IN TOUCH® BLOOD GLUCOSE MONITORING SYSTEM Owner's Manual



## **Table of Contents**

Chapter 1 – Your In Touch <sup>®</sup> Blood Glucose Monitoring System	6
Indications for Use	6
The In Touch <sup>®</sup> Blood Glucose Meter	8
In Touch® Test Strips	9
In Touch <sup>®</sup> Control Solution	9
In Touch <sup>®</sup> Lancing Device and Lancets	9
In Touch <sup>®</sup> Data Management System	10
Limitations	11
Register Your In Touch <sup>®</sup> Blood Glucose Monitoring System	12
Using This Owner's Manual	13
Chapter 2 – Components	14
The In Touch <sup>®</sup> Blood Glucose Monitoring System	14
Blood Glucose Test Strips	15
Lancing Device	17
Control Solution	19
Chapter 3 – Getting Started	20
Turning On and Setting up your In Touch <sup>®</sup> Meter	20
Your In Touch® Meter	23
The Display Screen	24
Chapter 4 – Checking Your Blood Glucose	26
How To Check Your Blood Glucose	26
Mealtime Tags	32
Changing Your Selections	37
If Data Transmission Is Unsuccessful	40
Chapter 5 – Viewing Results	44
Logbook	45
Logbook-Mealtime Values	47
Patterns & Stats	48
Snapshot Summary	50

<b>Chapter 6 – Sharing with Your Team</b>	52
MyCoach	53
MyMD	54
MyFamily	56
MyMobile	57
<b>Chapter 7 – Your Messages</b>	58
Messages	58
Chapter 8 - Your Activity	64
Chapter 9 - Settings Help About Airplane Mode Meds Activity Monitor Settings Sounds Reminders Calibrate Control	66 66 68 69 71 71 71
<b>Chapter 10 – Your Personal Web Portal</b>	76
Logging In	76
Dashboard	77
Chapter 11 – Checking Your In Touch® Meter	84
Using Control Solution	85
Checking your In Touch <sup>®</sup> Meter with Control Solution	85
Control Solution Troubleshooting	91
<b>Chapter 12 – Maintenance</b>	92
Cleaning and Disinfecting Your In Touch <sup>®</sup>	94
Battery	96
Storing Your In Touch <sup>®</sup> Meter & Strips	98

Chapter 13 – Troubleshooting	100
Issues With Tests	100
Basic Troubleshooting	100
Error Messages	101
Communication Errors	103
Getting Support	103
Chapter 14 – Specications and Limitations	104
Specications	104
Operating Ranges	104
Electrical & Power Ratings	104
Environmental	105
Chapter 15 – Warranty and Compliance	106
Limitations On Warranty	106
For Warranty Service	106
FCC Caution	107
FCC Radiation Exposure Statement	107
Privacy Policy	108

# **Chapter 1** Your In Touch<sup>®</sup> Blood Glucose Monitoring System

Thank you for choosing In Touch<sup>®</sup> as your gateway to managing your diabetes. Your new In Touch<sup>®</sup> system will help you monitor your glucose and your daily physical activity to help you lead a healthier life. This Owner's Manual has important information about the system and how it works. Please read it carefully before using In Touch<sup>®</sup> because it will help you make the most it.

### Indications for Use

The In Touch<sup>®</sup> Blood Glucose Monitoring System (In Touch<sup>®</sup> BGMS) is an Over-The-Counter (OTC) device utilized by persons with diabetes in home settings for the quantitative measurement of glucose in fresh whole capillary blood from the fingertip. It is intended for use by people with diabetes mellitus at home as an aid to monitor the effectiveness of diabetes control program. The In Touch<sup>®</sup> BGMS is for in vitro diagnostic use only and should not be used for the diagnosis of /or screening for diabetes mellitus or neonatal use. The In Touch<sup>®</sup> BGMS is intended to be used by a single person and should not be shared.

The In Touch<sup>®</sup> Blood Glucose Test Strips (In Touch<sup>®</sup> strips) are used with the In Touch<sup>®</sup> Blood Glucose Meter (In Touch<sup>®</sup> meter) in the quantitative measurement of glucose in fresh capillary blood from the fingertip.

The In Touch<sup>®</sup> Control Solution is for use with the In Touch<sup>®</sup> meter and In Touch<sup>®</sup> strips as a quality control check to verify that the meter and test strips are working together properly and that the test is performing correctly. The In Touch<sup>®</sup> Data Management System is an optional software accessory to be used with the In Touch<sup>®</sup> meter for transferring data to a computer and organizing it in tables and graphs to be used at home. The software does not recommend any medical treatment or medication dosage level.

### The In Touch<sup>®</sup> Blood Glucose Monitoring System.

The Livongo Health<sup>™</sup>, Inc. In Touch<sup>®</sup> BGMS, is an OTC system designed for the self-monitoring of blood glucose by persons with diabetes in home settings to aid in diabetes management. The system consists of the following components:

- In Touch<sup>®</sup> Blood Glucose Meter
- In Touch<sup>®</sup> Blood Glucose Test Strips
- In Touch<sup>®</sup> Lancing Device
- In Touch<sup>®</sup> Lancets
- In Touch<sup>®</sup> Level 1 Control Solution
- In Touch<sup>®</sup> Level 2 Control Solution
- AC Adapter (wall charger) and USB Charger
- Carrying Case
- In Touch<sup>®</sup> Data Management System (optional accessory to the In Touch<sup>®</sup> BGMS)





### The In Touch<sup>®</sup> Blood Glucose Meter

Your In Touch<sup>®</sup> meter is easy to use. It has a color touch screen that lets you easily select features like checking your blood glucose, viewing your logbook, sharing your results with your healthcare team, and viewing Healthy Living tips.

It gives accurate glucose test results in just 5 seconds using a very small blood sample.

In Touch<sup>®</sup>stores your glucose and activity results in its memory that you can view later but it can also send automatically and wirelessly your blood glucose data securely to your personal health account in the optional In Touch<sup>®</sup>Data Management System. You can also choose to send your results to your healthcare team to help you and your healthcare team manage your diabetes.

It even lets you know when you are running out of test strips and need to reorder. But remember, In Touch<sup>®</sup>is not intended to provide automated treatment guidance or decisions, and it's not a substitute for your professional healthcare provider.



### In Touch®Test Strips

The In Touch®test strips measure glucose in whole blood. The In Touch®Strips are designed for use with the In Touch®meter only. Each strip is to only be used once, and then discarded.

MESSAGES SETTINGS ACTIVITY In Touch<sup>®</sup>Strips are packaged as a 50 count of strips in sealed vials.

#### In Touch<sup>®</sup> Control Solution

The In Touch<sup>®</sup> Blood Glucose Control Solutions is for use with the In Touch<sup>®</sup> meter and In Touch<sup>®</sup> Strips as a quality control checks to verify that the meter and test strips are working together properly and that the test is performing correctly.

The solution may also be used to practice taking readings, or to check that you are following the correct testing procedure without using your own blood. If the monitor reading is within the control solution's acceptable range, the meter is working correctly.



### In Touch<sup>®</sup> Lancing Device and Lancets

The In Touch<sup>®</sup> Lancing Device is intended for use with In Touch<sup>®</sup> Lancets, which are disposable sterile lancets to draw small amounts of capillary blood from the fingertip to test with the In Touch<sup>®</sup> meter and test strips. The In Touch<sup>®</sup> Lancing Device is intended for single patient use.

### In Touch<sup>®</sup> Data Management System

The Livongo Health, Inc. In Touch<sup>®</sup> Data Management System is an optional accessory to assist you in monitoring your blood glucose levels using the In Touch<sup>®</sup> Blood Glucose Monitoring System. The software is password protected to ensure that your data is secure and not mixed with another user's. The software is an accessory which allows you to collect the data captured by the meter, review averages, highs and lows, and meal time blood glucose values, and organize it in various reports and graphs.

### Please note:

- In Touch<sup>®</sup> must only be used outside the body (in vitro diagnostic use).
- It should only be used with In Touch<sup>®</sup> blood glucose test strips and In Touch<sup>®</sup> control solutions.
- It should only be used for testing glucose (sugar) with fresh capillary whole blood samples.
- It should NOT be used to diagnose DKA or to test neonates.
- It should NOT be stored in the refrigerator or in the car.

### WARNINGS:

- **1.** Your In Touch<sup>®</sup> contains small parts. Keep it out of the reach of small children and pets.
- **2.** If you don't recognize the symptoms of hypoglycemia a blood glucose meter is critical to your care. Since any monitor may fail, break, or be misplaced, you should always have a backup monitor.
- **3.** Blood samples and blood products are potential sources of hepatitis and other infectious diseases. Handle all parts of your device with care. Do not share your In Touch<sup>®</sup>. It is for single-patient use only. Any items that are used to measure glucose like test strips, lancets, and alcohol swabs, must be disposed of safely to avoid the risk of infection. Please follow your healthcare provider's instructions for proper disposal.

- **4.** A pedometer is built into In Touch<sup>®</sup> as an option that will allow you to measure activity. It is used to estimate how many steps you have walked or taken. It should not be used for any treatment decision including but not limited to insulin dosing.
- **5.** Healthy Living tips are not intended to provide advice on treatment decisions nor provide or supplement clinical care from your healthcare professional.

### Limitations

The test strips give accurate results when the following limitations are observed:

- The test strips should not be used to diagnose or screen for diabetes, DKA, or to test neonates.
- Each test strip is for a single check only. Do not reuse the strips. Use a new, sterile In Touch<sup>®</sup> test strip each time you check.
- Your test strips are for personal use only. Do not share them with anyone, including relatives.
- Use only fresh capillary whole blood from the finger. Do not use serum or plasma.
- There is no effect on blood glucose for altitudes up to 8,516 feet (2,595 meters) above sea level.
- Refer to this Owner's Manual for operating temperature range for the monitor.
- Extremes in humidity (higher than 90% and lower than 10%) may affect results.
- The In Touch<sup>®</sup> Test Strips are calibrated against plasma.
- Glucose test results may be falsely low if you are severely dehydrated, if you are in shock, or in hyperosmolar crisis.
- Critically ill patients should not be tested with the In Touch® Meter.

### Your Doctor

Please use your In Touch<sup>®</sup> with care. If you experience symptoms that are not consistent with your blood glucose test results, and you have followed all the instructions in this Owner's Manual, consult your doctor or healthcare professional immediately. It is always better to be safe.

### Register Your In Touch® Blood Glucose Monitoring System

Before you get started, complete the registration online at: www.intouch.livongo.com

We use the information collected to improve our service.

### Contact Us

In Touch<sup>®</sup> is made by Livongo Health, Inc. 444 N. Michigan Avenue, Suite 2880 Chicago, IL 60611

Inside the USA, please call Customer Service toll-free at 1-800-945-4355, 24 hours 7 days a week or visit our website at: www.livongo.com

### Important Safety Instructions

Please take a moment to read through this important safety information. Remember, this is a medical device and it needs to be treated with care. In particular there is the risk of disease transmission when using blood glucose monitoring systems and they should be used with caution and care:

- The In Touch<sup>®</sup> Blood Glucose Monitoring System and lancing device must only be used by one person. For safety reasons, do not share it with anyone, including your family members.
- The meter and lancing device are for single patient use. Do not share them with anyone including other family members!
- Many parts of your device come into contact with your blood and are biohazardous. Kit parts can potentially transmit infectious diseases, even after being cleaned and disinfected.

- Always wash your hands thoroughly with soap and water and dry well after handling the meter, test strips, or your lancing device.
- Always consult your diabetes healthcare professional and follow his or her guidance about your blood glucose monitoring routine.
- If this device is used in a manner not specified by the manufacturer, the protection provided against hazards may be impaired.
- The In Touch<sup>®</sup> Blood Glucose Monitoring System is delivered fully assembled.

### Using This Owner's Manual

We have included some additional information in this Owner's Manual, including:

**NOTES** – helpful information for day-to-day use.

**CAUTIONS** – important tips to protect your glucose meter.

**WARNINGS** – crucial information that will help you use your glucose meter safely and tell you about the risks of receiving inaccurate readings.

"FDA Public Health Notification: Use of Fingerstick Devices on More than One Person Poses Risk for Transmitting Bloodborne Pathogens: Initial Communication" (2010) http://www.fda.gov/MedicalDevices/Safety/ AlertsandNotices/ucm224025.htm

"CDC Clinical Reminder: Use of Fingerstick Devices on More than One Person Poses Risk for Transmitting Bloodborne Pathogens" (2010) http:// www.cdc.gov/injectionsafety/Fingerstick-DevicesBGM.html

# Chapter 2 Components

### The In Touch<sup>®</sup> Blood Glucose Monitoring System

You have everything you will need in your In Touch<sup>®</sup> Blood Glucose Monitoring Kit to check and send your blood glucose to your personal account. It includes:

- In Touch<sup>®</sup> Blood Glucose Meter
- "About In Touch®" Feature Guide
- AC charger and USB cord

Additionally, in the Welcome Kit:

- · Lancing device and lancets
- Control solution (2 bottles-Level 1 and Level 2)
- Carrying case

Your new In Touch<sup>®</sup> meter is in a separate and sealed package that contains "About In Touch<sup>®</sup>" which shows you the features of In Touch<sup>®</sup>. Please review the About In Touch<sup>®</sup> before starting. In Touch<sup>®</sup> will be partly charged and ready to go when you take it out of the box. Plug it in overnight to fully charge it. Under normal blood glucose monitoring conditions, the charge should last for several weeks.



### Blood Glucose Test Strips

The In Touch<sup>®</sup> Blood Glucose Test Strips are designed for use with your In Touch<sup>®</sup> Blood Glucose Monitoring System only. Use each test strip only once, and then discard it. It is important to note that you should not reapply blood to the test strip.

The strips come in a variety of colors but all give identical results. They come in vials and also as individually sealed packages with a single test strip.

In Touch<sup>®</sup> Glucose Test Strips require only a very small amount of blood (0.8µL) and automatically draw blood into the test area of the strip. They can be handled with clean, dry hands without affecting the readings. They are convenient whether you test at home or on the go.

### Important Blood Glucose Test Strip Information

Please remember:

- Use only In Touch<sup>®</sup> Blood Glucose Test Strips when testing for glucose. The In Touch<sup>®</sup> Blood Glucose Tests strip will only work with the In Touch<sup>®</sup> Blood Glucose meter.
- Remove the test strip from the vial/foil only when ready to check your glucose.
- Store the test strip package between 41-86°F and between 10% and 90% relative humidity. Keep out of direct sunlight.

- Store the test strips in their original packaging only.
- After removing a glucose test strip from the vial, immediately replace the cap and close the vial tightly.
- Do not use test strips beyond the expiration date printed on the package as this may cause inaccurate results.
- Test strips should only be stored for 6 months after opening. Discard any remaining test strips after this date.

**WARNING:** The test strip vials and packaging contain small parts. Keep away from children and pets.

#### Cocking Barrel



#### Lancing Device

The picture above shows your lancing device. This is the part of the In Touch<sup>®</sup> Blood Glucose Monitoring System that takes the blood sample.

To use it, you should:

- 1. Unscrew the lancing device cover from the body of the lancing device. Insert a sterile lancet into the lancet holder and push it until the lancet comes to a complete stop in the lancing device.
- **2.** Hold the lancet firming in the lancet holder and twist the safety tab of the lancet until it loosens. Then pull the safety tab off the lancet. Save the safety tab for disposal.
- **3.** Carefully screw the cover back onto the lancing device. Avoid contact with the exposed needle. Make sure the cover is fully sealed on the lancing device.

DO NOT TOUCH THE LANCET TIP.

- **4.** Adjust the puncture depth by rotating the lancing device cover. There are a total of 6 puncture depth settings. To reduce discomfort, use the lowest setting that still produces an adequate drop of blood: short-length bars for soft skin; medium-length bars for normal skin, and long-length bars for thick or calloused skin.
- **5.** Pull the cocking barrel back to set the lancing device. You may hear a click. The device is now loaded and ready for obtaining a drop of blood.
- 6. Prior to testing, wipe your hand with an alcohol swab or wash your hands with soap. Use warm water to increase blood flow in your fingers if necessary. Then dry your hands thoroughly. Massage your hand from the wrist up to the fingertip a few times to stimulate blood flow.
- **7.** Hold the lancing device against the side of the finger to be lanced with the cover resting on the finger. Push the release button to prick your fingertip. You should hear a click as the lancing device activates. Gently massage your finger from the base to the tip to obtain the required blood volume. Avoid smearing the drop of blood.
- **8.** After finishing your blood check, unscrew the end cap, carefully remove the used lancet, and dispose of it safely in an appropriate container.

### **Control Solution**

The In Touch<sup>®</sup> Blood Glucose Monitoring System Glucose Control Solution comes as vials of Level 1 and Level 2 solutions. They contain a known concentration of glucose. They are used to confirm that your In Touch<sup>®</sup> Blood Glucose Monitoring system and test strips are working together properly. They also confirm that you are performing the test correctly. It is important to run a quality control test regularly to make sure you are getting correct results.

You can also use this solution to practice taking readings or to check that you are following the correct testing procedure without using your own blood. If the meter reading is within the control solution's acceptable range, the meter is working correctly.

# Chapter 3 Getting Started

### Turning On and Setting up your In Touch® Meter



You need to do very little to set up and use your meter. It will be partially charged but check to make sure that the battery is at least 50% full before using it for the first time.

To check the battery status, look at the battery gauge icon in the top left corner of the screen. You want to see at least two bars in the battery icon before you check your blood glucose

By pressing the side On/Off button, the Wake-Up screen will appear. It will beep for a few seconds as it finds the network.





The time and date are set automatically, no matter where you are, and are shown at the top of the Home screen. If you are traveling, In Touch<sup>®</sup> will set your meter's time to the time zone that you are in. This is to make sure that your readings are sent with right time stamp.

Having the correct time and date of each blood test result is important because it helps you and your healthcare professional understand your blood glucose patterns and can be used to introduce changes in your management plan.

In Touch<sup>®</sup> will also automatically detect the wireless network that you are in and 'roam' if necessary. There is no charge to you for roaming or wireless connections.

### Sleeping and Turning off your In Touch® meter.

To save battery, your In Touch<sup>®</sup> meter will go to sleep mode after 2 minutes of non-use. You can also "sleep" your In Touch<sup>®</sup> meter by pressing the On/Off button briefly. To "Power Down" and turn off your In Touch<sup>®</sup> meter completely, just hold in the On/Off button for 3 seconds, and the screen will read "Powering Down." You can turn on In Touch<sup>®</sup> by holding in the On/Off button for 3 seconds.



Hold in for 3 seconds

Your In Touch® Meter



- **CAUTION:** Always handle your In Touch<sup>®</sup> with care. Dropping the unit or exposing it to water, for example, may damage the sensitive monitoring equipment inside. If you are packing away your unit for an extended period of time, protect it from moisture, prolonged direct sunlight, and extreme temperatures. Look after it, and it will keep looking after you.
- 1. On/Off button.
- 2. Color touch display screen.
- 3. Test strip port.
- 4. USB charging port.
- 5. Wireless signal indicator.
- 6. Battery charge indicator.



- 1. Signal strength
- 2. Current date and time
- 3. Battery level and charging state
- **4.** Check your blood glucose level
- **5.** Trends for information on your performance
- 6. Messages you should check
- 7. Settings for making sure your device works perfectly
- **8.** Team to send your information to My Coach, MyMD, MyFamily & MyMobile
- 9. Activity Tracker/Pedometer

# **Chapter 4** Checking Your Blood Sugar

### **Before Checking**

Before checking and to ensure accurate results, wash and thoroughly dry your hands and the checking site.

## Safety Tips

- Follow the cleaning and disinfecting instructions for the meter (Chapter 10) and lancing device to prevent the risk of blood-borne pathogens.
- The meter and lancing device are intended for a single user and should never be shared.
- Wash your hands with soap and warm water and dry them thoroughly. Alternatively, use alcohol pads to clean the area to be tested and dry it thoroughly after cleaning.

**NOTE:** It is important to clean the puncture site.

### How To Check Your Blood Glucose

 To save power, the meter will go to sleep when it's not being used. To Power On and Wake Up your In Touch<sup>®</sup> press the ON/OFF button on the right side of the meter. If your In Touch<sup>®</sup> is in the sleep mode, you can also "wake-up" In Touch by inserting a test strip.



2. Press Check, in the top left hand corner.



**3.** The screen will display "Insert Strip." Insert the test strip with the arrow facing into the device as shown in the Figure.





- 4. The screen will display "Ready to Check Glucose".
- **5.** A picture of a finger will appear on the screen to prompt you to apply a blood sample. The last blood glucose value and the current steps/calories are displayed at the bottom of the screen. You can cancel the check at any time.



- **6.** Point your hand down and massage your finger with your thumb towards the fingertip to stimulate blood flow.
- **7.** Use the lancing device, loaded with a new lancet, to puncture your finger. (See lancing device instructions for use.)
- 8. Squeeze your finger to form a drop of blood. A picture will appear on the screen to show you that you are now ready to apply the drop of blood to the tip of the inserted strip. Touch the end of the test strip to the blood drop until the test strip is full.



**NOTE:** If the strip is removed before you start the check, the screen will display a message, "Strip removed, please insert another strip if you want to check your blood glucose", and then return to the Home screen.

**NOTE:** If a check is not performed after inserting the strip, the device will wait for two minutes, display a message to remove the strip if not checking, and then return to the home screen.

**9.** Once you apply the blood sample to the tip of the strip, the screen will display, "Now Checking Glucose" While you are waiting for your results, a personalized health tip will appear instead of the typical countdown. When you have finished reading the tip your results will appear and you will hear a beep if you have enabled sound (see Settings).



**NOTE:** Healthy Living Tips are not intended to provide advice on treatment decisions.

**10.** The test can be canceled at any time by either removing the strip or pressing the Cancel button. The blood glucose result is available onscreen in 5 seconds. The results will show the blood glucose value and the amount it has increased (+) or decreased (-) since the last time you checked.



**11.** Once the result is displayed on the screen, it is automatically stored into the device's memory.

**NOTE:** If the error screen appears, it is most likely due to the blood sample being too small. The sample has to fill most of the well/channel in the white part of the testing strip.

**WARNING:** Your lancing device is for personal use only. DO NOT share it with others. Sharing the lancing device or lancets can transmit serious infections. To avoid accidents, do not store used lancets in the device after checking and do not load the lancing device with a new sterile lancet unless ready to use.

**NOTE:** Do not press the test strip directly against the skin. Touch the test strip gently to the blood drop.

**12.** After your blood glucose is displayed on the screen, you can quickly and easily tag your blood glucose result with important information as follows:

### **Mealtime Tags**

Right after the blood glucose result is displayed, you will be asked to select the meal at which the blood glucose was taken.

As an option, you can also select "Add Carbs." to add carb count for the meal you just ate by tapping "Add Carbs." A key pad will appear. The numbers will be highlighted as you enter them and will register in the counter box. By pressing "Back", you will return to the meal selection screen.

Just tab the touchscreen to select which meal to go to next page.





If you do not want to tag carbs with your blood glucose, simply select the meal type to go to the next page. If you use insulin (SETTINGS -> Medication), you can also log your insulin dose by selecting the "Add Meds" button on the top left below your blood glucose value. It will bring you to a screen where you can choose the insulin type: Short, Long, Both Short & Long Acting, and Premix.



<u> </u>	22 AM Sat, F	eb 7 jul					
Before Breakfast	Before Lunch	mg/dl Before Dinner					
After Breakfast Other-	After Lunch No Meal	After Dinner Add Carbs					
Add Meds	Ne	ext					
In Touch							



















### Feeling

Sometimes you may want to quickly add some other helpful tags to your blood glucose data including how you feel, whether your blood glucose reading follows exercise, or whether it is with or without medication.

These selections are all at your fingertips and can be chosen from a preselected list on the In Touch<sup>®</sup> display screen (your website will give you additional opportunities to add notes).

If you are feeling fine, for example, just tap "I feel fine" to record this as part of your blood glucose data set that is automatically recorded in your logbook and transmitted to your health account.

These notes can be helpful for both you and your healthcare provider to understand any patterns that might arise with mealtimes, medications, exercise, or other factors.

### **Changing Your Selections**

**13.** When you are finished and have tagged your blood glucose value, added meal tags, or carbs, and how you feel you will be asked if you are ready to submit the data to your health record in the In Touch<sup>®</sup>Data Management System.

This allows you to go back and change your previous selections before transmitting the data. If you press No you will be taken back to the tagging screens. If you press Yes, your data will be sent securely to your health record in the In Touch<sup>®</sup>Data Management System.



**14.** When your results have been successfully transmitted, you will receive confirmation that the data has been securely uploaded with your blood glucose average or an educational tip or reminder.







I 10:22 AM Sat, Feb 7 Furl 1220 mg/dl Vour BG value of 121 was stored to your Health Record Please remove test strip Done Lone

- **15.** If the reading is high or low, or if there is another issue, you may be prompted to check again.
- **16.** Your results and tags can be found in your account in the In Touch<sup>®</sup>Data Management System within a minute; from there, you can send the data directly to your coach or your healthcare team.
- **17.** You can also view your results online in the In Touch Data Management System at: www.intouch.livongo.com or get a summary of your results on your mobile phone by sending to MyMobile.

38

### If Data Transmission Is Unsuccessful

If there are only one or two bars of wireless signal strength on your device, it may result in unreliable transmission or reception of your data. The signal strength indicator is located at the top of the In Touch<sup>®</sup> screen.

If the device cannot communicate with your secure health portal, the following message will appear:

"No data connection, data will be stored and transmitted as soon as a secure connection is detected."

In this case, your results will be stored and automatically transmitted once a sufficient signal is acquired. You do not need to do anything since this will happen during next Blood Glucose check and a reliable signal is obtained. If there are multiple values, these are all stored, and all sent with the correct time and date and sequence once a reliable cellular signal is obtained.

If the data transfer fails, In Touch<sup>®</sup> displays the blood glucose on its screen just like any other glucose meter. The results will also be stored in the memory and can be reviewed in the Trends section.

*IMPORTANT:* If your blood glucose level is above 600 mg/dL or below 20 mg/dL, re-check your blood glucose immediately using a new test strip.

![](_page_20_Picture_8.jpeg)

#### What Do Your Results Mean?

Your blood glucose value will vary according to your food intake, your medication, your general health, your stress levels, and your level of physical activity. To give you an idea, the ideal ranges for people who don't have diabetes are as follows:

- 70 to 100 mg/dL before meals, and
- 100 to 140 mg/dL after meals

### Blood Sugar

Test results greater than 250 mg/dL may mean high blood sugar (hyperglycemia).

Test results lower than 60 mg/dL may mean low blood sugar (hypoglycemia).

### High Or Low Readings

If your In Touch<sup>®</sup> displays results that are more than 250 mg/dL or below 50 mg/dL AND you feel ill, treat your diabetes according to your doctor's instructions.

If your In Touch<sup>®</sup> displays results that are more than 250 mg/dL or below 50 mg/dL and you DO NOT feel ill:

- Test your In Touch<sup>®</sup> with a control solution (see Chapter 9).
- Wash your hands, dry them thoroughly, and check again using your fingertip.

If you still get a high or low reading, you should contact your doctor.

If your blood glucose results are more than 600 mg/dL the screen will display Out of Range: HIGH, and you should contact your doctor. If your blood glucose results are less than 20 mg/dL the screen will display Out of Range: LOW, and you should contact your doctor.

### References

Standards of Medical Care in Diabetes – 2014, Diabetes Care - 2014 v 37: S1 January 2014

Logbook

# **Chapter 5** Viewing Results and Trends

Your In Touch<sup>®</sup> stores 1000 records in its on-board memory. This gives you a convenient view of what's been happening. There is a quick and easy way to review your results:

Tap the Trends icon on the home screen.

![](_page_22_Picture_5.jpeg)

Under Trends, you can view your Logbooks, Mealtime blood glucose values, Averages and standard deviation (how much your blood glucose value fluctuates around the average during a period), High, Lows, and Activity.

You can also get a Snapshot Summary of your results over a 7-day, 14-day, or 30-day period.

![](_page_22_Picture_8.jpeg)

![](_page_22_Picture_9.jpeg)

#### TRENDS

Your Logbook is an overview of your recent records. It will show your results up to 90 days. You will see the Day and Mealtime, ("Before" and "After") at which the blood glucose was taken and the blood glucose value. The most recent 5-day values will appear on the first screen.

If you want to review your Daily blood glucose, just tap the button on the Day you want to review. When you tap the day it will display your blood glucose results for the selected day and show the times that you checked your blood glucose, the meal, whether it was before (whole apple) or after (eaten), and the carbs, if entered for that meal.

![](_page_23_Picture_3.jpeg)

![](_page_23_Picture_4.jpeg)

#### Logbook-Mealtime Values

If you want to review your meal time blood glucose values, In Touch<sup>®</sup> can also display blood glucose values for Breakfast (B), Lunch (L), Dinner (D) for each of your meals. To get a quick view of your mealtime blood glucose values, on the Logbook display, tap the Breakfast (B), Lunch (L), or Dinner (D) buttons that are on the top bar of your Logbook table. It will then display the Mealtime values, before or after eating. Mealtime values can be reviewed up to 90 days.

High or low values are highlighted in yellow.

Carbs and additional Notes (e.g. Feelings) will be displayed in these tables.

Tapping on the Day button in the far left-hand column will display an expanded view of the Mealtime Logbook for each day and is your Daily Log.

![](_page_24_Picture_1.jpeg)

![](_page_24_Picture_2.jpeg)

![](_page_24_Picture_3.jpeg)

![](_page_24_Picture_4.jpeg)

### Patterns & Stats

In Touch<sup>®</sup> also provides Quick Views of your blood glucose statistics, displaying averages and standard deviation (how much your blood glucose value fluctuates around the average in those periods), highs, lows, and percentage of your blood glucose values within your set targets.

Tapping the top row of the column select the period you want to review (7, 14, 30, or 90 days). Your selection will be highlighted. You can select All (all meals) or the individual meals, B, L, D (Breakfast, Lunch, or Dinner). Your selection will be highlighted. From your selections, the tables display the average, highest or lowest values during that period, the standard deviation (how much your blood glucose value fluctuated around the average during that period or meal), and percentage of your blood glucose values within your set goal during that period or meal.

![](_page_24_Picture_8.jpeg)

![](_page_24_Picture_9.jpeg)

![](_page_25_Picture_1.jpeg)

#### 10:22 AM Sat, Feb 7 Snapshot - 30 day Average 118 High 303 Low 84 Blood Glucos Std Dev 39 % On 97 %High %Low 3 0 Glucose Goals Average 5322 High Low 13866 534 Steps Back In Touch

**NOTE:** You should always consult your healthcare professional for your recommended target ranges.

### **Steps and Calories**

Your In Touch<sup>®</sup> automatically records your steps and the number of calories you burned.

Your results for the week can be displayed by tapping the Activity button.

Like your blood glucose results, your activity results are displayed by the week. You can tap on the day to get an expanded view as well as the steps for that day (Daily Steps). These results are also automatically sent to your personal account when your blood glucose results are submitted.

#### **Snapshot Summary**

In Touch<sup>®</sup>will provide an updated 30-day snapshot of your blood glucose, average, standard deviation (how much your blood glucose value fluctuates around the average in the 30-day period), glucose goals, and Steps.

![](_page_25_Picture_10.jpeg)

![](_page_25_Picture_11.jpeg)

# **Chapter 6** Sharing with Your Team

You can send your results to your Team via In Touch<sup>®</sup>: a health coach that you may work with, your doctor, a family member or to your mobile phone. By simply tapping MyCoach or MyMD, your blood glucose values will be faxed or emailed to your Team member, family, or doctor at the number or address you provided when you registered.

For example, if you tap MyMobile, your summary will be sent to your mobile phone as a text message or email

### MyCoach

By tapping the MyCoach icon you can send your blood glucose results in the form of a logbook directly to your own coach or healthcare professional involved in your diabetes care prior to a diabetes education session that you might have scheduled.

![](_page_26_Picture_6.jpeg)

![](_page_26_Picture_7.jpeg)

![](_page_27_Picture_1.jpeg)

![](_page_27_Picture_2.jpeg)

![](_page_27_Picture_3.jpeg)

![](_page_27_Picture_4.jpeg)

MyMD

![](_page_27_Picture_6.jpeg)

![](_page_27_Picture_7.jpeg)

![](_page_27_Picture_8.jpeg)

#### MyMD

![](_page_28_Picture_2.jpeg)

![](_page_28_Picture_3.jpeg)

![](_page_28_Picture_4.jpeg)

![](_page_28_Figure_5.jpeg)

#### MyMobile

MyMobile allows you to send records directly to your mobile phone for easy viewing. A link to your summary reports will be sent to you via text.

By selecting MyMD, you can share your results with your MD.

If you know or find out your doctor's FAX number, a keyboard will appear where you can enter your doctor's fax number so you can send your blood glucose results and blood glucose logbook directly to your doctor. You only have to enter this once as it will be stored in memory.

### MyFamily

MyFamily enables you to select a member of your family you want to receive your results. They will get your results by text on their mobile phone or email. You and they can choose how they want to get your blood glucose results.

![](_page_28_Figure_12.jpeg)

# **Chapter 7** Your Messages

#### Messages

In Touch<sup>®</sup> also provides the ability to retrieve and view periodic educational and Healthy Living tips, reminders, and motivational messages. The Message Icon on the home screen will display how many new and unread messages you have waiting in your Inbox.

Messages include reminders, healthy living tips, and communications from your health team. To view your messages, tap the Message icon on the Home screen. You will see you In Touch<sup>®</sup> Inbox with the letter icon either closed, indicating unread messages, or open, indicating read message. Tap on the closed letter icon to read the message in your Inbox.

To retrieve any new messages tap on the "Retrieve Messages" to retrieve any communications from your health team or reminders.

![](_page_29_Picture_6.jpeg)

![](_page_29_Picture_7.jpeg)

![](_page_29_Picture_8.jpeg)

![](_page_30_Picture_1.jpeg)

![](_page_30_Picture_2.jpeg)

![](_page_30_Picture_3.jpeg)

![](_page_30_Figure_4.jpeg)

**Answer on the Go:** One feature of the messaging of In Touch<sup>®</sup> is that you will be notified when you are close to running out of blood glucose strips. When you are about 21 days away from running out an automatic message will ask you if you would like to re-order.

![](_page_30_Picture_6.jpeg)

![](_page_30_Picture_7.jpeg)

### MESSAGES

If you do, then the supplies will be sent directly to the address you have in your account.

**NOTE:** "Healthy Living Tips and messages are not intended to provide advice on treatment decisions nor provide or supplement clinical care."

**NOTE:** When the meter memory is full (after 1000 results), the oldest result will be deleted from the on board memory. If you use the optional In Touch<sup>®</sup> Data Management System you won't lose any data because the data will be retained in the logbooks of your secure personal account in the In Touch<sup>®</sup> Data Management System.

# **Chapter 8** Your Activity

In Touch<sup>®</sup> has a built in accelerometer to measure your activity. It can be turned on by tapping the "Activity" icon on the Home screen. To "lock" the screen when it is in your pocket or purse, tap the lock icon in the upper right hand corner of the screen-this will lock the screen and put the meter to "sleep" (to conserve battery) and lock the screen, but the activity monitor will still be active. When you press the On/Off button, it will wake up In Touch<sup>®</sup>. When you tap the Stop button, the activity information will be sent to your personal account. You can reset the activity monitor at any time.

![](_page_32_Picture_3.jpeg)

![](_page_32_Picture_4.jpeg)

![](_page_32_Picture_5.jpeg)

![](_page_32_Picture_6.jpeg)

![](_page_32_Picture_7.jpeg)

# Chapter 9 Settings

### Help

If you experience any issue with your In Touch<sup>®</sup> meter, please contact Customer Service at 1-800-945-4355. The telephone number and email address is also listed in the About menu of In Touch<sup>®</sup> under the Settings Menu.

#### About

The About menu contains important information about your In Touch<sup>®</sup> meter including the Serial Number, production version number, transmitting module ID number (called the "IMEI" number), and the wireless card number ("SIM ID"), all of which are used to troubleshoot any issues you might have. When you call Technical Support, please have these numbers available so we can trace and correct any problems you might have.

![](_page_33_Picture_6.jpeg)

![](_page_33_Picture_7.jpeg)

![](_page_33_Picture_8.jpeg)

### Airplane Mode

Turning on the Airplane Mode will turn off the access to the cellular network so you will not be able to transmit your readings when it is turned on. This is useful if you are taking off or landing during a flight.

In Touch's<sup>®</sup> internal clock will, however, continue to work properly in this mode and will reset when Airplane Mode is turned off. You can still use In Touch<sup>®</sup> just like any other glucose meter.

![](_page_34_Picture_4.jpeg)

![](_page_34_Picture_5.jpeg)

### Meds

n Touch<sup>®</sup>has a built in insulin logbook to help you record your insulin dose. To do this, simply tap the Meds and set it to Insulin Y/N, and your In Touch<sup>®</sup>will prompt you, should you wish, to record your insulin dose when you are checking your blood glucose. In Touch<sup>®</sup>does not do any calculation or make any recommendation for insulin doses and is simply a logbook to help you record your insulin dose

![](_page_34_Picture_8.jpeg)

![](_page_34_Picture_9.jpeg)

### Activity Monitor Settings

These settings allow you to tailor your stride and step information, as short, medium, or long strides. Setting your weight will help you calculate the calories that you spend from activity. This can help you get more accurate results that reflect your body shape and the way that you walk.

![](_page_35_Picture_1.jpeg)

![](_page_35_Picture_2.jpeg)

![](_page_35_Picture_3.jpeg)

![](_page_35_Picture_4.jpeg)

#### Sounds

You can set the sounds of In Touch<sup>®</sup> by selecting whether you want any sound (beep) when you are making selections on the touch screen, or to know when enough blood is applied to the test strip, when checking is completed and the reading is being submitting and received, and for your selected reminders (medication or blood glucose checking).

![](_page_35_Picture_7.jpeg)

![](_page_35_Picture_8.jpeg)

### Reminders

Your In Touch<sup>®</sup> has a reminder function that will sound or provide a message on the screen. It is pre-set to "On" and lets you know when you have set a reminder to check your blood glucose or take medications.

You can create up to three reminders to tell you when to check or take medications. You can set the times by tapping the time and the AM or PM, and also set the day of the week.

![](_page_36_Picture_1.jpeg)

![](_page_36_Picture_2.jpeg)

![](_page_36_Picture_3.jpeg)

![](_page_36_Picture_4.jpeg)

![](_page_36_Picture_5.jpeg)

![](_page_36_Picture_6.jpeg)

![](_page_36_Picture_7.jpeg)

![](_page_36_Picture_8.jpeg)

### **Calibrate Control**

This function allows you to test the meter and test strip functions using a control solution to make sure they are working properly. The value will be stored in the memory of In Touch<sup>®</sup> and can be sent to your account in the optional In Touch<sup>®</sup> Data Management System, but will be separate from your actual blood glucose values. This will enable you to review how your meter and strips are working. For a detailed walkthrough, please see Chapter 11: Checking Your In Touch<sup>®</sup> Meter on page 84.

![](_page_37_Picture_3.jpeg)

# **Chapter 10** Your Personal Web Portal

While your blood glucose values are stored in In Touch's<sup>®</sup> memory, the In Touch<sup>®</sup> meter can transfer the data to the In Touch<sup>®</sup> Data Management System which organizes the data in tables and graphs to be used at home and which serves as your personal web portal. The In Touch<sup>®</sup> Data Management System is an optional accessory which allows you to collect the data captured by the meter, review averages, highs and lows, and meal time blood glucose values, and organize, print, and share it in various reports and graphs. Your test results are stored securely online at http://www.intouch.livongo.com.

**NOTE:** The In Touch<sup>®</sup> Data Management System is a software accessory that can used with the In Touch<sup>®</sup> meter for transferring data to a computer and organizing it in tables and graphs to be used at home. The software does not recommend any medical treatment or medication dosage level.

### Logging In

You will need to enter your User ID (usually your email address) and the personal identification number (PIN) you specified when you first registered.

![](_page_38_Picture_5.jpeg)

### Dashboard

When you log in, the first screen you will see is your Blood Glucose Dashboard, which will let you view your results for today or for the last 7, 14, 30 or 90 days; you can also create a printout.

At a glance, the Dashboard shows you your average blood glucose level within your chosen timeframe, your highest and lowest levels, how many strips you have used and how well you are sticking to your checking routine. The views and logbooks mirror those that you see on your In Touch<sup>®</sup> meter.

![](_page_39_Figure_0.jpeg)

![](_page_39_Figure_1.jpeg)

![](_page_39_Figure_2.jpeg)

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		7:20 PM	120	Dinner 🎽					User Input
		6:18 PM	85	🝎 Dinner				I feel fine	
		7:20 PM	120	Dinner 🎽					
		6:18 PM	85	🝎 Dinner					
		7:20 PM	120	Dinner					
	wed 09/10	8:25 AM	85	Breakfast					
		9:20 AM	120	Breakfast 🎽					
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		12:20 PM	120	No Meal					
		6:18 PM	85	🍎 Dinner		Long Acting: Short Acting:	5 IU 8 IU		
		7:20 PM	120	Dinner					
	thurs 09/11	6:18 PM	85	🍎 No Meal					
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Contact: 1-800	)-945-4355		Terms of Use   Privacy Sta	temen ©2015 Livong	o Health							

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Share your Health Snapshot	
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SUBJECT: Lucas Anderson is sharing his Health Snapshot with you	
Last 7 Days Last 14 Days Last 30 Days Last 90 Days	
Date Time BG Value (mg/dL) Meal Tag	*
09/09 10:02 AM 97 No Meal	
12:36 PM 164 Lunch	2
6:18 PM 145 🍎 Dinner	
09/10 9:47 AM 102 Breakfast	ž
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# **Chapter 11** Checking Your In Touch<sup>®</sup> Meter

Every once in a while In Touch<sup>®</sup> needs a "check-up" just like you do. The In Touch<sup>®</sup> Control Solution contains a known concentration of glucose to help you do this. It is used to check that the In Touch<sup>®</sup> Blood Glucose Test Strips and In Touch<sup>®</sup> Blood Glucose Meter are properly working together. A control solution test is similar to a blood test, except that you use In Touch<sup>®</sup> Control Solution and not a blood sample. It also confirms that you are performing the test correctly.

You should perform a quality control test in the following situations:

- Before you use your meter for the first time. This will help you get used to this test.
- Before using a new box of test strips.
- When you suspect that the meter or test strips are not working properly.
- When you suspect that your test results are inaccurate or if they do not match how you feel.
- If you suspect your meter is damaged.
- At least once a week.
- After cleaning and disinfecting your meter.

Two levels of control solution are available: Control Solution 1 and Control Solution 2. Control Solution 1 is sufficient for most self-testing needs. If you think your meter or strips may not be working correctly, you may also want to do a Control Solution 2 test.

### **Using Control Solution**

- Use only genuine In Touch<sup>®</sup> Control Solution, Level 1 and Level 2 to check.
- Check the expiration date on the control solution vial. Do not use control solution past the expiry date or you may get inaccurate results.
- The control solution will remain accurate for 6 months after first opening. Discard any remaining solution after this date.
- Do not refrigerate or freeze the control solution.
- Shake the control solution well before using it.

**CAUTION:** The In Touch<sup>®</sup> Glucose Control Solution ranges printed on the test strip vial and foil pouch are for the control solution only and are used to test the performance of the meter and test strip.

If your Control Solution results continue to fall outside the printed range:

- The In Touch<sup>®</sup> Meter may not be working properly.
- Do not use the meter to check your blood.
- Inside the USA, call Customer Service at 1-800-945-4355, Customer Service is available 24 hours a day, 365 days a year.

### Checking your In Touch® Meter with Control Solution

There are two ways you can check your In Touch<sup>®</sup> with Control Solution. The first is to follow the same procedure as you would to check your blood glucose. In Touch<sup>®</sup> will automatically detect that it is Control Solution and display so on your screen. It will display the following images to guide you through the process of Checking your In Touch<sup>®</sup> with Control Solution. The second method can be accessed through the Home screen.

- Press the ON/OFF button on the side to wake up In Touch<sup>®</sup> and go to Settings > Calibrate > Control. Tap the Calibrate-Control panel which will then bring you to the screen to insert the blood glucose test strip.
- **2.** Insert the glucose test strip, apply a small drop of the control solution to the top of the bottle cap or a clean surface, and touch the end of the test strip to the control solution as shown. Wait 5 seconds and the result will be displayed.

![](_page_43_Picture_3.jpeg)

![](_page_43_Picture_4.jpeg)

![](_page_43_Figure_5.jpeg)

![](_page_43_Picture_6.jpeg)

![](_page_43_Picture_7.jpeg)

![](_page_43_Picture_8.jpeg)

![](_page_44_Picture_0.jpeg)

![](_page_44_Picture_1.jpeg)

**3.** Insert a strip into the meter. When you insert a strip in the meter, it will wake up the meter and indicate that it is checking the test strip.

**NOTE:** If the strip is removed before you start, the screen will go blank. If a control is not performed within 2 minutes of inserting the strip, the screen will go blank. To check, remove and replace the strip, starting from Step 1.

- **4.** Shake the control solution vial. Discard one drop before use. Squeeze the second drop of control solution onto a clean, hard, dry surface, like the top of the control cap.
- 5. Go to the Settings section and select Calibrate > Control.
- **6.** Pick up the meter with the strip inserted and touch the strip to the drop of control solution.
- 7. The control result is available on-screen in 5 seconds.

![](_page_44_Picture_8.jpeg)

![](_page_45_Picture_0.jpeg)

- **8.** Compare the result on the display with the range printed on the strip vial or foil pouch. If the result falls within the range, your monitor and strips are working correctly.
- **9.** The result is automatically stored into the device's memory, is marked in your blood glucose log as a control sample. Should you use the optional In Touch Data Management System your controls will be clearly separate and marked within your blood glucose logbooks.

### **Control Solution Troubleshooting**

Out-of-range results may be caused by the following:

- An error may have occurred when performing the control test. Try another test and remember to follow the instructions carefully.
- The control solution may have expired or may have been contaminated. Check the expiration date on the control solution vial. Control solution is only good for 6 months after opening. Make sure the control solution vial is closed when not in use.
- The strip may have expired. Check the expiration date on the test strip vial.The test strip may have been damaged. This can be caused by extreme temperatures or by leaving the test strip vial cap open. Try another test using a new test strip.
- There may be a meter malfunction. Call Customer Service at 1-800-945-4355. Customer Service is available 24 hours a day, 365 days a year.

### Important Tips

- Use only In Touch<sup>®</sup> Control Solution with In Touch<sup>®</sup> Strips. Other brands of control solution or test strips will produce inaccurate results.
- Always check the expiration date. Do not use expired control solution.
- You can store the control solution closed and at room temperature at relative humidity between 10-90%. Do not freeze.
- Never touch the tip of the control solution bottle to the test strip; this will contaminate all of the remaining solution in the bottle.

**NOTE:** If the control solution test result is outside the range (is either higher or lower), your monitor and test strip may not be working together properly. Repeat the process using a new test strip.

**WARNING:** Do not use the meter for medical purposes until your control solution test results fall within the range marked on the test strip package.

## **Chapter 12** Maintenance

### Cleaning and Disinfecting Your In Touch®

We recommend that you clean and disinfect your In Touch<sup>®</sup> meter at least once a week.

What is the difference between cleaning and disinfecting?

Cleaning and disinfecting is not the same thing. Cleaning simply removes blood and dirt. Disinfecting kills germs and provides an extra level of safety. The exterior of the In Touch®should only be cleaned and disinfected with DISPATCH Hospital Cleaner Disinfectant TowelsTM. These have special ingredients (active ingredient sodium hypochlorite) that have been tested and have been shown to be safe for use and to clean and disinfect your In Touch®Meter. In the following procedure, the first disinfectant towel is used for cleaning and the second towel provides for disinfection

You should disinfect areas where there are both high concentrations of germs and a possibility that they will be spread to others. DISPATCH Hospital Cleaner Disinfectant TowelsTM have ingredients that clean and disinfect your meter, lancing device, and endcaps. While surfaces may look clean, many infectious germs may be lurking around. Some germs can live on surfaces for hours and even for days! The disinfection process shown below that you should follow is effective in destroying dangerous Hepatitis B viruses.

Clean and disinfect your meter at least once a week using the procedure below. Liquids should not enter the test strip port.

If the meter or lancing device is being operated by a second person who is providing testing assistance to the user, the meter should be decontaminated prior to use by the second person. See your lancing device's user manual for instructions on decontaminating your lancing device.

You can find DISPATCH Hospital Cleaner Disinfectant TowelsTM at Medex Supply - www.medexsupply.com - (888) 433-2300, Sears www.sears.com - (800) 349-4358, Berktree - www.berktree.com -(866) 505-5333, Optics Planet - www.opticsplanet.com - (800) 504-5897, and Amazon.com - www.amazon.com. A full list of authorized dealers of is DISPATCH Hospital Cleaner Disinfectant TowelsTM can be found at www.intouch.livongo.com

Clean and disinfect your meter at least 1 time per week using DISPATCH Hospital Cleaner Disinfectant TowelsTM using the following steps illustrated in the figure below:

- 1. Dispense the DISPATCH towel from its package or container.
- **2.** Clean the outside of the meter to remove any blood or dirt with one DISPATCH towel.
- **3.** Discard used towel in a sealed container where it will not be touched by others.
- 4. Dispense a second DISPATCH towel from its package or container.
- **5.** Disinfect the meter with the second towel by wiping all outside surfaces thoroughly, around the strip port and surface of the touchscreen.
- **6.** Discard used towel in a sealed container where it will not be touched by others.
- **7.** Wait at least one minute and make sure device is completely air dried before next blood test and that no "bubbles" from the cleaning and disinfecting agent remain.

### Cleaning and Disinfecting Your Meter

Clean and disinfect your meter at least 1 time per week using Caltech DISPATCH Cleaner/Disinfectant with Bleach Premoistened Towels using the following method:

![](_page_47_Picture_2.jpeg)

The In Touch<sup>®</sup>Blood Glucose Meter has been validated for 1,825 cleaning and disinfection cycles. Please obtain a new meter after cleaning and disinfecting the meter 1,825 times or once the lifetime of the meter (5 years) has been reached, whichever comes first.

- Do not allow cleaning solution to run in or around the strip port. Doing so may cause a malfunction.
- Do not let the meter come in contact with water.
- Do not use any glass or household cleaners on the meter.
- Stop using the meter and contact customer service for a replacement meter device immediately if you notice any of the following signs of deterioration:
  - The meter does not turn on.
  - The meter's screen has been cracked or has become clouded.
  - There is crazing (looks like a fine network of cracks along the surface), distortion, weakening, etching, erosion, scratching of the case or glass, erasure of laser labeling of the case so that the exterior labeling including the Serial Number, IMEI, SIM, device identification, FCC number are obscure
  - Difficulty with insertion of USB charger or ease of strip insertion
  - Or change in responsiveness or brightness of the touchscreen or home screen gauges

**IMPORTANT:** If the meter is being operated by a second person who is providing testing assistance to the user, the meter should ALWAYS be decontaminated prior to use by the second person.

For technical support, Call Customer Service at 1-800-945-4355. Customer Service is available 24 hours a day, 365 days a year.

dried before next blood te

### Battery

The meter is powered by a rechargeable battery.

![](_page_48_Picture_2.jpeg)

![](_page_48_Picture_3.jpeg)

When charging using the USB charger, you will not be able to use In Touch®to do any checking of your blood glucose and the display screen will show it is charging. Unplug the charger from the wall before checking. After charging, wait 30 minutes before you do any blood glucose tests.

![](_page_48_Picture_5.jpeg)

If you notice significant reduction in the duration of your meter's operating time, it may need to be replaced. Please contact Call Customer Service at 1-800-945-4355. Customer Service is available 24 hours a day, 365 days a year or e-mail intouchsupport@livongo.com.

![](_page_48_Picture_7.jpeg)

### Storing Your In Touch® Meter & Strips

Your meter is a delicate electronic device that should be handled with care. Severe shock, such as that caused by dropping the meter, could damage it.

The meter and test strips only work in the temperature range of 41  $^\circ$  F to 113  $^\circ$  F.

Store the test strips between 41°F and 86°F and between 10% and 90% relative humidity. Do not freeze. See the test strip package insert instructions for more details.

Don't leave the meter in a place that is extremely hot or cold (e.g. anywhere near a heat source or in an extremely hot or cold car).

Do not expose the meter or test strips to high levels of humidity, such as in the bathroom or kitchen.

Immediately close the bottle cap tightly after removing a test strip.

**CAUTION:** DO NOT attempt to open the meter to make any repairs. If you do, your warranty and all claims will be void! Only authorized service personnel can repair the monitor.

If you have any problems or questions, turn your meter off and contact In Touch<sup>®</sup> call Customer Service at 1-800-945-4355.

Support is available 24 hours 365 days a year.

# **Chapter 13** Troubleshooting

### Issues With Test

If your meter does not begin checking after you have inserted a blood sample, you should check if:

- The test strip is upside down or is not inserted fully.
- The battery is dead.
- You have taken enough blood to sample.
- Your In Touch<sup>®</sup> has automatically turned itself off.
- The test strip may be damaged.
- Your In Touch<sup>®</sup> may not be working properly.

### **Basic Troubleshooting**

- 1. Make sure that the colored- labeled side of the In Touch<sup>®</sup> test strip is facing you and that the arrow on the test strip is in the direction of the test strip port opening. If you are still having issues with tests:
- 2. Repeat the test with a new test strip.

After 3 attempts, call Customer Service at 1-800-945-4355 (inside the USA).

## **Error Messages**

In the event of an error while checking your blood glucose, error messages in plain language (not E codes) will appear on In Touch<sup>®</sup>'s screen.

Internal Calibration Error. This means that insertion of the test strip and application of the sample was in error. So just try again.

Blood Applied Too Quickly. In Touch<sup>®</sup> will tell you that it is "Checking Strip" before you can apply the blood sample. If you apply it before it is calibrated, you will get this error.

Contaminated or Used Strip. The test strip that you are using is either contaminated or has been used. Select a new strip from the vial and re-test.

Insufficient Blood Sample. In Touch<sup>®</sup> Strips require a very small drop of blood. However, sometimes the blood droplet might thin out or disperse so that it is too little to be measured with accuracy. If you try to apply more to the strip after, you may get erroneous results. You need to take out the test strip and re-check using a new test strip.

emperature Too High. The outside temperature is too high and is above 113°F.

Temperature too Low. The outside temperature is too low to give an accurate reading and is below 41°F.

Glucose Strip Coding Error. The In Touch<sup>®</sup>Blood Glucose Test Strips are non code strips and when inserted are checked to ensure they are the right strip for In Touch<sup>®</sup>and inserted in the right way. You will see the screen say "Checking Strip", followed by "Ready to Check Glucose" with an image where to apply the drop of blood onto the strip. If you receive this message you may have applied the drop of blood too soon or there was an error in insertion of the strip. Replace with a fresh strip and try again. Wait until you see "Ready to Check Glucose" before applying blood to the test strip. If the message persists please call Customer Service. Hematocrit Error. In Touch<sup>®</sup> will operate in the hematocrit range 20% to 70%. If the hematocrit is above or below this range, you will receive this message. Your results will not be accurate outside of this range. Very high (above 70%) and very low (below 20%) hematocrit levels can cause false results. Talk to your doctor to find out your hematocrit level.

Meter CRC Error. In Touch<sup>®</sup> communicates with a cellular GSM enabled radio to transmit the blood glucose results. If there is a communication error between the radio and the glucose-sensing module you will receive this message. Your results will be stored in the memory for retrieval until the communication is restored.

Test Strip Removed. If the blood glucose test strip is removed before a reading can be obtained, you will receive this message. Take out the strip, discard it, replace it with a fresh test strip and repeat the measurement.

Glucose Result Out of Range (High). In Touch<sup>®</sup>can measure blood glucose accurately to 600 mg/dL. If the blood glucose is higher than 600 mg/dL the screen will display, Out of Range: HIGH. Please call your provider if the display says Out of Range: HIGH.

Glucose Result Out of Range (Low). In Touch<sup>®</sup> can measure blood glucose accurately from 20mg/dL to 600 mg/dL. If the blood glucose is lower than 20 mg/dL the screen will display, Out of Range: LOW. Please call your provider if the display says Out of Range: LOW.

Communication Error. Please try again. Sometimes if you are not in cellular range, your blood glucose results will not be transmitted. You will receive this message, but the results will be stored in In Touch<sup>®</sup>memory and transmitted when you check your blood glucose again.

Meter Failure Message. This means that the meter may need to be restarted, as with any computer device. Restart your meter and contact In Touch®support if the problem continues. Turn your meter offbefore calling Livongo Health<sup>™</sup> at 1-800-945-4355

### **Communication Errors**

Error Message: "No data connection, data will be stored."

What it means: The meter cannot find a cellular connection.

Action to take: See "Communication Errors" below.

If you are having trouble uploading your results to In Touch<sup>®</sup>, you may want to try the following:

- If you are testing indoors, move closer to a window for better cellular reception.
- Try testing outdoors.
- Check to see if there is cellular coverage in your area. Two bars or less of wireless signal strength may result in unreliable transmission and reception of data.
- Restart the meter.

## **Getting Support**

If you still can't resolve your problem, turn your meter offand contact our In Touch<sup>®</sup>Customer Service at either 1-800-945-4355 or intouchsupport@livongo.com

# **Chapter 14** Specifications and Limitations

## Specifications

Test Measured Blood Glucose Glucose Methodology Glucose oxidase biosensor Glucose Test Results mg/dL (Plasma values) Measuring Range: 20-600 mg/dL Acceptable Hematocrit range 20% to 70% Length of Test 5 seconds Test Strip Volumes 0.8 µL

## **Operating Ranges**

Temperature: 41°F to 113°F (5°C to 45°C) Humidity: 10% to 90% relative humidity Altitude: up to 8,516 ft (2,595 m) Weight: 2.65 oz (75 g) Size 3.6x2.3x0.9 in (96 x57 x 17.7 mm) Meter data storage: 1000 results

## **Electrical & Power Ratings**

Electrical Specifications: 3.7V Li-Polymer Battery 1100mAh

Maximum current (Battery): 650mA peak Maximum power (Battery): 2.4W peak Maximum current (USB input, charging): 1A continuous

USB charging input: 5V 1A

### Environmental

- The storage temperature range for the meter: -13°F to 115°F (-25°C to 46°C).
- The storage temperature range for the test strips: 41°F to 86°F (5°C to 30°C).
- The meter operational temperature range: 41°F to 113°F (5°C to 45°C).
- The relative humidity range: 10% to 90% non-condensing.

## **Chapter 15** Warranty and Compliance

Your In Touch<sup>®</sup> meter is guaranteed to be free of material and workmanship defects for one (1) year from the date of receipt (except as noted below). If at any time during the first year after purchase, your In Touch<sup>®</sup> does not work for any reason (other than as de-'scribed below), it will be replaced with a new meter or a substantial equivalent, free of charge.

### Limitations On Warranty

This warranty is subject to the following exceptions and limitations:

- This warranty is applicable only to the original purchaser.
- This warranty does not apply to units that malfunction or are damaged due to obvious abuse, misuse, alteration, neglect, unauthorized maintenance or failure to operate meter in accor-dance with instructions.
- We have no knowledge of the performance of the In Touch<sup>®</sup>meter when used with test strips other than In Touch<sup>®</sup>Strips. Therefore, we make no warranty as to the performance of the In Touch<sup>®</sup>when used with any test strips other than In Touch<sup>®</sup>Test Strips.
- There is no other express warranty for this product. The option of replacement, described above, is the warrantor's only obligation under this warranty.

### For Warranty Service

The original purchaser must contact Customer Service at 1-800-945-4355 if in the USA. FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. The FCC ID is 2AA923614-04 and the IC ID is 11549A-853555300503 which are engraved on the back of your In Touch<sup>®</sup>. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Using this equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by doing one of the following:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet that is on a different circuit from the receiver.
- Consult Livongo Health or an experienced radio/TV technician for help.

### FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

### FCC Radiation Exposure Statement

This equipment complies with FCC Radiation Exposure Limits for an uncontrolled environment.

This transmitter must not be co-located with or operating in conjunction with any other antenna or transmitter.

## **Privacy Policy**

As the manufacturer of In Touch<sup>®</sup>, Livongo Health is committed to securing your personal information responsibly and in compliance with the law. We pledge that we will not share or sell your personal information with marketers or third parties. The information you voluntarily share with us will only be used to help us provide you a better service in the future.

![](_page_55_Picture_0.jpeg)

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