The first time you turn the meter on, the Setup Wizard is activated. You must complete the Setup Wizard before performing a blood glucose test for the first time.

The Setup Wizard assists you in selecting settings for:

- Meter language
- Time and date
- Units (carbohydrate)
- Warning limits for hypo (low) and hyper (high) blood glucose levels
- Time blocks
- Bolus advice (optional)
- bG test reminders (optional)

⚠ WARNING

It is important to discuss your individual settings for warning limits, time blocks, bolus advice and bG test reminders with your healthcare professional.

NOTE

- The Setup Wizard is activated every time you turn the meter on until you complete the process.
- If you turn the meter off during the Setup Wizard, you must reconfirm all of the settings in order to complete the Setup Wizard.
- To return to a previous screen in the Setup Wizard, select Back.
- If you choose not to set up bolus advice and bG test reminders as part of the Setup Wizard, these features can be set up later. For information on how to set up these features after completion of the Setup Wizard, see the **Setting Up Bolus Advice** section in the **Changing Bolus Advice Settings** chapter and the **Meter Reminders** chapter in this User's Manual.
- The default settings in the meter and the settings illustrated in this User's Manual are for example only.

2.4 Completing the Setup Wizard

Refer to the **Important Information** section of this User's Manual for detailed explanations of the various settings in the Setup Wizard.

1

Power Button

Starting with the meter turned off, press the power button to turn on the meter.

2

The meter vibrates, beeps and displays this splash screen for a short period of time (this screen appears each time the meter is turned on).

3

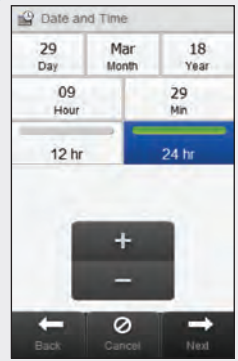
Choose the desired language from the list. Select Next.

4

If you are using the Accu-Chek 360° configuration software: Plug the meter into the PC, choose PC setup and then select Next to continue the setup using the software. You do not need to follow the rest of the steps in this section.

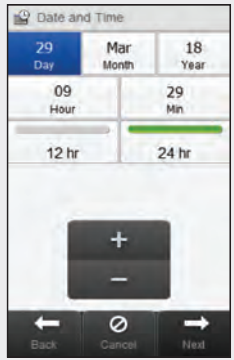
To proceed with the setup on the meter, choose Manual. Select Next.

5



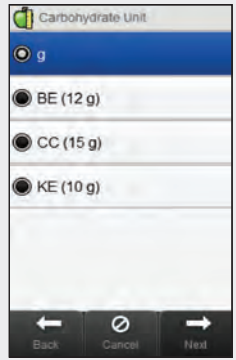
Select 12 hr or 24 hr to set the time format, if necessary.

6



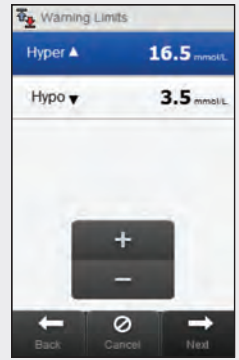
Set the date and time. Select Next.

7



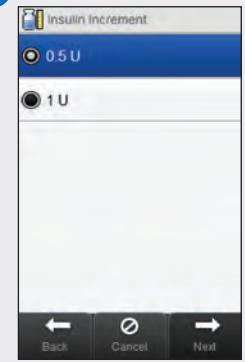
Choose the appropriate carbohydrate unit. Select Next.

8



Set the Hyper (upper) and Hypo (lower) warning limits. Select Next.

9

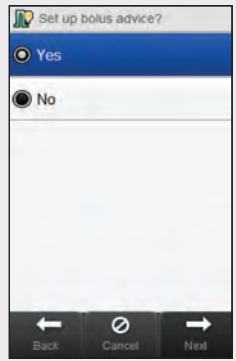


Choose the appropriate insulin increment. Select Next.

10

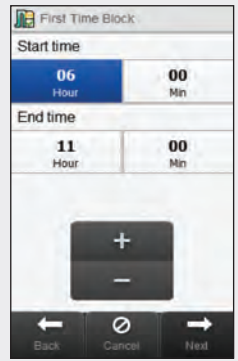
Set the maximum amount for any single bolus. Select Next.

11



Choose Yes to receive bolus advice. Choose No to not receive bolus advice. Select Next.

12



Set the start time and end time for the first time block. Select Next.

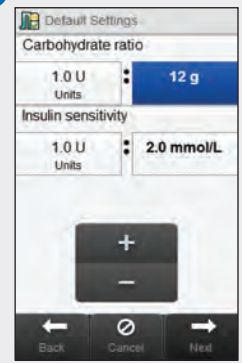
13

Set the target range. Select Next.

NOTE

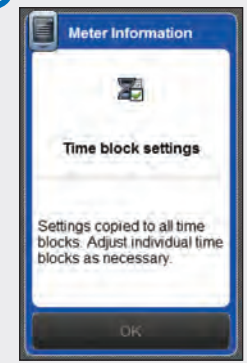
If you choose not to receive bolus advice, the Setup Wizard skips Step 14.

14



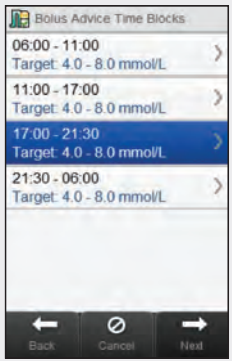
Set the Carbohydrate ratio and Insulin sensitivity. Select Next.

15



Select OK.

16

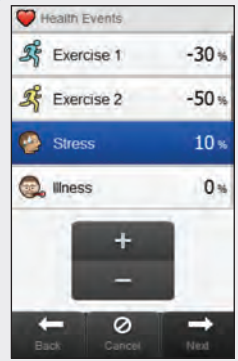


Select any additional time block to edit the End time, Upper value and Lower value. Select Next when you have finished editing the time blocks.

NOTE

- If bolus advice is on, you can also set the carbohydrate ratio and insulin sensitivity for each time block.
- To reset all edited time blocks to their default values, select Cancel and then Yes. This restarts the meter setup process.
- If you chose not to receive bolus advice, Done appears instead of Next on the screen. Select Done to complete the Setup Wizard.

17



Set the percentage for any desired health events. Scroll to view additional options. Select Next.

18

Set the Meal rise, Snack size, Acting time and Offset time. Select Done to complete the Setup Wizard.

NOTE

Consult your healthcare professional and read the next section **Important Information** for help with the settings in the Setup Wizard. For additional assistance with the bolus advice settings, read the **Bolus Advice** chapter of this User's Manual.

2.5 Important Information

2.5.1 Carbohydrate Unit

You have a choice among different carbohydrate units in the meter that best fit your needs. The following carbohydrate units are available:

Abbreviation	Unit of Measurement	Gram Equivalent
g	Grams	1 gram
KE	Kohlenhydrateinheit (Carbohydrate Unit)	10 grams
BE	Bread Equivalent	12 grams
CC	Carbohydrate Choice	15 grams

NOTE

The gram equivalent for KE, BE and CC can be changed using the Accu-Chek 360° configuration software. The default gram equivalents are shown in the previous table.

2.5.2 Warning Limits

You can select hyper (high) and hypo (low) blood glucose warning limits that best fit your needs.

Whenever a blood glucose result is above the hyper warning limit or below the hypo warning limit, the meter displays a warning.

- Set the hyper warning limit greater than the target range of all time blocks.
- Set the hypo warning limit less than the target range of all time blocks.

2.5.3 Insulin Increment

Insulin increment is the amount in units (U) by which your insulin dose is adjusted when programming a bolus or when entering a manual logbook entry.

The meter rounds off the insulin amount to be delivered, which the meter calculates if bolus advice is set up, or when you manually enter the bolus and basal insulin data into the logbook.

The insulin increment can be set to 0.5 or 1 U.

2.5.4 Max Bolus

Max bolus serves as a safety measure against unintended large boluses. It is a meter setting that specifies a maximum bolus insulin amount. A bolus that is larger than the max bolus amount requires an additional confirmation.

Max bolus can be set to a maximum of 50 U in increments of 1 U or 0.5 U (per the insulin increment value).

2.5.5 Time Blocks

Setting time blocks to fit your own schedule helps you and your healthcare professional see how patterns in your blood glucose levels may be affected by your daily activities and lifestyle.

Time blocks combine to cover a 24-hour time period.

The meter comes with four default time blocks. You may set up to eight time blocks. You can change the time period for any of the default time blocks.

To complete the Setup Wizard, you must complete and save the default settings for the time blocks. Each time block must be at least 15 minutes long and can only be set in 15-minute increments. When you set the end time for a time block, the meter automatically sets this end time as the start time for the next time block.

You can set a different blood glucose target range for each time block. The target range for each time block must be within the hypo and hyper warning limits.

When the default time blocks are set up, the settings are applied to all of the other time blocks. If bolus advice is set up, you must also set the carbohydrate ratio and insulin sensitivity for the default time block. You can set a different carbohydrate ratio and insulin sensitivity for each time block.

Talk to your healthcare professional about setting up time blocks.

2.5.6 Bolus Advice

The bolus advice feature calculates a bolus for you that is customised to the time of day and your changing situations. This function is activated only if you set up bolus advice on your meter.

Bolus advice recommendations provided by the meter are intended solely as advice.

For more detailed information on bolus advice, see the **Bolus Advice** chapter in this User's Manual.

Carbohydrate Ratio

The carbohydrate ratio is the amount of insulin necessary to account for a certain amount of carbohydrates.

Talk to your healthcare professional to determine the appropriate carbohydrate ratio for you.

Insulin Sensitivity

The insulin sensitivity is the amount of insulin necessary to lower your blood glucose by a certain amount.

Talk to your healthcare professional to determine the appropriate insulin sensitivity settings for you.

Health Events

Health events can be selected to indicate how you are feeling or what you are doing that might affect your blood glucose level. You have the option of setting a percentage for each health event which adjusts the bolus advice recommendation if you set up bolus advice.

Health events available on the meter are:

- Exercise 1
- Exercise 2
- Stress
- Illness
- Premenstrual
- Customized (1–3)

A positive percentage increases the bolus amount and a negative percentage (-) decreases the bolus amount. Talk to your healthcare professional to determine the appropriate percentage for each health event for you.

Advice Options

Meal rise, snack size, acting time and offset time are advice options. Below are detailed descriptions of each of these settings.

Meal Rise

During or after meals, an increase in blood glucose level is considered normal within a certain range, even though a bolus has been delivered.

Enter the maximum increase in your blood glucose level that is to be tolerated after a meal without an additional correction bolus.

Snack Size

The snack size defines a threshold of carbohydrates above which a meal rise is triggered.

Acting Time

The period of time from the start of a bolus until your blood glucose level is expected to return to the target level.

You can adjust the length of the acting time to fit your individual needs, within a specified time interval (1 ½ hours to 8 hours). If you are unsure of your insulin acting time, check with your healthcare professional. The total acting time includes the offset time.

Offset Time

The expected amount of time before the insulin begins to lower blood glucose levels in the body.

3 Testing Your Blood Glucose

3.1 Performing a Blood Glucose Test

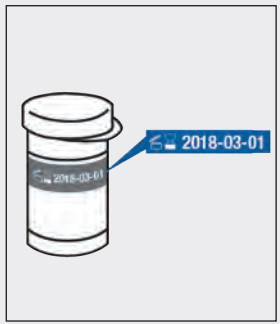
NOTE

- You need the meter, a test strip, a lancing device and a lancet.
- Set up the meter before you perform your first blood glucose test.
- A blood glucose test cannot be performed while the meter is plugged in.
- Blood glucose is sometimes shortened to bG, but it means the same thing.

1

Wash and dry your hands.
Prepare the lancing device.

2



Check the use by date on the test strip container. Do not use test strips past the use by date.

3

Insert the test strip into the meter in the direction of the arrow. The meter turns on.

NOTE

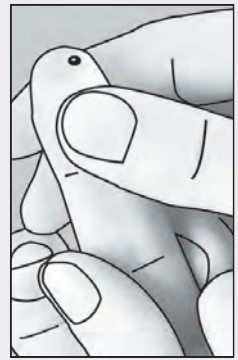
- Do not touch the blood drop to the test strip until the Apply Drop screen is displayed.
- Be careful not to put any fluids into the test strip slot.
- If a test strip error occurs, remove and discard the test strip. Repeat the test with a new test strip.
- Do not apply a blood drop to the test strip before you insert it into the meter.
- When a test strip is in the meter, the buttons and touchscreen selections are inactive, including the power button. The buttons become active when you remove the test strip or when the test is complete.
- Other ways to start a blood glucose test:
  - From the Main Menu, select Meter > bG Test or select Bolus > bG Test. Insert a test strip into the meter.
  - When a bG test reminder notification is displayed, insert a test strip into the meter.

An image of the test strip container is displayed for a few seconds. Continue to the next step.

4

The Apply Drop screen appears. Perform a finger prick with the lancing device.

5

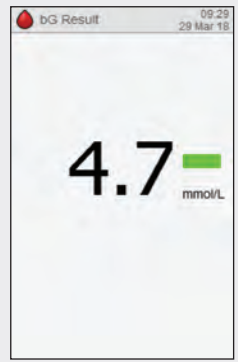


Gently squeeze your finger to assist the flow of blood. This helps you get a blood drop.

6

Touch the blood drop to the **front edge** of the yellow window of the test strip. Do not put blood on top of the test strip.

The Analyzing screen appears when there is enough blood in the test strip.

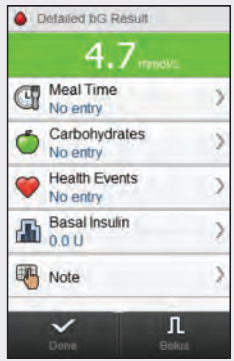


The result appears on the display.

NOTE

- For information about blood glucose results, see the **Understanding Blood Glucose Results** and **Unusual Blood Glucose Results** sections in this chapter.
- The blood glucose result must be used within 10 minutes for bolus advice.

7



In approximately 3 seconds the Detailed bG Result screen appears. Remove and discard the used test strip. Perform one of the following:

- Complete the blood glucose test without adding information or delivering a bolus: Select Done.

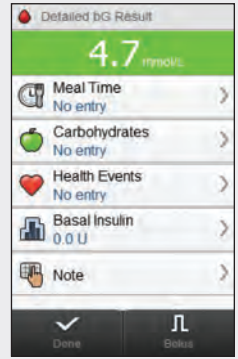
- If bolus advice is enabled: Go to the **Delivering a Bolus Using Bolus Advice** section in the **Bolus Advice** chapter in this User's Manual.

- If bolus advice is not enabled:
  - Add information to be saved with the blood glucose result: Continue to the next section **Adding Information to a Blood Glucose Result**. A bolus can be delivered after adding the information.
  - Deliver a bolus without adding information: Select Bolus and go to the **Delivering a Bolus Without Bolus Advice** section in this chapter.

3.2 Adding Information to a Blood Glucose Result

Adding information to the entry fields provides you with a record of the circumstances surrounding your blood glucose result. This information is helpful later for determining patterns in your blood glucose levels. The steps in this section only apply if the bolus advice feature is not being used. If bolus advice is enabled, go to the **Delivering a Bolus Using Bolus Advice** section in the **Bolus Advice** chapter in this User's Manual.

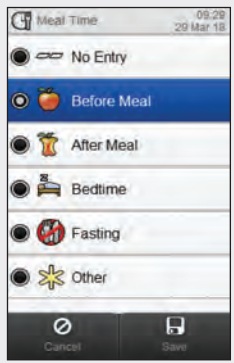
1



To add an entry, select it and refer to the instructions on the following pages.

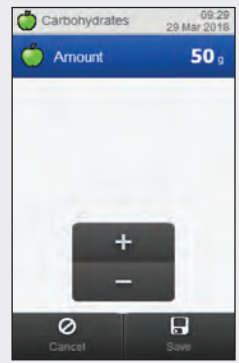
Screens for Adding Entries for Detailed bG Result

Meal Time



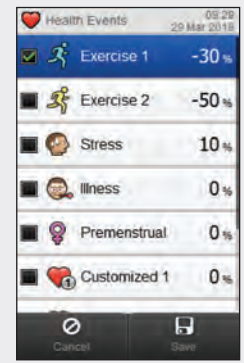
Choose the meal time. Select Save.

Carbohydrates



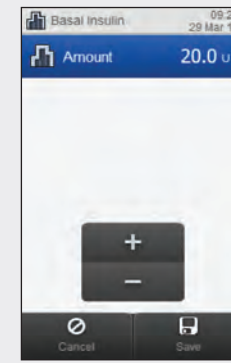
Set the amount of carbohydrates consumed. Select Save.

Health Events



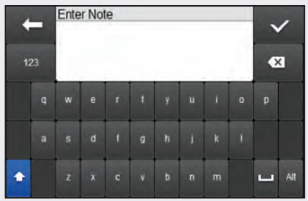
Choose up to four health events. Select Save.

Basal Insulin



Set the basal insulin amount. Select Save.

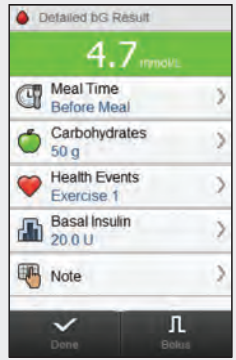
Note



Type a note (up to 60 characters) to save with this record.

Select ✓.

2



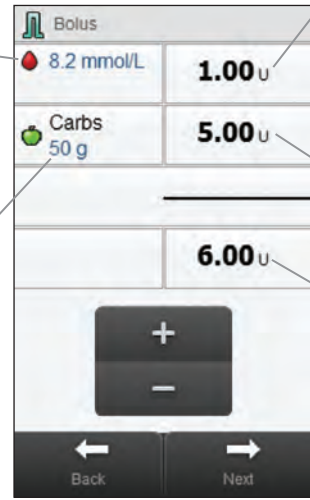
Perform one of the following:

- Save the entries and proceed with bolus delivery: Select Bolus and continue to **Delivering a Bolus Without Bolus Advice**.
- Save the entries and do not proceed with bolus delivery: Select Done.

3.3 Delivering a Bolus Without Bolus Advice

bG Result
No bG Test is displayed if there is no current bG result.

Carbohydrate Amount
No Entry is displayed if no amount is entered.



Correction Bolus
Insulin to return an out-of-target blood glucose result to a target value.

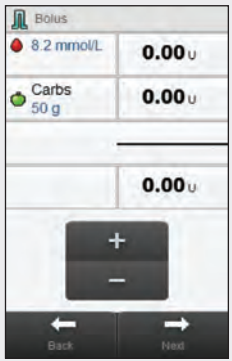
Carbohydrate Bolus
Insulin to account for the food you eat.

Total Bolus
Sum of the Correction Bolus and Carbohydrate Bolus amounts.

NOTE

When the Bolus screen first appears there are no bolus amounts. The bolus amounts are entered by you.

1

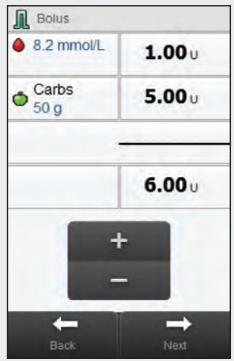


Enter the bolus amounts, as necessary. To input a bolus amount, select the entry field for Correction Bolus, Carbohydrate Bolus or Total Bolus and set the amount.

NOTE

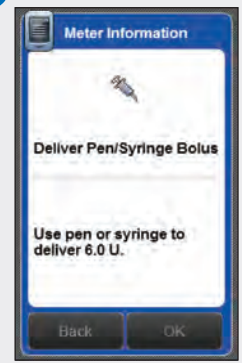
- If you set either the Correction Bolus or Carbohydrate Bolus first: The ability to edit the Total Bolus is disabled; however, the Total Bolus updates accordingly.
- If you set the Total Bolus first: The ability to edit the Correction Bolus and Carbohydrate Bolus is disabled; however, the Correction Bolus updates accordingly.
- If a Carbohydrate Bolus is entered and no Carbohydrate Amount has been entered (Carbs displays No Entry), you should consider entering an amount for carbohydrates. Select Back to enter an amount. An amount is not required, but the more complete the data the more accurate any future bolus advice recommendations are when using bolus advice.

2



Select Next.

3



Review the bolus amount. Select Back to adjust or select OK to record the bolus.

Deliver the bolus using your pen or syringe.

3.4 Understanding Blood Glucose Results

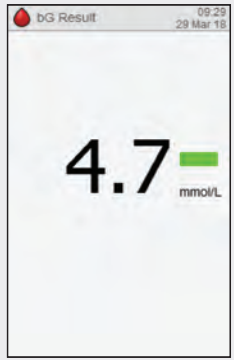
The status bar indicates how the blood glucose result compares to the target blood glucose range for the current time block.

NOTE

Treat low or high blood glucose as recommended by your healthcare professional.

Status Bar Descriptions

The following are status bar descriptions with sample displays:



Green indicates the result is within the target range for the current time block.

Blue indicates the result is above the target range for the current time block. The result is not above the hyper warning limit.

Blue with Hyper indicates the result is above the hyper warning limit.

Yellow indicates the result is below the target range for the current time block. The result is not below the hypo warning limit.

Red with Hypo indicates the result is below the hypo warning limit.

LO or HI Display

The blood glucose result may be below the measuring range of the meter. If you are experiencing any of the common symptoms of low blood glucose, contact your healthcare professional immediately. Treat low blood glucose as recommended by your healthcare professional.

The blood glucose result may be above the measuring range of the meter. If you are experiencing any of the common symptoms of high blood glucose, contact your healthcare professional immediately. Treat high blood glucose as recommended by your healthcare professional.

3.5 Unusual Blood Glucose Results

If your blood glucose result does not match the way you feel, follow these steps:

Troubleshooting Checks	Actions
1. Did you wash your hands?	Wash your hands with warm soapy water and dry thoroughly. Repeat the blood glucose test with a new test strip.
2. Have the test strips expired?	Discard the test strips if they are past the use by date. Repeat the blood glucose test with an unexpired test strip.
3. Has the cap on the test strip container always been closed tightly?	Replace the test strips if you think the test strip container was uncapped for some time. Repeat the blood glucose test.
4. Was the test strip used immediately after it was removed from the test strip container?	Repeat the blood glucose test with a new test strip.
5. Were the test strips stored in a cool, dry place?	Repeat the blood glucose test with a properly stored test strip.

Troubleshooting Checks	Actions
6. Did you follow the directions?	Read the **Performing a Blood Glucose Test** section in this chapter and repeat the blood glucose test. Contact Roche if you still have problems.
7. Are the meter and test strips working properly?	Perform a control test. See the **Performing a Control Test** section in the **Control Testing** chapter in this User's Manual.
8. Are you still unsure of the problem?	Contact Roche.

3.6 Symptoms of Low or High Blood Glucose

Being aware of the symptoms of low or high blood glucose can help you understand your test results and decide what to do if they seem unusual.

Symptoms of low blood glucose (hypoglycaemia) may include, but are not limited to: anxiety, shakiness, sweating, headache, increased hunger, dizziness, pale skin colour, sudden change in mood or irritability, fatigue, difficulty concentrating, clumsiness, palpitations and/or confusion.

Symptoms of high blood glucose (hyperglycaemia) may include, but are not limited to: increased thirst, frequent urination, blurred vision, drowsiness and/or unexplained weight loss.

⚠ WARNING

If you are experiencing any of these symptoms, test your blood glucose. If your blood glucose result is displayed as hypo, LO, hyper or HI, contact your healthcare professional immediately.

4 Control Testing

4.1 When to Perform a Control Test

Performing a control test lets you know the meter and test strips are working properly. You should perform a control test when:

- you open a new test strip box.
- you left the test strip container open.
- you think the test strips are damaged.
- you want to check the meter and test strips.
- the test strips were stored in extreme temperatures, humidity or both.
- you dropped the meter.
- your blood glucose result does not match how you feel.
- you want to check if you are performing the test correctly.

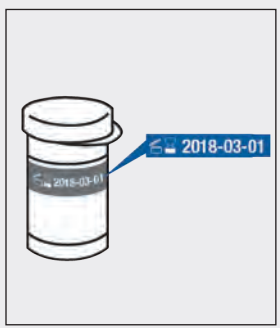
4.2 About the Control Solutions

- Use only Accu-Chek Aviva control solutions.
- Close the control solution bottle tightly after use.
- Write the date you opened the control solution bottle on the bottle label. The control solution is good for 3 months from that date or until the use by date on the bottle label, whichever comes first.
- Do not use control solution that is past the use by date.
- Refer to the control solution package insert for control solution storage conditions.
- The meter automatically recognises the Accu-Chek Aviva control solution.
- The control results are not displayed in memory.
- The control solution can stain fabric. Remove stains by washing with soap and water.

4.3 Performing a Control Test

You need the meter, a test strip, and control solution Level 1, Level 2 or both. The control level is printed on the bottle label.

1



Check the use by date on the test strip container. Do not use test strips past the use by date.

2

Insert the test strip into the meter in the direction of the arrow. The meter turns on.

NOTE

- Do not touch the control solution drop to the test strip until the Apply Drop screen is displayed.
- Be careful not to put any fluids into the test strip slot.
- If a test strip error occurs, remove and discard the test strip and repeat the test with a new test strip.
- Do not apply the control solution to the test strip before you insert it into the meter.
- When a test strip is in the meter the buttons and touchscreen selections are inactive, including the power button. The buttons become active when you remove the test strip or when the test is complete.
- Another way to start a control test is from the Main Menu. Select Meter > bG Test and insert a test strip into the meter.

An image of the test strip container is displayed for a few seconds. Continue to the next step.

3

The Apply Drop screen appears. The test strip is ready for testing.

4

Select the control solution to test. You will enter the level later in the test.

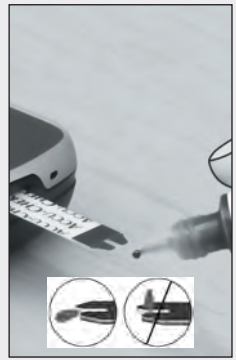
5

Put the meter on a flat surface, such as a table.

6

Remove the bottle cap. Wipe the tip of the bottle with a tissue.

7



Squeeze the bottle until a tiny drop forms at the tip. Touch the drop to the **front edge** of the yellow window of the test strip. Do not put control solution on top of the test strip.

The Analyzing screen appears when there is enough control solution in the test strip.

8

Wipe the tip of the bottle with a tissue. Cap the bottle tightly.

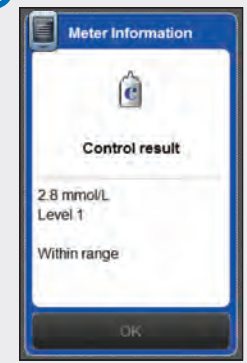
9

The control result appears on the display. Choose the control solution level and select Done.

NOTE

If you choose No Entry and select Done, the Control result screen shown in Step 10 is not displayed. Go to Step 11.

10



Within range means that the meter and test strips are working properly. Out of range, LO or HI means that the control result is outside of the acceptable range; see the **Out-of-Range Control Results** section in this chapter. Select OK.

11

Remove and discard the used test strip.

4.4 Out-of-Range Control Results

If the control result is out of range, check this list to help solve the problem:

Troubleshooting Checks	Actions
1. Are either the test strips or control solutions expired?	Discard the test strips or control solutions if either is past the use by date. If the control solution was opened more than 3 months ago, discard it. Repeat the control test with an unexpired test strip and an unexpired control solution.
2. Did you wipe the tip of the control solution bottle before use?	Wipe the tip of the bottle with a tissue. Repeat the control test with a new test strip and a fresh drop of control solution.
3. Were the caps on the test strip container and the control solution bottle always closed tightly?	Replace the test strips or control solutions if you think either was uncapped for some time. Repeat the control test.
4. Was the test strip used immediately after it was removed from the test strip container?	Repeat the control test with a new test strip and a fresh drop of control solution.

Troubleshooting Checks	Actions
5. Were the test strips and control solutions stored in a cool, dry place?	Repeat the control test with a properly stored test strip and control solution.
6. Did you follow the directions?	Read the **Control Testing** chapter and repeat the control test. Contact Roche if you still have problems.
7. Did you choose the correct control solution level, either 1 or 2, when you performed the control test?	If you chose the wrong control solution level, you can still compare the control result to the range printed on the test strip container.
8. Are you still unsure of the problem?	Contact Roche.

5 Bolus Advice

5.1 Overview

Important information regarding the use of bolus advice is presented in this **Overview** and the **Before Using Bolus Advice** section in this chapter.

- Bolus advice is intended exclusively for use by well-trained individuals who carry out their own insulin therapy with multiple daily injections (MDI) and who are using bolus and basal insulin separately. It is recommended you discuss your bolus advice settings with your healthcare professional prior to setting up this feature.
- Bolus advice is only available if it is set up in the initial meter startup (see the **Startup** chapter in this User's Manual) or through Settings on the Main Menu (see the **Setting Up Bolus Advice** section in the **Changing Bolus Advice Settings** chapter in this User's Manual).
- Definitions of the bolus advice settings are in the **Important Information** section in the **Startup** chapter in this User's Manual.
- After it is set up, bolus advice may be turned off. See the **Turning Off Bolus Advice** section in the **Changing Bolus Advice Settings** chapter in this User's Manual.
- Bolus advice calculates insulin doses for you based on many different pieces of information, such as:
  - The values you entered in the setup of bolus advice
  - Your current blood glucose result
  - The amount of carbohydrates you estimated for a meal
  - Your current health event status
  - Bolus and/or meal history

5.2 Before Using Bolus Advice

5.2.1 Intended Users

You need to understand certain information in order to use bolus advice. Working closely with your healthcare professional, you must be very familiar with your diabetes therapy. Bolus advice calculates recommended boluses for you. This can help you determine the amount of insulin you currently require. You provide the information on which the bolus advice recommendations are based.

Bolus advice is not able to judge your current situation independent of your own estimation. It cannot correct possible input errors. This is particularly true for the carbohydrate amount entered. Warnings are displayed for entries that exceed possible limits. You are prompted to check these entries and make corrections, if necessary. No warning message is displayed if the data is possible (within the acceptable ranges) but incorrect. Therefore, it is important to carefully review all of your entries.

⚠ WARNING

- Always compare the recommendation with how you actually feel and adjust the recommended bolus, if necessary.
- Always carry out the actions entered into bolus advice in a timely fashion. Eat the carbohydrate amount you entered and administer the insulin amount you confirmed.
- Do not use bolus advice with inhaled insulin. Bolus advice should be used only if you are using U100, rapid-acting injectable insulin.
- Do not use bolus advice with Neutral Protamine Hagedorn (NPH) insulin or any other intermediate-acting insulin.
- Do not use bolus advice if basal insulin dose is unstable.
- Long-acting insulin should not be used as a meal or correction bolus.

5.2.2 Information not taken into account when bolus advice is used

- It is possible that the values entered when setting up bolus advice do not match how you actually feel. In this case, you can increase or decrease the recommended bolus amount to your needs.
- Bolus amounts and meals that were consumed but not entered into the meter cannot be reflected in the calculation.
- If you delivered a bolus without using bolus advice, you can enter the bolus information into the electronic logbook. It is important that you enter bolus and carbohydrate information into the logbook in order to obtain accurate bolus advice recommendations. See the **The Logbook** section in the **My Data** chapter in this User's Manual.
- The basal insulin doses you record do not influence the bolus advice.

5.2.3 Warning messages

After performing a blood glucose test, warning messages about your blood glucose result may be displayed. Take careful note of these messages.

- If your blood glucose result is too low, you are prompted to eat a certain amount of fast-acting carbohydrates. A bolus will not be recommended in this situation. Treat your low blood glucose as recommended by your healthcare professional.
- If your blood glucose result is high and above the hyper warning limit, you are prompted to consider checking bG, ketones and insulin until your blood glucose is below the hyper warning limit.

- If your blood glucose result is outside the meter's measurement range, the meter displays a message of either LO or HI. No bolus advice will be recommended for a LO or HI result. Retest your blood glucose and contact your healthcare professional if you need more assistance.
- See the **Troubleshooting** chapter in this User's Manual for more information regarding blood glucose warning messages.

5.2.4 Summary

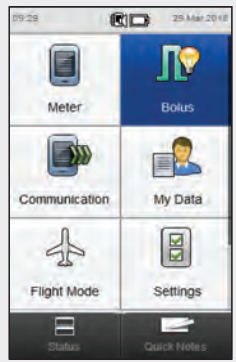
- It is recommended you set up bolus advice with your healthcare professional.
- Carefully check all of your entries.
- Make sure meals and boluses are recorded in the meter for accurate bolus advice recommendations.
- Take note of all warning messages, especially those regarding low or high blood glucose results. Immediate action may be necessary.
- Always compare the recommendation with how you actually feel and adjust the bolus, if necessary.
- Always carry out the actions entered in bolus advice in a timely fashion.

5.3 Delivering a Bolus Using Bolus Advice

1

Perform a blood glucose test. See the **Testing Your Blood Glucose** chapter in this User's Manual.

or

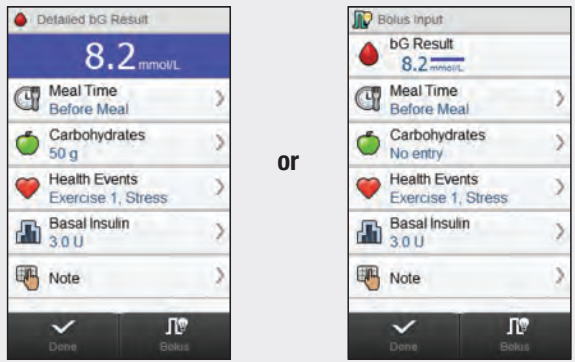


Select Bolus on the Main Menu.

NOTE

- Bolus advice is only available if it has been set up, which is indicated by this icon for the Bolus selection on the Main Menu and on other screens: . If bolus advice has not been set up or it has been turned off, this icon is displayed: . See the **Setting Up Bolus Advice** section in the **Changing Bolus Advice Settings** chapter in this User's Manual for instructions on how to set up bolus advice.
- Be patient when waiting for bolus advice results; the meter is processing numerous inputs.
- The confirmation steps are important for you to review the accuracy of the information you entered for bolus advice.
- Blood glucose is sometimes shortened to bG, but it means the same thing.

2



To add or adjust an entry, select it and refer to the instructions on the following pages. When the entries are complete, choose one of the following:

- Select Bolus to proceed with bolus advice (go to Step 3).
- Select Done to save the entries and not proceed with bolus advice.

NOTE

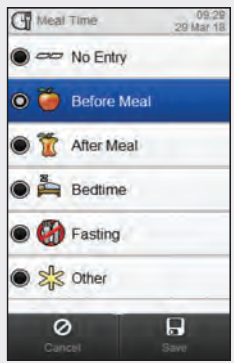
- The Detailed bG Result screen is displayed if a bG test was performed in Step 1. The Bolus Input screen is displayed if Bolus was selected on the Main Menu in Step 1.
- The bG Result, Carbohydrates and Health Events entries are used in the calculation of the bolus advice recommendation. All of the entries are saved as a record.
- On the Bolus Input screen, if the text bG Test is displayed instead of bG Result, there is no current blood glucose result that can be used for bolus advice. Continue with bolus advice with one of the following:
  - Perform a blood glucose test by selecting bG Test. See the **Testing Your Blood Glucose** chapter in this User's Manual. After testing your blood glucose, return to this step.
  - Do not perform a blood glucose test, but add entries as described in Step 2. If a Carbohydrates amount is entered and you proceed with selecting Bolus, a Carbohydrate Bolus is recommended. Proceed to Step 3.

NOTE

- The latest blood glucose result can only be used for bolus advice within 10 minutes after the test. At 2 minutes, a countdown timer appears on the top of the screen displaying the remaining time. Once the 10 minutes have elapsed, it is not possible to proceed with bolus advice and the Bolus selection on the screen is deactivated. When the countdown timer has elapsed, continue with one of the following:
  - Begin again with bolus advice: Remove all entries and select Done. Return to Step 1 in this chapter.
  - Do not use bolus advice, but save the record: Complete all entries and select Done.
- If the displayed blood glucose result is below your hypo warning limit (indicated by the Below hypo warning limit Warning after your blood glucose test), it is not possible to proceed to obtain a bolus advice recommendation. The Bolus selection on the Bolus Input screen is deactivated. Select Done.

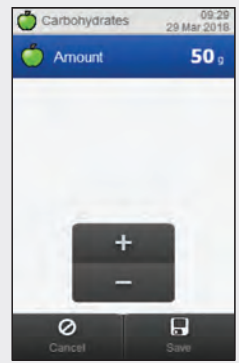
Screens for Adding or Adjusting Entries for Bolus Advice

Meal Time



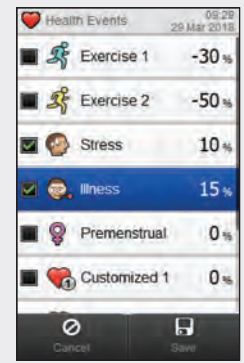
Choose an applicable meal time. Select Save.

Carbohydrates



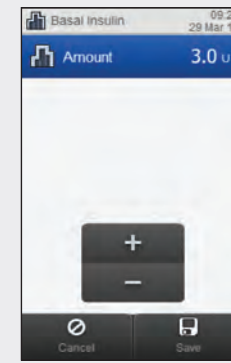
Set the amount of carbohydrates consumed. Select Save.

Health Events



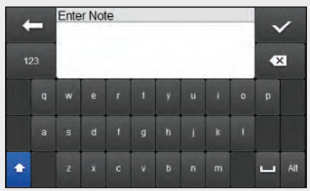
Choose up to four health events. Select Save.

Basal Insulin



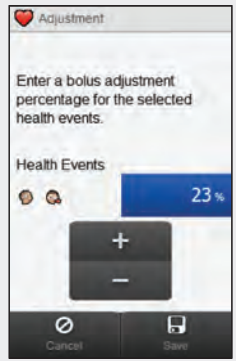
Set the basal insulin amount. Select Save.

Note



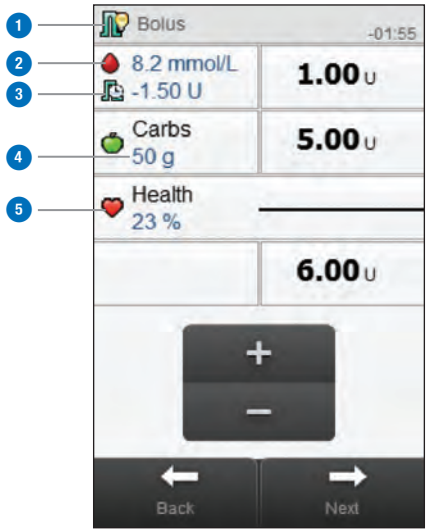
Type a note (up to 60 characters) to save with this record. Select ✓.

3

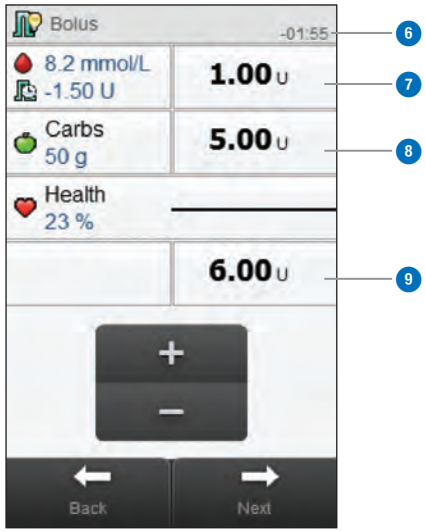


If multiple health events have been selected, this screen is displayed; otherwise proceed to the next step.

For multiple health events, this screen displays “--- %”. You must enter a summarised health event percentage for the selected health events, even if this percentage is zero. Select Save.

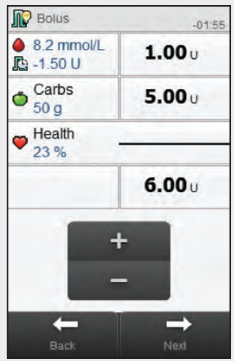


1	**Icon**	Indicates if bolus advice is enabled or disabled.
2	**bG Result**	Current bG result. No bG Test is displayed if 10 minutes or more have elapsed since the last blood glucose result was obtained.
3	**Active Insulin**	A calculated value representing the effective amount of insulin currently in the body that is working to lower blood glucose. This amount does not include any insulin that is working to account for carbohydrate intake. It also does not include basal insulin.
4	**Carbohydrate Amount**	No Entry is displayed if no amount is entered.
5	**Health Event Percentage**	Percentage based upon one to four chosen health events.



6	**Countdown Timer**	Only displayed if less than 2 minutes are remaining to use the bG Result for bolus advice.
7	**Correction Bolus**	Insulin to return an out-of-target blood glucose to a target value. The amount displayed has been adjusted by the Health Event Percentage.
8	**Carbohydrate Bolus**	Insulin to account for the food you eat. The amount displayed has been adjusted by the Health Event Percentage.
9	**Total Bolus**	Sum of items 7 and 8.

4

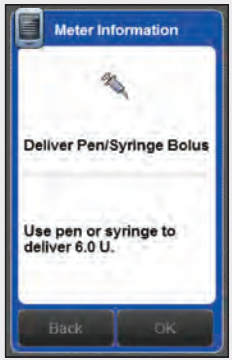


Review the bolus amounts. To adjust a bolus amount, select it and set the amount. Select Next to proceed with bolus delivery.

NOTE

- If a Carbohydrate Bolus is entered (callout 8) and no Carbohydrate Amount has been entered (Carbs displays No Entry), you should consider entering an amount for carbohydrates. Select Back to enter an amount. An amount is not required, but the more complete the data the more accurate any future bolus advice recommendations are when using bolus advice.
- If you adjust either the Correction Bolus or Carbohydrate Bolus first: The ability to edit the Total Bolus is disabled; however, the Total Bolus updates accordingly.
- If you adjust the Total Bolus first: The ability to edit the Correction Bolus and Carbohydrate Bolus is disabled.
  - If Total Bolus is increased: The Correction Bolus is increased accordingly.
  - If Total Bolus is decreased: The Carbohydrate Bolus is decreased accordingly; once the Carbohydrate Bolus becomes 0, then the Correction Bolus is decreased accordingly.

5



Review the bolus amount. Select Back to adjust or select OK to record the bolus.

Deliver the bolus using your pen or syringe.

6 Changing Bolus Advice Settings

6.1 Overview

You can make changes to bolus advice to adjust for your individual therapy requirements:

Bolus advice settings

- Set up bolus advice
- Health event percentages
- Advice options: meal rise, snack size, acting time and offset time
- Turn off bolus advice

Time blocks

- Start times, end times, target ranges, carbohydrate ratio and insulin sensitivity for time blocks
- Add or delete a time block
- Reset all time blocks

⚠ WARNING

It is **strongly recommended** that you discuss possible updates to your bolus advice settings with your healthcare professional prior to making changes.

NOTE

- When editing a setting, any unsaved changes are discarded if the meter turns off or if a test strip is inserted into the meter.
- If bolus advice is turned off, see the **Changing Meter Settings** chapter in this User's Manual to change the time blocks and other meter settings.

6.2 Setting Up Bolus Advice

⚠ WARNING

- The bolus advice feature should not be used if you are using an intermediate-acting insulin like Neutral Protamine Hagedorn (NPH) insulin or any other intermediate-acting insulin.
- It is **strongly recommended** that you discuss bolus advice with your healthcare professional prior to setting up bolus advice.

Bolus advice provides recommendations for the amount of insulin to be delivered for food intake and to correct blood glucose levels. Proceed with this section if you did not set up bolus advice when you completed the Setup Wizard (see the **Startup** chapter in this User's Manual) or if you have turned off bolus advice.

Review the following in this User's Manual:

- **Overview** section in the **Bolus Advice** chapter
- **Before Using Bolus Advice** section in the **Bolus Advice** chapter
- **Important Information** section in the **Startup** chapter

Before setting up bolus advice, have the following information available:

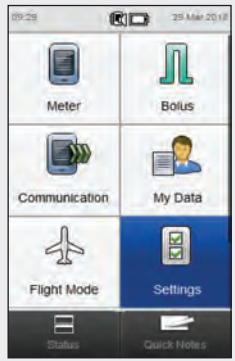
- The number of time blocks with start and end times
- The blood glucose target range, carbohydrate ratio and insulin sensitivity for each time block
- The percentage for each health event
- The meal rise, snack size, acting time and offset time

NOTE

After bolus advice is set up the settings can be changed, or bolus advice can be turned off. If bolus advice is turned off, the settings are discarded.

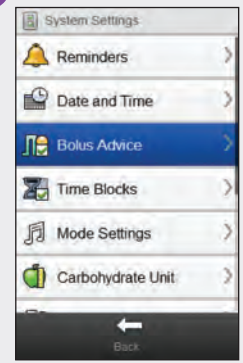
Main Menu > Settings > Bolus Advice

1



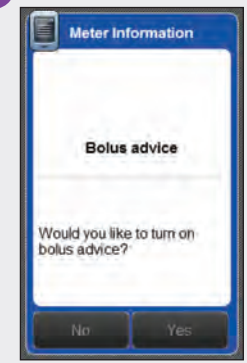
From the Main Menu, select Settings.

2



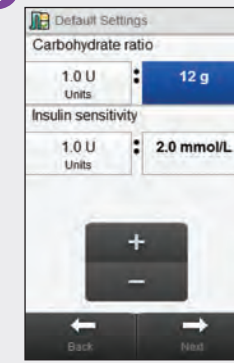
Select Bolus Advice.

3



Select Yes.

4



Set the default Carbohydrate ratio and Insulin sensitivity. Select Next.

5

Select OK.

6

Select a time block to edit and continue to Step 7, or if you do not need to make any changes, select Next and go to Step 11.

NOTE

- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- Changing the End time of the last time block does not change the Start time of the first time block, but it creates a new time block. See the **Bolus Advice: Adding a Time Block** section in this chapter.
- To change the Start time of the first time block, the time blocks must be reset. See the **Bolus Advice: Resetting All Time Blocks** section in this chapter.
- If the End time of a time block is decreased until it is the same as its Start time, the time block is deleted. See the **Bolus Advice: Deleting Time Blocks** section in this chapter.

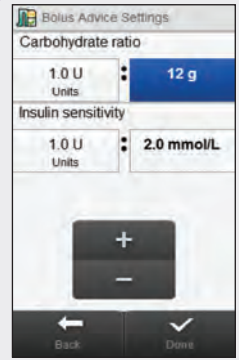
7

Set the End time. Select Next.

8

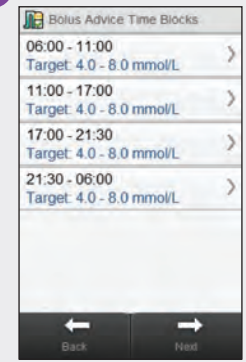
Set the Upper value and Lower value. Select Next.

9



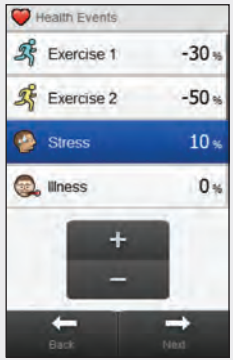
Set the Carbohydrate ratio and Insulin sensitivity. Select Done.

10



Edit any other time block (reference Step 6). Once all time blocks are complete, select Next and continue to Step 11.

11

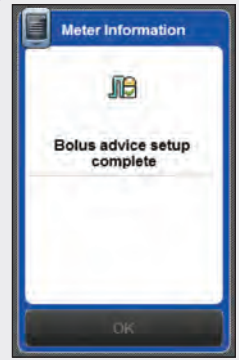


Set the percentages for health events. Scroll the screen to see more health events. Select Next.

12

Set the Meal rise, Snack size, Acting time and Offset time. Select Next.

13



Select OK.

6.3 Bolus Advice: Time Block Settings

This section is for changing the settings for individual time blocks if bolus advice has been set up. These time block settings include:

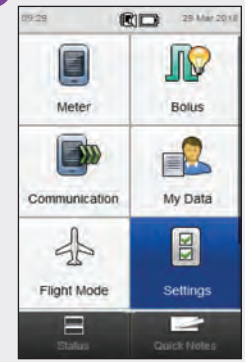
- Start time
- End time
- Target range
- Carbohydrate ratio
- Insulin sensitivity

WARNING

It is **strongly recommended** that you discuss possible updates to your bolus advice settings with your healthcare professional prior to making changes.

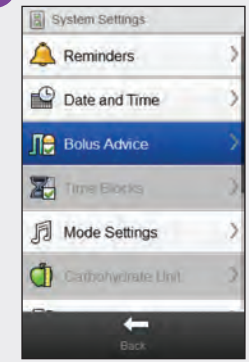
Main Menu > Settings > Bolus Advice > Time Blocks

1



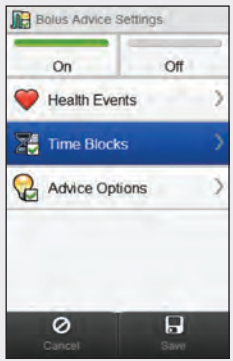
From the Main Menu, select Settings.

2



Select Bolus Advice.

3



Select Time Blocks.

4

Select a time block to edit.

NOTE

- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- Changing the End time of the last time block does not change the Start time of the first time block, but it creates a new time block. See the **Bolus Advice: Adding a Time Block** section in this chapter.
- To change the Start time of the first time block, the time blocks must be reset. See the **Bolus Advice: Resetting All Time Blocks** section in this chapter.
- If the End time of a time block is decreased until it is the same as its Start time, the time block is deleted. See the **Bolus Advice: Deleting Time Blocks** section in this chapter.

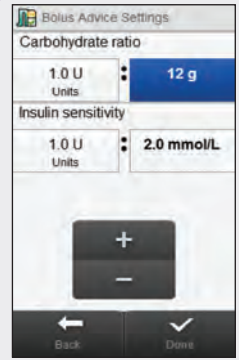
5

Set the End time. Select Next.

6

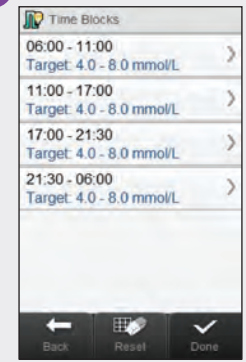
Set the Upper value and Lower value. Select Next.

7



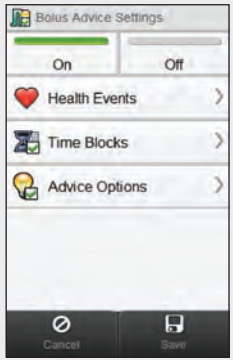
Set the Carbohydrate ratio and Insulin sensitivity. Select Done.

8



Edit any other time block (reference Step 4). Once all time blocks are complete, select Done and continue to Step 9.

9



Select Save.

6.4 Bolus Advice: Adding a Time Block

This section is for adding a time block if bolus advice has been set up.

Before adding a time block, have the following information available:

- The number of time blocks you need with the start and end times for each
- The blood glucose target range, carbohydrate ratio and insulin sensitivity for each time block

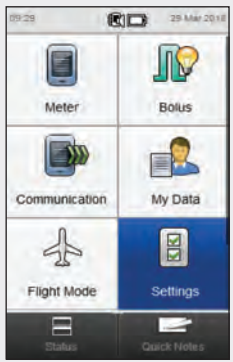
To add a time block, decrease the last time block's end time. After the time block is created, it may be necessary to change the end time and other information for each time block until all of the time blocks are set up the way you want them.

⚠ WARNING

It is **strongly recommended** that you discuss possible updates to your bolus advice settings with your healthcare professional prior to making changes.

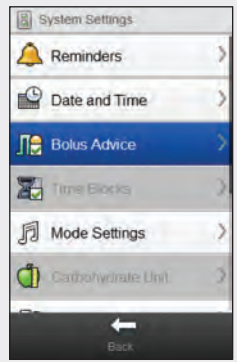
Main Menu > Settings > Bolus Advice > Time Blocks

1



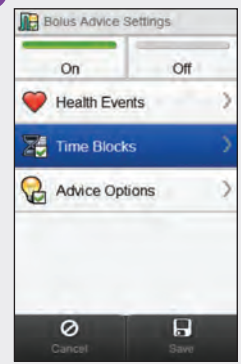
From the Main Menu, select Settings.

2



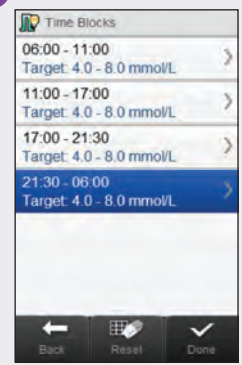
Select Bolus Advice.

3



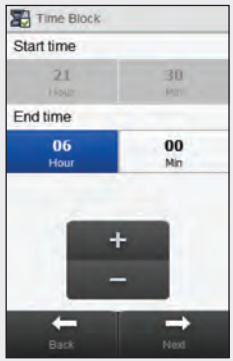
Select Time Blocks.

4



Select the **last** time block.

5

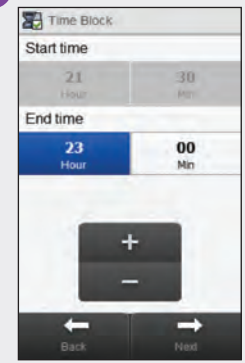


Decrease the End time.

NOTE

- Decrease the End time for the last time block by any amount in order to create a new time block. This creates a time block by splitting the last time block into two time blocks.
- Do not decrease the End time until it equals the Start time because the meter deletes the time block when you select Next.
- Once the new time block is created, you can change the End time for all appropriate time blocks.
- For this example, a time block is added with a Start time of 21:30 and an End time of 23:00.

6

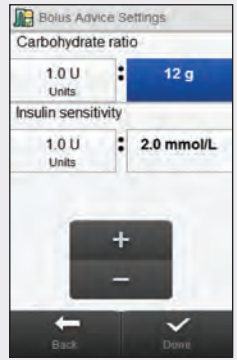


Select Next.

7

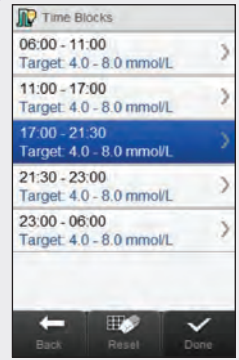
Set the Upper value and Lower value for the new time block. Select Next.

8



Set the Carbohydrate ratio and Insulin sensitivity for the new time block. Select Done.

9

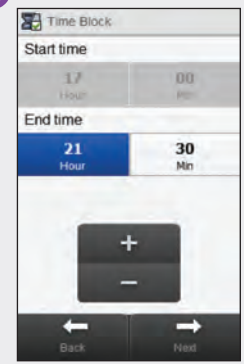


It may be necessary to change the end times and settings of other time blocks. Select a time block to edit and continue to Step 10, or if you do not need to make any changes, select Done and go to Step 14.

NOTE

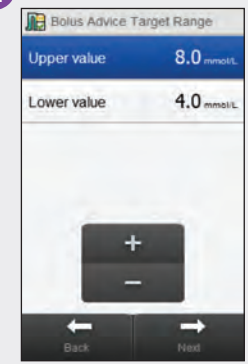
- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- To change the Start time of the first time block, the time blocks must be reset. See the **Bolus Advice: Resetting All Time Blocks** section in this chapter.
- If the End time of a time block is decreased until it is the same as its Start time, the time block is deleted. See the **Bolus Advice: Deleting Time Blocks** section in this chapter.

10



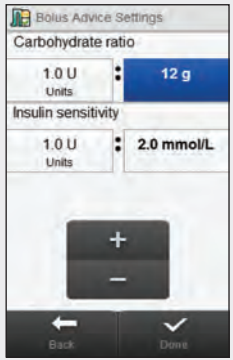
Set the End time. Select Next.

11



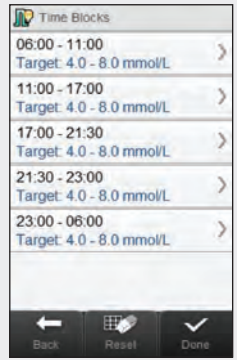
Set the Upper value and Lower value. Select Next.

12



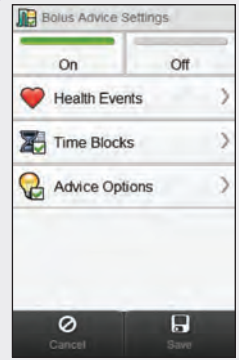
Set the Carbohydrate ratio and Insulin sensitivity. Select Done.

13



Edit any other time block (reference Step 9). Once all time blocks are complete, select Done and continue to Step 14.

14



Select Save.

6.5 Bolus Advice: Deleting Time Blocks

This section is for deleting time blocks if bolus advice has been set up. There are two different methods for deleting time blocks. The first method deletes one or more time blocks by combining time blocks. The alternative method deletes a single time block.

Before deleting time blocks, have the following information available:

- The number of time blocks you need with the start and end times for each
- The blood glucose target range, carbohydrate ratio and insulin sensitivity for each time block

After time blocks are deleted, it may be necessary to change the end times and other information for the remaining time blocks until all of the time blocks are set up the way you want them.

⚠ WARNING

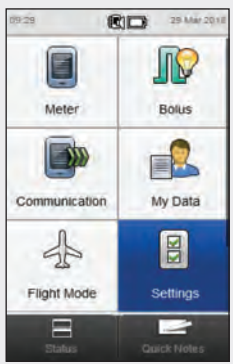
It is **strongly recommended** that you discuss possible updates to your bolus advice settings with your healthcare professional prior to making changes.

6.5.1 Bolus Advice: Deleting One or More Time Blocks

This method of deleting one or more time blocks is accomplished by combining time blocks.

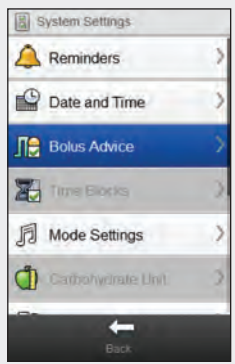
Main Menu > Settings > Bolus Advice > Time Blocks

1



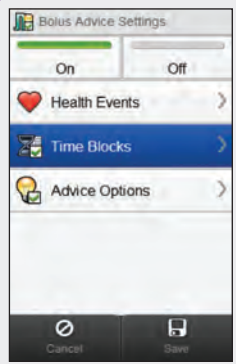
From the Main Menu, select Settings.

2



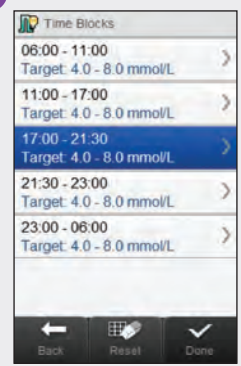
Select Bolus Advice.

3



Select Time Blocks.

4

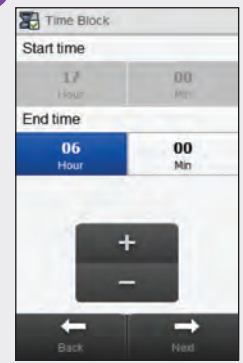


Select the first time block that is to be combined.

NOTE

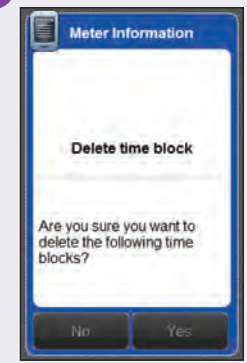
- For this example, the last three time blocks are combined into one time block.
- The target range, carbohydrate ratio and insulin sensitivity values in this first time block selected, are used in the resulting time block.

5



Increase the End time until it equals the End time of the last time block to be deleted. Select Next.

6



Select Yes.

7

It may be necessary to change the end times and other information for the remaining time blocks. Select a time block to edit and continue to Step 8, or if you do not need to make any changes, select Done and go to Step 12.

NOTE

- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- Changing the End time of the last time block does not change the Start time of the first time block, but it creates a new time block. See the **Bolus Advice: Adding a Time Block** section in this chapter.
- To change the Start time of the first time block, the time blocks must be reset. See the **Bolus Advice: Resetting All Time Blocks** section in this chapter.

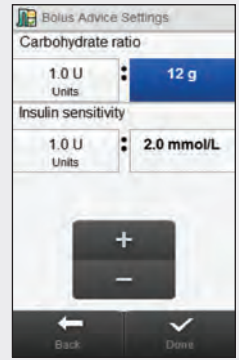
8

Set the End time. Select Next.

9

Set the Upper value and Lower value. Select Next.

10

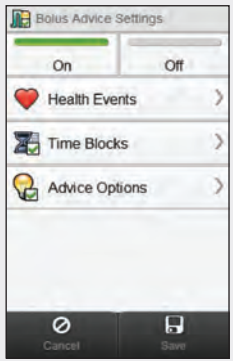


Set the Carbohydrate ratio and Insulin sensitivity. Select Done.

11

Edit any other time block (reference Step 7). Once all time blocks are complete, select Done and continue to Step 12.

12



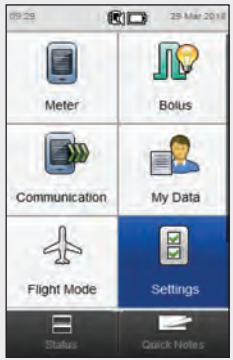
Select Save.

6.5.2 Bolus Advice: Deleting a Single Time Block

To delete a time block, decrease the time block's end time until it equals its start time.

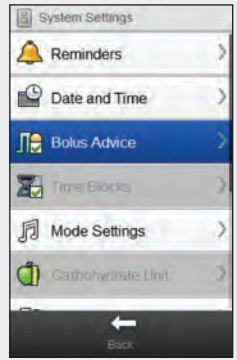
Main Menu > Settings > Bolus Advice > Time Blocks

1



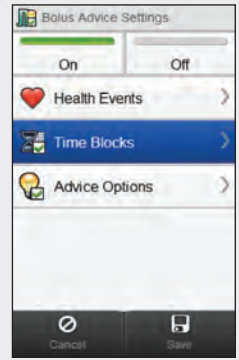
From the Main Menu, select Settings.

2



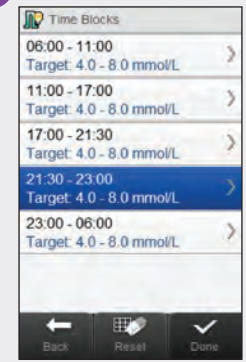
Select Bolus Advice.

3



Select Time Blocks.

4

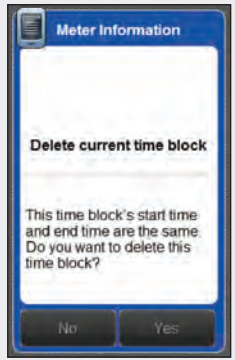


Select the time block to delete.

5

Decrease the End time until it equals the Start time. Select Next.

6



Select Yes.

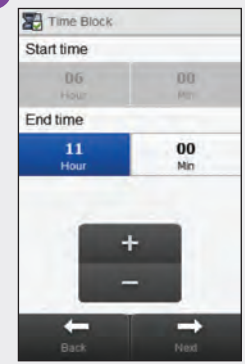
7

It may be necessary to change the end times and other information for the remaining time blocks. Select a time block to edit and continue to Step 8, or if you do not need to make any changes, select Done and go to Step 12.

NOTE

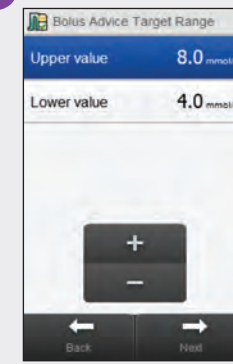
- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- Changing the End time of the last time block does not change the Start time of the first time block, but it creates a new time block. See the **Bolus Advice: Adding a Time Block** section in this chapter.
- To change the Start time of the first time block, the time blocks must be reset. See the **Bolus Advice: Resetting All Time Blocks** section in this chapter.

8



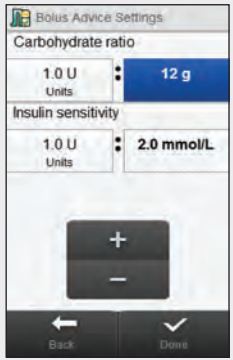
Set the End time. Select Next.

9



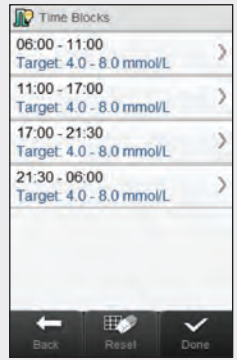
Set the Upper value and Lower value. Select Next.

10



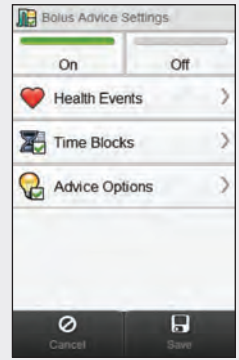
Set the Carbohydrate ratio and Insulin sensitivity. Select Done.

11



Edit any other time block (reference Step 7). Once all time blocks are complete, select Done and continue to Step 12.

12



Select Save.

6.6 Bolus Advice: Resetting All Time Blocks

This section is for resetting and re-entering the settings for **all** of the time blocks if bolus advice has been set up. One reason for resetting the time blocks is to change the start time of the first time block.

Before you reset the time blocks, have the following information available:

- The number of time blocks you need with start and end times for each
- The blood glucose target range, carbohydrate ratio and insulin sensitivity for each time block

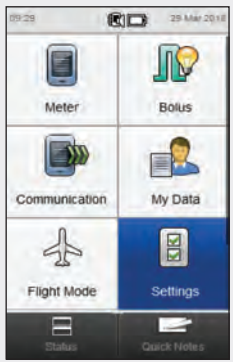
The health event percentages and the advice options (meal rise, snack size, acting time and offset time) are not reset.

⚠ WARNING

It is **strongly recommended** that you discuss possible updates to your bolus advice settings with your healthcare professional prior to making changes.

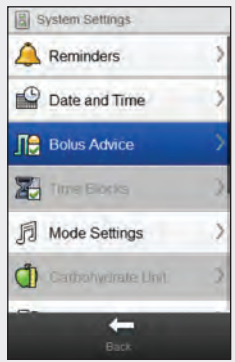
Main Menu > Settings > Bolus Advice > Time Blocks

1



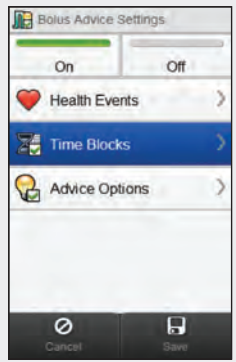
From the Main Menu, select Settings.

2



Select Bolus Advice.

3



Select Time Blocks.

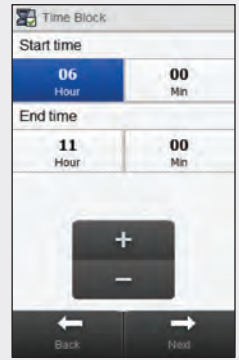
4

Select Reset.

5

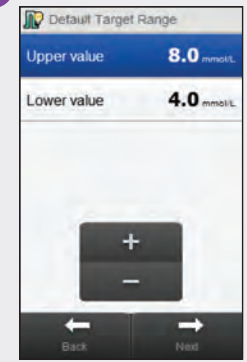
Select Yes.

6



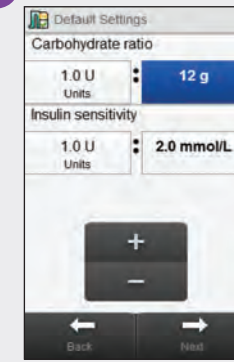
Set the Start time and End time for the first time block. Select Next.

7



Set the default Upper value and Lower value. Select Next.

8



Set the default Carbohydrate ratio and Insulin sensitivity. Select Next.

9

Select OK.

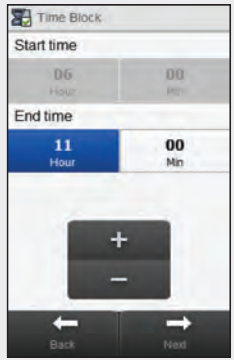
10

Select a time block to edit and continue to Step 11, or if you do not need to make any changes, select Done and go to Step 15.

NOTE

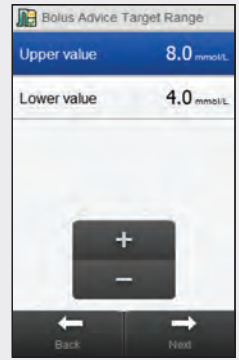
- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- Changing the End time of the last time block does not change the Start time of the first time block, but it creates a new time block. See the **Bolus Advice: Adding a Time Block** section in this chapter.
- If the End time of a time block is decreased until it is the same as its Start time, the time block is deleted. See the **Bolus Advice: Deleting Time Blocks** section in this chapter.

11



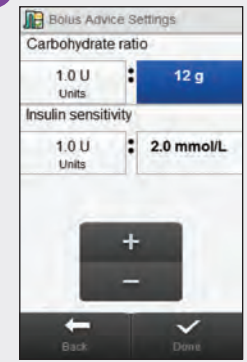
Set the End time. Select Next.

12



Set the Upper value and Lower value. Select Next.

13

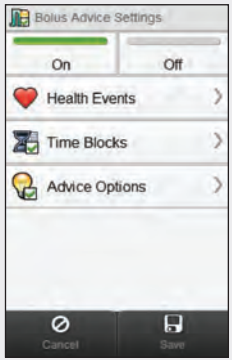


Set the Carbohydrate ratio and Insulin sensitivity. Select Done.

14

Edit any other time block (reference Step 10). Once all time blocks are complete, select Done and continue to Step 15.

15



Select Save.

6.7 Health Event Percentages

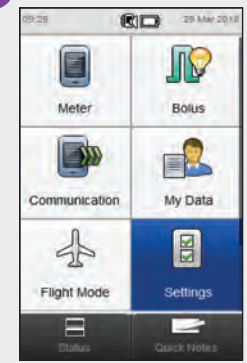
This section is for changing health event percentages if bolus advice has been set up.

WARNING

It is **strongly recommended** that you discuss possible updates to your bolus advice settings with your healthcare professional prior to making changes.

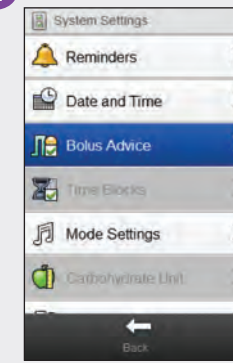
Main Menu > Settings > Bolus Advice > Health Events

1



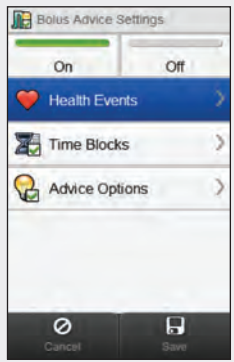
From the Main Menu, select Settings.

2



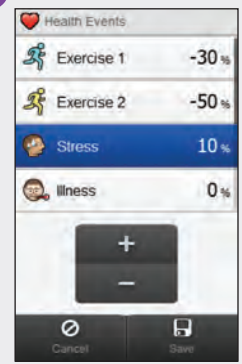
Select Bolus Advice.

3



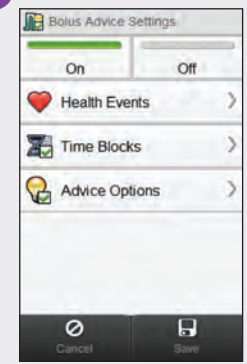
Select Health Events.

4



Set the percentages for health events. Scroll the screen to see more health events. Select Save.

5



Select Save.

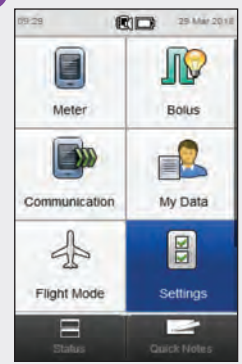
6.8 Advice Options: Meal Rise, Snack Size, Acting Time, Offset Time

This section is for changing the values for meal rise, snack size, acting time and offset time if bolus advice has been set up.

Main Menu > Settings > Bolus Advice > Advice Options

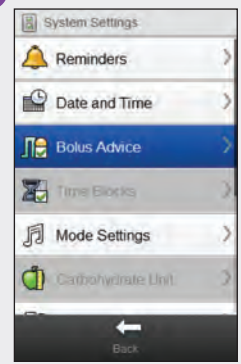
> **⚠ WARNING**
>
> It is **strongly recommended** that you discuss possible updates to your bolus advice settings with your healthcare professional prior to making changes.

1



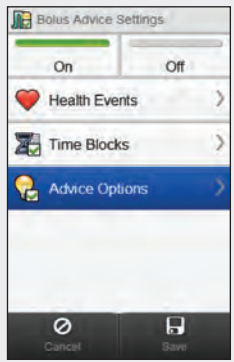
From the Main Menu, select Settings.

2



Select Bolus Advice.

3

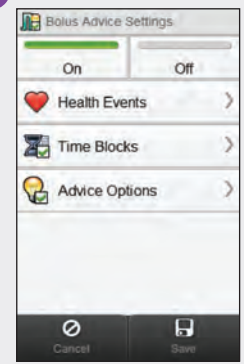


Select Advice Options.

4

Set the Meal rise, Snack size, Acting time and Offset time. Select Save.

5



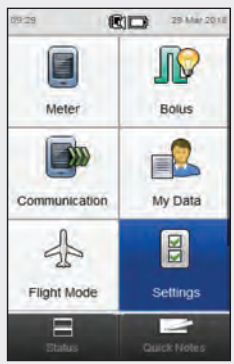
Select Save.

6.9 Turning Off Bolus Advice

Once turned off, bolus advice must be set up to be used again.

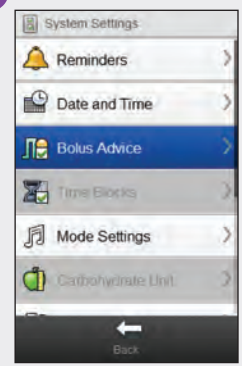
Main Menu > Settings > Bolus Advice > Bolus Advice Settings

1



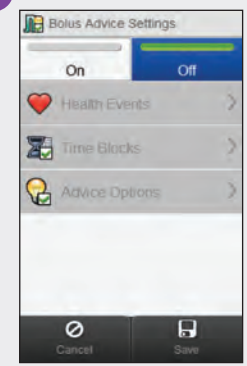
From the Main Menu, select Settings.

2



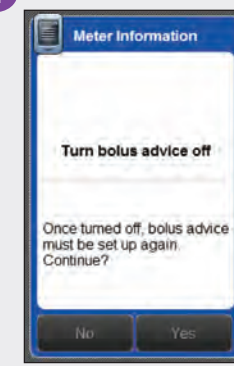
Select Bolus Advice.

3



Select Off. Select Save.

4



All bolus advice settings are deleted if you continue. Select Yes to turn off bolus advice.

7 Changing Meter Settings

7.1 Overview

You can make the following changes to the meter to adjust it to your individual therapy requirements and personal preferences. Consult with your healthcare professional to ensure the appropriate settings are selected.

Device settings

- Date and time
- Mode settings: sound, vibration and signal suspension
- Home screen default
- Touchscreen: tone and vibration
- Display brightness
- Background colour
- Language

Time blocks

- Start times, end times and target ranges for time blocks
- Add or delete a time block
- Reset all time blocks

Therapy settings

- Warning limits: Hyper and Hypo
- Insulin increment
- Max bolus amount
- Carbohydrate unit

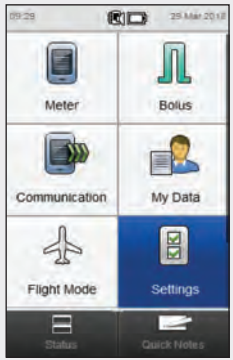
NOTE

- When editing a setting, any unsaved changes are discarded if the meter turns off or if a test strip is inserted into the meter.
- If bolus advice is turned on, see the **Changing Bolus Advice Settings** chapter in this User's Manual to change the time blocks, health events and advice options (meal rise, snack size, acting time and offset time).

7.2 Date, Time and Time Format

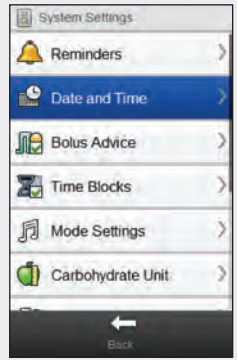
Main Menu > Settings > Date and Time

1



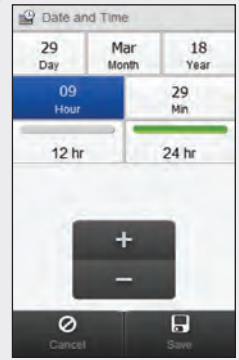
From the Main Menu, select Settings.

2



Select Date and Time.

3



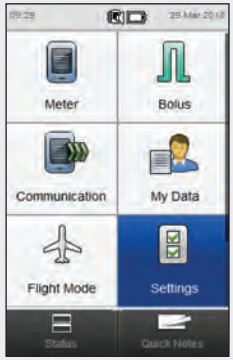
Date and Time: Select and set the appropriate fields. **Time Format:** Choose 12 hr or 24 hr. Select Save.

7.3 Mode Settings: Sound, Vibration

You can choose whether you want the meter to sound, vibrate, or do both at the same time as an event occurs (such as a Warning). You can adjust the sound volume.

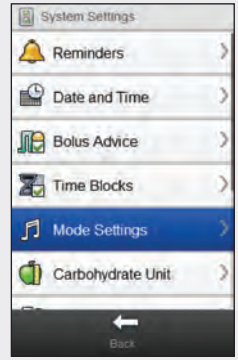
Main Menu > Settings > Mode Settings

1



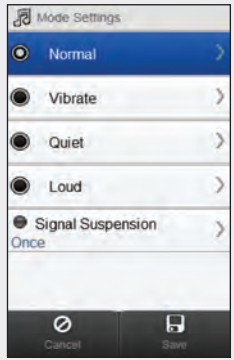
From the Main Menu, select Settings.

2



Select Mode Settings.

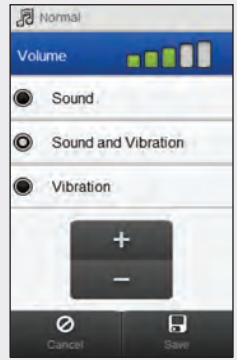
3



To Activate a Mode:
Press the radio button to the left of the mode's name. Go to Step 4.

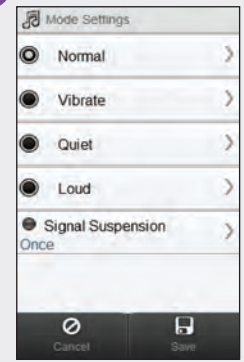
To Change a Mode's Setting:
Press the mode's name. Pressing on a mode's name does NOT activate the mode. Go to Step 4.

4



Choose the desired mode setting. Set the volume, if applicable. Select Save.

5



The radio button with the gray dot indicates the mode that is activated. Select Save.

7.4 Mode Settings: Signal Suspension

You can suspend the signals for Warnings for a specified period of time. However, since Error and Maintenance messages require your immediate attention, you cannot suspend these event signals. Also, the Reminders you programmed will not be suspended.

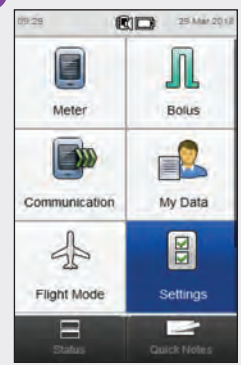
A signal suspension can be set to occur once or it can be set to repeat at the same time every day.

NOTE

Warnings that occur during the signal suspension period are displayed when the meter turns on, or when the signal suspension period ends.

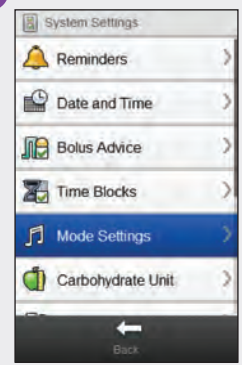
Main Menu > Settings > Mode Settings > Signal Suspension

1



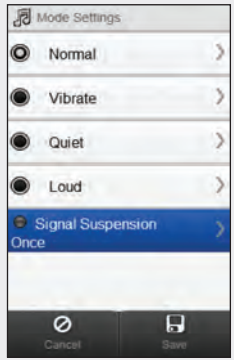
From the Main Menu, select Settings.

2



Select Mode Settings.

3



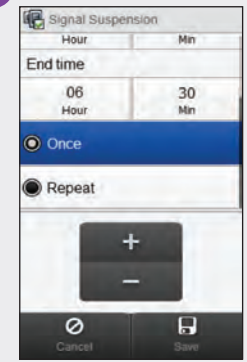
Select Signal Suspension.

4

Select On: Set the Start time and End time. Continue to Step 5.

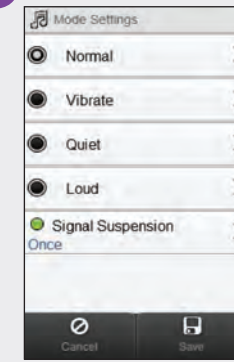
Select Off: Select Save. Go to Step 6.

5



If On is selected, scroll the screen and choose either Once or Repeat. Select Save.

6



Select Save.

7.5 Home Screen Default

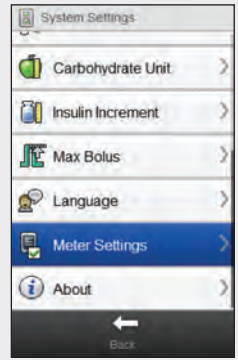
The Home screen is the screen displayed when the meter is powered on or after you complete a meter function, like changing a setting. You can choose either the Main Menu or Status screen to be the Home screen.

Main Menu > Settings > Meter Settings > Home Screen

1

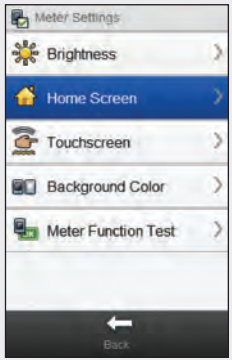
From the Main Menu, select Settings.

2



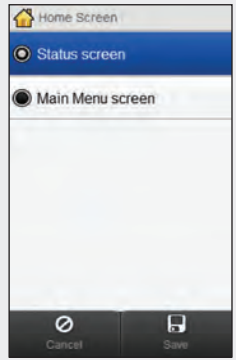
Scroll the screen and select Meter Settings.

3



Select Home Screen.

4



Choose a screen. Select Save.

7.6 Touchscreen: Tone, Vibration

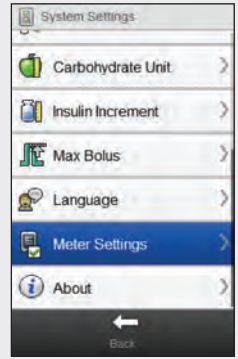
You can choose whether you want the meter to emit a tone, vibrate, do both at the same time or do neither when you make a selection on the touchscreen.

Main Menu > Settings > Meter Settings > Touchscreen

1

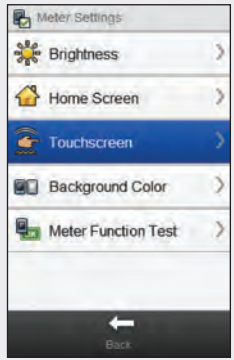
From the Main Menu, select Settings.

2



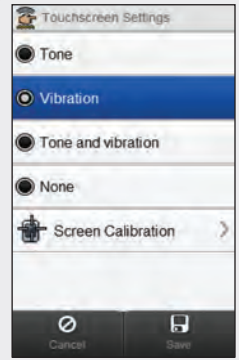
Scroll the screen and select Meter Settings.

3



Select Touchscreen.

4



Choose the desired touchscreen setting. Select Save.

7.7 Brightness

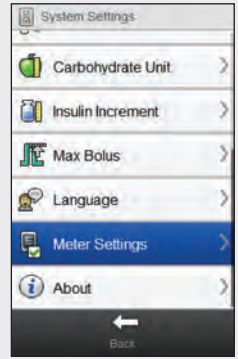
You can adjust the brightness level of the meter display for different lighting conditions.

Main Menu > Settings > Meter Settings > Brightness

1

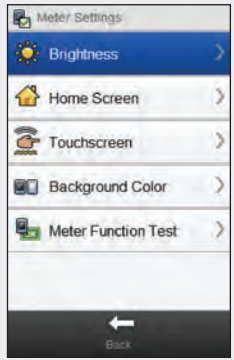
From the Main Menu, select Settings.

2



Scroll the screen and select Meter Settings.

3



Select Brightness.

4

Set the brightness level.
Select Save.

7.8 Background Colour

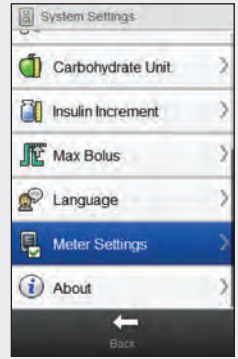
You can choose the background colour of the meter display to be either dark or light.

Main Menu > Settings > Meter Settings > Background Color

1

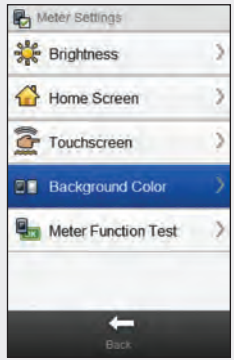
From the Main Menu, select Settings.

2



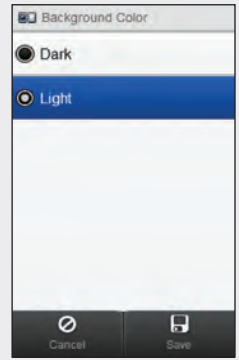
Scroll the screen and select Meter Settings.

3



Select Background Color.

4



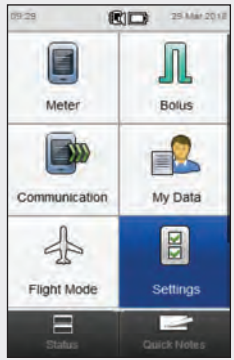
Choose the desired background colour. Select Save.

7.9 Language

You can select a language for the screen text from a predefined list.

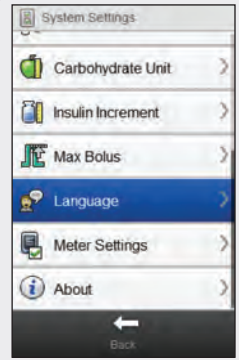
Main Menu > Settings > Language

1



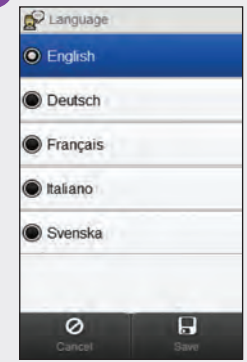
From the Main Menu, select Settings.

2



Scroll the screen and select Language.

3



Choose the desired language. Select Save.

7.10 Time Block Settings

This section is for changing the settings for individual time blocks when bolus advice is turned off. These time block settings include:

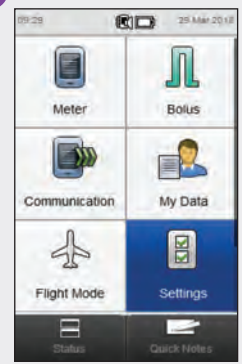
- Start time
- End time
- Target range

NOTE

It is recommended that you discuss possible updates to your time block settings with your healthcare professional prior to making changes.

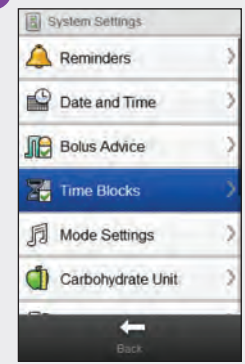
Main Menu > Settings > Time Blocks

1



From the Main Menu, select Settings.

2



Select Time Blocks.

NOTE

Time Blocks cannot be selected if it is shaded. The shading means bolus advice is turned on. If Time Blocks is shaded, go to the **Bolus Advice: Time Block Settings** section in the **Changing Bolus Advice Settings** chapter in this User's Manual.

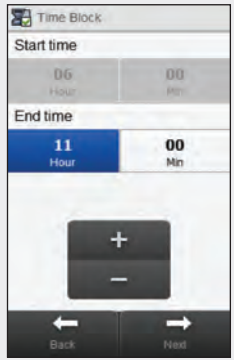
3

Select a time block to edit.

NOTE

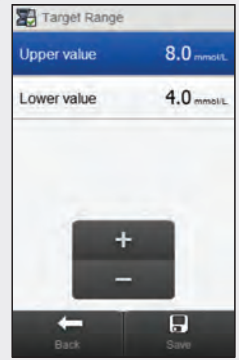
- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- Changing the End time of the last time block does not change the Start time of the first time block, but it creates a new time block. See the **Adding a Time Block** section in this chapter.
- To change the Start time of the first time block, the time blocks must be reset. See the **Resetting All Time Blocks** section in this chapter.
- If the End time of a time block is decreased until it is the same as its Start time, the time block is deleted. See the **Deleting Time Blocks** section in this chapter.

4



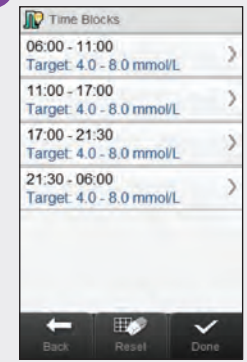
Set the End time. Select Next.

5



Set the Upper value and Lower value. Select Save.

6



Edit any other time block (reference Step 3). Once all time blocks are complete, select Done.

7.11 Adding a Time Block

This section is for adding a time block if bolus advice is turned off.

Before adding a time block, have the following information available:

- The number of time blocks you need with the start and end times for each
- The blood glucose target range for each time block

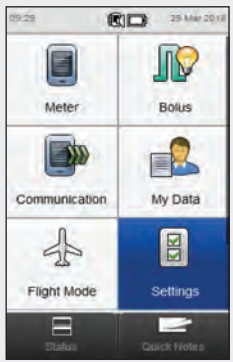
To add a time block, decrease the last time block's end time. After the time block is created, it may be necessary to change the start time, end time and other information for each time block until all of the time blocks are set up the way you want them.

NOTE

It is recommended that you discuss possible updates to your time block settings with your healthcare professional prior to making changes.

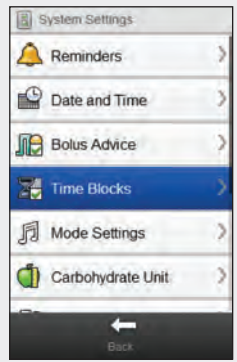
Main Menu > Settings > Time Blocks

1



From the Main Menu, select Settings.

2

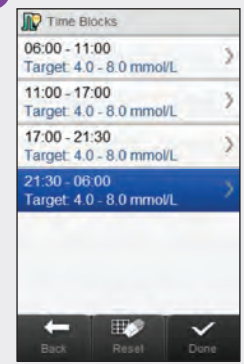


Select Time Blocks.

NOTE

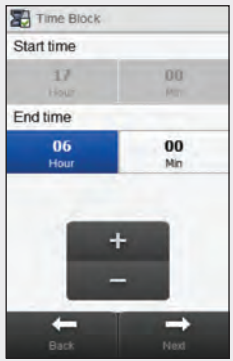
Time Blocks cannot be selected if it is shaded. The shading means bolus advice is turned on. If Time Blocks is shaded, go to the **Bolus Advice: Adding a Time Block** section in the **Changing Bolus Advice Settings** chapter in this User's Manual.

3



Select the **last** time block.

4

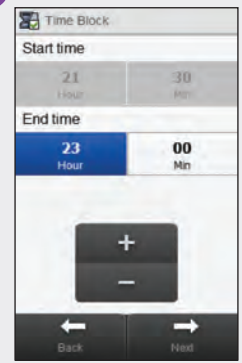


Decrease the End time.

NOTE

- Decrease the End time for the last time block by any amount in order to create a new time block. This creates a time block by splitting the last time block into two time blocks.
- Do not decrease the End time until it equals the Start time because the meter deletes the time block when you select Next.
- Once the new time block is created, you can change the Start time and End time for all appropriate time blocks.
- For this example, a time block is added with a Start time of 21:30 and an End time of 23:00.

5

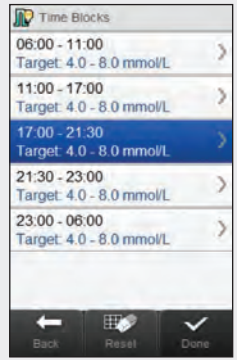


Select Next.

6

Set the Upper value and Lower value for the new time block. Select Save.

7

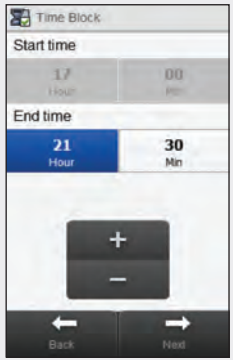


It may be necessary to change the start times, end times and settings of other time blocks. Select a time block to edit and continue to Step 8. If you do not need to make any changes, select Done and the addition of the time block is complete.

NOTE

- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- To change the Start time of the first time block, the time blocks must be reset. See the **Resetting All Time Blocks** section in this chapter.
- If the End time of a time block is decreased until it is the same as its Start time, the time block is deleted. See the **Deleting Time Blocks** section in this chapter.

8

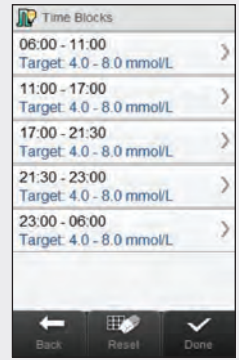


Set the End time. Select Next.

9

Set the Upper value and Lower value. Select Save.

10



Edit any other time block (reference Step 7). Once all time blocks are complete, select Done.

7.12 Deleting Time Blocks

This section is for deleting time blocks if bolus advice is turned off. There are two different methods for deleting time blocks. The first method deletes one or more time blocks by combining time blocks. The alternative method deletes a single time block.

Before deleting time blocks, have the following information available:

- The number of time blocks you need with the start and end times for each
- The blood glucose target range for each time block

After time blocks are deleted, it may be necessary to change the start times, end times and other information for the remaining time blocks until all of the time blocks are set up the way you want them.

NOTE

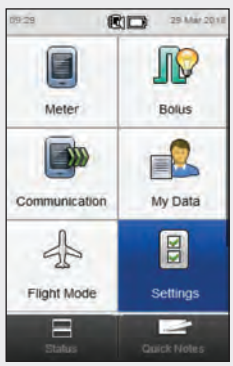
It is recommended that you discuss possible updates to your time block settings with your healthcare professional prior to making changes.

7.12.1 Deleting One or More Time Blocks

This method of deleting one or more time blocks is accomplished by combining time blocks.

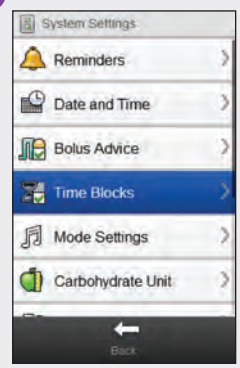
Main Menu > Settings > Time Blocks

1



From the Main Menu, select Settings.

2

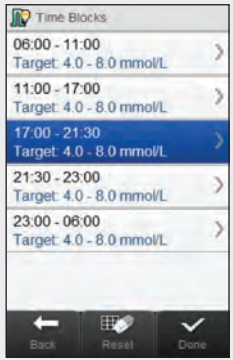


Select Time Blocks.

NOTE

Time Blocks cannot be selected if it is shaded. The shading means bolus advice is turned on. If Time Blocks is shaded, go to the **Bolus Advice: Deleting Time Blocks** section in the **Changing Bolus Advice Settings** chapter in this User's Manual.

3

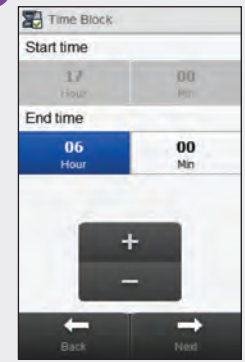


Select the first time block that is to be combined.

NOTE

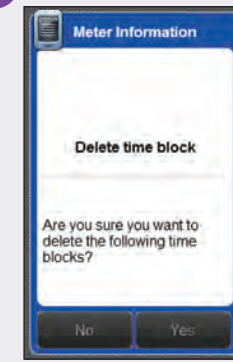
- For this example, the last three time blocks are combined into one time block.
- The target range values in this first time block selected are used in the resulting time block.

4



Increase the End time until it equals the End time of the last time block to be deleted. Select Next.

5



Select Yes.

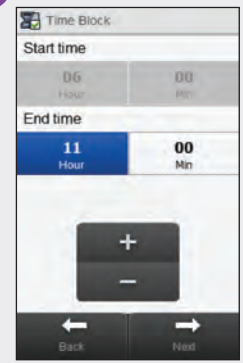
6

It may be necessary to change the start times, end times and other information for the remaining time blocks. Select a time block to edit and continue to Step 7. If you do not need to make any changes, select Done.

NOTE

- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- Changing the End time of the last time block does not change the Start time of the first time block, but it creates a new time block. See the **Adding a Time Block** section in this chapter.
- To change the Start time of the first time block, the time blocks must be reset. See the **Resetting All Time Blocks** section in this chapter.

7



Set the End time. Select Next.

8

Set the Upper value and Lower value. Select Save.

9

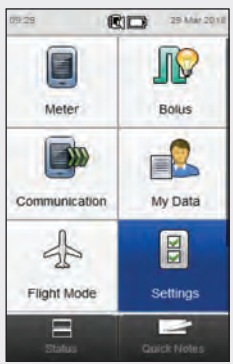
Edit any other time block (reference Step 6). Once all time blocks are complete, select Done.

7.12.2 Deleting a Single Time Block

To delete a time block, decrease the time block's end time until it equals its start time.

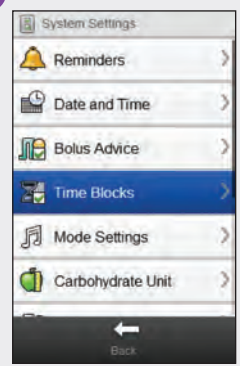
Main Menu > Settings > Time Blocks

1



From the Main Menu, select Settings.

2

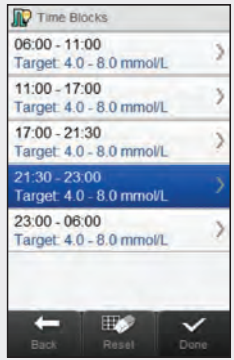


Select Time Blocks.

NOTE

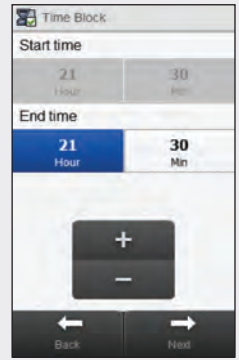
Time Blocks cannot be selected if it is shaded. The shading means bolus advice is turned on. If Time Blocks is shaded, go to the **Bolus Advice: Deleting Time Blocks** section in the **Changing Bolus Advice Settings** chapter in this User's Manual.

3



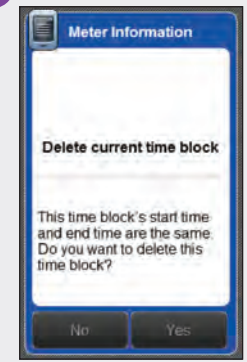
Select the time block to delete.

4



Decrease the End time until it equals the Start time. Select Next.

5



Select Yes.

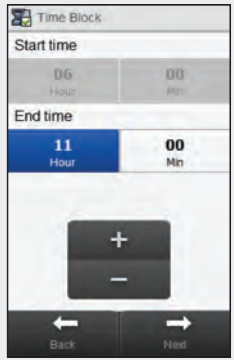
6

It may be necessary to change the start times, end times and other information for the remaining time blocks. Select a time block to edit and continue to Step 7. If you do not need to make any changes, select Done.

NOTE

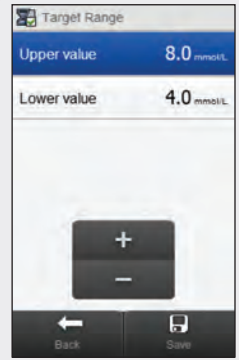
- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- Changing the End time of the last time block does not change the Start time of the first time block, but it creates a new time block. See the **Adding a Time Block** section in this chapter.
- To change the Start time of the first time block, the time blocks must be reset. See the **Resetting All Time Blocks** section in this chapter.

7



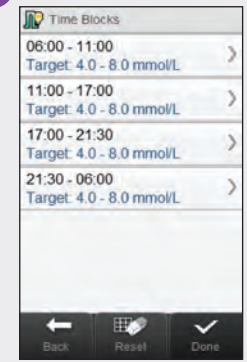
Set the End time. Select Next.

8



Set the Upper value and Lower value. Select Save.

9



Edit any other time block (reference Step 6). Once all time blocks are complete, select Done.

7.13 Resetting All Time Blocks

This section is for resetting and re-entering the settings for **all** of the time blocks if bolus advice is turned off. One reason for resetting the time blocks is to change the start time of the first time block.

Before you reset the time blocks, have the following information available:

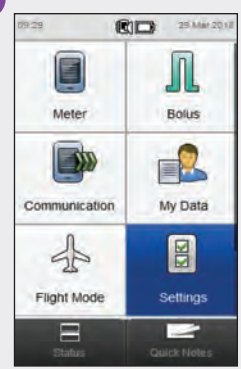
- The number of time blocks you need with the start and end times for each
- The blood glucose target range for each time block

NOTE

It is recommended that you discuss possible updates to your time block settings with your healthcare professional prior to making changes.

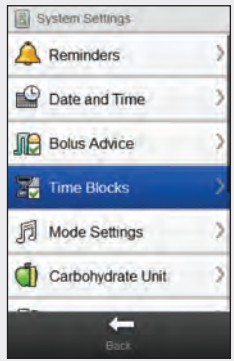
Main Menu > Settings > Time Blocks

1



From the Main Menu, select Settings.

2

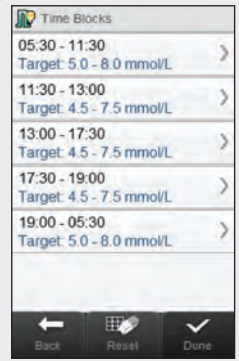


Select Time Blocks.

NOTE

Time Blocks cannot be selected if it is shaded. The shading means bolus advice is turned on. If Time Blocks is shaded, go to the **Bolus Advice: Resetting All Time Blocks** section in the **Changing Bolus Advice Settings** chapter in this User's Manual.

3

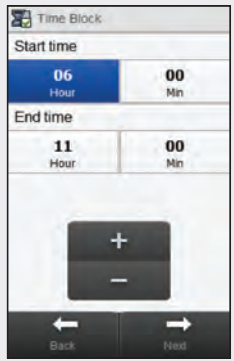


Select Reset.

4

Select Yes.

5

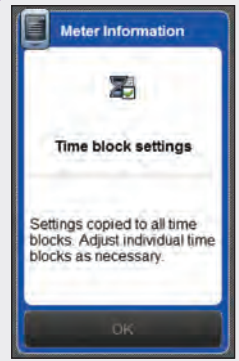


Set the Start time and End time for the first time block. Select Next.

6

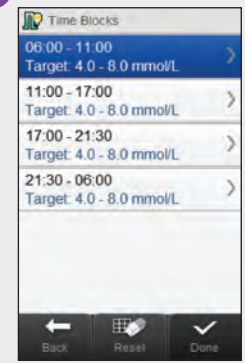
Set the default Upper value and Lower value. Select Next.

7



Select OK.

8



Select a time block to edit and continue to Step 9. If you do not need to make any changes, select Done and the resetting of the time blocks is complete.

NOTE

- The End time of a time block is the same as the Start time of its following time block. Only an End time can be changed, which changes the Start time of the following time block.
- Changing the End time of the last time block does not change the Start time of the first time block, but it creates a new time block. See the **Adding a Time Block** section in this chapter.
- If the End time of a time block is decreased until it is the same as its Start time, the time block is deleted. See the **Deleting Time Blocks** section in this chapter.

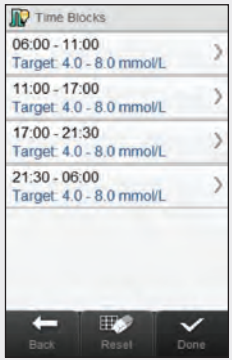
9

Set the End time. Select Next.

10

Set the Upper value and Lower value. Select Save.

11



Edit any other time block (reference Step 8). Once all time blocks are complete, select Done.

7.14 Warning Limits: Hypo, Hyper

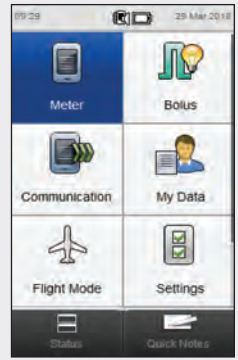
You can set blood glucose warning limits for hypoglycaemia (hypo) or hyperglycaemia (hyper) conditions. The meter displays the appropriate warning if your blood glucose result is below the hypo warning limit or above the hyper warning limit.

⚠ WARNING

Consult with your healthcare professional before changing your hypo and hyper warning limits.

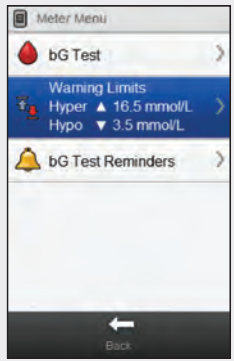
Main Menu > Meter > Warning Limits

1



Select Meter on either the Main Menu or Status screen.

2



Select Warning Limits.

3

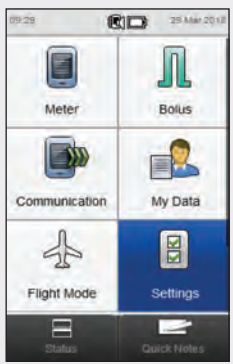
Set the Hyper limit and the Hypo limit. Select Save.

7.15 Insulin Increment

Insulin increment is the amount by which your insulin dose is adjusted when programming a bolus or when entering a manual logbook entry. The insulin increment can be set to either 0.5 or 1 U.

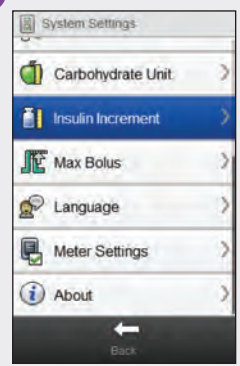
Main Menu > Settings > Insulin Increment

1



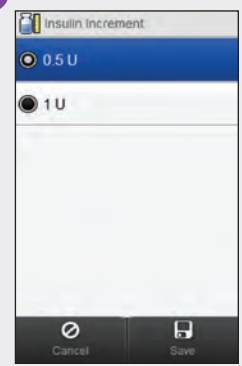
From the Main Menu, select Settings.

2



Scroll the screen and select Insulin Increment.

3



Choose the desired Insulin Increment. Select Save.

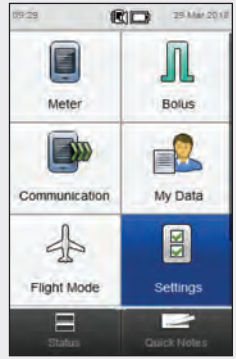
7.16 Max Bolus Amount

Max bolus serves as a safety measure against unintended large boluses. It is a meter setting that specifies a maximum amount of insulin that can be delivered in any single bolus. A bolus that is larger than the max bolus amount requires an additional confirmation. The max bolus can be set between 0 and 50 U in increments of 1 U or 0.5 U (per the insulin increment value).

> **⚠ WARNING**
>
> Consult with your healthcare professional before changing your max bolus amount.

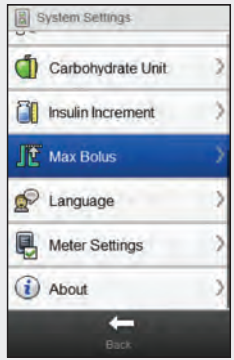
Main Menu > Settings > Max Bolus

1



From the Main Menu, select Settings.

2



Scroll the screen and select Max Bolus.

3

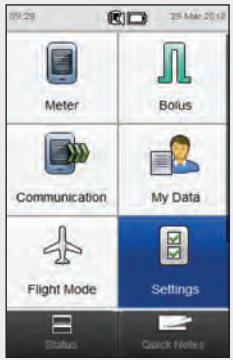
Set the Max Bolus amount. Select Save.

7.17 Carbohydrate Unit

You have a choice of different carbohydrate units (Grams, BE, KE or CC).

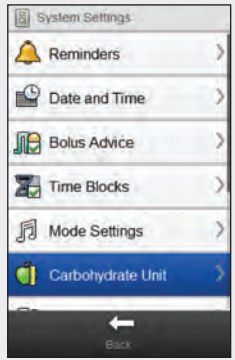
Main Menu > Settings > Carbohydrate Unit

1



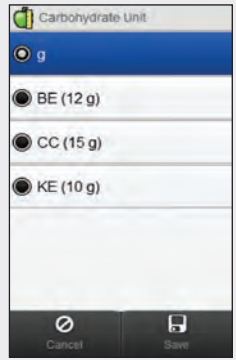
From the Main Menu, select Settings.

2



Select Carbohydrate Unit.

3



Choose the desired Carbohydrate Unit. Select Save.

NOTE

The gram equivalents for KE, BE and CC can be changed using the Accu-Chek 360° configuration software. The default gram equivalents are shown on the screen in Step 3.

8 Meter Reminders

8.1 Overview

⚠ WARNING

The meter will not display reminders while it is connected and communicating to a Continua Certified® manager.

NOTE

Blood glucose is sometimes shortened to bG, but it means the same thing.

bG Test Reminders: After Meal, After Low bG, After High bG

- After Meal reminds you to test after you mark a blood glucose result as Before Meal.
- After Low bG reminds you to test after your blood glucose result is less than the low blood glucose threshold setting.
- After High bG reminds you to test after your blood glucose result is greater than the high blood glucose threshold setting.
- At the scheduled time, the meter turns on and displays the reminder (if a test strip has not been inserted). However, if the meter is already on when the reminder is scheduled and no blood glucose test was performed, the reminder is displayed when the meter powers down.
- When you perform a blood glucose test, the meter dismisses any blood glucose test reminders which are pending within the next 30 minutes. If necessary, a new reminder is scheduled based upon the blood glucose result.
- After Meal Reminder and After Low bG Test Reminder: Select Snooze to reschedule the reminder in 5 minutes, or select Dismiss to end the reminder.
- After High bG Test Reminders: Select Snooze to reschedule the reminder in 15 minutes, or select Dismiss to end the reminder.

Date Reminders: Dr. Visit, Lab Test, Customized

Date reminders are a helpful way to remind you of an upcoming Dr. visit or lab test. In addition, you can set up a customised date reminder.

- These reminders are displayed when you turn the meter on and a test strip has not been inserted.
- Select Snooze to reschedule the reminder in 15 minutes, or select Dismiss to end the reminder.

Alarm Clock Reminders: bG Test, Other, Basal Injection

Alarm clock reminders are a helpful way to remind you to test your blood glucose, or for any other daily appointment.

- At the scheduled time, the meter turns on and displays the reminder (if a test strip has not been inserted). However, if the meter is already on when the reminder is scheduled and no blood glucose test was performed for an Alarm Clock bG Test Reminder, the reminder is displayed when the meter powers down.
- When you perform a blood glucose test, the meter dismisses Alarm Clock bG Test reminders which are pending within the next 30 minutes.
- You can set up to eight alarm clock reminders.
- Select Snooze to reschedule the reminder in 15 minutes, or select Dismiss to end the reminder.

Medication Reminders

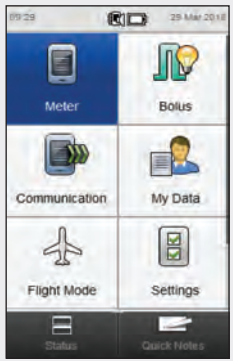
A medication reminder can be used to let you know when it is time to take a medication. A medication reminder can be set to occur one time or every day at the same time.

- You can set up to five medication reminders.
- You can give each medication reminder a unique name.
- Select Snooze to reschedule the reminder for 15 minutes, or select Dismiss to end the reminder.

8.2 Blood Glucose Test Reminder: After Meal

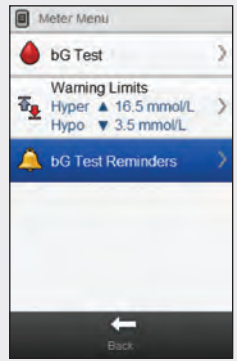
Main Menu > Meter > bG Test Reminders > After Meal

1



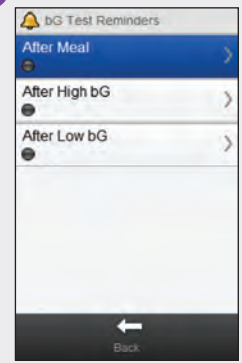
Select Meter on either the Main Menu or Status screen.

2



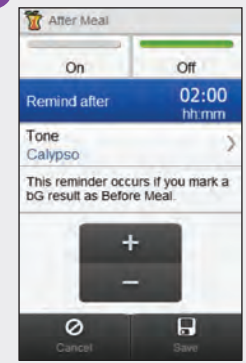
Select bG Test Reminders.

3



Select After Meal.

4



Set the Remind after time. To change the tone, select Tone and continue to the next step; otherwise go to Step 6.

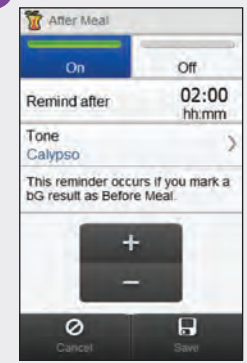
5

Choose a tone. Select Save.

NOTE

- Select to hear the tone.
- Scroll the screen for more tone choices.

6

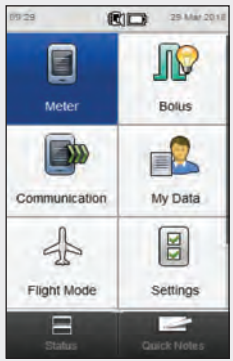


Select On to activate the reminder. Select Save.

8.3 Blood Glucose Test Reminder: After High Blood Glucose Result

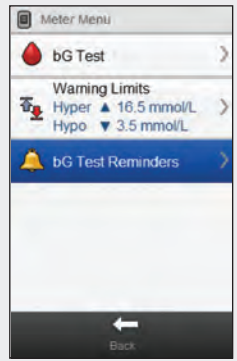
Main Menu > Meter > bG Test Reminders > After High bG

1



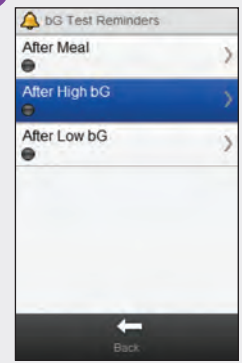
Select Meter on either the Main Menu or Status screen.

2



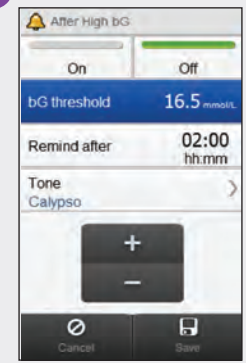
Select bG Test Reminders.

3



Select After High bG.

4



Set the bG threshold. Set the Remind after time. To change the tone, select Tone and continue to the next step; otherwise go to Step 6.

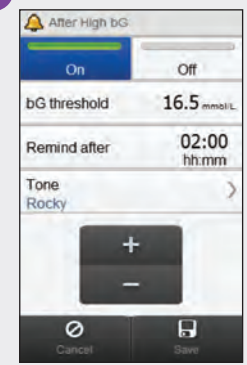
5

Choose a tone. Select Save.

NOTE

- Select to hear the tone.
- Scroll the screen for more tone choices.

6

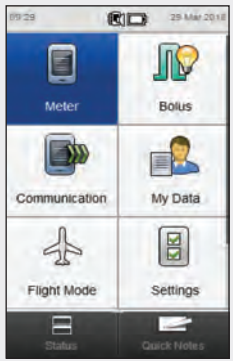


Select On to activate the reminder. Select Save.

8.4 Blood Glucose Test Reminder: After Low Blood Glucose Result

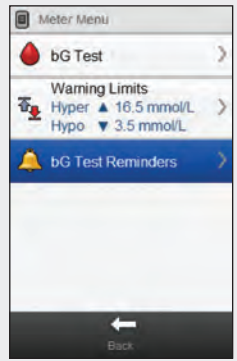
Main Menu > Meter > bG Test Reminders > After Low bG

1



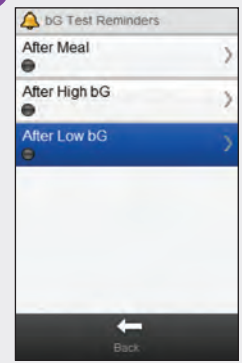
Select Meter on either the Main Menu or Status screen.

2



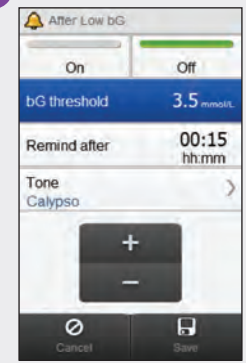
Select bG Test Reminders.

3



Select After Low bG.

4



Set the bG threshold. Set the Remind after time. To change the tone, select Tone and continue to the next step; otherwise go to Step 6.

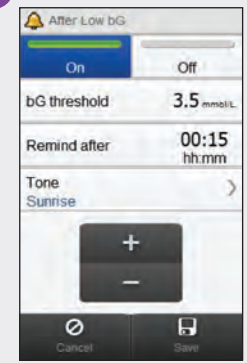
5

Choose a tone. Select Save.

NOTE

- Select to hear the tone.
- Scroll the screen for more tone choices.

6

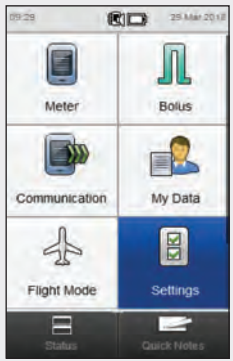


Select On to activate the reminder. Select Save.

8.5 Doctor Visit Reminder

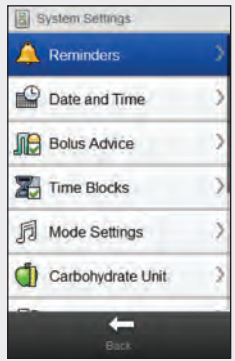
Main Menu > Settings > Reminders > Dr. Visit

1



From the Main Menu, select Settings.

2

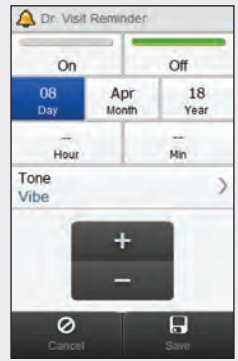


Select Reminders.

3

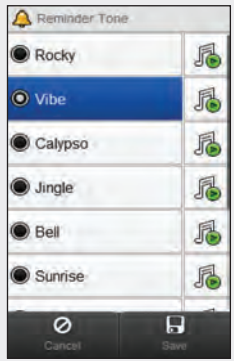
Select Dr. Visit.

4



Set the date and time. To change the tone, select Tone and continue to the next step; otherwise go to Step 6.

5



Choose a tone. Select Save.

NOTE

- Select to hear the tone.
- Scroll the screen for more tone choices.

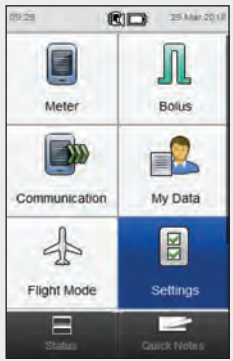
6

Select On to activate the reminder. Select Save.

8.6 Lab Test Reminder

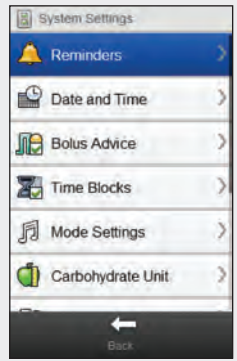
Main Menu > Settings > Reminders > Lab Test

1



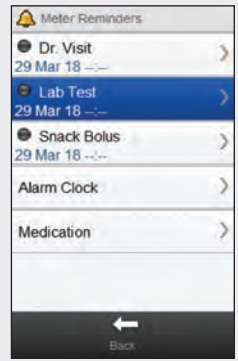
From the Main Menu, select Settings.

2



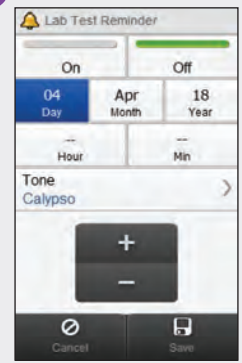
Select Reminders.

3



Select Lab Test.

4



Set the date and time. To change the tone, select Tone and continue to the next step; otherwise go to Step 6.

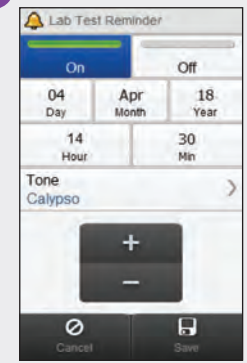
5

Choose a tone. Select Save.

NOTE

- Select ♫ to hear the tone.
- Scroll the screen for more tone choices.

6

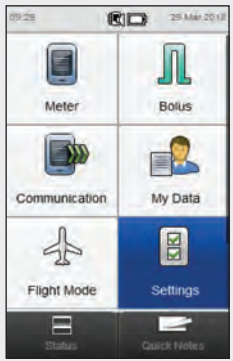


Select On to activate the reminder. Select Save.

8.7 Customised Reminder

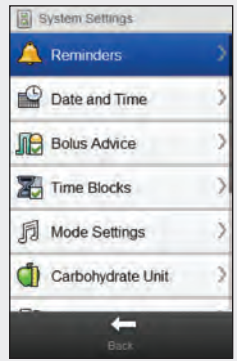
Main Menu > Settings > Reminders > Customized

1



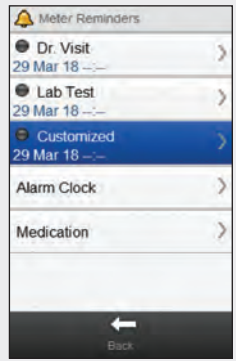
From the Main Menu, select Settings.

2



Select Reminders.

3

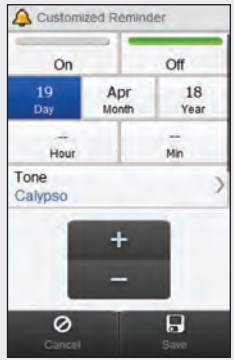


Select Customized.

NOTE

If you previously named the reminder, the name is displayed instead of Customized.

4



Set the date and time. To change the tone, select Tone and continue to the next step; otherwise go to Step 6.

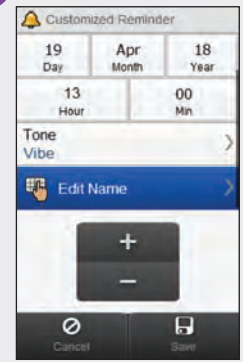
5

Choose a tone. Select Save.

NOTE

- Select to hear the tone.
- Scroll the screen for more tone choices.

6

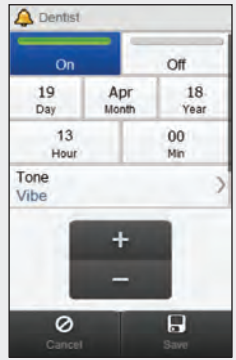


To change the reminder name, scroll the screen and select Edit Name; otherwise go to Step 8.

7

Delete the previous name. Type a name. Select ✓.

8

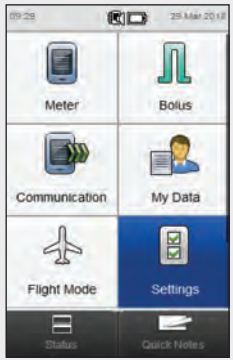


Select On to activate the reminder. Select Save.

8.8 Alarm Clock Reminder

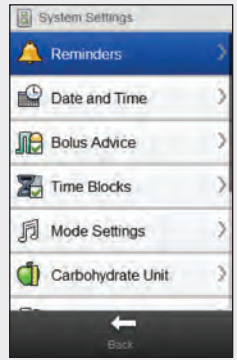
Main Menu > Settings > Reminders > Alarm Clock

1



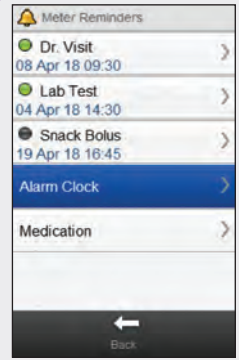
From the Main Menu, select Settings.

2



Select Reminders.

3



Select Alarm Clock.

4

Select a reminder.

NOTE

- Scroll the screen to display additional reminders.
- Reminders that are On are shown with a green indicator.

5

Select On to activate the reminder or select Off to turn off the reminder.

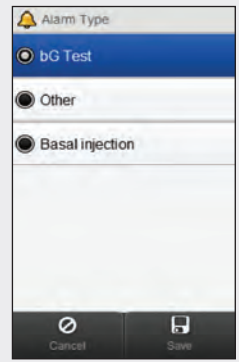
To change this reminder: Select the field to change and refer to the instructions on the following pages. When setup is completed, select Save.

Alarm Clock Detail Entries

Type	The reminder type is displayed when the reminder occurs.
Time	The time of day the reminder occurs.
Recurrence	The reminder occurs one time or every day at the same time.
Tone	Choose a unique tone for each reminder.

Screens for Entries of an Alarm Clock Reminder

Type



Choose the type of reminder. Select Save.

Time

Set the reminder time. Select Save.

Recurrence

Choose Once or Repeat. Select Save.

Tone

Choose a tone. Select Save.

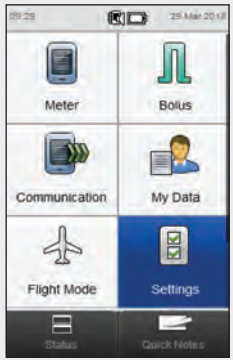
NOTE

- Select to hear the tone.
- Scroll the screen for more tone choices.

8.9 Medication Reminder

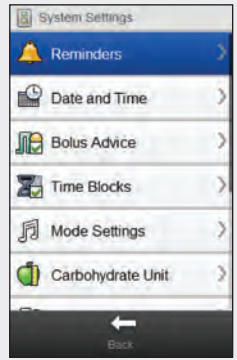
Main Menu > Settings > Reminders > Medication

1



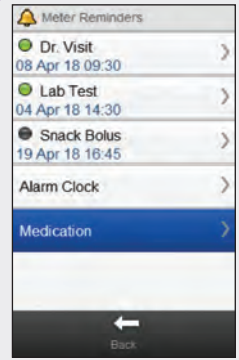
From the Main Menu, select Settings.

2



Select Reminders.

3



Select Medication.

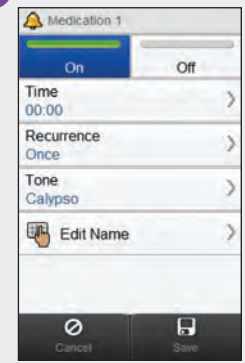
4

Select a Medication reminder.

NOTE

- If you previously named the reminder, the name is displayed instead of Medication.
- Reminders that are On are shown with a green indicator.

5



Select On to activate the reminder or select Off to turn off the reminder.

To change this reminder: Select the field to change and refer to the instructions on the following pages. When entries are completed, select Save.

Medication Reminder Entries

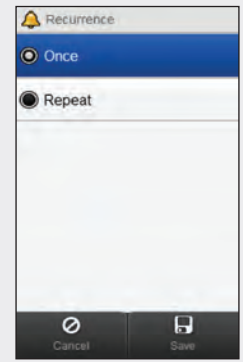
Time	The time of day the reminder occurs.
Recurrence	Reminder occurs one time or every day at the same time.
Tone	Choose a unique tone for each reminder.
Edit Name	Name the reminder.

Screens for Entries of a Medication Reminder

Time

Set the reminder time. Select Save.

Recurrence



Choose Once or Repeat. Select Save.

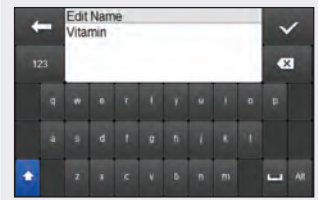
Tone

Choose a tone. Select Save.

NOTE

- Select to hear the tone.
- Scroll the screen for more tone choices.

Edit Name



Delete the previous name. Type a name. Select ✓.

9 Communication

9.1 Overview

The meter can communicate with a PC using a USB connection to control and share data, as well as send and receive data from Accu-Chek 360º software or any compatible software.

9.2 Connecting the Meter to a PC using a USB Cable

1

Plug the smaller end of the USB cable into the meter.

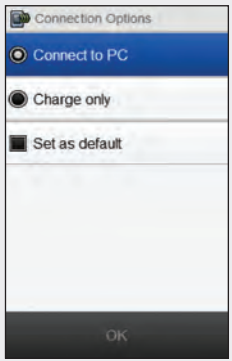
2

Plug the larger end of the USB cable into an available USB port on the PC.

NOTE

- If the meter is already connected to a PC with a USB cable but is charging in idle status, you can establish a data connection. From the Main Menu, select Communication > Connect to PC.
- The meter cannot be used to perform a bG test while connected to a PC.

3



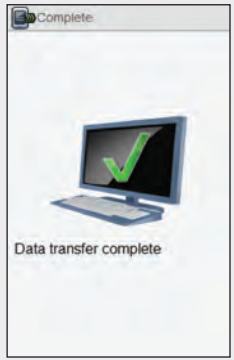
Select Connect to PC. Select OK.

NOTE

- If the meter does not respond automatically to being connected to a PC, select Connect to PC from the Communication menu.
- By selecting Charge only, the meter charges its battery through the USB connection and does not otherwise communicate with the PC.
- Select Set as default to not see this screen again in the future. Every time you connect a USB cable, the meter automatically performs the selected action.

The meter attempts to connect to the PC.

When the meter successfully connects to the PC, the Connected screen appears and data transfer begins. Do not disconnect the USB cable during data transfer.



When the meter has completed transferring data, the Complete screen appears.

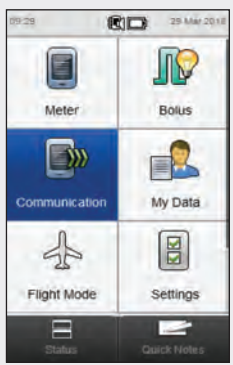
The battery charge screen appears. After about 3 seconds, the meter screen goes blank. Charging continues.

9.3 Changing USB Cable Connection Settings

The Communication Settings menu allows you to choose what the meter does when you connect it to a PC with a USB cable.

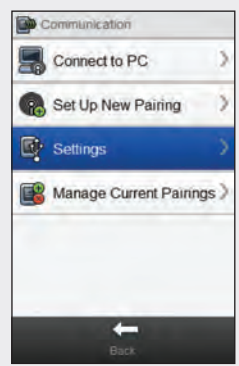
Main Menu > Communication > Settings

1



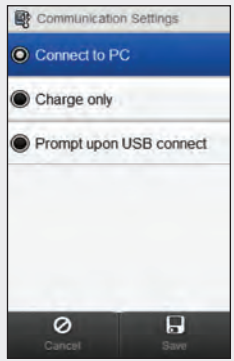
From the Main Menu, select Communication.

2



Select Settings.

3



Select the desired option.
Select Save.

Option	Description
Connect to PC	The meter automatically connects to the PC.
Charge only	The meter takes no immediate action upon being connected and charges the battery only.
Prompt upon USB connect	The meter prompts you to choose your desired communication setting upon being connected.

10 Travel Settings

10.1 Overview

Most airlines and many governments ban the use of wireless radio devices during flight. Flight Mode enables the meter to comply with these regulations while retaining your ability to use the non-wireless functions of the meter.

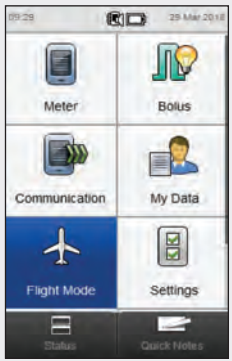
NOTE

Turning the Flight Mode on can also help to conserve battery power.

10.2 Turning On Flight Mode

Main Menu > Flight Mode

1

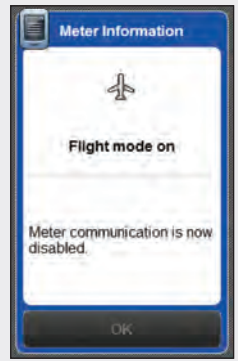


From the Main Menu, select Flight Mode.

2

Select Flight Mode on.

3

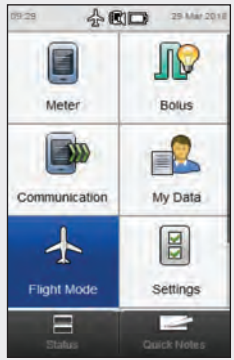


Select OK.

10.3 Turning Off Flight Mode

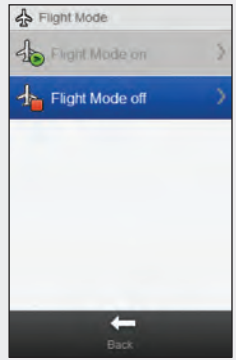
Main Menu > Flight Mode

1



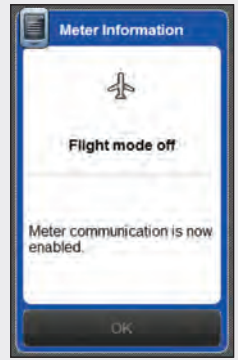
From the Main Menu, select Flight Mode.

2



Select Flight Mode off.

3



Select OK.

11 My Data

11.1 Overview

Analysing your information stored in the meter is an effective way for you and your healthcare professional to determine how well you are controlling your diabetes. This analysis is a valuable tool for making improvements to your diabetes management. The reports the meter displays help you get the most from your Accu-Chek Aviva Insight diabetes manager.

The meter generates graphs and reports to help you analyse the information stored in the meter. Graphs can be a good way to view your blood glucose results. The meter can display a line graph to depict the trends of your blood glucose results with other information, such as your bolus history, a graph showing result ranges for a standard day or a standard week, and a pie chart with different colours to illustrate the number of test results within, above or below your blood glucose target range.

NOTE

- Reviewing reports consumes battery power. It is advisable to connect the meter to the charger while reviewing reports.
- Blood glucose is sometimes shortened to bG, but it means the same thing.

11.2 The Logbook

From the logbook records stored in the meter, you are able to view a specific blood glucose result with its attributes (e.g., meal time, carbohydrates, health event and bolus). In addition, for a specific logbook record, you are able to change or add to its attributes.

NOTE

- The logbook on the meter replaces the physical blood glucose diary you may have kept in the past.
- Logbook data cannot be changed if that data was used to calculate bolus advice.

The meter automatically stores up to 2,000 logbook records with the time and date. You can review up to the last 250 logbook records on the meter or up to 2,000 logbook records using a computer with compatible software. Logbook records are stored from the newest to the oldest.

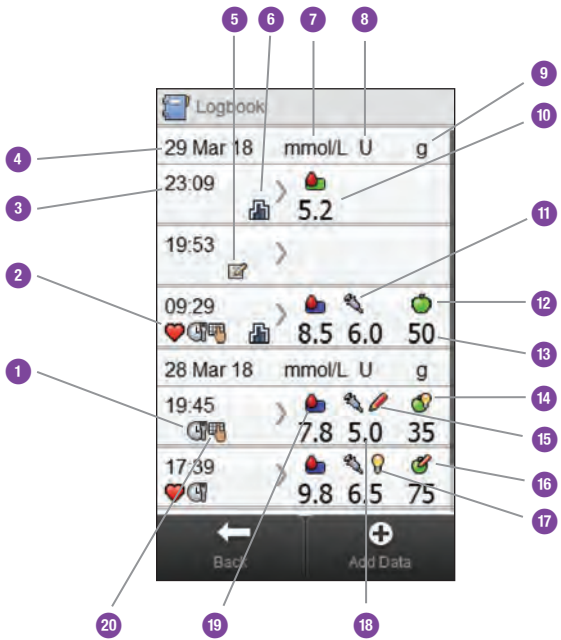
Each logbook record can contain:

- Date and time
- Blood glucose result
- Meal time (events)
- Carbohydrate intake
- Health event
- Bolus type
- Bolus amount
- Note
- Quick Notes

NOTE

- **Do not change your therapy based on one individual record or test result in the logbook.**
- This chapter shows sample screens. The screens may look slightly different from the screens on the meter. If you have any questions about the meter screens, contact Roche.
- The information in the logbook is saved when you replace the meter battery. You should check the time and date after replacing the battery. For more information on changing the battery, see the **Care and Maintenance** chapter of this User's Manual.
- It is very important to have the correct time and date set. Having the correct time and date setting helps ensure accurate interpretation of information by you and your healthcare professional.
- Once 2,000 records are in the logbook, adding a new record causes the oldest logbook record to be deleted.
- Control results are stored in the meter, but cannot be reviewed in the logbook. Control results can be reviewed using a computer with compatible software.
- Before reviewing logbook records or control results on a PC, the stored logbook records must first be transferred to a PC running a compatible software application. For product availability, contact Roche.
- Control results are not used in any report or graph on the meter.

11.2.1 Understanding the Logbook



1	Meal time icon
2	Health event icon
3	Time of record
4	Date of record
5	Quick Notes icon
6	Basal icon
7	Indicates bG column
8	Indicates bolus column
9	Indicates carbohydrate column
10	Blood glucose result

11	Bolus type icon
12	Carbohydrates icon
13	Carbohydrate amount
14	Carbohydrates advice accepted icon
15	Bolus advice not accepted icon
16	Carbohydrates advice not accepted icon
17	Bolus advice accepted icon
18	Bolus amount
19	bG value range icon
20	Note icon

NOTE

The Logbook screen displays the records in the order in which they occurred with the most recent record shown on top.

Icon descriptions

Icon	Icon name	Description
	bG Value Range Indicator	Icon background colour indicates where the blood glucose result falls within the target range. The background colours of this icon represent: ▸ Green: within target range ▸ Yellow: below target range ▸ Red: hypo ▸ Blue: above target range or hyper
	Meal time	Icon is displayed when information exists for this record regarding meal time.
	Carbohydrates	Icon is displayed when information exists for this record regarding carbohydrates.
	Carbohydrates advice accepted	Icon is displayed when the carbohydrate amount from the bolus advice recommendation hypo warning screen was used.
	Carbohydrates advice not accepted	Icon is displayed when the carbohydrate amount from the bolus advice recommendation hypo warning screen was changed.

Icon	Icon name	Description
	Health event	Icon is displayed when information exists for this record regarding health events.
	Basal insulin	Basal insulin entered into your logbook record.
	Bolus advice accepted	Bolus advice recommendation from the meter was accepted.
	Bolus advice not accepted	Bolus advice recommendation from the meter was changed prior to delivery.
	Bolus manually delivered using pen/syringe	Bolus delivered using pen/syringe.
	Quick Notes	Icon is displayed when information exists for this record regarding Quick Notes.
	Note	Icon is displayed when information exists for this record regarding a note.

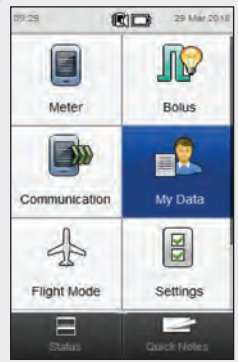
11.2.2 Viewing and Adjusting Logbook Data

Main Menu > My Data > Logbook

NOTE

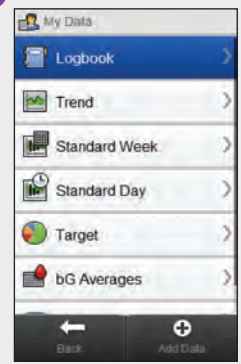
- Logbook data that has been used for bolus advice (with the exception of notes) cannot be adjusted.
- Blood glucose results cannot be adjusted.

1



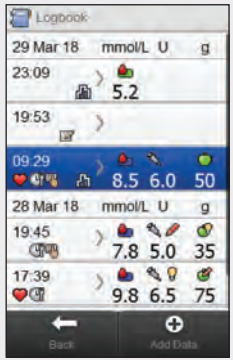
From the Main Menu, select My Data.

2



Select Logbook.

3

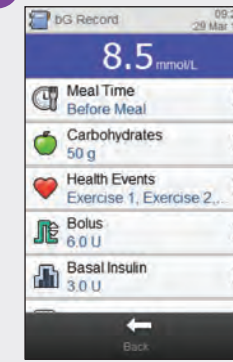


Select the desired logbook record. For a logbook record with Quick Notes only, go to Step 5.

NOTE

- Scroll down to view additional records if they are present.
- Logbook records which have been used for bolus advice contain either the Bolus advice accepted icon: or the Bolus advice not accepted icon: . These records are locked and can be viewed but not adjusted.
- Locked logbook records do not display the Save button at the bottom of the individual data item screens. Only the Back button is displayed.

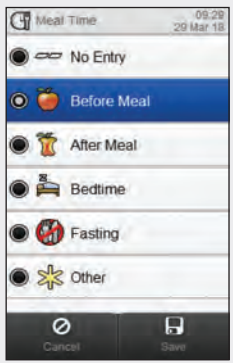
4



To view and adjust an entry, select it and refer to the instructions on the following pages. When you have finished, select Back to return to the My Data menu.

Screens for Viewing and Adjusting Entries in the Logbook

Meal Time

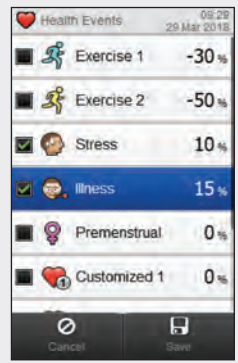


Choose applicable meal time. Select Save.

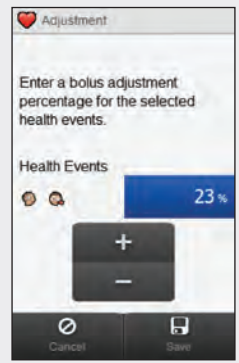
Carbohydrates

Set the amount of carbohydrates consumed. Select Save.

Health Events

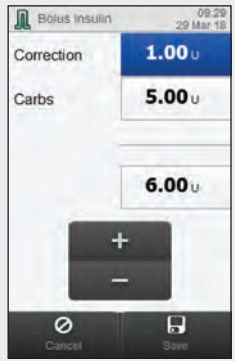


Choose up to four health events. Select Save.



If bolus advice is turned on and multiple health events have been selected, this screen displays “--- %”. You must enter a summarised health event percentage for the selected health events, even if this percentage is zero. Select Save.

Bolus

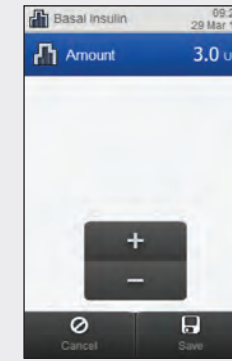


Set bolus amounts. Select Save.

NOTE

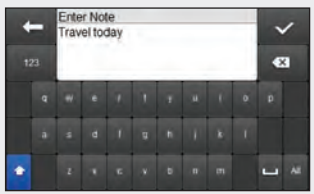
If a Carbohydrate Bolus is entered and no Carbohydrate Amount has been entered (Carbohydrates displays No Entry on the bG Record screen in Step 4), you are prompted to enter an amount for carbohydrates. An amount is not required, but the more complete the data the more accurate any future bolus advice recommendations are when using bolus advice.

Basal Insulin



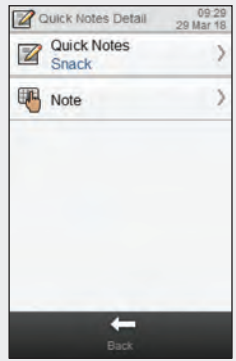
Set the basal insulin amount. Select Save.

Note



Type a note to save with this record. Select ✓.

5

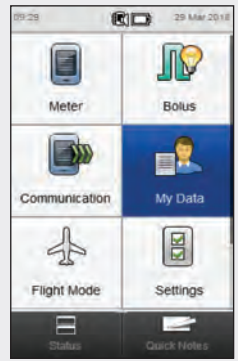


Select Quick Notes to make an update. Select Note to type a note using the keyboard. Select Back to return to Step 3.

11.2.3 Adding New Data to the Logbook

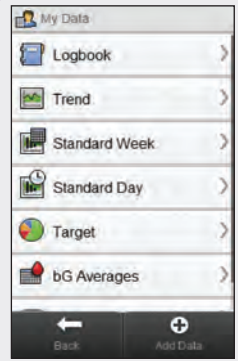
Main Menu > My Data > Add Data

1



From the Main Menu, select My Data.

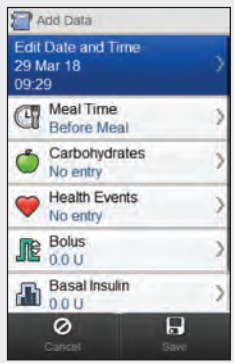
2



Select ⊕ Add Data.

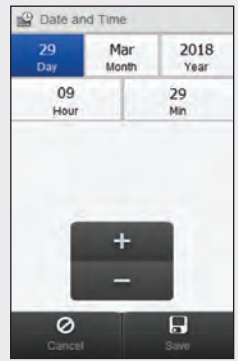
Screens for Adding New Data

3



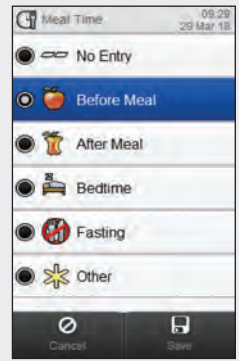
Select any of the options on the Add Data screen and refer to the instructions on the following pages. When you have finished, select Save to save your entry and return to the My Data menu.

Date and Time



Set the date and time. Select Save.

Meal Time

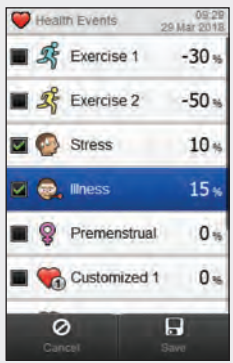


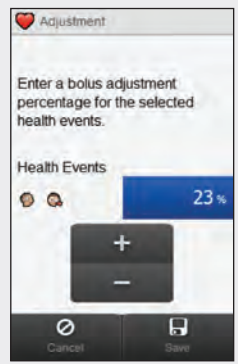
Choose an applicable meal time. Select Save.

Carbohydrates

Set the amount of carbohydrates consumed. Select Save.

Health Events

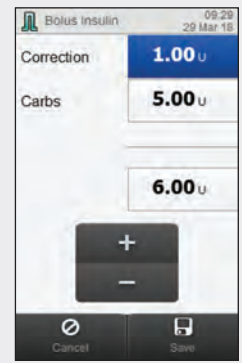




Choose up to four health events. Select Save.

If bolus advice is turned on and multiple health events have been selected, this screen displays "--- %". You must enter a summarised health event percentage for the selected health events, even if this percentage is zero. Select Save.

Bolus

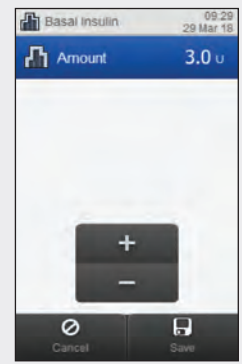


Set bolus amounts. Select Save.

NOTE

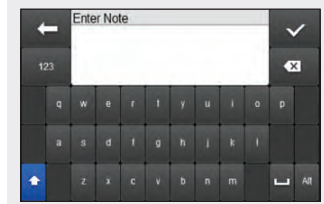
If a Carbohydrate Bolus is entered and no Carbohydrate Amount has been entered (Carbohydrates displays No Entry on the Add Data screen in Step 3), you are prompted to enter an amount for carbohydrates. An amount is not required, but the more complete the data the more accurate any future bolus advice recommendations are when using bolus advice.

Basal Insulin



Set the basal insulin amount. Select Save.

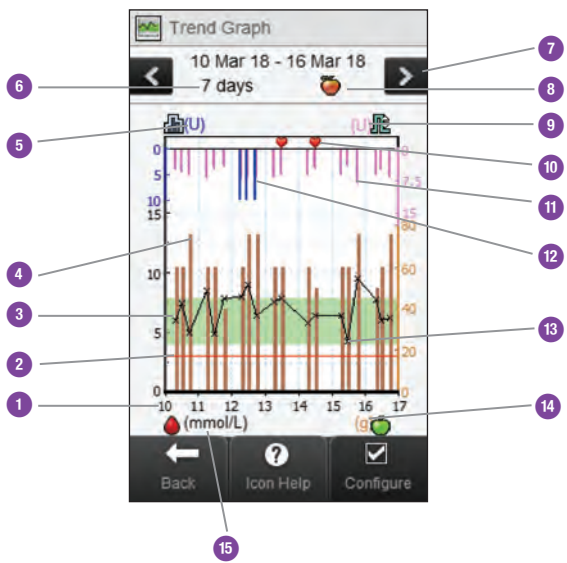
Note



Type a note to save with this record. Select ✓.

11.3 The Trend Graph

With the trend graph, the meter displays your blood glucose trends and other information using logbook data for the time scale and meal time you choose.



11.3.1 Understanding the Trend Graph

1	**Times of day or days of the month**	
2	**Hypo warning limit**	Red horizontal line
3	**Green area**	Indicates blood glucose target range
4	**Carbohydrate value**	Brown bar: height shown is in relation to the carbohydrate amount
5	**Basal unit of measurement**	
6	**Time scale**	

7	**Scroll left/right buttons**	Moves forward or back in time by the time scale chosen. Example: For a 7-day time scale, selecting the scroll left icon shows the data from the 7 days before the dates currently shown.
8	**Selected meal time**	
9	**Bolus unit of measurement**	
10	**Health Event**	Indicates a health event exists for the record
11	**Bolus**	Pink bar: height shown is in relation to the bolus insulin amount
12	**Basal value**	Blue line: indicates the basal insulin amount
13	**Blood glucose result**	Displayed as Xs and connected with lines
14	**Carbohydrate unit of measurement**	
15	**Blood glucose unit of measurement**	
16	**Arrow**	(Not shown) Indicates blood glucose data extends beyond screen

NOTE

- If data is not available, the No Data Available screen is displayed.
- Trend graphs do not include corrupt results or control results.
- On the upper right side of the graph, the maximum bolus amount indicator is the pink tick mark with the largest value shown beside it (on this example screen: 15 U). The purpose of this indicator is to adjust the scale for the top portion of the graph based on the single biggest bolus insulin amount (callout 11) delivered for the time chosen (callout 6). The maximum bolus amount indicator values available on the meter are 1, 5, 15, 30 and 60 U. For example, if the single biggest bolus insulin amount is 8 U, then the meter scales the upper graph to be between 0 and 15 U.

NOTE

- On the lower right side of the graph, the maximum carbohydrate amount indicator is the brown tick mark with the largest value shown beside it (on this example screen: 80 g). The purpose of this indicator is to adjust the scale for the bottom portion of the graph based on the single biggest carbohydrate amount (callout 4) for the time chosen (callout 6). The maximum carbohydrate amount indicator values available on the meter are 40, 80, 120, 160, 200 and 240 g, or the equivalent scale for BE, KE or CC. For example, if the single biggest carbohydrate amount is 76 g, then the meter scales the lower graph to be between 0 and 80 g.
- On the upper left side of the graph, the maximum basal amount indicator is the blue tick mark with the largest value shown beside it (on this example screen: 10 U). The purpose of this indicator is to adjust the scale for the top portion of the graph based on the single biggest basal insulin amount (callout 12) delivered for the time chosen (callout 6). The maximum basal amount indicator values available on the meter are 1, 2, 5, 10, 20 and 40 U. For example, if the single biggest basal insulin amount is 9 U, then the meter scales the upper graph to be between 0 and 10 U.

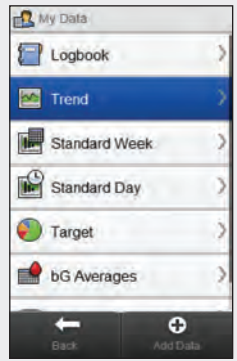
11.3.2 Viewing the Trend Graph

Main Menu > My Data > Trend

1

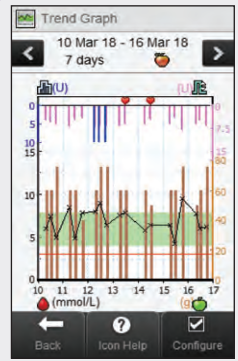
From the Main Menu, select My Data.

2



Select Trend.

3

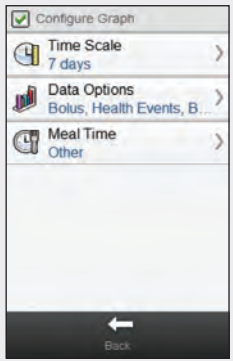


Select ✓ Configure to change how the trend graph displays your trend data.

NOTE

Select ⓘ to view a list of trend icons and their explanations.

4

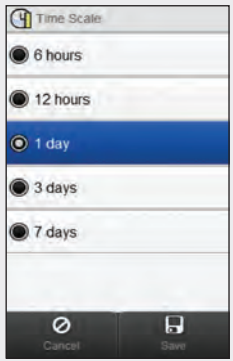


Select any of the options on the Configure Graph screen and refer to the instructions in the rest of this section.

When you have finished, select Back to return to the trend graph displaying your data in the manner you selected.

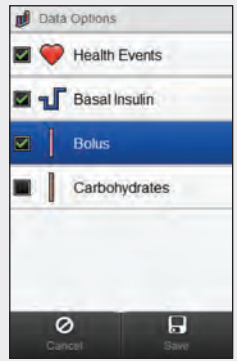
Screens for Configuring the Trend Graph

Time Scale



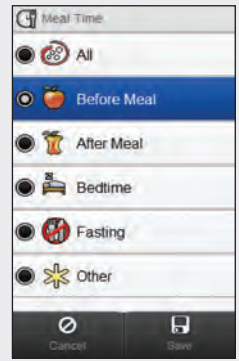
Select the time scale. Select Save.

Data Options



Select one or more data options. Select Save.

Meal Time



Select the meal time. Select Save.

11.4 The Standard Week

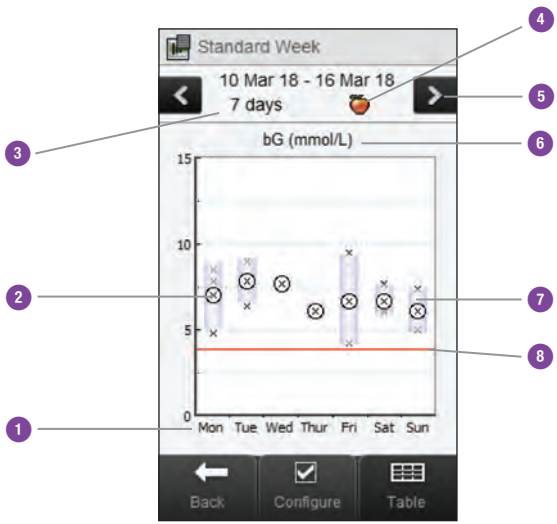
With the Standard Week graph, the meter displays your blood glucose averages, number of tests and standard deviations for each day of an average week, calculated using logbook data from the time scale and meal time you choose.

NOTE

The standard deviation measures how spread out the blood glucose results are from the blood glucose average. A high standard deviation means the blood glucose results vary greatly around the blood glucose average.

11.4.1 Understanding the Standard Week Graph and Table

Standard Week Graph



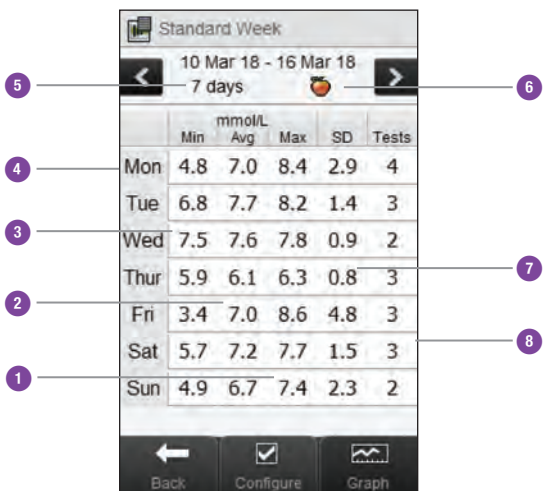
1	**Days of week**	
2	**X**	▸ Indicates each blood glucose result. ▸ “X” in the centre of a circle indicates the average of all blood glucose results for the selected criteria.
3	**Time scale**	
4	**Meal time selection**	

5	**Scroll left/right buttons**	Moves forward or back in time by the time scale chosen. Example: For a 7-day time scale, selecting the scroll left icon shows the data from the 7 days before the dates currently shown.
6	**Blood glucose unit of measurement**	

7	**Box for each day**	▸ The top of the box indicates the standard deviation above the average and the bottom of the box indicates the standard deviation below the average. The box is not displayed if there is not enough data to determine standard deviation. ▸ The top of the box is open if the standard deviation is off the top of the graph. ▸ Box and “X” are not displayed for a day if no data is found.
8	**Hypo warning limit**	Red horizontal line
9	**Arrow**	(Not shown) Indicates that there is data off the top of the graph.

Standard Week Table

Select Table to switch to the standard week table. The standard week table displays the same data as the standard week graph in table format. To return to the standard week graph from the standard week table, select Graph.



1	Highest blood glucose result for each day of the week
2	Blood glucose average for each day of the week
3	Lowest blood glucose result for each day of the week
4	Day of week
5	Time scale
6	Meal time selection
7	Standard deviation (SD) for each day of the week
8	Number of tests for each day of the week

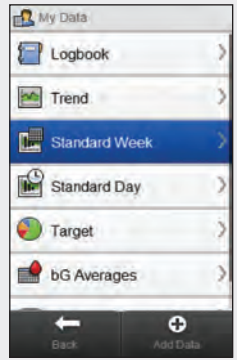
11.4.2 Viewing Standard Week Data

Main Menu > My Data > Standard Week

1

From the Main Menu, select My Data.

2

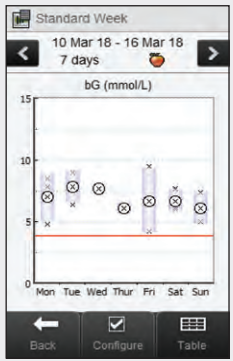


Select Standard Week.

NOTE

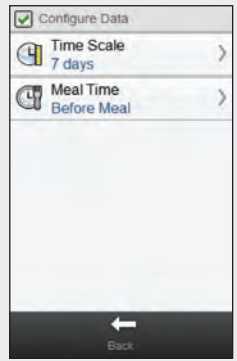
- If there is no data available to display the standard week graph and table for the time scale or meal time chosen, the No Data Available screen is displayed.
- The standard week graph and table do not include corrupt results, control results, HI values or LO values.

3



To change the time scale and meal time displayed for the standard week, select Configure.

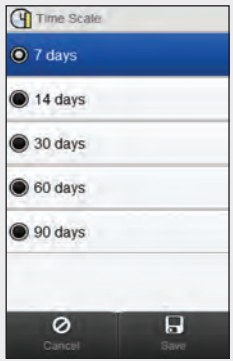
4



Select either of the options on the Configure Data screen and refer to the instructions in the rest of this section. Select Back when finished to return to the Standard Week graph or table.

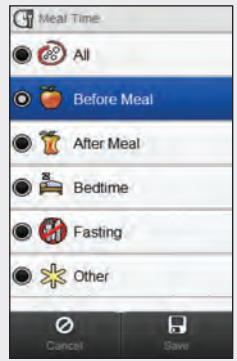
Screens for Configuring Standard Week Data

Time Scale



Select a time scale. Select Save.

Meal Time



Select a meal time. Select Save.

11.5 The Standard Day

With the Standard Day graph, the meter displays your blood glucose averages, number of tests and standard deviations for each time block, calculated using logbook data from the time scale and meal time you choose.

NOTE

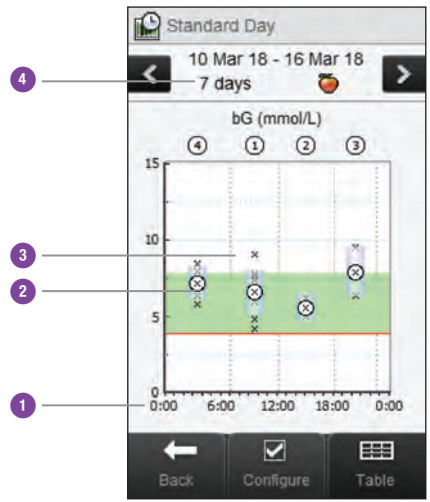
Refer to the **Changing Meter Settings** chapter in this User's Manual for instructions on setting up the time blocks.

NOTE

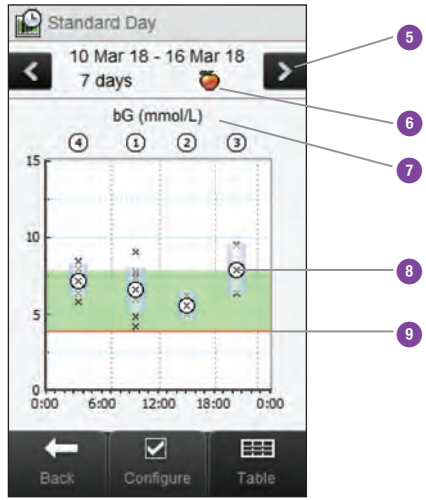
The standard deviation measures how spread out the blood glucose results are from the blood glucose average. A high standard deviation means the blood glucose results vary greatly around the blood glucose average.

11.5.1 Understanding the Standard Day Graph and Table

Standard Day Graph



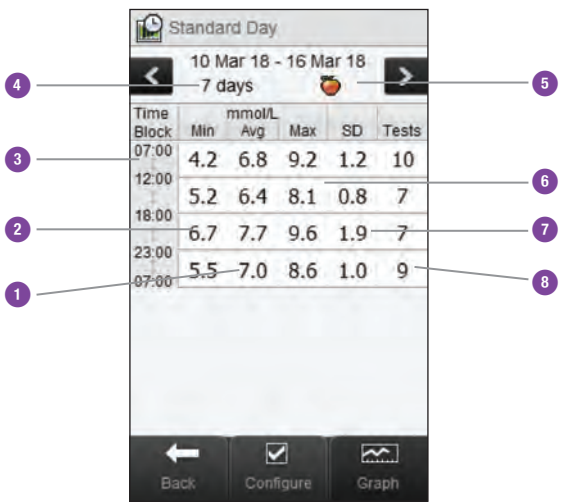
1	**Time of day**	
2	**Box for each time block**	▸ The top of the box indicates one standard deviation above the average and the bottom of the box indicates one standard deviation below the average. The box is not displayed if there is not enough data to determine standard deviation. ▸ The top of the box is open if the standard deviation is off the top of the graph. ▸ Box and “X” are not displayed for a time block if no data is found.
3	**Time blocks**	
4	**Time scale**	



5	**Scroll left/right buttons**	Moves forward or back in time by the time scale chosen. Example: For a 7-day time scale, selecting the scroll left icon shows the data from the 7 days before the dates currently shown.
6	**Meal time selection**	
7	**Blood glucose unit of measurement**	
8	**X**	▸ Indicates each blood glucose result. ▸ “X” in the centre of a circle indicates the average of all blood glucose results for the selected criteria.
9	**Hypo warning limit**	Red horizontal line
10	**Arrow**	(Not shown) Indicates that there is data off the top of the graph.

Standard Day Table

Select Table to switch to the standard day table. The standard day table displays the same data as the standard day graph in table format. To return to the standard day graph from the standard day table, select Graph.



1	Blood glucose average for each time block
2	Lowest blood glucose result for each time block
3	Time block
4	Time scale
5	Meal time selection
6	Highest blood glucose result for each time block
7	Standard deviation (SD) for each time block
8	Number of tests for each time block

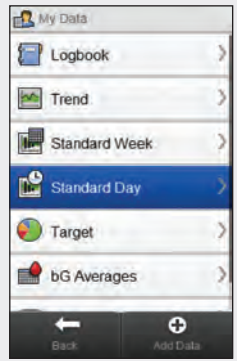
11.5.2 Viewing Standard Day Data

Main Menu > My Data > Standard Day

1

From the Main Menu, select My Data.

2

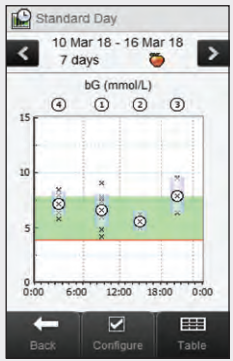


Select Standard Day.

NOTE

- If there is no data available to display the standard day graph and table for the time scale or meal time chosen, the No Data Available screen is displayed.
- The standard day graph and table do not include corrupt results, control results, HI values or LO values.

3



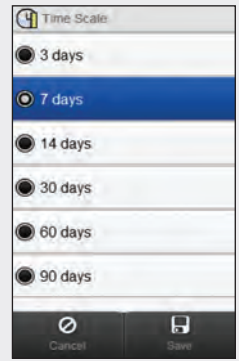
To change the time scale and meal time displayed, select ✓ Configure.

4

Select either of the options on the Configure Data screen and refer to the instructions in the rest of this section. Select Back when finished to save any changes and return to the standard day graph or table.

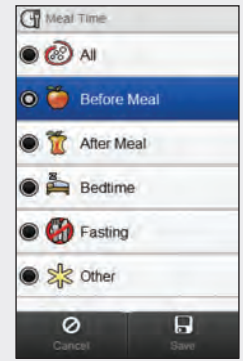
Screens for Configuring Standard Day Data

Time Scale



Select a time scale. Select Save.

Meal Time



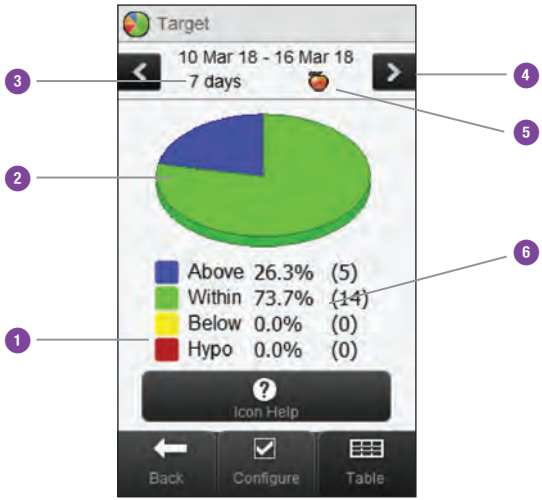
Select a meal time. Select Save.

11.6 Target Data

The meter displays a pie chart and table illustrating your blood glucose results as “Above”, “Within”, “Below” and “Hypo” for the time scale and meal time you choose.

11.6.1 Understanding the Target Chart and Target Table

Target Chart



1	**Legend**	Blood glucose result categories
2	**Target chart**	Represents the percentages for the blood glucose result categories
3	**Time scale**	
4	**Scroll left/right buttons**	Moves forward or back in time by the time scale chosen. Example: For a 7-day time scale, selecting the scroll left icon shows the data from the 7 days before the dates currently shown.
5	**Meal time selection**	
6	**Percentage of occurrence**	(Number shown in parentheses represents the number of occurrences)

Target Table

Select Table to switch to the target table. The target table displays the same data as the target chart in table format.

To return to the target chart from the target table, select Chart.

1	**Number of occurrences**	
2	**Meal time selection**	
3	**Legend**	Blood glucose result categories
4	**Time scale**	
5	**Scroll left/right buttons**	Moves forward or back in time by the time scale chosen. Example: For a 7-day time scale, selecting the scroll left icon shows the data from the 7 days before the dates currently shown.
6	**Target table**	

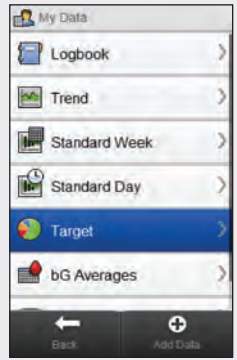
11.6.2 Viewing Target Data

Main Menu > My Data > Target

1

From the Main Menu, select My Data.

2

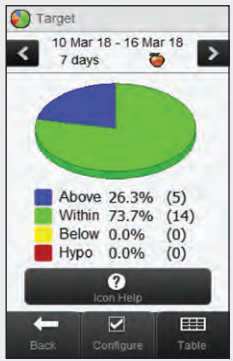


Select Target.

NOTE

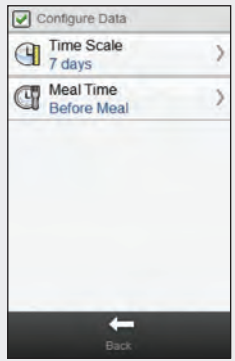
- If there is no data available to display the target chart and table for the time scale or meal time chosen, the No Data Available screen is displayed.
- The target chart and table do not include corrupt results, control results, or HI and LO results.

3



To change the time scale and meal time displayed, select ✓ Configure.

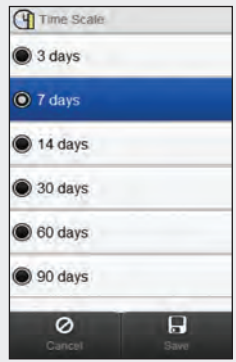
4



Select either of the options on the Configure Data screen and refer to the instructions in the rest of this section. Select Back when finished to save any changes and return to the target chart or table.

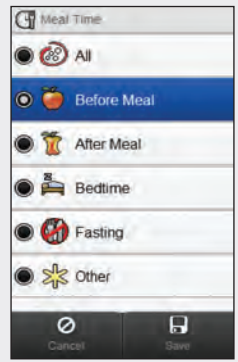
Screens for Configuring Target Data

Time Scale



Select a time scale. Select Save.

Meal Time



Select a meal time. Select Save.

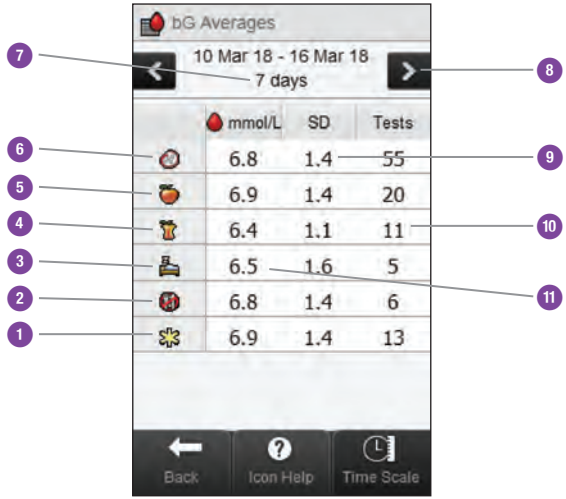
11.7 The bG Averages Table

The bG Averages table displays your blood glucose averages and standard deviations for the time scale and meal time you choose.

NOTE

The standard deviation measures how spread out the blood glucose results are from the blood glucose average. A high standard deviation means the blood glucose results vary greatly around the blood glucose average.

11.7.1 Understanding the bG Averages Table



1	**Other icon**	Data for all test results marked as Other
2	**Fasting icon**	Data for all test results marked as Fasting
3	**Bedtime icon**	Data for all test results marked as Bedtime
4	**After meal icon**	Data for all test results marked as After meal
5	**Before meal icon**	Data for all test results marked as Before meal
6	**All icon**	Combined data from all meal times

7	**Time scale**	
8	**Scroll left/right buttons**	Moves forward or back in time by the time scale chosen. Example: For a 7-day time scale, selecting the scroll left icon will show the data from the 7 days before the dates currently shown.

9	**Blood glucose standard deviation**	Calculated for the meal time
10	**Number of tests**	Used to calculate the averages and standard deviation of each meal time
11	**Blood glucose average**	Calculated for the meal time

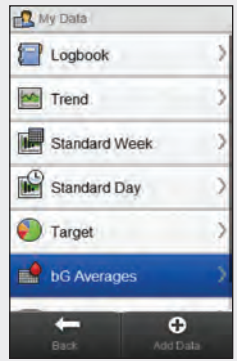
11.7.2 Viewing the bG Averages Table

Main Menu > My Data > bG Averages

1

From the Main Menu, select My Data.

2

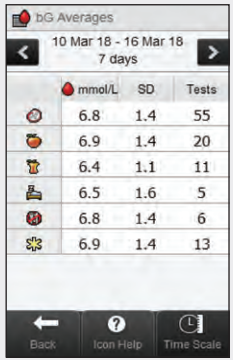


Select bG Averages.

NOTE

- If there is no data available to display the bG averages table for the time scale or meal time chosen, the No Data Available screen is displayed.
- Calculations do not include corrupt results, control results, HI values or LO values.

3

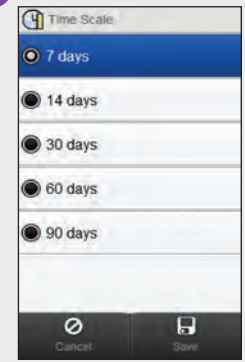


Select Time Scale to adjust the time scale of the bG Averages table.

NOTE

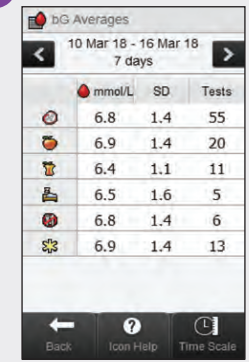
Select ⓘ to view a list of meal time icons and their explanations.

4



Choose a time scale. Select Save.

5



Select Back when finished to return to the My Data menu.

12 Care and Maintenance

12.1 Overview

The meter needs little or no maintenance with normal use. It automatically tests its own systems every time you turn it on and lets you know if something is wrong by displaying a message.

If you drop the meter or think it is not giving accurate results, contact Roche. Do not attempt to repair the meter yourself.

If you have any questions about the care and maintenance of the meter, contact Roche.

12.2 Charging the Battery

For instructions on charging the battery, see the **Charging the Battery** section in the **Startup** chapter in this User's Manual.

12.3 Power-Saving Tips

To conserve battery life:

- Turn the meter off when you have finished rather than utilising the automatic power off feature.
- Only turn on the vibration feature for mode settings when it is needed. See the **Mode Settings: Sound, Vibration** section in the **Changing Meter Settings** chapter in this User's Manual.
- Only turn on the touchscreen tone and vibration features when they are needed. See the **Touchscreen: Tone, Vibration** section in the **Changing Meter Settings** chapter in this User's Manual.
- Keep the brightness level of the display at a minimum. See the **Brightness** section in the **Changing Meter Settings** chapter in this User's Manual.
- Turn on the Flight Mode. See the **Turning On Flight Mode** section in the **Travel Settings** chapter in this User's Manual.

12.4 Changing the Battery

Never remove the meter battery unless authorised by Roche. Contact Roche before attempting to replace the battery. The rechargeable battery has a limited number of charge cycles. If you notice that the meter must be charged more often than it did when it was new, you may need to change the battery. The meter requires a custom rechargeable battery provided by Roche. Contact Roche to get a replacement battery and then follow the steps in this section.

NOTE

When the battery is replaced, all records remain saved in the logbook.

1

Open the battery door on the back of the meter by pushing in the direction of the arrow and pulling up the door.

Remove the old battery.

⚠ WARNING

- Follow these steps to prevent possible damage to the meter contacts.
- Do not try to force the battery into the meter. The battery only goes in one way.

2

Align the new battery by placing the (+) (-) end as shown.

3

Slide the (+) (-) end of the battery against the meter contacts. Press battery into meter.

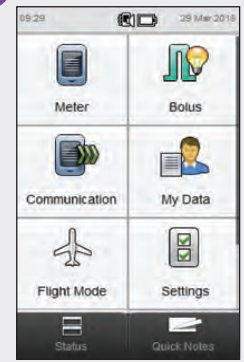
4

Put the battery door back in place and snap it closed by pushing the battery door in the direction of the arrow.

5

Charge the battery. See the **Charging the Battery** section in the **Startup** chapter in this User's Manual.

6



After the battery is fully charged, confirm the date and time are correct on either the Main Menu or the Status screen. To update the date or the time, see the **Date, Time and Time Format** section in the **Changing Meter Settings** chapter in this User's Manual.

12.5 Cleaning the Meter

Keep the meter free of dust. If you need to clean or disinfect it, follow these guidelines carefully to help you get the best performance possible.

⚠ WARNING

- Do not allow any liquid to enter the slots in the meter
- Do not spray a cleaning solution directly onto the meter
- Do not immerse the meter in liquid

1

Make sure the meter is turned off.

2

Gently wipe the meter's surface with a soft cloth slightly dampened (wring out any excess liquid) with one of these cleaning solutions:

- 70 % isopropyl alcohol
- Mild dishwashing liquid mixed with water
- 10 % household bleach solution (1 part bleach plus 9 parts water) made the same day

NOTE

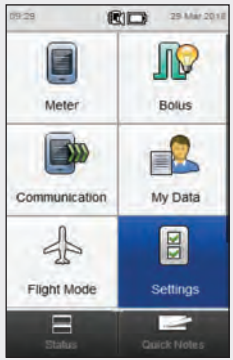
You can use a standard touchscreen cleaning cloth for normal cleaning of the touchscreen.

12.6 Touchscreen Calibration

Calibrating the touchscreen can help improve the meter's touch sensitivity.

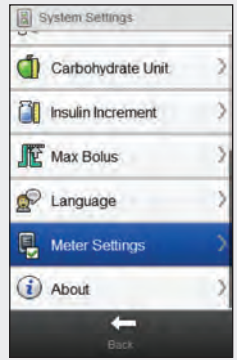
Main Menu > Settings > Meter Settings > Touchscreen > Screen Calibration

1



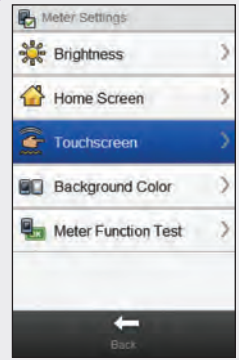
From the Main Menu, select Settings.

2



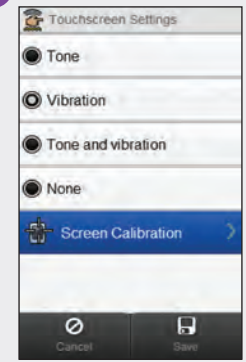
Scroll the screen and select Meter Settings.

3



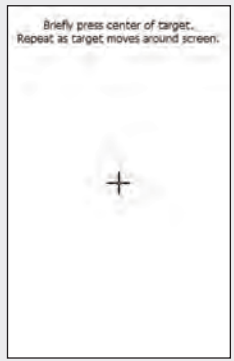
Select Touchscreen.

4



Select Screen Calibration.

5

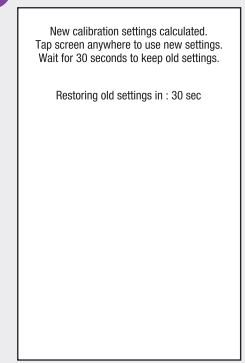


Screen text: Briefly press center of target. Repeat as target moves around screen.

NOTE

Touchscreen calibration instructions only appear in English.

6



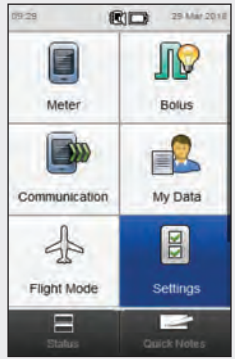
Screen text: New calibration settings calculated. Tap screen anywhere to use new settings. Wait for 30 seconds to keep old settings. Restoring old settings in : 30 sec (countdown timer).

12.7 Meter Function Test

If the meter display is faulty, or you cannot hear or feel the alerts, you can let the meter check the display, vibration and sound functions for proper operation.

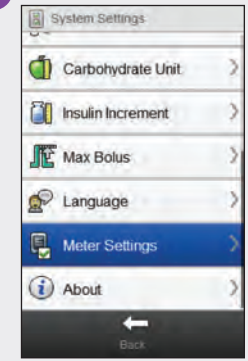
Main Menu > Settings > Meter Settings > Meter Function Test

1



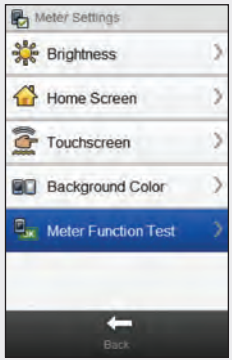
From the Main Menu, select Settings.

2



Scroll the screen and select Meter Settings.

3



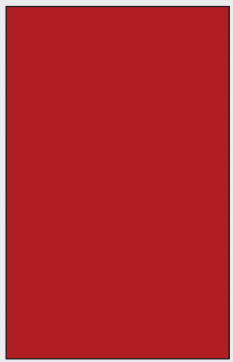
Select Meter Function Test.

4

Touch the screen where indicated.

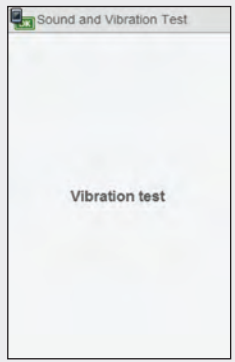
Screens Displayed During the Meter Function Test

Display Test



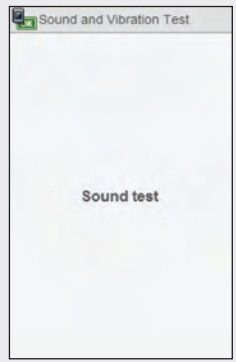
The display cycles through colours (red, blue, green and white).

Vibration Test



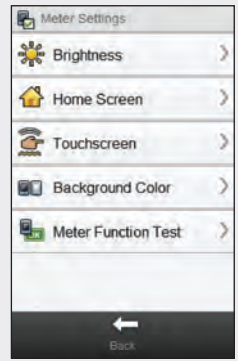
The meter vibrates three times.

Sound Test



The meter emits a sound.

5



If the meter does not perform as described in the meter function test, contact Roche.

13 Troubleshooting

13.1 Overview

For most problems, the meter displays a message with a short description of the problem and a proposed solution. This chapter goes into more detail describing the problem with the possible cause and suggesting possible solutions. The problems are grouped by the type of problem or message (for example, Error or Warning). If the possible solutions do not solve the problem, contact Roche.

NOTE

- If you have a problem not included here, contact Roche.
- If you drop the meter or think it is not giving accurate results, make sure your test strips and control solution have not expired, and perform a control test.
- Blood glucose is sometimes shortened to bG, but it means the same thing.

13.2 Troubleshooting the Meter

General Problems

Problem	Possible Causes	Possible Solutions
Display is blank or the meter does not turn on.	The battery is low on power.	See the **Charging the Battery** section in the **Startup** chapter in this User's Manual.
	The battery may be defective.	Replace the battery if it does not charge. See the **Changing the Battery** section in the **Care and Maintenance** chapter in this User's Manual.
	The meter has an electronic error.	Reset the meter by pressing and holding the power button for at least 5 seconds until the meter screen goes blank. Release the power button. The power-up cycle can take a minute or more. Resetting the meter does not require you to remove the battery.
	The display is damaged.	Contact Roche.
	The meter is defective.	Contact Roche.
	The temperature may be outside the meter operating range.	Move the meter to an area with the proper temperature. Allow the meter to adjust to the proper temperature. Do not artificially heat or cool the meter.

Problem	Possible Causes	Possible Solutions
Battery does not recharge while the meter is plugged into a computer with the USB cable.	The computer USB port cannot charge the meter battery.	Charge the meter battery using a power outlet. See the **Charging the Battery Using a Power Outlet** section in the **Startup** chapter in this User's Manual.
	The USB cable being used is not the one that was supplied with the meter.	Replace the USB cable with the one that was supplied with the meter.
Battery must be charged more often than it did when it was new.	The rechargeable battery has a limited number of charge cycles after which its charge capacity is reduced.	The battery may need replacing. Contact Roche before attempting to replace the battery. See the **Changing the Battery** section in the **Care and Maintenance** chapter in this User's Manual.
Display freezes or does not respond.	The meter has an electronic error.	Reset the meter by pressing and holding the power button for at least 5 seconds until the meter screen goes blank. Release the power button. The power-up cycle can take a minute or more. Resetting the meter does not require you to remove the battery. If this does not solve the problem, contact Roche.
Display is faulty; the colour on the screen is incorrect.		Perform a meter function test. See the **Meter Function Test** section in the **Care and Maintenance** chapter in this User's Manual. If the meter function test indicates there is a problem with the display, contact Roche.

Problem	Possible Causes	Possible Solutions
Sound is faulty; you cannot hear the alerts.	The sound feature is turned off or is set too low.	▸ Check to see if the active mode setting (Normal, Vibrate, Quiet, Loud) has sound and if the volume is set at a level that is audible. See the **Mode Settings: Sound, Vibration** section in the **Changing Meter Settings** chapter in this User's Manual. ▸ Check to see if the signal suspension is on and is active. Signal suspension may need to be turned off or its settings changed. See the **Mode Settings: Signal Suspension** section in the **Changing Meter Settings** chapter in this User's Manual. ▸ Perform a meter function test. See the **Meter Function Test** section in the **Care and Maintenance** chapter in this User's Manual. If the meter function test indicates there is a problem with the sound, contact Roche.

Problem	Possible Causes	Possible Solutions
Start time: Cannot change the Start time for the first time block.	The first time set up (Setup Wizard) is already complete, and therefore the start time of the first time block cannot be changed in the device settings.	To change the Start time for the first time block, select Reset on the Time Blocks screen. Once the time blocks are reset, you must re-enter all time block information. ▸ If bolus advice is turned on, see the **Bolus Advice: Resetting All Time Blocks** section in the **Changing Bolus Advice Settings** chapter in this User's Manual. ▸ If bolus advice is turned off, see the **Resetting All Time Blocks** section in the **Changing Meter Settings** chapter in this User's Manual.

Problem	Possible Causes	Possible Solutions
Touchscreen is not operating properly.	Touchscreen has not been calibrated.	▸ Calibrate the touchscreen. See the **Touchscreen Calibration** section in the **Care and Maintenance** chapter in this User's Manual. If calibrating the touchscreen does not solve the problem, contact Roche. ▸ If the touchscreen is calibrated and you still think it is not operating properly, the following may help you know when a selection is made: Set up the touchscreen to emit a tone, vibrate, or do both. See the **Touchscreen: Tone, Vibration** section in the **Changing Meter Settings** chapter in this User's Manual.

Problem	Possible Causes	Possible Solutions
Touchscreen calibration text is not translated.	Touchscreen calibration instructions only appear in English.	Refer to the **Touchscreen Calibration** section in the **Care and Maintenance** chapter in this User's Manual. ▸ First English screen: Briefly press center of target. Repeat as target moves around screen. ▸ Second English screen: New calibration settings calculated. Tap screen anywhere to use new settings. Wait for 30 seconds to keep old settings. Restoring old settings in : 30 sec (countdown timer)
Vibration is faulty; you cannot feel the alerts.	Vibration feature is turned off.	▸ Check to see if the active mode setting (Normal, Vibrate, Quiet, Loud) has vibration. See the **Mode Settings: Sound, Vibration** section in the **Changing Meter Settings** chapter in this User's Manual. ▸ Check to see if the signal suspension is on and is active. Signal suspension may need to be turned off or its settings changed. See the **Mode Settings: Signal Suspension** section in the **Changing Meter Settings** chapter in this User's Manual. ▸ Perform a meter function test. See the **Meter Function Test** section in the **Care and Maintenance** chapter in this User's Manual. If the meter function test indicates there is a problem with vibration, contact Roche.

Error Messages

Code	Screen Message	Possible Causes	Possible Solutions
E-57	Electronic error	An electronic error has occurred or, in rare cases, a used test strip was removed and reinserted.	Reset the meter by pressing and holding the power button for at least 5 seconds until the meter screen goes blank. Release the power button. The power-up cycle can take a minute or more. Resetting the meter does not require you to remove the battery. If this does not solve the problem, contact Roche.
E-60	Internal clock error		Contact Roche.

Information Messages

Screen Message	Possible Causes	Possible Solutions
Battery low is displayed while the meter is plugged into a computer with a USB cable.	The computer USB port cannot charge the meter battery.	Charge the meter battery using a power outlet. See the **Charging the Battery Using a Power Outlet** section in the **Startup** chapter in this User's Manual.
Bolus above allowed amount NOTE: This message can only occur if bolus advice is turned on.	The recommended total bolus amount is greater than the maximum allowed total bolus amount. The meter sets the total bolus amount to equal the maximum bolus allowed. The carbohydrate bolus and the correction bolus are adjusted to equal the total bolus amount.	Check the accuracy of all entries. If necessary, contact your healthcare professional.

Screen Message	Possible Causes	Possible Solutions
Bolus too high NOTE: This message can only occur if bolus advice is turned off.	The total bolus amount is greater than the maximum allowed total bolus amount. The meter sets the total bolus amount to equal the maximum bolus allowed. The carbohydrate bolus and correction bolus are adjusted to equal the total bolus amount.	Check the accuracy of all entries. If necessary, contact your healthcare professional.
Carbohydrate ratio not valid	The carbohydrate ratio is outside of the acceptable meter range.	Check your entries and contact your healthcare professional to determine the appropriate settings.
Expired bG record	This message is displayed when the blood glucose test was performed more than 10 minutes earlier.	Perform a blood glucose test to update your blood glucose result to receive bolus advice.

Screen Message	Possible Causes	Possible Solutions
Insulin sensitivity not valid	The insulin sensitivity is outside of the acceptable meter range.	Check your entries and contact your healthcare professional to determine the appropriate settings.
Invalid bolus advice times	The acting time value is less than the offset time value.	The acting time value must be set equal to or greater than the offset time value. Reset the acting time value or revise the offset time value.
Invalid setting with the text Hypo value must be less than time block target ranges.	The hypo warning limit value must be less than all of your target ranges in the time block settings.	Either reset the hypo warning limit so it is below the target ranges of your time blocks or revise the target ranges for the time blocks. See the **Warning Limits: Hypo, Hyper** section in the **Changing Meter Settings** chapter in this User's Manual.

Screen Message	Possible Causes	Possible Solutions
Invalid setting with the text Hyper value must be greater than time block target ranges.	The hyper warning limit value must be greater than all of your target ranges in the time block settings.	Either reset the hyper warning limit so it is above the target ranges of your time blocks or revise the target ranges for the time blocks. See the **Warning Limits: Hypo, Hyper** section in the **Changing Meter Settings** chapter in this User's Manual.
Invalid date/time		Re-enter the date or time.
No carbs entered with the text Add a carbohydrates amount?	If a Carbs insulin bolus is entered on the Bolus Insulin screen and no carbohydrate amount has been entered (Carbohydrates displays No Entry).	Select Yes on the Information screen to enter an amount for carbohydrates into the logbook. Select No for not adding an amount. NOTE: An amount is not required, but the more complete the data the more accurate any future bolus advice recommendations are if using bolus advice.

Maintenance Messages

Code	Screen Message	Possible Causes	Possible Solutions
M-51	Test strip error	If you see this message **before** you applied a drop to the test strip: The test strip is damaged or is not properly inserted into the meter.	▸ Remove the test strip and reinsert it, or replace it if damaged. ▸ If the message reappears, contact Roche.
M-52	Code chip error	The activation chip is incorrect. NOTE: Code chip and activation chip are interchangeable and mean the same thing.	▸ Turn the meter off. Remove and reinsert the activation chip. ▸ If you continue to receive this message, contact Roche to get a replacement activation chip. Turn the meter off and exchange the activation chip with the replacement activation chip. If this does not solve the problem, contact Roche.

Code	Screen Message	Possible Causes	Possible Solutions
M-54	Drop too small	Not enough blood or control solution was drawn into the test strip for measurement, or it was applied after the test had started.	Discard the test strip and repeat the test with a fresh test strip and a fresh drop of blood or control solution.
M-56	Drop applied too soon	Blood or control solution was applied to the test strip before the Apply Drop screen appeared on the meter.	Discard the test strip and repeat the test with a fresh test strip and a fresh drop of blood or control solution.

Code	Screen Message	Possible Causes	Possible Solutions
M-58	Temperature out of range	The temperature is above or below the proper range for performing a blood glucose test or a control test.	Move the meter to an area within the proper temperature range indicated for test strip use in the test strip package insert. Wait until the M-58 message no longer occurs and repeat the test. Do not artificially heat or cool the meter.
M-63	Code chip missing	The activation chip is not inserted into the meter. NOTE: Code chip and activation chip are interchangeable and mean the same thing.	Turn the meter off and insert the activation chip. If you need an activation chip, contact Roche.

Warning Messages

Code	Screen Message	Possible Causes	Possible Solutions
W-75	Above hyper warning limit	Your blood glucose result is above the hyper warning limit set in the meter.	▸ Treat high blood glucose as recommended by your healthcare professional. ▸ Consider rechecking blood glucose, ketones and insulin.
W-76	HI bG warning	Your blood glucose may be higher than the measuring range of the meter.	▸ If you are experiencing any of the common symptoms of high blood glucose, contact your healthcare professional immediately. ▸ Treat high blood glucose as recommended by your healthcare professional. ▸ Consider rechecking blood glucose, ketones and insulin.

Code	Screen Message	Possible Causes	Possible Solutions
W-80	Below hypo warning limit	Your blood glucose result is below the hypo warning limit set in the meter.	▸ Treat low blood glucose as recommended by your healthcare professional. ▸ If bolus advice is turned on, the meter displays a recommended number of fast carbohydrates for you to eat. It is recommended you retest your blood glucose.
W-81	LO bG warning	Your blood glucose may be lower than the measuring range of the meter.	▸ If you are experiencing any of the common symptoms of low blood glucose, contact your healthcare professional immediately. ▸ Treat low blood glucose as recommended by your healthcare professional. ▸ Consider rechecking blood glucose.

Code	Screen Message	Possible Causes	Possible Solutions
W-85	Bolus advice data reset	When bolus advice is enabled, this warning is displayed when either: ▸ The logbook entries have been deleted, or ▸ An Internal clock error E-60 has occurred.	Wait 8 hours for accurate bolus advice. For additional assistance, contact Roche.

14 Technical Information

14.1 Product Limitations

Read the literature packaged with the test strips and control solutions for the latest information on product specifications and limitations.

14.2 Specifications

Blood volume	Refer to the test strip package insert.
Sample type	Refer to the test strip package insert.
Test time	Refer to the test strip package insert.
Measurement range	Refer to the test strip package insert.
Test strip storage conditions	Refer to the test strip package insert.
Meter storage conditions	-20 °C to 50 °C

System operating conditions	Refer to the test strip package insert.
Memory capacity	2000 logbook records
Automatic power off	2 minutes
Power supply	▶ One custom lithium-ion rechargeable battery ▶ Power adapter: PHIHONG switching power supply Model PSC03R-050
Display	76 mm colour TFT touchscreen
Dimensions	105 × 53 × 19 mm LWH
Weight	105 g

Construction	Hand-held
Protection class	III
Meter type	The Accu-Chek Aviva Insight diabetes manager is suitable for continuous operation.
Control solution storage conditions	Refer to the control solution package insert.
Interfaces 	USB: micro-B connector; Continua Certified® to a Continua Certified manager.

Electromagnetic Compatibility

The meter meets the electromagnetic emission requirements as per EN 61326-2-6. Its electromagnetic emission is thus low. Interference on other electrically-driven equipment is not anticipated.

Performance Analysis

Refer to the test strip package insert.

Test Principle

Refer to the test strip package insert.

Bluetooth® Wireless Technology

The meter utilises Bluetooth wireless technology to communicate and transfer information. Bluetooth wireless technology is a form of radio frequency (RF) technology that operates in the unlicensed industrial, scientific and medical band at 2.4 to 2.485 GHz. The RF channel utilised for communication between the meter and another device is not an open channel.

Radio Frequency Communication

The device complies with the United States Federal Communication Commission (FCC) standards. The device complies with FCC Part 15 Rules. Operation of the device is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Compliance with these guidelines means that under normal, daily circumstances the device should not affect the operation of other devices. In addition, the device should operate normally in the presence of other devices.

In the event there is interference from another device, it is recommended that you increase distance between meter and that device. You may also turn off the interfering device.

Changes or modifications to the device not expressly approved by Roche could void the user's authority to operate the device.

The device has been tested and found to comply with the limits for a Class B digital device. The device generates, uses, and can radiate radio frequency energy.

Declaration of Conformity

Roche hereby declares that the Accu-Chek Aviva Insight diabetes manager conforms with the basic requirements and other relevant regulations of the European Directive 2014/53/EU. The conformity declaration may be found at the following Internet address: http://declarations.accu-chek.com

Maximum Transmitted Power

Accu-Chek Aviva Insight meter: 30 mW

14.3 Product Safety Information

⚠ WARNING

- Choking hazard. Small parts. Keep away from children under the age of 3 years.
- Strong electromagnetic fields may interfere with the proper operation of the meter. Do not use the meter close to sources of strong electromagnetic radiation.
- To avoid electrostatic discharge, do not use the meter in a very dry environment, especially one in which synthetic materials are present.

14.4 Discarding the Meter

⚠ WARNING

- During blood glucose testing, the meter itself may come into contact with blood. Used meters therefore carry a risk of infection. Before discarding the meter, remove the battery or batteries. Discard used meters according to the regulations applicable in your country. Contact the local council and authority for information about correct disposal.
- The meter falls outside the scope of the European Directive 2002/96/EC – Directive on waste electrical and electronic equipment (WEEE).
- Discard used batteries according to local environmental regulations.

14.5 Explanation of Symbols

These symbols may appear on the packaging, on the type plate, and in the User's Manual for the meter.

	Consult instructions for use
	Caution, refer to safety-related notes in the instructions for use accompanying this product.
	Temperature limitation (store at)
	Manufacturer
	Catalogue number
	In vitro diagnostic medical device
	Global Trade Item Number

	This product fulfils the requirements of the European Directive 98/79/EC on in vitro diagnostic medical devices.
	This product fulfils the requirements of the European Directive 1999/5/EC on radio and telecommunications terminal equipment (R&TTE).
	Custom lithium-ion rechargeable battery
	Batch code
	Serial number
	Use by
	Manufacturer date

14.6 List of Icons

The icons and icon names in the meter are:

Icon Name	Icon
About or Information	
Active	
Active Insulin	
Add Data	
Advice Options (Bolus Advice)	
After Meal	

Icon Name	Icon
All	
Analyzing	
Background Color	
Backspace (Keyboard)	
Basal Insulin	
Basal Insulin Locked	
Battery (Power Level)	

Icon Name	Icon
Battery Charging (Empty)	
Battery Charging (Full)	
Battery Charging (Partial)	
Bedtime	
Before Meal	
bG Averages	
bG or bG Test	
bG Value Range Above	

Icon Name	Icon
bG Value Range Hypo	
bG Value Range Low	
bG Value Range Normal	
Bolus	
Bolus Advice	
Bolus Advice Accepted	
Bolus Advice Not Accepted	
Bolus Advice Setting	

Icon Name	Icon
Bolus Locked	
Bolus Menu	
Cancel	
Capital Letters (Keyboard)	
Carbohydrate Unit	
Carbohydrates	
Carbohydrates Accepted	
Carbohydrates Locked	

Icon Name	Icon
Carbohydrates Not Accepted	
Chart	
Communication or Radio Connection	
Connect to PC	
Control Test	
Data	
Date and Time	
Delete	

Icon Name	Icon
Device Connect	
Device Settings	
Devices	
Display Brightness	
Done	
Edit Name	
Error	
Error Log	

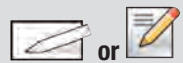
Icon Name	Icon
Exercise 1	
Exercise 2	
Fasting	
Flight Mode	
Flight Mode (Turn Off)	
Flight Mode (Turn On)	
Graph	
Health Event	

Icon Name	Icon
Health Event (Custom)	
Health Event Locked	
Help	
Home Screen	
Illness	
Insulin	
Insulin Increment	
Language	

Icon Name	Icon
Locked	
Logbook	
Logbook Locked	
Main Menu	
Maintenance Message	
Manage Devices (Pairings)	
Max Bolus	
Meal	

Icon Name	Icon
Meal Time	
Meal Time Locked	
Meter	
Meter Function Test	
Meter Information	
Mode Setting	
My Data	
No Entry (Meal Time)	

Icon Name	Icon
Note	
Note Locked	
Other (Meal Time)	
Pair (New)	
PC (Computer)	
Pen/Syringe (Bolus)	
Play Tone	
Premenstrual	

Icon Name	Icon
Quick Notes	
Radio Connection	
Reminder	
Reset Timeblocks	
RF (Radio Frequency) Signal	
Save	
Setup Mode	

Icon Name	Icon
Snack	
Sound (Volume)	
Sound and Vibrate	
Standard Day	
Standard Week	
Status Screen	
Stress	

Icon Name	Icon
System Settings	
Table	
Target Data	
Temperature	
Time Scale	
Timeblock Settings	
Touchscreen Calibration	

Icon Name	Icon
Touchscreen Settings	
Trend Graph	
Vibrate	
Warning	
Warning Limits	

14.7 Guarantee

The statutory provisions on rights in consumer goods sales in the country of purchase shall apply.

14.8 Additional Supplies

Test Strips

Accu-Chek Aviva test strips

Control Solutions

Accu-Chek Aviva control solutions

14.9 Information for Healthcare Professionals

⚠ WARNING

Healthcare Professionals: Follow the infection control procedures appropriate for your facility. Refer to the test strip package insert for additional healthcare professional information.

Sample Handling

Always wear gloves when handling blood-contaminated items. Always adhere to the recognised procedures for handling objects that are potentially contaminated with human material. Follow the hygiene and safety policy of your laboratory or institution. Prepare the selected blood collection site per facility policy.

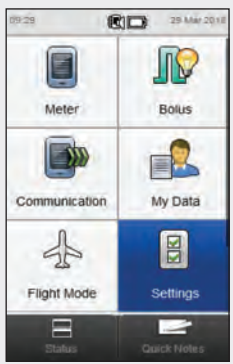
Refer to the test strip package insert for additional information regarding acceptable sample types, anticoagulants and handling instructions.

14.10 Meter Information

This information is primarily for technical support purposes and may be requested by support personnel.

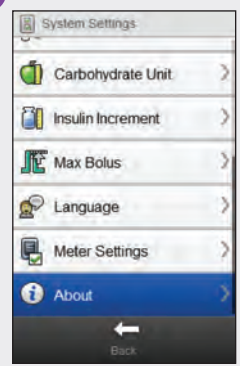
Main Menu > Settings > About > Meter Information

1



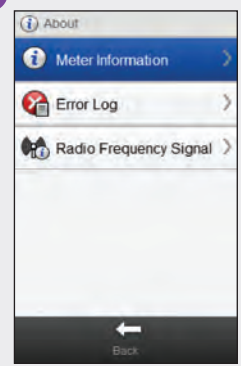
From the Main Menu, select Settings.

2



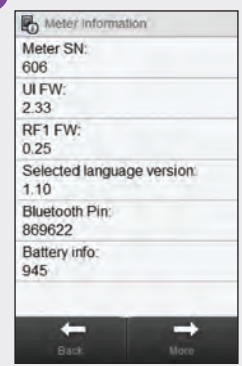
Scroll the screen and select About.

3



Select Meter Information.

4



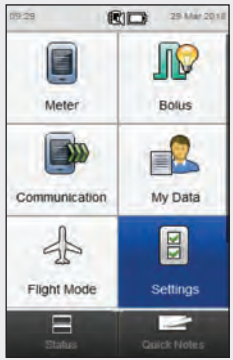
To see additional meter information, select More.

14.11 Error Log

The Error Log screen displays up to the last 50 Errors and Maintenance messages starting with the most recent entry.

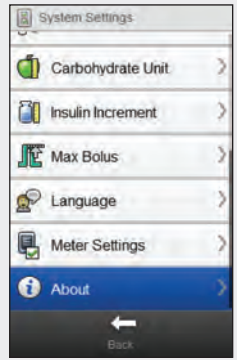
Main Menu > Settings > About > Error Log

1



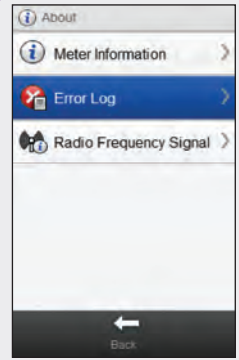
From the Main Menu, select Settings.

2



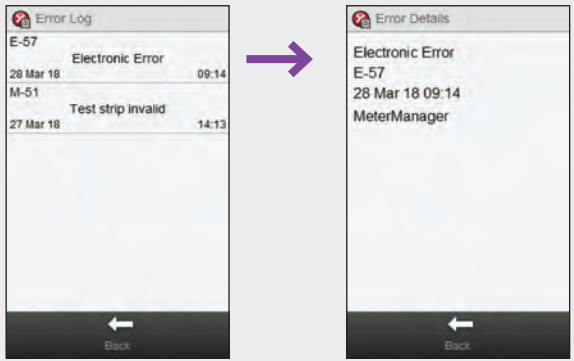
Scroll the screen and select About.

3



Select Error Log.

4



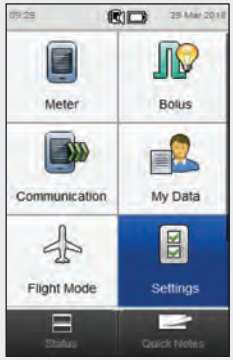
Scroll to view all Error Log records. Select an Error Log record to see its details.

14.12 Radio Frequency (RF) Signal

This information is primarily for technical support purposes and may be requested by support personnel.

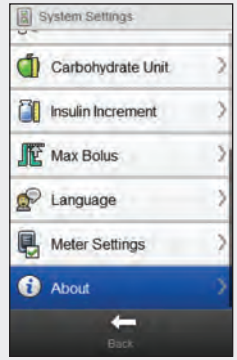
Main Menu > Settings > About > Radio Frequency Signal

1



From the Main Menu, select Settings.

2



Scroll the screen and select About.

3

Select Radio Frequency Signal.

NOTE

If the meter is not paired to a device, the Radio Frequency Signal button is disabled.

The names of the radio frequency devices with the radio frequency signal strength of each are displayed.

14.13 Meter Range Limits and Defaults

Data Type	Unit of Measurement	MIN	MAX	Increments	Default Setting
Acting Time	HH:MM	01:30	08:00	00:15	04:00
After High bG Reminder Duration (Remind after)	HH:MM	01:00	06:00	00:15	04:00
After Low bG Reminder Duration (Remind after)	HH:MM	00:05	00:30	00:05	00:15
After Meal Test Reminder Duration (Remind after)	HH:MM	01:00	04:00	00:15	02:00

Data Type	Unit of Measurement	MIN	MAX	Increments	Default Setting
Basal Insulin	U	0	99	Insulin Increment	0
bG Result	mmol/L	0.6	33.3	0.1	No Entry (- - - mmol/L)
bG Threshold (After High bG Reminder)	mmol/L	5.5	19.5	0.1	Hyper Warning Limit
bG Threshold (After Low bG Reminder)	mmol/L	3.0	5.5	0.1	Hypo Warning Limit
Bolus Insulin	U	0	25	Insulin Increment	0
Carb Ratio (carbs)	grams	1	240	1	No Entry (- - - g)
	BE	0.1	20	0.1	No Entry (- - - BE)
	KE	0.1	24	0.1	No Entry (- - - KE)
	CC	0.1	16	0.1	No Entry (- - - CC)

Data Type	Unit of Measurement	MIN	MAX	Increments	Default Setting
Carb Ratio (insulin)	U	0.1	50	0.1	1
Carbohydrates	grams	0	240	1	No Entry (- - - g)
	BE	0	20	0.1	No Entry (- - - BE)
	KE	0	24	0.1	No Entry (- - - KE)
	CC	0	16	0.1	No Entry (- - - CC)
Control Result	mmol/L	0.6	33.3	0.1	No Entry (- - - mmol/L)
Customized 1, 2 and 3 (health event)	%	-50	50	1	0

Data Type	Unit of Measurement	MIN	MAX	Increments	Default Setting
Exercise 1 (health event)	%	-50	50	1	0
Exercise 2 (health event)	%	-50	50	1	0
Hyper Warning Limit	mmol/L	10.0	19.4	0.1	16.6
Hypo Warning Limit	mmol/L	2.8	5.0	0.1	4.0
Illness (health event)	%	-50	50	1	0
Insulin Increment	U	0.5	1		1

Data Type	Unit of Measurement	MIN	MAX	Increments	Default Setting
Insulin Sensitivity (bG)	mmol/L	0.1	55.4	0.1	No Entry (- - - mmol/L)
Insulin Sensitivity (insulin)	U	0.1	50	0.1	1
Lower value (Target Range)	mmol/L	2.8	8.0	0.1	4.0
Max Bolus	U	0	50	1 or 0.5 (per the insulin increment value)	No Entry (- - - U)
Meal Rise (bG)	mmol/L	1.7	11.1	0.1	2.8
Offset Time	HH:MM	00:45	Acting Time	00:15	01:00

Data Type	Unit of Measurement	MIN	MAX	Increments	Default Setting
Premenstrual (health event)	%	-50	50	1	0
Snack Size (carbs)	grams	0	24	1	No Entry (- - - g)
	BE	0	2.0	0.1	No Entry (- - - BE)
	KE	0	2.4	0.1	No Entry (- - - KE)
	CC	0	1.6	0.1	No Entry (- - - CC)
Stress (health event)	%	-50	50	1	0
Upper value (Target Range)	mmol/L	5.5	15.0	0.1	8.0

Appendix A: Bolus Advice Overview

Bolus Calculation

The bolus recommended by the bolus advice feature of the meter consists of two components: a recommendation for a carbohydrate bolus that covers your food intake and a recommendation for a correction bolus to adjust your blood glucose level if it is not within the target range. The correction bolus can be positive if your current blood glucose level is above your target range or negative if it is below your target range.

Carbohydrate Bolus

A carbohydrate bolus is the amount of insulin that needs to be administered to cover the amount of carbohydrates you are planning to eat. It is calculated as:

Carbohydrate Bolus = Carbohydrate Intake × Carbohydrate Ratio

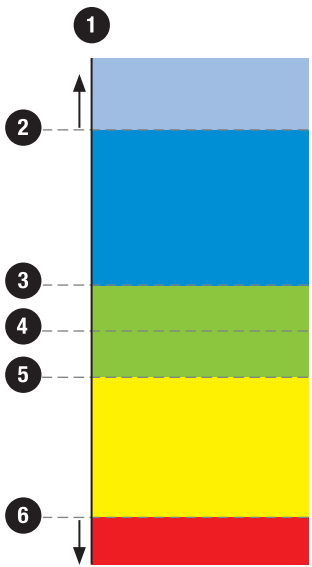
Where:

Carbohydrate Ratio = Insulin ÷ Carbohydrates

Correction Bolus

If your current blood glucose level is not within your target range, a correction bolus is recommended.

Blood Glucose Limits



1. bG Result

2. Hyper Warning

3. Upper Target Limit

4. Target

5. Lower Target Limit

6. Hypo Warning

Discuss your blood glucose limits with your healthcare professional.

The calculation for the recommended correction bolus depends on your current blood glucose result, your insulin sensitivity for the current time block, and whether you are planning to eat. Health event percentages are applied to the bolus advice recommendation.

Example Bolus Advice Calculations

Blood Glucose Level	Without Food Intake (No Carbohydrates)	Prior to a Meal
Above Upper Target Limit	(bG - Target bG) × Insulin Sensitivity	(bG - Target bG) × Insulin Sensitivity + Carbohydrate Bolus
Between Upper and Lower Target Limit	No correction bolus is necessary.	(bG - Target bG) × Insulin Sensitivity + Carbohydrate Bolus. A correction bolus can be negative.
Between Lower Target Limit and Hypo Warning	No bolus recommended. The correction bolus is negative.	(bG - Target bG) × Insulin Sensitivity + Carbohydrate Bolus. The correction bolus is negative.
Below Hypo Warning	Hypo warning appears. It is recommended you eat fast-acting carbohydrates. Bolus advice is not available.	Hypo warning appears. It is recommended you eat fast-acting carbohydrates. Bolus advice is not available.

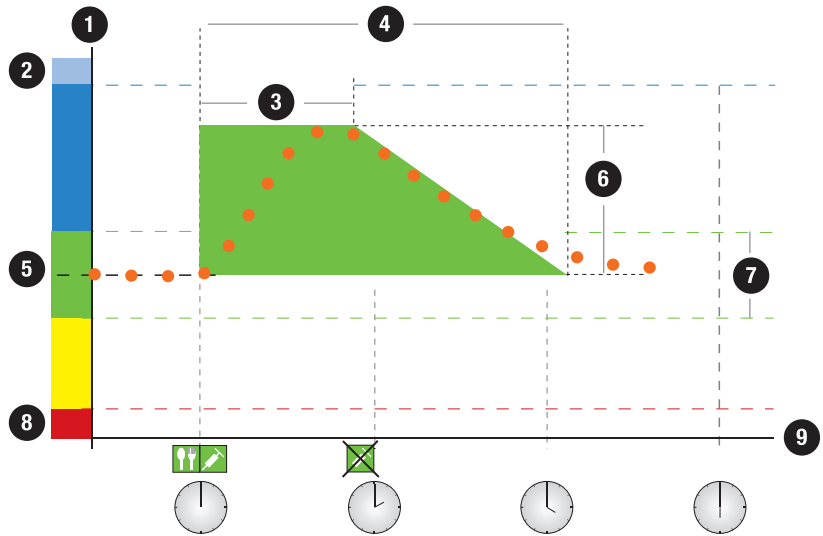
Other Boluses

Subsequent Carbohydrate Boluses

If you are planning to eat several meals or snacks in a short period of time, you should administer a carbohydrate bolus for each meal. The calculation is always the same as a carbohydrate bolus.

Correction Bolus After a Meal

After a meal, it is normal to allow for a rise of your blood glucose level even if you administered the correct carbohydrate bolus. The allowed blood glucose level rise is called meal rise. After a certain period of time (offset time) the meal rise decreases from its maximum until your blood glucose level has returned to the target level. The period of time from the start of the meal rise until your blood glucose level returns to the target level is defined as acting time. During this time, a correction bolus is only recommended if your blood glucose level exceeds the current meal rise level.



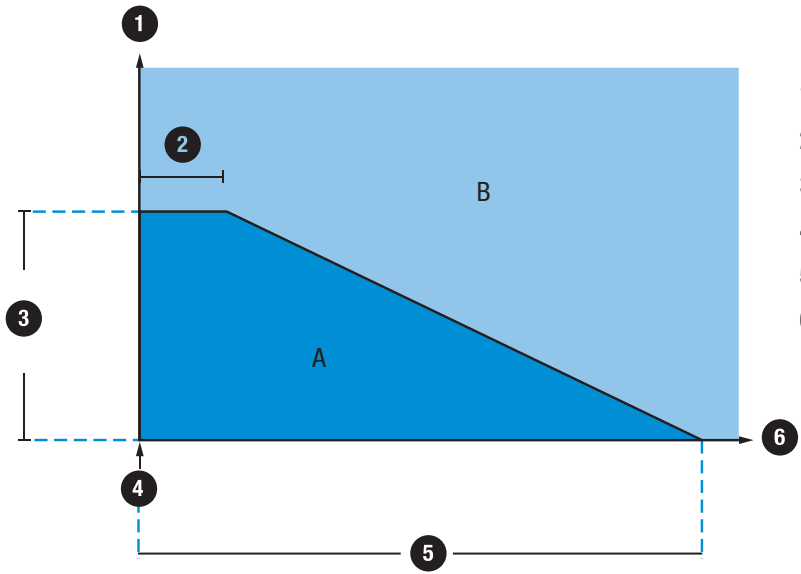
The dotted line shows how your blood glucose level might change after a carbohydrate bolus. Bolus advice tolerates an increase in your blood glucose level within the meal rise range (green) without calculating an extra correction bolus. When you enter a carbohydrate amount that is greater than the snack size, the meal rise setting is added to the blood glucose target value. The shape of the meal rise (the width of the green area) is determined by the offset time and the acting time.

- Current bG Values
- Meal
- Bolus
- Bolus Not Required
- Currently Allowed bG Value: Meal Rise

1. bG Level
2. Hyper
3. Offset Time
4. Acting Time
5. Target Value
6. Meal Rise
7. Target Range
8. Hypo
9. Time

Subsequent Correction Boluses

The difference between your current blood glucose level and your target blood glucose level is called Delta bG. A correction bolus administered according to the previous conditions covers this difference for a certain period of time. As the correction bolus starts to take effect, your current blood glucose level should fall and the covered Delta bG decreases after the offset time. At the end of the acting time, your blood glucose level should return to the target limit. You receive a recommendation for another correction bolus only if your current blood glucose result exceeds the current Delta bG level.



1. bG Result
2. Offset Time
3. Delta bG (Correction Insulin)
4. Correction Bolus
5. Acting Time
6. Time

Subsequent Correction Boluses: If your blood glucose result is within Section A of the graph, a correction bolus is not recommended. If your blood glucose result is within Section B of the graph, a correction bolus is recommended.

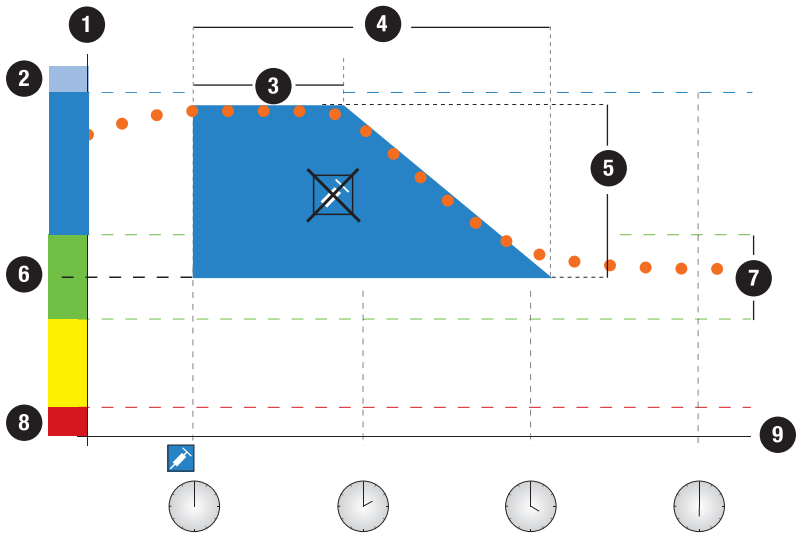
Examples of Bolus Advice Recommendations

The following graphs provide differing examples of how bolus advice considers different factors when calculations are made.

The currently allowed blood glucose value considers the following factors:

- Target Range Mean Value
- Meal Rise
- Correction Bolus

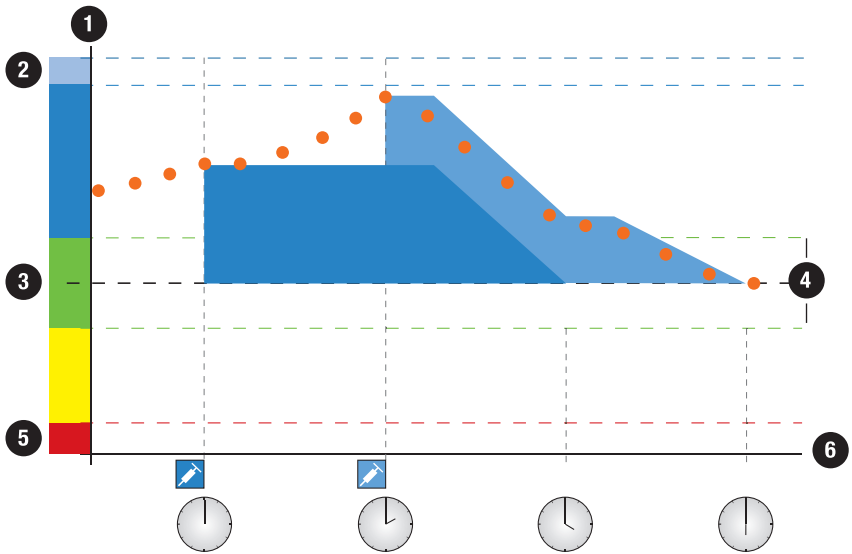
After a Correction Bolus



The above diagram shows an example of the effect of this rule. The first correction bolus at 12:00 remains active during the acting time (the width of the blue area). If the blood glucose value at 14:00 falls below the currently allowed blood glucose value (top of the blue area), another correction bolus is not calculated.

- Current bG Values
- Bolus
- Bolus Not Required
- Currently Allowed bG Value: Corrected bG

1. bG Level
2. Hyper
3. Offset Time
4. Acting Time
5. Corrected bG
6. Target Value
7. Target Range
8. Hypo
9. Time



Current bG Values

Bolus

1. bG Level

2. Hyper

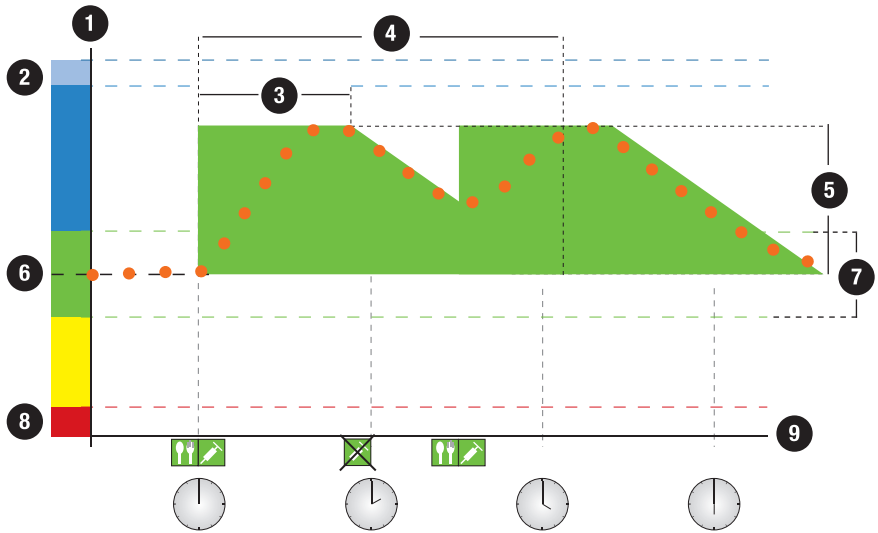
3. Target Value

4. Target Range

5. Hypo

6. Time

When a blood glucose result is greater than the currently allowed blood glucose value, a bolus is calculated (light blue) that only considers the difference between the current blood glucose value (orange dots) and the currently allowed blood glucose value (the top of the blue area).



Current bG Values

Meal

Bolus

Bolus Not Required

Currently Allowed bG Value: Meal Rise

1. bG Level
2. Hyper
3. Offset Time
4. Acting Time
5. Meal Rise
6. Target Value
7. Target Range
8. Hypo
9. Time

Subsequent Meals

If you eat several meals in a row, the meal rise is restarted for each new carbohydrate bolus.

Appendix B: Bolus Advice Calculations

The Mathematical Basis for Bolus Calculations

The following is a list of the most important formulas and the calculation principles on which bolus advice is based. It is difficult to accurately calculate a bolus yourself using these formulas when the acting time and offset time of recent meals and correction boluses are considered.

Carbohydrate Advice

This calculation is made when the blood glucose result falls below the hypo warning limit. It is based on the other values defined for the current time block and the result is calculated as a carbohydrate intake recommendation.

Carbohydrates = (Target Range Mean Value – Current bG) × Insulin Sensitivity ÷ Carbohydrate Ratio

Where:

Insulin Sensitivity = Insulin ÷ ΔbG

Carbohydrate Ratio = Insulin ÷ Carbohydrates

NOTE

- A minimum amount of 12 g (or equivalent BE, KE or CC units) is always given. If the calculated value is below 12 g, then 12 g is used.
- The carbohydrate advice is displayed in the carbohydrate unit of measure you have selected (g, BE, KE or CC).

Carbohydrate Bolus

The following formula is used to calculate the bolus for meals:

Carbohydrate Bolus = Carbohydrate Intake × Carbohydrate Ratio

Where:

Carbohydrate Ratio = Insulin ÷ Carbohydrates

Currently Allowed Blood Glucose Value

The target range average value used in the calculation of the correction bolus, as shown below, changes with the definition for the time blocks.

Consequently, the currently allowed blood glucose value is calculated as follows:

Currently Allowed Blood Glucose Value = Target Range Mean Value + Meal Rise + Sum of Blood Glucose Range Covered by Correction Bolus

Where:

Meal Rise is from the current active meal

Sum of Blood Glucose Range Covered by Correction Bolus from currently acting correction boluses

When no meal rise or correction bolus acting time is currently in effect, a value of “0” is substituted for these parameters in the formula.

Correction Bolus

Generally, a correction bolus is only calculated if the current blood glucose value is above the hypo bG warning limit and outside the target range. If the current blood glucose value is above the target range, the currently allowed blood glucose value must also be exceeded. Only correction boluses greater than “0” trigger a corresponding acting time.

Correction Bolus = (Current bG – Currently Allowed bG) × Insulin Sensitivity

Where:

Insulin Sensitivity = Insulin ÷ ΔbG

The blood glucose correction portion depends on the following requirements:

- If current bG > currently allowed blood glucose value, then blood glucose correction portion = current bG – currently allowed blood glucose value
- If current bG > hypo warning limit and current bG < target range lower limit, then bG correction portion = current bG – target range average value

Correction Bolus with Carbohydrate Intake

Whenever carbohydrates have been entered, the related carbohydrate bolus is always offset against any (even negative) correction bolus.

When a meal is eaten, the correction bolus is also calculated for blood glucose results that fall within the target range if:

- The current blood glucose result falls below the target range average value, or
- The current blood glucose result is above the currently allowed blood glucose value.

Mathematically negative overall boluses are displayed as “0”.

Active Insulin

A calculated value representing the effective amount of insulin currently in the body that is working to lower blood glucose. This amount does not include any insulin that is working to account for carbohydrate intake. It also does not include basal insulin.

Glossary

Term	Definition
Acting time	The period of time from the start of a bolus until your blood glucose level is expected to return to the target level.
Active insulin	A calculated value representing the effective amount of insulin currently in the body that is working to lower blood glucose. This amount does not include any insulin that is working to account for carbohydrate intake. It also does not include basal insulin.
Advice options	Factors that influence bolus advice recommendations including meal rise, snack size, acting time and offset time.
After high bG reminder	A reminder to retest your blood glucose. When enabled, this reminder occurs after a high blood glucose result.
After low bG reminder	A reminder to retest your blood glucose. When enabled, this reminder occurs after a low blood glucose result.
After meal reminder	A reminder to retest your blood glucose. When enabled, this reminder occurs after a meal. For this reminder to occur, you must enter the meal time of a bG test as before meal.
Alarm	Audible or vibrating (silent) notification indicating a reminder, warning, error or maintenance message.

Term	Definition
am	Ante Meridiem (12-hour clock notation for “before noon”)
Basal rate	The amount of insulin delivered per hour that is required to cover your basal, meal-independent insulin needs.
BE	Bread Equivalent
bG test reminders	Reminders to retest your blood glucose after a high blood glucose result, after a low blood glucose result or after a meal.
bG threshold	A bG test reminder setting; the upper limit is for your blood glucose for a high bG test reminder and the lower limit is for your blood glucose for a low bG test reminder.
Blood glucose (bG)	The level of glucose (sugar) in blood.
Bluetooth Wireless Technology	Wireless short-range communications technology which connects devices in order to exchange information.
Bolus	The amount of insulin delivered (in addition to the basal rate) to cover the intake of food and to correct high blood glucose levels. The bolus amount is determined by your healthcare professional’s guidelines, your blood glucose level, your food intake, your activity level and other factors.

Term	Definition
Bolus advice	When enabled, bolus advice provides a suggestion for how much insulin should be delivered for a meal and/or to correct for a blood glucose level.
°C	Degrees Celsius (or Centigrade)
Carbohydrate (or Carb) ratio	The amount of insulin necessary to account for a certain amount of carbohydrates.
Carbohydrates (or Carbs)	Carbohydrates include sugars and starches. Carbohydrates can increase blood glucose levels slowly or rapidly. Carbohydrates are generally counted to calculate a bolus insulin amount.
CC	Carbohydrate Choice
Control result	Value displayed on meter as the result of a control test. When the control result is within the range shown on the label of the test strip container, the test strips and the meter are working properly.
Control test	A meter test using control solution which lets you know that the meter and test strips are working properly.
Corrupt result	A historical result that cannot be displayed by the meter because of an error.

Term	Definition
Current time	The time you set through the Settings menu and then in the Date and Time screen.
Default	The initial settings on the meter before you change or customise them.
Discovery mode	When your meter is “discoverable,” other Bluetooth devices can detect it, pair with it or connect to it.
Dismiss	Ends a reminder.
End time	The end time of a time block.
FCC	Federal Communications Commission (United States)
Flight mode	This setting disables all wireless communication on the meter to comply with regulations on air travel.
g	Grams

Term	Definition
GHz	Gigahertz
Health event	Information about your current health status or activities (Exercise 1, Exercise 2, Stress, Illness, Premenstrual or Customized). Up to four health events can be selected and stored with a blood glucose result. Each status or activity (health event) accounts for a certain percentage according to your settings and is used to adjust bolus advice recommendations.
HI	Appears on the meter's screen when the test result is above the meter's measurement range.
Hyper	Hyperglycaemia: A condition that occurs when the blood glucose level is too high.
Hyper warning limit	A limit set in the meter. When your blood glucose result is above the hyper warning limit, a warning is displayed. The hyper warning limit should be provided by or discussed with your healthcare professional.
Hypo	Hypoglycaemia: A condition that occurs when the blood glucose level is too low.
Hypo warning limit	A limit set in the meter. When your blood glucose result is below the hypo warning limit, a warning is displayed. The hypo warning limit should be provided by or discussed with your healthcare professional.
IC	Industry Canada

Term	Definition
Insulin increment	The amount in units (U) by which your insulin dose is adjusted when programming a bolus or when entering a manual logbook entry.
Insulin sensitivity	The amount of insulin necessary to lower your blood glucose by a certain amount.
ISO	International Organization for Standardization
KE	Kohlenhydrateinheit (carbohydrate unit)
Lanyard	A cord worn around the wrist or neck to carry an object.
LCD	Liquid Crystal Display
LO	Appears on the meter's screen when the test result is below the meter's measurement range.
Max bolus	Max bolus serves as a safety measure against unintended large boluses. It is a meter setting that specifies a maximum amount of insulin that can be delivered in any single bolus. A bolus that is larger than the max bolus amount requires an additional confirmation.

Term	Definition
Meal rise	The increase in blood glucose levels during or after meals that is considered normal within a certain range, even though a bolus has been delivered.
Meal time	Information about the time point of a blood glucose result (before meal, after meal, bedtime, fasting or other). It can be selected from a pop-up menu and is stored with a blood glucose result.
Meter	Blood glucose meter
mmol/L	Millimoles per Litre
Note	Additional information
Offset time	The expected amount of time before the insulin begins to lower blood glucose levels in the body.
Paired	Meter and another device exclusively communicate and transfer information with each other when they are paired.
Pen/syringe bolus	A bolus delivered using a pen or syringe.

Term	Definition
PIN	Personal Identification Number
pm	Post Meridiem (12-hour clock notation for “after noon”)
Quick Notes	A logbook entry that can quickly be saved from the Main Menu or Status screen.
Remind after	A bG test reminder setting. The amount of time after a high blood glucose result, after a low blood glucose result or after a meal you want the reminder to occur.
Reminder	When enabled, reminders occur to remind you to test your blood glucose, to retest your blood glucose or of an event or activity.
RF	Radio Frequency
SD	Standard Deviation
Signal suspension	Suspends meter signals until the suspension period ends or the meter is turned on.

Term	Definition
Snack size	The snack size defines a threshold of carbohydrates above which a meal rise is triggered.
Snooze	Reschedules a reminder to reoccur in a preset amount of time (for example, in 5 minutes).
Standard deviation	As it is used in this User's Manual, standard deviation measures how widely spread the blood glucose results are (e.g., if the bG results are close to the bG average, then the standard deviation is small).
Start time	The start time of a time block.
Target range	The desired upper and lower limits of your blood glucose level considered acceptable when fasting or before a meal as set by your healthcare professional.
Test strip	A plastic strip coated with chemicals that, when inserted into a meter, reacts with a blood drop to deliver a blood glucose result.
Time block	One of up to eight time periods within one day.
Time scale	The user sets the duration of time to configure a My Data graph or table.

Term	Definition
Touchscreen	A screen that can be touched to interact with the device.
U	Units (insulin units)
USB	Universal Serial Bus
Warning	Describes items and conditions that present hazards and may cause personal injury.
Warning limit	See Hyper warning limit or Hypo warning limit.

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