

ACCU-CHEK® Aviva Expert



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ACCU-CHEK® Aviva Expert

BLOOD GLUCOSE METER

Getting Started Guide



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V7/1 – 05071763005 – Schwarz –
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Contents

Introduction	3
1 Understanding Your New System	5
1.1 Overview	6
1.2 The Accu-Chek Aviva Expert Meter at a Glance	7
1.3 Screen Content and Navigation	12
2 Getting Started	19
2.1 Overview	20
2.2 Coding Your Meter	21
2.3 Setup Wizard	23
2.4 Setup Wizard: Important Information	39
3 Testing Your Blood Glucose	49
3.1 Overview	50
3.2 Performing a Blood Glucose Test	51

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 Roche USA – 49396
V4/3 – 05071763005 – Magenta

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V4/4 – 05071763005 – Yellow

Appendix: Explanation of Symbols 57

Glossary 59

Index 67

Introduction

Whether the Accu-Chek Aviva Expert Meter is your first blood glucose meter or you have used a meter for some time, please take the time to read the Getting Started Guide, the Standard Owner's Booklet, and the Advanced Owner's Booklet carefully before you use your new meter. To use it correctly and dependably, you need to understand its operation, screen displays, and all individual features.

Your new meter includes three booklets:

- **Getting Started Guide:**
Use this booklet to set up the meter.
- **Standard Owner's Booklet:**
Use this booklet for instructions on how to operate the standard features of the meter.
- **Advanced Owner's Booklet:**
Use this booklet for instructions on how to operate the advanced features of the meter.

This booklet includes information about:

- Understanding your new Accu-Chek Aviva Expert System
- Getting started
- Coding the meter
- Completing the Setup Wizard
- Testing your blood glucose

 **WARNING:**

This Getting Started Guide does not replace the Standard Owner's Booklet for your Accu-Chek Aviva Expert Meter. The Standard Owner's Booklet contains important handling instructions and additional information.

Suitable for self-testing

Should you have any questions, please contact one of our customer support and service centers. A listing is at the back of the Standard Owner's booklet.



1 Understanding Your New System

1.1 Overview	6
1.2 The Accu-Chek Aviva Expert Meter at a Glance	7
1.3 Screen Content and Navigation	12

1.1 Overview

Your new meter has several features to assist you in managing your diabetes. It is important that you understand the features and how to operate the meter correctly.

 **NOTE:**

- This booklet shows sample screens. The screens in this booklet may look slightly different from the screens on the meter. If you have any questions about the meter screens, contact Roche.
- On the meter display, the code chip is referred to as a code key. Code key and code chip are interchangeable and mean the same thing.

1.2 The Accu-Chek Aviva Expert Meter at a Glance

Display

Shows menus, results, messages, and data stored in the diary.

Buttons

Press to enter menus or the diary, adjust settings, and scroll through results.

Left/Right Soft Keys

Press to select the menu or option above the key.

Power On/Off Button

Turns the meter on or off.

Test Strip Slot

Insert golden end of test strip here.

Backlight Button

Press to adjust the backlight level.

Infrared (IR) Window

Transfers data from the meter to a computer.

Code Key Slot

Insert code key here with code number facing away from you.

Battery Door

Remove the battery door by pushing the tab and pulling up the door.





Top View
Infrared (IR) Window



Code Key
(for example)



Batteries
Insert batteries according to the + and - symbols in the battery compartment.



Test Strip

Yellow Window - Touch blood drop or control solution here.

Golden End - Insert this end of the test strip into the meter.



Test Strip Container
(for example)



Control Solution Bottle
(for example)

The meter has seven buttons and two soft keys.



i NOTE:

- You hear a sound every time an active button/soft key is pressed unless you turned off the key sound.
- Press  or insert a test strip to turn on the meter.

Table of Buttons and Soft Keys

Button	Name	Function
	Left Arrow	▶ Move or scroll to the left in a screen.
	Right Arrow	▶ Move or scroll to the right in a screen.
	Up Arrow	▶ Move or scroll up in a screen.
	Down Arrow	▶ Move or scroll down in a screen.
	Left Soft Key	▶ Select the option above the key on the display.
	Right Soft Key	▶ Select the option above the key on the display.
	Enter	▶ Select a menu or option. ▶ Save changes and exit the entry field.
	Backlight	▶ Adjust the backlight level (low, medium, high).
	Power On/Off	▶ Turn the meter on and off.

Table of Button Combinations

Button Combination	Name	Function
When the buttons are locked, press and hold  and  until the Main Menu appears.	Unlock Keys	► Unlocks the buttons.

1.3 Screen Content and Navigation

This section provides an explanation of how to understand and navigate the screens on the meter.



Each time the meter is turned on, this splash screen (Accu-Chek logo screen) is displayed for a short period of time.

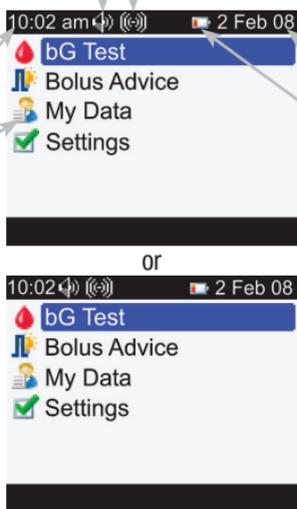
Features on the Main Menu:

Sound Icon

Appears when the beeper is turned on.

Time

Menu Options



Vibrate Icon

Appears when vibrate is turned on.

Date

Low Battery Icon

Appears when the meter batteries are low.

i NOTE:

To select an item on a menu, press ▲ or ▼ to highlight (blue) the menu item and then press .

Features on a screen:

Title Bar

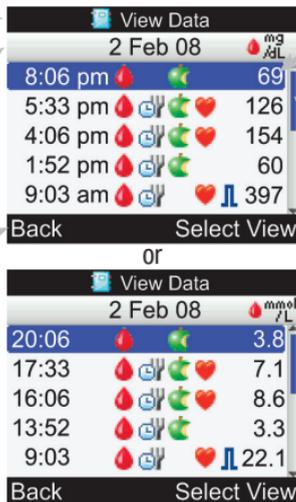
Primary menu title is displayed here.

Secondary Title Bar

When necessary, a secondary title bar appears. Secondary menu text is displayed here.

Left Soft Key Option

Press  to select the option above the button on the screen.



Highlighted Option

When a menu choice or item is selected, it is highlighted in blue.

Scroll Bar

If there is more information available than fits on the screen, a vertical scroll bar appears on the right side of the screen.

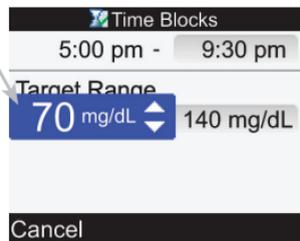
Right Soft Key Option

Press  to select the option above the button on the screen.

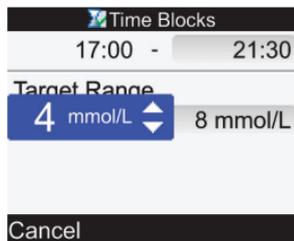
Information can be entered on some screens. Numerical entry fields appear as pop-up entry fields. When an option must be selected, it appears as a pop-up menu.

- To open a pop-up menu or entry field, press .
- Press  or  to select the appropriate pop-up menu option or until the correct numerical entry is present, and then press .
- Press and hold  or  to scroll faster.

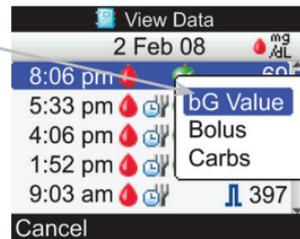
Pop-Up Entry Field



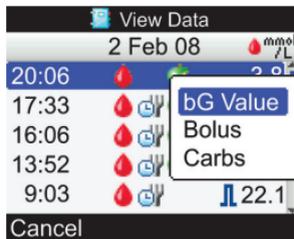
or



Pop-Up Menu



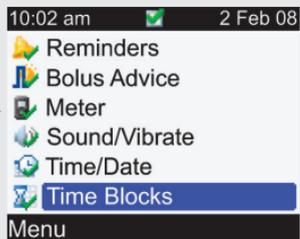
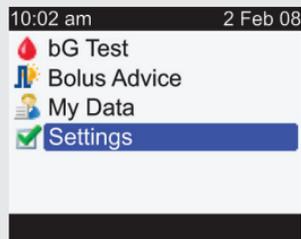
or



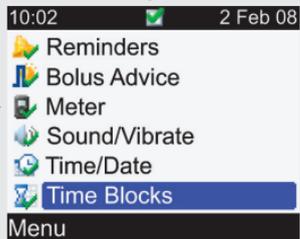
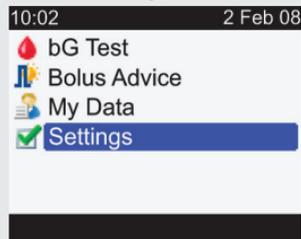
General Navigation Steps

To change the settings or enter information into the meter:

1.



or



or

- ▶ Press or to select a menu option and press .
- ▶ Repeat the previous step as necessary.

2.

The screenshot shows two 'Time Blocks' screens. The top screen has a time range of 12:00 am - 5:30 am and a target range of 70 mg/dL - 140 mg/dL. The bottom screen has a time range of 0:00 - 5:30 and a target range of 4 mmol/L - 8 mmol/L. Each screen has 'Cancel' and 'Save' buttons at the bottom.

- ▶ Press \triangle or ∇ or \triangleleft or \triangleright to select an option or a desired entry field and press \odot .

3.

The screenshot shows the 'Time Blocks' screen with the time range 12:00 - 5:30 am. The '5:30 am' is highlighted with a blue bar and a double-headed arrow, indicating it is being edited. The target range is 70 mg/dL - 140 mg/dL. The bottom screen shows the time range 0:00 - 5:30 with '5:30' highlighted and a double-headed arrow. The target range is 4 mmol/L - 8 mmol/L. Each screen has 'Cancel' and 'Save' buttons at the bottom.

- ▶ Press \triangle or ∇ to select the desired entry and press \odot .
- ▶ Repeat Steps 2 and 3, as necessary.

4.

- ▶ Select Save by pressing \odot to save changes and return to the previous screen.

2 Getting Started

2.1 Overview	20
2.2 Coding Your Meter	21
2.3 Setup Wizard	23
2.4 Setup Wizard: Important Information	39

2.1 Overview

Prior to using your Accu-Chek Aviva Expert Meter for the first time:

- Code the meter. If a code key is not inserted into the meter prior to turning on the meter, an error message appears. See Section 2.2, “Coding Your Meter” for instructions.
- Set up the meter properly. See Section 2.3, “Setup Wizard.”
- Consult with your healthcare professional to ensure the appropriate settings are selected.

i NOTE:

Blood glucose and bG are interchangeable and mean the same thing.

2.2 Coding Your Meter

1.



- ▶ Ensure the meter is off.

2.



- ▶ Turn over the meter.

3.



- ▶ Position the code key so that the code number faces away from you. Push it into the code key slot until it stops.

4.



- ▶ Leave the code key in the meter until you open a new box of test strips.

 **WARNING:**

Change the code key every time you open a new box of test strips.

 **CAUTION:**

Do not force the code key into the meter. It is designed to go in the meter only one way.

 **NOTE:**

- A new code key is inside each new box of test strips.
- If an improper, expired, or corrupted code key is inserted, you cannot complete a blood glucose test.

2.3 Setup Wizard

The first time you turn on the meter, the Setup Wizard is activated.

The Setup Wizard assists you in selecting settings for:

- Meter language¹
- Time and date¹
- Units (carbs)¹
- Warning limits for hypo (low) and hyper (high) blood glucose levels¹
- Time blocks¹
- Bolus advice (optional)
- bG test reminders (optional)

¹You must set up these items in order to complete a blood glucose test.

 **WARNING:**

- It is important to discuss your individual settings for warning limits, time blocks, bolus advice, and bG test reminders with your healthcare professional. For more information, see Section 2.4, “Setup Wizard: Important Information.”
- The default settings in the meter and the settings illustrated in this booklet are for example only.
- Bolus Advisor should not be used if you are using an intermediate-acting insulin like Neutral Protamine Hagedorn (NPH) insulin or any other intermediate-acting insulin.

i NOTE:

- Prior to turning on your meter for the first time, code your meter. See Section 2.2, “Coding Your Meter” for instructions.
- The Setup Wizard activates every time you turn on the meter until you complete the process.
- If you turn off the meter during the Setup Wizard, you must reconfirm all of the settings in order to complete the Setup Wizard.
- You must complete the Setup Wizard prior to performing a blood glucose test for the first time.
- To return to the previous screen in the Setup Wizard, select Back.
- A selected option is highlighted in blue.
- 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 Standard Owner’s Booklet.

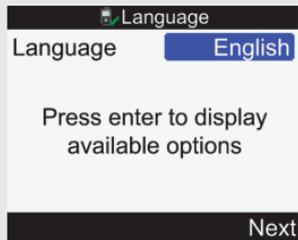
Completing the Setup Wizard

1.



- ▶ Press **1**. The meter beeps and displays this splash screen for a short period of time (this screen appears each time the meter is turned on).

2.



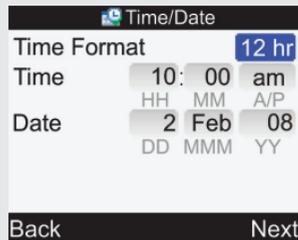
To Change the Language:

- ▶ Press **1** to display the Language options.
- ▶ Select the desired Language and press **1**.

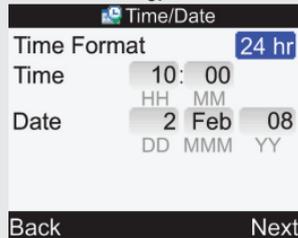
To Continue:

- ▶ Select Next.

3.



or



To Change the Time Format:

- ▶ Select the Time Format entry field and press **1**.
- ▶ Select 12 hr or 24 hr Time Format and press **1**.

To Change the Time:

- ▶ Select the Time entry field and press .
- ▶ Set the Hour and press .
- ▶ Set the Minutes and press .
- ▶ If Time Format is 12 hr, select am or pm and press .

To Change the Date:

- ▶ Select the Date entry field and press .
- ▶ Set the Day and press .
- ▶ Set the Month and press .
- ▶ Set the Year and press .

To Continue:

- ▶ Select Next.

4.

Units	
Carbs	Grams
Insulin Increment	1 U
Max Bolus	50 U
Back	Next

To Change the Carb Units:

- ▶ Press .
- ▶ Select Grams, BE, KE, or CC and press .

To Change the Insulin Increment:

- ▶ Select the Insulin Increment entry field.
- ▶ Select 0.5 U or 1 U Insulin Increment and press .

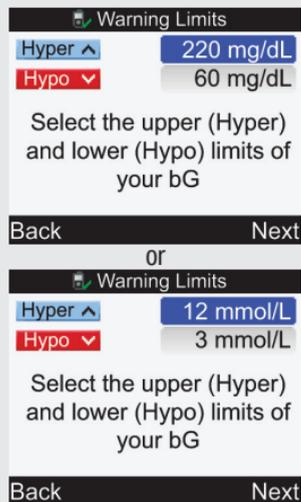
To Change the Max Bolus:

- ▶ Select the Max Bolus entry field.
- ▶ Set the Max Bolus level and press .

To Continue:

- ▶ Select Next.

5.



To Change the Hyper (Upper) Blood Glucose Level:

- ▶ Select the Hyper entry field and press .
- ▶ Set the Hyper (upper) blood glucose level and press .

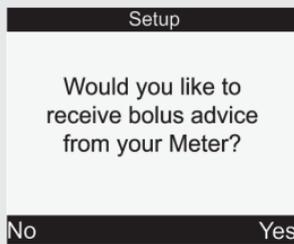
To Change the Hypo (Lower) Blood Glucose Level:

- ▶ Select the Hypo entry field and press .
- ▶ Set the Hypo (lower) blood glucose level and press .

To Continue:

- ▶ Select Next.

6.



- ▶ To receive Bolus Advice, select Yes and proceed to Step 8.
- ▶ If you do NOT want to receive Bolus Advice, select No and continue to Step 7.

7.

Setup

Edit at least one time block by selecting a time block and pressing enter

Back Next

If you Choose NOT to set up Bolus Advice:

You must edit at least one time block in order to complete the Setup Wizard.

- ▶ Select Next.

Time Blocks

Start	End
12:00 am	5:30 am
5:30 am	11:00 am
11:00 am	5:00 pm
5:00 pm	9:30 pm
9:30 pm	12:00 am

Back

or

Time Blocks

Start	End
0:00	5:30
5:30	11:00
11:00	17:00
17:00	21:30
21:30	0:00

Back

To Change the Time Blocks:

- ▶ Select a Time Block to edit and press .

Time Blocks

12:00 am - 5:30 am

Target Range

70 mg/dL - 140 mg/dL

Cancel Save

or

Time Blocks

0:00 - 5:30

Target Range

4 mmol/L - 8 mmol/L

Cancel Save

To Change the End Time:

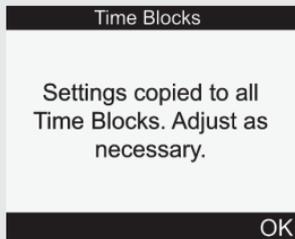
- ▶ Select the End Time entry field and press .
- ▶ Set the End Time and press .

To Change the Target Range:

- ▶ Select the entry field for the lower value of the Target Range and press .
- ▶ Set the lower value and press .
- ▶ Select the entry field for the upper value of the Target Range and press .
- ▶ Set the upper value and press .

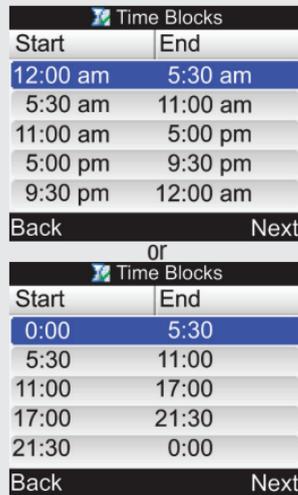
To Continue:

- ▶ Select Save.



The Target Range is copied to all Time Blocks. You may edit the Target Range for any other Time Block, if necessary.

- ▶ Select OK.



- ▶ Repeat the previous steps to change another Time Block.
- ▶ To continue, select Next and proceed to Step 11.

8.

Setup

Edit at least one time block by selecting a time block and pressing enter

Back

Next

If you Choose to set up Bolus Advice:

You must edit at least one time block in order to complete the Setup Wizard.

- ▶ Select Next.

Time Blocks

Start	End
12:00 am	5:30 am
5:30 am	11:00 am
11:00 am	5:00 pm
5:00 pm	9:30 pm
9:30 pm	12:00 am

Back

or

Time Blocks

Start	End
0:00	5:30
5:30	11:00
11:00	17:00
17:00	21:30
21:30	0:00

Back

To Change the Time Blocks:

For the first Time Block that is edited, Carb Ratio and Insulin Sensitivity must be entered to complete the Setup Wizard.

- ▶ Select a Time Block to edit and press .

Time Blocks

12:00 am - 5:30 am

Target Range
70 mg/dL - 140 mg/dL

Carb Ratio
1 U for 10 g

Cancel Save

scroll down

Time Blocks

Target Range
70 mg/dL - 140 mg/dL

Carb Ratio
1 U for 10 g

Insulin Sensitivity
1 U for 40 mg/dL

Cancel Save

or

Time Blocks

0:00 - 5:30

Target Range
4 mmol/L - 8 mmol/L

Carb Ratio
1 U for 10 g

Cancel Save

scroll down

Time Blocks

Target Range
4 mmol/L - 8 mmol/L

Carb Ratio
1 U for 10 g

Insulin Sensitivity
1 U for 2 mmol/L

Cancel Save

To Change the End Time:

- ▶ Select the End Time entry field and press .
- ▶ Set the End Time and press .

To Change the Target Range:

- ▶ Select the entry field for the lower value of the Target Range and press .
- ▶ Set the lower value and press .
- ▶ Select the entry field for the upper value of the Target Range and press .
- ▶ Set the upper value and press .

To Change the Carb Ratio:

- ▶ Select the entry field for the number of Insulin Units and press .
- ▶ Set the number of Insulin Units and press .
- ▶ Select the entry field for the amount of Carbs and press .

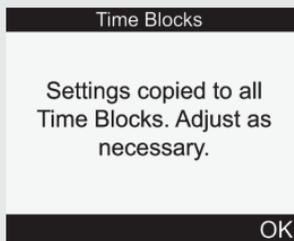
- ▶ Set the amount of Carbs covered by the selected units of insulin and press .

To Change the Insulin Sensitivity:

- ▶ Select the entry field for the number of Insulin Units and press .
- ▶ Set the number of Insulin Units and press .
- ▶ Select the entry field for the Insulin Sensitivity level and press .
- ▶ Set the Insulin Sensitivity level and press .

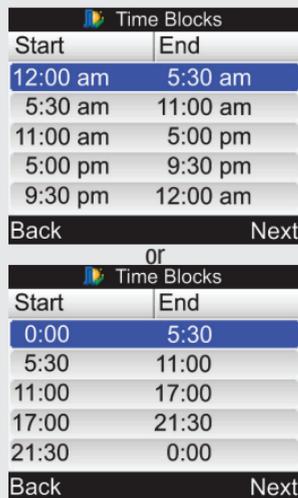
To Continue:

- ▶ Select Save.



The Target Range, Carb Ratio, and Insulin Sensitivity are copied to all Time Blocks. You may edit the Target Range, Carb Ratio, and Insulin Sensitivity for any other Time Block, if necessary.

- ▶ Select OK.



- ▶ Repeat the previous steps to change another Time Block.

To Continue:

- ▶ Select Next.

9.

Health Events	
Exercise 1	-10%
Exercise 2	-20%
Stress	0%
Illness	20%
Premenstrual	0%

Back Next

To Change the Health Events:

- ▶ Select the entry field of the Health Event to be changed and press .
- ▶ Set the percentage and press .
- ▶ Repeat the previous steps to change another Health Event.

To Continue:

- ▶ Select Next.

10.

Advice Options	
Meal Rise	100 mg/dL
Snack Size	24 g
Acting Time	4:00
Offset Time	1:00
HH MM	

Back Next

or

Advice Options	
Meal Rise	6 mmol/L
Snack Size	24 g
Acting Time	4:00
Offset Time	1:00
HH MM	

Back Next

You must edit the Snack Size to complete the Setup Wizard.

To Change the Meal Rise:

- ▶ Select the Meal Rise entry field and press .
- ▶ Set the Meal Rise amount and press .

To Change the Snack Size:

- ▶ Select the Snack Size entry field and press .
- ▶ Set the Snack Size amount and press .

To Change the Acting Time:

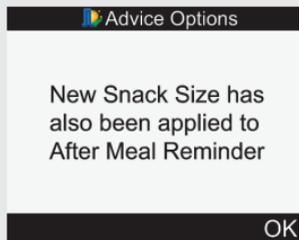
- ▶ Select the Acting Time entry field and press .
- ▶ Set the Acting Time duration and press .

To Change the Offset Time:

- ▶ Select the Offset Time entry field and press .
- ▶ Set the Offset Time duration and press .

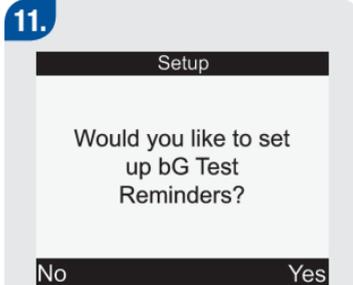
To Continue:

- ▶ Select Next.

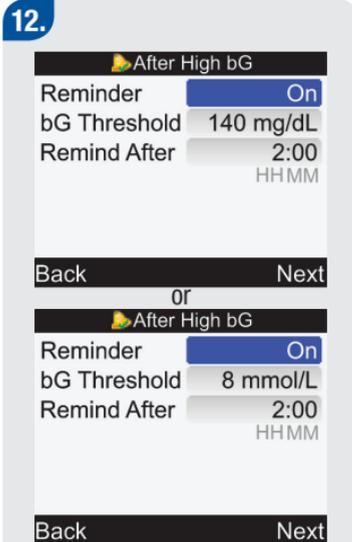


When the Snack Size is changed, this screen appears.

- ▶ Select OK.



- ▶ To set up bG Test Reminders, select Yes and continue to Step 12.
- ▶ If you do NOT want to set up bG Test Reminders, select No and proceed to Step 15.



To Turn On the After High bG Reminder:

- ▶ Select the Reminder entry field and press .
- ▶ Select On and press .

To Change the bG Threshold:

- ▶ Select the bG Threshold entry field and press .
- ▶ Set the bG Threshold level and press .

To Change the Remind After Time:

- ▶ Select the Remind After entry field and press .
- ▶ Set the amount of time after a high bG test you want to be reminded to retest your blood glucose and press .

To Continue:

- ▶ Select Next.

13.

After Low bG	
Reminder	On
bG Threshold	90 mg/dL
Remind After	0:15 HH MM
Back	Next

After Low bG	
Reminder	On
bG Threshold	5 mmol/L
Remind After	0:15 HH MM
Back	Next

To Turn On the After Low bG Reminder:

- ▶ Select the Reminder entry field and press .
- ▶ Select On and press .

To Change the bG Threshold:

- ▶ Select the bG Threshold entry field and press .
- ▶ Set the bG Threshold level and press .

To Change the Remind After Time:

- ▶ Select the Remind After entry field and press .
- ▶ Set the amount of time after a low bG test you want to be reminded to retest your blood glucose and press .

To Continue:

- ▶ Select Next.

14.

After Meal	
Reminder	On
Snack Size	24 g
Remind After	2:00 HH MM
Back	Next

To Turn On the After Meal Reminder:

- ▶ Select the Reminder entry field and press .
- ▶ Select On and press .

To Change the Snack Size:

- ▶ Select the Snack Size entry field and press .
- ▶ Set the Snack Size amount and press .

To Change the Remind After Time:

- ▶ Select the Remind After entry field and press .
- ▶ Set the amount of time after a meal you want to be reminded to test your blood glucose and press .

To Continue:

- ▶ Select Next.

After Meal
New Snack Size has also been applied to Bolus Advice Options
OK

If Bolus Advice is set up and the Snack Size is changed, then this screen appears.

- ▶ Select OK.

15.

Setup
Setup Completed Successfully
Next

- ▶ Select Next.

16.

10:02 am 2 Feb 08

-  bG Test
-  Bolus Advice
-  My Data
-  Settings

or

10:02 2 Feb 08

-  bG Test
-  Bolus Advice
-  My Data
-  Settings

You are ready to begin using your new meter.

Congratulations on completing the Setup Wizard!

2.4 Setup Wizard: Important Information

Carbohydrate Units

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

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

Max Bolus

The max bolus is the maximum amount of bolus insulin to be delivered at one time. A bolus that is larger than the max bolus amount requires an additional confirmation. This serves as a safety measure against unintended large boluses.

Insulin Increment

The insulin increment can be set to 0.5 or 1 U. When you manually enter bolus information into the diary, it can only be entered in half or whole units. If bolus advice is set up, the meter will round to the set insulin increment.

Warning Limits

- You can select hyper (high) and hypo (low) blood glucose limits that best fit your needs.
- Whenever a blood glucose test 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.

Time Blocks

- Setting time blocks to fit your own schedule helps you and your healthcare professional see how patterns in your blood glucose may be affected by your daily activities and lifestyle.
- Time blocks cover a 24-hour time period (from midnight to midnight).
- The meter comes with five preset time blocks. You may set up to eight time blocks.
- You can change the time period for any of the default time blocks.
- You must complete and save the settings in at least one time block.
- Each time block must be at least 30 minutes long and can only be set in 30-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 target blood glucose range for each time block.
- The target range for each time block must be within the hypo and hyper warning limits.
- If bolus advice is set up, you must set the carb ratio and insulin sensitivity for the first time block you edit.
- When a time block is edited for the first time, the settings (target range, carb ratio, and insulin sensitivity) are applied to all of the other time blocks.
- “Next” will not appear on the Time Blocks screen in the Setup Wizard until at least one time block is saved.

Your meter comes with the following default time blocks:

Time Block	12-Hour Format	24-Hour Format
1	12:00 am–5:30 am	0:00–5:30
2	5:30 am–11:00 am	5:30–11:00
3	11:00 am–5:00 pm	11:00–17:00
4	5:00 pm–9:30 pm	17:00–21:30
5	9:30 pm–12:00 am	21:30–0:00

Talk to your healthcare professional about setting up time blocks to help you manage your diabetes. Here is a suggested pattern:

Time Block	Start Time	End Time
1. Night time	Midnight	The time you normally wake up
2. Breakfast	The time you normally wake up	1½ hours before you normally eat lunch
3. Lunch	1½ hours before you normally eat lunch	1½ hours before you normally eat dinner
4. Dinner	1½ hours before you normally eat dinner	1½ hours before you normally go to bed
5. Bedtime	1½ hours before you normally go to bed	Midnight

Bolus Advice

- Bolus advice provided by the meter is solely advice. Do not change your therapy based on one reading. Contact your healthcare professional prior to changing your diabetes therapy.
- Bolus advice calculates a bolus for you that is adapted to the time of day and your changing situations.
- This function is activated only if you set up bolus advice on your meter.
- For more detailed information on bolus advice, see the Advanced Owner's Booklet.

Carb Ratio

- The carb ratio is the amount of insulin necessary to account for a certain number of carbohydrates.
- Talk with your healthcare professional to determine the appropriate carbohydrate ratio.

Insulin Sensitivity

- The insulin sensitivity is the amount of insulin necessary to lower your blood glucose by a certain amount.
- Talk with your healthcare professional to determine the appropriate insulin sensitivity settings.

Health Events

Health events can be selected to indicate how you are feeling or what you are doing that might affect your diabetes. Your meter allows you the option of setting a percentage for each health event, except for Fasting, if you set up bolus advice. Fasting does not scale bolus advice calculations and is not adjustable.

Health events available on the meter are:

- Exercise 1
- Exercise 2
- Stress
- Illness
- Premenstrual
- Fasting

A positive percentage (+) increases the bolus amount and a negative percentage (-) decreases the bolus amount. Discuss the appropriate percentage for each health event with your healthcare professional.

Bolus Advice Options

Meal rise, snack size, acting time, and offset time are bolus advice options. See below for detailed descriptions of each of these settings.

Meal Rise

- During or after meals, an increase in blood glucose levels is considered normal within a certain range, even though a meal bolus has been delivered.
- Enter the maximum increase in your blood glucose test result that is to be tolerated without an additional correction bolus.

Snack Size

- The snack size is the amount of carbohydrates that is not to be counted as a regular meal with the expected meal rise.
- An increase in your blood glucose test result is not tolerated since the meal rise factor is not triggered for bolus advice calculations.

Acting Time

- The period of time from the start of the meal rise or the delivery of a correction 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 (1½ hours to 8 hours).

Offset Time

- Offset time takes into account the expected delay for the blood glucose level to actually fall during the acting time of insulin in the body.

bG Test Reminders

- Your meter can be set up to remind you to retest your blood glucose after a high bG test result, after a low bG test result, or after a meal.
- The after meal bG test reminder is set up with a carb value for the snack size and occurs after the snack size is exceeded.
- Any of the bG test reminders can be turned on or off individually, as needed.



3 Testing Your Blood Glucose

3.1 Overview	50
3.2 Performing a Blood Glucose Test	51

3.1 Overview

Before you perform your first blood test, ensure the Accu-Chek Aviva Expert Meter is set up correctly and that you perform a control test. You need a coded meter, a test strip, and a lancing device.

WARNING:

- Do not change your treatment because of one blood glucose test result.
- NEVER ignore symptoms of high or low blood glucose.

NOTE:

- If you need to perform a control test, only use Accu-Chek Aviva Control Solutions. See the Standard Owner's Booklet for more information about control testing.
- For more information on blood glucose testing, see the Standard Owner's Booklet.
- Blood glucose and bG are interchangeable and mean the same thing.

3.2 Performing a Blood Glucose Test

Prepare > Insert Test Strip > Match Code Number > Test Blood Sample > bG Test Result

1.

- ▶ Wash and dry your hands.
- ▶ Prepare the lancing device for a fingertip test.

2.



- ▶ Insert the golden end of a test strip into the meter in the direction of the arrow. The meter turns on.

3.



- ▶ Ensure the code number on the display matches the code number on the test strip container. If you miss seeing the code number, remove the test strip and reinsert it into the meter.

4.



- ▶ The Apply Sample screen appears. The test strip is ready for testing.

5.



Fingerstick:

- ▶ Perform a fingerstick with the lancing device. Blood samples taken from the palm are equivalent to blood taken from the fingertip.

6.



Fingerstick:

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

7.



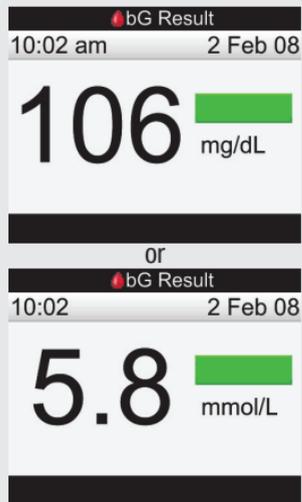
- ▶ Touch the blood drop to the **front edge** of the yellow window of the test strip. Do not put blood on top of the test strip.

8.



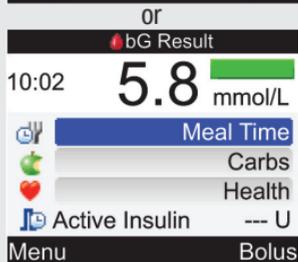
When the test strip has enough blood, the Analyzing screen appears.

9.



The result appears on the display.

10.



Approximately 3 seconds later, the detailed bG Result screen appears.

- ▶ Remove and discard the used test strip.

i NOTE:

- If the blood drop is too small, reapply pressure to get a sufficient blood drop.
- For more information regarding blood glucose test results, see the Standard Owner's Booklet.
- To add detailed information to the blood glucose test result (meal time, carbs, and health events), see the Standard Owner's Booklet.
- If a test strip error occurs, remove and discard the used test strip and repeat the test with a new test strip.
- Be careful not to put any fluids into the test strip slot.
- When a test strip is in the meter, the buttons are inactive. The buttons become active when you remove the test strip or when the test is complete.
- The meter cannot be turned off when the following screens are displayed:
 - Match Code to Vial
 - Apply Sample
 - Analyzing
 - bG Result

Appendix: Explanation of Symbols

You may encounter the following symbols on the packaging, on the type plate (back of meter), and in the instructions for the meter, shown here with their meaning.

	Consult the instructions for use.
	Warning (refer to accompanying documents). Please refer to safety-related notes in the owner's booklets accompanying this instrument.
	Caution (refer to accompanying documents). Please refer to safety-related notes in the owner's booklets accompanying this instrument.
	Note (additional information)
	Store at
	Manufacturer
REF	Catalogue number
	For in vitro diagnostic use
	Blood glucose meter and test strips: These products fulfill the requirements of Directive 98/79/EC on in vitro diagnostic medical devices.
	1.5V AAA

Glossary

Term	Definition
Acting Time	The period of time from the start of the meal rise or the delivery of a correction bolus until your blood glucose level is expected to return to the target level.
Advice Options	Factors that influence bolus advice calculations 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 test result.
After Low bG Reminder	A reminder to retest your blood glucose. When enabled, this reminder occurs after a low blood glucose test 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 carbohydrate data greater than the snack size amount.
Basal Insulin	A dose of long-acting insulin intended to maintain normal blood glucose levels between meals and at night.
BE	Bread Equivalent (1 BE = 12 g carbohydrates).
bG Test Reminders	Reminders to retest your blood glucose after a high blood glucose test result, after a low blood glucose test result, or after a meal.

Term	Definition
bG Threshold	A bG test reminder setting. The upper limit for your blood glucose for a high bG test reminder and the lower limit for your blood glucose for a low bG test reminder.
Blood Glucose (bG)	The level of sugar in the blood.
Bolus	The delivery of insulin all at once rather than slowly throughout the day, usually used to compensate for meals or high blood glucose.
Bolus Advice	When enabled, bolus advice provides recommendations on the amount of insulin for food intake and for correcting blood glucose levels that are not within your target range.
Bolus Advice Options	See Advice Options.
Carb Ratio	The amount of insulin necessary to account for a certain number of carbohydrates.
Carbohydrates (or Carbs)	Carbohydrate foods include sugars and starches. Carbohydrates can raise blood glucose levels slowly or rapidly. Carbohydrates are generally counted to calculate a bolus insulin dose.
Caution	Provides information that, if not followed, could result in material hazards (damage to or destruction of equipment or materials).
CC	Carbohydrate Choice (1 CC = 15 g carbohydrates).

Term	Definition
Control Test	A meter test using control solution which lets you know that the meter and test strips are working properly.
Day	Period of time starting at 12:00 am (00:00) and ending at 11:59 pm (23:59).
End Time	The end time of a time block.
g	Grams.
Health Events	A pop-up menu selection (exercise 1, exercise 2, stress, illness, premenstrual, or fasting) that allows information to be stored with a blood glucose test result or in a diary record and percentages that could adjust bolus advice recommendations for your current health status or activities.
Hyper	Hyperglycemia: an abnormally high level of glucose in the blood.
Hyper Warning Limit	When your blood glucose test result is above the hyper warning limit, a warning is displayed.
Hypo	Hypoglycemia: an abnormally low level of glucose in the blood.

Term	Definition
Hypo Warning Limit	When your blood glucose test result is below the hypo warning limit, a warning is displayed.
Insulin Sensitivity	The amount of insulin necessary to lower your blood glucose by a certain amount.
KE	Kohlenhydrateinheit (1 KE = 10 g carbohydrates).
Max Bolus	The max bolus is the maximum amount of bolus insulin to be delivered at one time. A bolus that is larger than the max bolus amount requires an additional confirmation. This serves as a safety measure against unintended large boluses.
Meal Rise	During or after meals, an increase in blood glucose levels is considered normal within a certain range, even though a meal bolus has been delivered. A meal rise is in effect for a specified time period.
Meal Time	A pop-up menu selection (pre-meal, post-meal, bedtime, or other) that allows information to be stored with a blood glucose test result or in a diary record.
Meter	Blood glucose meter.
mg/dL	Milligram per deciliter.

Term	Definition
mmol/L	Millimoles per liter.
Note	Additional information.
NPH Insulin	Neutral Protamine Hagedorn. An intermediate-acting insulin that, on average, starts to lower blood glucose within 1 to 2 hours after injection. It has its strongest effect 6 to 10 hours after injection but keeps working about 10 hours after injection. Also called N insulin.
Offset Time	Offset time takes into account the expected delay for the blood glucose level to actually fall due to the acting insulin in the body. It describes the first time period within the acting time.
Pre-Mixed Insulin	A commercially produced combination of two different types of insulin.
Remind After	A bG test reminder setting. The amount of time after a high blood glucose test result, after a low blood glucose test 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.
Snack Size	The amount of carbohydrates that is not to be counted as a regular meal with the expected meal rise.

Term	Definition
Soft Keys	Two keys under the meter display used to navigate through the user interface. Just above each soft key, the meter display shows the selection (e.g., Save, Cancel, Back, etc.).
Start Time	The start time of a time block.
Target Range	The desired upper and lower limits of your blood glucose level considered acceptable as set by your healthcare professional.
Time Blocks	Up to eight time periods within one day to facilitate your changing insulin needs throughout the day.
Warning	Describes items and conditions that present hazards and may cause personal injury.
Warning Limits	See Hyper Warning Limit or Hypo Warning Limit.

Index

A

acting time, 34, 47
advice options, 34–35, 46–47
after high bG reminder, 35–36, 48
after low bG reminder, 36, 48
after meal bG reminder, 37, 48

B

backlight, 7, 9–10
batteries, 8, 13, 57
BE, 27, 39
bG test reminders, 35–37, 48
bG threshold, 36
blood glucose testing, 50–55
bolus advice, 28–29, 31–37, 44–47
buttons, 7, 9–11, 55

C

carbohydrates, units of measure, 27, 39
carb ratio, 31–33, 41, 44
caution, 57
CC, 27, 39
code chip. *See* code key
code key, 6–8, 20–22
coding the meter, 20–22
control solution, 8, 50
control test, 50

D

date, 13, 27
display, 7, 13–15

E

end time, 29, 32, 41, 43

G

g (grams), 27, 39

H

health events, 34, 45

hyper blood glucose level, 28, 40

hyper warning limit, 28, 40–41

hypo blood glucose level, 28, 40

hypo warning limit, 28, 40–41

I

infrared (IR) window, 7–8

insulin increment, 27, 40

insulin sensitivity, 31–33, 41, 44

K

KE, 27, 39

L

lancing device, 50–53

language, 26

M

max bolus, 27, 39

meal rise, 34, 46

meal time, 55

meter, 7–11

N

navigation, 12–18

neutral protamine hagedorn (NPH), 24

note, 57

O

offset time, 34, 47

R

remind after, 35–37

S

snack size, 34–35, 37, 46

soft keys, 7, 9–10, 14

start time, 41, 43

symbols, 57

T

target range, 30, 32–33, 40–41

test strip, 7

time, 13, 27

time blocks, 29–33, 41–43

time format, 26

U

units of measure. *See* carbohydrates, units of measure

W

warning, 57

warning limits, 28, 40

