Table of Contents

What is **NESCO** *All New* MultiCheck **GCUHb system for?**

- The self-testing **NESCO** *All New* MultiCheck **GCUHb** Blood Glucose/Cholesterol/Uric Acid/Hemoglobin Multi-Function Monitoring System is designed for in vitro diagnostic use only (external use only). The system is for healthcare professionals and persons with diabetes,hyper-cholesterolemia, hyperuricemia or anemia to measure glucose, cholesterol, uric acid and hemoglobin values in fresh capillary whole blood from finger stick quantitatively. Frequent monitoring of whole blood glucose, cholesterol, uric acid and hemoglobin is an adjunct to the care of persons with diabetes, hypercholesterolemia, hyperuricemia and anemia. Simply apply a drop of blood to the test strip, the test result will be displayed on the screen after 6 seconds for glucose, 150 seconds for cholesterol, 6 seconds for uric acid and 6 seconds for hemoglobin.

- The **NESCO** *All New* MultiCheck **GCUHb** System is suitable for diabetes, hypercholesterolemia, hyperuricemia and anemia management at home or professional use.

- The **NESCO** *All New* **MultiCheck** **GCUHb** Meter can only be used with **NESCO** *All New* **MultiCheck** Blood Glucose, Cholesterol, Uric Acid and Hemoglobin Test Strips. The use of any other test strips may give incorrect results.
- Before using the products to test your blood glucose, cholesterol, uric acid and hemoglobin levels, read all the instructions carefully. It includes all the information you need to know in order to get the accurate blood glucose, cholesterol, uric acid and hemoglobin readings.
- Do not change your medical plan without doctor's approval. The **NESCO** *All New* **MultiCheck** **GCUHb** system should not be used for the diagnosis of diabetes, hypercholesterolemia, hyperuricemia and anemia or for the test of newborns.

Important Information

- Blood specimens containing ascorbic acid (Vitamin C) greater than 150 mg/dL, Amiloride greater than 20 mg/dL, acetaminophen greater than 8mg/dL, L-Dopa greater than 20 mg/dL, Dopamine greater than 20 mg/dL, Methyl-Dopa greater than 4 mg/dL, Galactose greater than 400 mg/dL, uric acid greater than 10.5 mg/dL and Xylose greater than 50 mg/dL may give **inaccurate glucose results.**

- Blood specimens containing ascorbic acid (Vitamin C) greater than 5 mg/dL, acetaminophen greater than 15 mg/dL, L-Dopa greater than 1.25 mg/dL, Dopamine greater than 3 mg/dL, Methyl-Dopa greater than 5 mg/dL, Glibenclimide greater than 10 mg/dL, creatinine greater than 20 mg/dL and Billirubin greater than 20 mg/dL may give **inaccurate cholesterol results.**

- Blood specimens containing ascorbic acid (Vitamin C) greater than 10 mg/dL, acetaminophen greater than 2 mg/dL, L-Dopa greater than 20 mg/dL, Dopamine greater than 5 mg/dL, Methyl-Dopa greater than 1.0 mg/dL, Cholesterol greater than 400 mg/dL, creatinine greater than 30 mg/dL, Diclofenac greater than 75 mg/dL,Amiloride greater than 20 mg/dL and ketoprofen greater than 500 **inaccurate uric acid results.**

- Blood specimens containing ascorbic acid (Vitamin C) greater than 150 mg/dL, L-Dopa greater than 20 mg/dL, Dopamine greater than 20 mg/dL and Methyl-Dopa greater than 4 mg/dL may give **inaccurate hemoglobin results**.

- Cholesterol up to 500 mg/dL or triglycerides up to 3000 mg/dL do not significantly affect the glucose results. Grossly lipaemic patient samples have not been tested and are not recommended for testing glucose level with the NESCO MultiCheck *All New* GCUHb System.

- Hematocrit (percentage of red blood cells in your blood) below 30% or higher than 55% was found to cause a higher or lower reading, respectively. No significant effect on the reading was found for hematocrits in the blood sample between 30% and 55%.

- The monitoring system will not work properly at altitudes greater than 8,000 feet.

- The System is designed to use at temperatures between 57.2°F and 104°F (14°C and 40°C) and below 85% of relative humidity. If you use the system outside the proposed conditions, it can give false results.

- Be sure to store the test strips between 40°F and 86°F (4°C and 30°C)

and avoid direct sunlight.

- Be sure to follow your local regulations for proper disposal of used test strips and lancets.
- Do not use this meter in a dry environment, especially if synthetic materials are present. Synthetic clothes, carpets, etc., may cause damaging static discharges in a dry environment.
- Do not use this meter near cellular or cordless telephones, walkie talkies, garage door openers, radio transmitters, or other electrical or electronical equipment that are sources of electromagnetic radiation, as these may interfere with the proper operation of the meter.
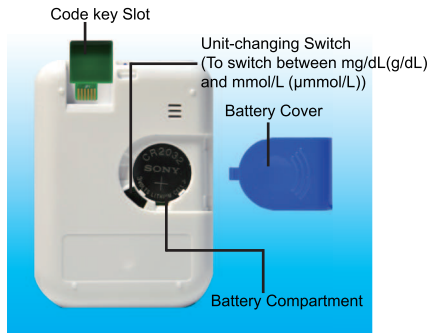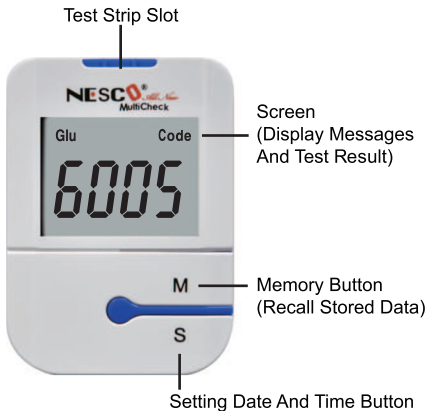
Items in the Package

- **NESCO** GCUHb Meter
- Puncturer (lancing device)
- Lancets
- Pouch

- **NESCO** GCUHb User's Manual
- Log Book
- Check Strip
- One **LITHIUM CELL** (CR2032, 3V)
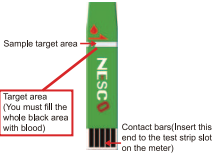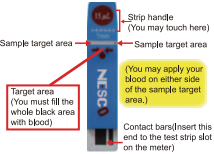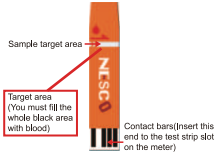
Items Need to be Purchased Separately

◆ **NESCO** ® *All New* **MultiCheck** Blood Glucose, cholesterol, uric acid and hemoglobin Test Strip (comes with a code key)

   ◆ Glucose Strips

   ◆ Cholesterol Trips

   ◆ Uric Acid Strips

   ◆ Hemoglobin Strips

◆ **NESCO** ® *All New* **MultiCheck** GCUHb Glucose/Cholesterol/Uric Acid/Hemoglobin Control Solutions

   ◆ 3ml for glucose

   ◆ 1ml for cholesterol

   ◆ 3ml for uric acid

   ◆ 1ml for hemoglobin

Getting to Know NESCO All New MultiCheck GCUHb Blood Glucose/Cholesterol/Uric Acid/Hemoglobin Multi-Function Monitoring System

Test Strip Slot

Screen
(Display Messages
And Test Result)

Memory Button
(Recall Stored Data)

Setting Date And Time Button

Code key Slot

Unit-changing Switch
(To switch between mg/dL(g/dL)
and mmol/L (μmmol/L))

Battery Cover

Battery Compartment

Glucose Test Strip	Cholesterol Test Strip	Uric Acid Test Strip	Hemoglobin Test Strip
Sample target area — Target area (You must fill the whole black area with blood) Contact bars(Insert this end to the test strip slot on the meter)	Strip handle (You may touch here) Sample target area — Sample target area (You may apply your blood on either side of the sample target area.) Target area (You must fill the whole black area with blood) Contact bars(Insert this end to the test strip slot on the meter)	Sample target area — Target area (You must fill the whole black area with blood) Contact bars(Insert this end to the test strip slot on the meter)	Sample target area Target area (You must fill the whole black area with blood) Contact bars(Insert this end to the test strip slot on the meter)

Setting Up Your **NESCO** *All New* **MultiCheck** **GCUHb Multi-Function Monitoring System**

Setting Date and Time

> **NOTE:**
> When you install the battery into the meter every time or replace the batteries, the meter will enter setting mode automatically. You can set correct time and date before you begin testing.

1. The meter will automatically enter the setting mode after you install the batteries.
2. Press "S" button to obtain correct number.
3. Press "M" button to confirm up setting and shifts to the month setting.
4. Repeat the same steps to set the month, date, hour and minute.
5. When you finish setting, the meter will turn off automatically.

Checking the Unit of Measurement

Before you get started...

NESCO MultiCheck GCUHb meter can measure your blood glucose, cholesterol, uric acid and hemoglobin in units as described below:

	Push Switch Up		Push Switch Down	
	Unit	**Decimal point**	Unit	**Decimal point**
Glucose	mmol/L	**Yes**	mg/dL	**No**
Cholesterol	mmol/L	**Yes**	mg/dL	**No**
Uric Acid	µmol/L	**No**	mg/dL	**Yes**
Hemoglobin	mmol/L	**Yes**	g/dL	**Yes**

* You should check this setting every time you put batteries into your meter.
* Use a screwdriver to adjust the switch.

The Batteries Installation

NOTE:
Your meter comes with One LITHIUM CELL (CR2032, 3V)

1. Slide battery cover off from the back of the meter.

2. Insert One LITHIUM CELL (CR2032, 3V) into battery slot.

3. Slide battery cover back.

CAUTIONS:
◎ Make sure the "+" and "-" ends of the batteries match the marks in the battery compartment.

Using Check Strip to Check the Meter

You would need to use the check strip to check the meter when

- You use [NESCO All New MultiCheck] GCUHb monitoring system for the first time.
- You drop the meter.
- You think there is something wrong with the results you got and you want to check whether meter and test strips are working correctly or not.

1. Insert the check strip into the test strip slot on the meter.

2. The screen should display "OK".   If "X" appears on the screen, remove the check strip and reinsert it.   If "X" displays again, stop the test and call our customer support.
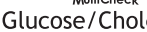
Control Check with Glucose/Cholesterol/Uric Acid/Hemoglobin Control Solutions

When to Run a Control Check with Glucose/Cholesterol/Uric Acid/Hemoglobin Control Solutions?

- You think there is something wrong with the glucose, cholesterol, uric acid or hemoglobin measurement you got and you want to check whether meter and test strips are working correctly.

Items You Need

- **NESCO** GCUHb Glucose/Cholesterol/Uric Acid/Hemoglobin control solutions
- **NESCO** GCUHb Meter
- **NESCO** Blood Glucose Test Strips
- **NESCO** Blood Cholesterol Test Strips
- **NESCO** Blood Uric Acid Test Strips
- **NESCO** Blood Hemoglobin Test Strips
- Glucose/Cholesterol/Uric Acid/Hemoglobin Code key in the test strips box

Steps for Running a Glucose Control Check

CAUTION:

◎ Always check the glucose code key number to make sure it matches the number labeled on the test strip vial when you run a glucose control test. Otherwise you may get incorrect results.

◎ Always write down the opening date of your glucose control solution vial and test strip vial. Both of them are good for only **3 months** after first opening or until the expiration date, whichever comes first.

◎ The result will be stored in memory and appear just like the blood glucose result.

1. Insert the code key come with the glucose test strips into the code key slot on the back of the meter.

2. Take one strip from the vial. Close the vial quickly.

3. Insert the test strip into the test strip slot on the meter. The meter will first display code number, then the blood symbol "⬥".

4. Hold the glucose control solution bottle upside down, slowly squeeze the bottle to form a small drop, discard the first drop of the solution, let the second drop touch the edge of the sample targeting area on the test strip. The control solution will be drawn into the targeting zone automatically.

5. You will hear a "Beep" sound. Close the cap of the control solution immediately. The meter start to count down 6 seconds then show your result on the screen.

6. Check if the displayed glucose value falls within the

acceptable range shown on the test strip vial.

7. Remove the test strip from the meter and discard it.

Steps for Running a Cholesterol Control Check

CAUTION:

◎   Always check the Cholesterol code key number to make sure it matches the number labeled on the test strip vial when you run a Cholesterol control test. Otherwise you may get incorrect results.

◎   Always write down the opening date of your <u>Cholesterol control solution vial</u> and <u>test strip vial</u>. Both of them are good for only **2 months** after first opening or until the expiration date, whichever comes first.

◎   The result will be stored in memory and appear just like the blood cholesterol result.

1. Insert the cholesterol code key into the code key slot on the back of the meter.

2. Take one strip from the vial. Close the vial quickly.

3. Insert the test strip into the test strip slot on the meter. The meter will first display code number, then the blood symbol "🩸".
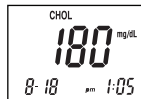
Caution:
Make sure that the code number shown on the screen is the same as the code number printed on the Cholesterol test strip vial, otherwise you may get incorrect measurement.

4. Hold the Cholesterol control solution bottle upside down, slowly squeeze the bottle to form a small drop, discard the first drop of the solution, let the second drop touch the edge of the sample targeting area on the test strip. The control solution will be drawn into the targeting zone automatically.

5. You will hear a "Beep" sound. Close the cap of the control solution immediately. The meter start to count down 150 seconds then show your result on the screen.
6. Check if the displayed cholesterol value falls within the acceptable range shown on the test strip vial.
7. Remove the test strip from the meter and discard it.

Steps for Running a Uric Acid Control Check

CAUTION:

◎ Always check the Uric Acid code key number to make sure it matches the number labeled on the test strip vial when you run a Uric Acid control test. Otherwise you may get incorrect results.

◎ Always write down the opening date of your Uric Acid control solution vial and test strip vial. Both of them are good for only **2 months** after first opening or until the expiration date, whichever comes first.

◎ The result will be stored in memory and appear just like the blood uric acid result.

1. Insert the uric acid code key into the code key slot on the back of the meter.

2. Take one strip from the vial. Close the vial quickly.

3. Insert the test strip into the test strip slot on the meter. The meter will first display code number, then the blood symbol "💧".

Caution:

Make sure that the code number shown on the screen is the same as the code number printed on the Uric Acid test strip vial, otherwise you may get incorrect measurement.

4. Hold the Uric Acid control solution bottle upside down, slowly squeeze the bottle to form a small drop, discard the first drop of the solution, let the second drop touch the edge of the sample targeting area on the test strip. The control solution will be drawn into the targeting zone automatically.

24

5. You will hear a "Beep" sound. Close the cap of the control solution immediately. The meter start to count down 6 seconds then show your result on the screen.
6. Check if the displayed uric acid value falls within the acceptable range shown on the test strip vial.
7. Remove the test strip from the meter and discard it.

Steps for Running a Hemoglobin Control Check

CAUTION:
◎ Always check the Hemoglobin code key number to make sure it matches the number labeled on the test strip vial when you run a hemoglobin control test. Otherwise you may get incorrect results.
◎ Always write down the opening date of your <u>hemoglobin control solution vial</u> and <u>test strip vial</u>. Hemoglobin test strip is good for only **2 months** and hemoglobin control solution is good for only **1 month** after first opening or until the expiration date, whichever comes first.
◎ The result will be stored in memory and appear just like the blood hemoglobin result.

1. Insert the hemoglobin code key into the code key slot on the back of the meter.

2. Take one strip from the vial. Close the vial quickly.

3. Insert the test strip into the test strip slot on the meter. The meter will first display code number, then the blood symbol "🌢".

Caution:
Make sure that the code number shown on the screen is the same as the code number printed on the Hemoglobin test strip vial, otherwise you may get incorrect measurement.

4. Hold the hemoglobin control solution bottle upside down, slowly squeeze the bottle to form a small drop, discard the first drop of the solution, let the second drop touch the edge of the sample target area on the test strip. The control solution will be drawn into the target zone automatically.

5. You will hear a "Beep" sound. Close the cap of the control solution immediately. The meter start to count down 6 seconds then show your result on the screen.
6. Check if the displayed Hemoglobin value falls within the acceptable range shown on the test strip vial.
7. Remove the test strip from the meter and discard it.
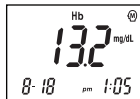
How to Read the Label on the Test Strip Vial?

Label on the Glucose Test Strip Vial

Code No.:	Code number of test strip
Lot.NO:GOT10001A	Lot.NO of test strips
Exp.Date:2011/12	Expiry date YYYY/MM

control : (N) 60 ~ 100 (H) 240 ~ 360 mg/dL — The glucose control result should fall within the specified range.

Glucose
25 Test Strips

Suitable for Self-Testing
- Read enclosed instructions carefully before use
- Store/Transport between 4~30℃ (40~86℉)
- Replace cap immediately after use
- Do not reuse

Read result in 10 seconds
Sample Volume ≥ 4 µl

Date Opened:
(Use within 3 months after first opening)

You should fill in the opening date here

Kernel Int'l Corp.
Made in Taiwan

Rev.A1 08/13
P/N 12040388

Label on the Cholesterol Test Strip Vial

NESCO ® *All New*
MultiCheck ®

Cholesterol
10 Test Strips

Code No.:
Lot.NO:CHS10001A
Exp.Date:2011/12

control : (N) 60 ~ 240 mgidL

Suitable for Self-Testing
- Read enclosed instructions carefully before use
- Store/Transport between 4~30°C (40~86°F)
- Replace cap immediately after use
- Do not reuse

Read result in 150 seconds
Sample Volume ≥ 15µl

Date Opened:
(Use within 2 months after first opening)

IVD

CE 0197 30℃ 4℃

KIC
Kernel Int'l Corp.
Made in Taiwan

Rev.B3 11/12
P/N 12040191

| Code number of test strip |
| Lot.NO of test strips |
| Expiry date YYYY/MM |
| The glucose control rsult should fall within the specified range. |
| You should fill in the opening date here |

Label on the Uric Acid Test Strip Vial

NESCO ® *All New*
MultiCheck ®

Uric Acid
25 Test Strips

Code No.:
Lot.NO:UAT10001A
Exp.Date:2011/12

control : (N) 3.0 ~ 6.0 (H) 8.5 ~ 13.5 mg/dL

Suitable for Self-Testing
- Read enclosed instructions carefully before use
- Store/Transport between 4~30°C (40~86°F)
- Replace cap immediately after use
- Do not reuse

Read result in 20 seconds
Sample Volume ≥ 4 µl

Date Opened:
(Use within 2 months after first opening)

IVD

CE 0197 30℃ 4℃

KIC
Kernel Int'l Corp.
Made in Taiwan

Rev.A1 08/13
P/N 12040387

| Code number of test strip |
| Lot.NO of test strips |
| Expiry date YYYY/MM |
| The glucose control rsult should fall within the specified range. |
| You should fill in the opening date here |

Label on the Hemoglobin Test Strip Vial

Nesco® All New
MultiCheck

Hemoglobin
25 Test Strips

Code No.:
Lot.NO:HBS10001A
Exp.Date:2011/12

control · (N) 12~15 g/dL

Suitable for Self-Testing
- Read enclosed instructions carefully before use
- Store/Transport between 4~30°C (40~86°F)
- Replace cap immediately after use
- Do not reuse

Read result in 6 seconds
Sample Volume ≥ 2.6µl

Date Opened:
(Use within 2 months after first opening)

Kernel Int'l Corp.
Made in Taiwan

Rev.A3 11/12
P/N 12040189

0197

Code number of test strip

Lot.NO of test strips

Expiry date YYYY/MM

The glucose control rseult should fall within the specified range**.**

You should fill in the opening date here

Analyzing Your Control Results

You will find the acceptable range of glucose, cholesterol, uric acid and hemoglobin levels for the normal and high controls on the test strip vial label.
If your control results fall within the acceptable range, you can begin to test your blood glucose, cholesterol, uric acid or hemoglobin levels.
If your control results are not within the acceptable range, check the following items:

- Are your Glucose/Cholesterol/Uric Acid/Hemoglobin test strips or control solutions expired?
- Have you ever forgotten to close your Glucose/Cholesterol/Uric Acid/Hemoglobin test strip vials or control solution bottles?
- Does the code in the meter match the code on the test strip vial? Do you follow all the operation instruction correctly?
- Repeat the control test with a new test strip, following the steps exactly.

CAUTION:

If you continue to receive control values that are outside of the accepted range, discontinue your blood testing and contact Customer Service or your healthcare provider immediately.

Blood Glucose/Cholesterol/Uric Acid/Hemoglobin Testing

Items You Need

- **GCUHb Meter**
- **Blood Glucose Test Strips**
- **Blood Cholesterol Test Strips**
- **Blood Uric Acid Test Strips**
- **Blood Hemoglobin Test Strips**
- Glucose Code key (green color) in the glucose test strips box
- Cholesterol Code key (blue color) in the cholesterol test strips box
- Uric Acid Code key (orange color) in the uric acid test strips box
- Hemoglobin Code key (pink color) in the hemoglobin test strips box
- Puncturer
- Lancets
- Alcohol swab (not included)
- Log book

Preparing the Puncturer (Lancing Device)

NOTE:
To increase blood flow: warm fingers using warm water to wash hands, hang down arm.

CAUTIONS:
◎ For safety and to prevent cross-contamination, always place the protective cover back before discarding the used lancets.
◎ To avoid infection, you should-
   - Never reuse the lancets.
   - Never share your puncturer with others.
   - Use an alcohol pad to wipe off blood from puncturer's tip.
◎ To avoid accidental injury, do not leave a lancet in the puncturer. Always remove the used lancet immediately after a test.

Structure of Puncturer and Lancet

Lancet

Protective cover

Trigger

Adjustable tip

Carrier

auto-Lancet™

Sliding barrel
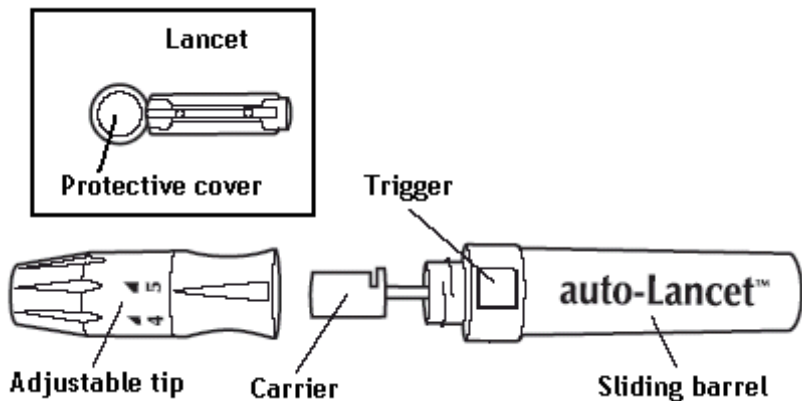
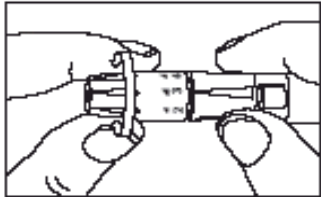## Steps for Using the Puncturer
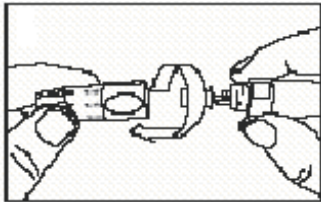
1. Unscrew and remove the puncturer's adjustable tip.
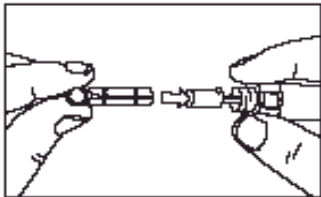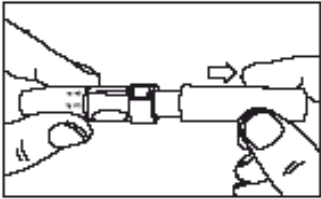

2. Insert a lancet into the carrier.
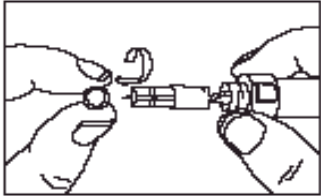
3. Twist off the protective cover.

4. Replace the adjustable tip tightly. Choose a desired skin penetration depth by rotating the top portion of the adjustable tip until the setting number lines up to the arrow. Settings are based on skin type:
   Depth 1~2: for soft or thin skin
   Depth 3: for average skin
   Depth 4~5: for thick or calloused skin

5. Hold the tip of the puncturer with one hand and pull the sliding barrel with the other hand. When a click is felt, the trigger rises up. Release the sliding barrel, it will move back to its original position.
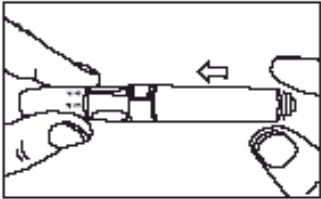
Testing Your Blood Glucose Level

CAUTIONS:
You can only use **NESCO** _All New_ MultiCheck blood glucose test strips and check strip on **NESCO** _All New_ MultiCheck GCUHb meter.

1. When you first time use the **NESCO** _All New_ MultiCheck GCUHb meter or open a new test strip vial, insert the code key from the test strip vial. Each test strip vial contains one code key. Make sure the number on the code key matches the code number on the vial of test strips you use.

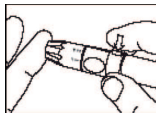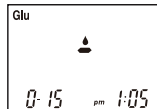2. Take one strip from the vial. Close the vial quickly.

Caution:
The test strips can be damaged when they are not capped and stored properly.

3. Insert the test strip into the test strip slot on the meter. The meter will first display code number, then the blood symbol "⬤".

4. When the screen shows blood symbol "⬤", clean your finger with alcohol swab. Let it dry completely.

5. Place the puncturer on your finger.

NOTE:
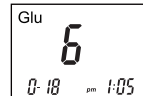**The best puncture site is on the side of fingertip, because it has the best blood supply.**

6. Press the trigger on the puncturer.
7. Lift up the puncturer.
8. Get a drop of blood.

9. Put the drop of blood on one side or the other side of the test strip target area. The blood will be absorbed and cause the target area to turn red. The testing reaction starts when the meter beeps. The meter start to count down 10 seconds then show your result on the screen. The meter stores your result in its memory automatically.
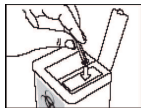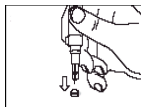
NOTE:
How much blood should be applied?
Although only a small amount of blood is needed,   it is very important that you put enough blood on your test strip so that the entire reaction zone is covered with blood. This ensures that your meter can give accurate and reliable results.

10. In about 10 seconds, the screen will display measured glucose value. Record the glucose value in your log book.
11. Pull the test strip out of the meter. The meter will turn off by itself. Unscrew the adjustable tip of the puncturer.

12. Put the protective cover of the lancet back on the lancet. Grip the puncturer holder firmly and pull the lancet out.

13. Discard the used lancet in an appropriate container with a lid.

14. Screw the adjustable tip back on the puncturer.

CAUTION:
To avoid accidental injury, do not leave used lancet in the puncturer. Always remove the used lancet immediately after each test.

Understanding Your Blood Glucose Test Results

According to the suggestions of American Diabetes Association：
Normal fasting blood glucose is 70～100 mg/dL（3.9~5.6 mmol/L）.
However, the above range is just a reference, and it may not apply for every person.

Consult your doctor for the appropriate range for you.

Testing Your Blood Cholesterol Level

> **CAUTIONS:**
> You can only use **NESCO** ® *All New* **MultiCheck** blood cholesterol test strips and check strip on **NESCO** ® *All New* **MultiCheck** GCUHb meter.

1. When you first time use the **NESCO** ® *All New* **MultiCheck** GCUHb meter or open a new test strip vial, insert the code key from the test strip vial. Each test strip vial contains one code key. Make sure the number on the code key matches the code number on the vial of test strips you use.

2. Take one strip from the vial. Close the vial quickly.
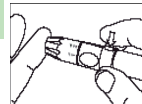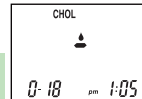
> **Caution:**
> **The test strips can be damaged when they are not capped and stored properly.**

3. Insert the test strip into the test strip slot on the meter. The meter will first display code number, then the blood symbol "⬥".

4. When the screen shows blood symbol "⬥", clean your finger with alcohol swab. Let it dry completely.
5. Place the puncturer on your finger.

NOTE:
The best puncture site is on the side of fingertip, because it has the best blood supply.

6. Press the trigger on the puncturer.
7. Lift up the puncturer.
8. Get a drop of blood.

9. Put the drop of blood on one side or the other side of the test strip target area. The blood will be absorbed and cause the target area to turn red. The testing reaction starts when the meter beeps. The meter will start to count down 150 seconds then show your result on the screen. The meter stores your result in its memory automatically.
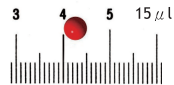

NOTE:
How much blood should be applied?
Although only a small amount of blood is needed, it is very important that you put enough blood on your test strip so that the entire reaction zone is covered with blood. This ensures that your meter can give accurate and reliable results.
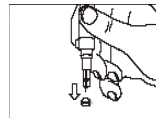
10. In about 150 seconds, the screen will display measured cholesterol value. Record the cholesterol value in your log book.
11. Pull the test strip out of the meter. The meter will turn off by itself. Unscrew the adjustable tip of the puncturer.

12. Put the protective cover of the lancet back on the lancet. Grip the puncturer holder firmly and pull the lancet out.

13. Discard the used lancet in an appropriate container with a lid.

14. Screw the adjustable tip back on the puncturer.

Understanding Your Blood Cholesterol Test Results

Normal fasting blood cholesterol is below 200 mg/dL.
However, the above range is just a reference, and it may not apply for every person.

Consult your doctor for the appropriate range for you.

Testing Your Blood Uric Acid Level

CAUTIONS:
You can only use **NESCO** *All New* MultiCheck blood uric acid test strips and check strip on **NESCO** *All New* MultiCheck GCUHb meter.

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1. When you first time use the **NESCO** *All New* MultiCheck GCUHb meter or open a new test strip vial, insert the code key from the test strip vial. Each test strip vial contains one code key. Make sure the number on the code key matches the code number on the vial of test strips you use.

2. Take one strip from the vial. Close the vial quickly.
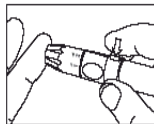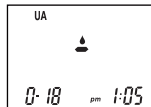

Caution:
The test strips can be damaged when they are not capped and stored properly.

3. Insert the test strip into the test strip slot on the meter. The meter will first display code number, then the blood symbol "●".

4. When the screen shows blood symbol "●", clean your finger with alcohol swab. Let it dry completely.
5. Place the puncturer on your finger.

NOTE:
The best puncture site is on the side of fingertip, because it has the best blood supply.

6. Press the trigger on the puncturer.
7. Lift up the puncturer.
8. Get a drop of blood.

9. Put the drop of blood on one side or the other side of the test strip target area. The blood will be absorbed and cause the target area to turn red. The testing reaction starts when the meter beeps. The meter will start to count down 20 seconds then show your result on the screen. The meter stores your result in its memory automatically.
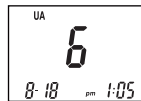

NOTE:
How much blood should be applied?
Although only a small amount of blood is needed, it is very important that you put enough blood on your test strip so that the entire reaction zone is covered with blood. This ensures that your meter can give accurate and reliable results.

Caution:
If you don't apply enough blood,you might need to use a new test strip to do the test again.

10. In about 20 seconds, the screen will display measured uric acid value. Record the uric acid value in your log book.
11. Pull the test strip out of the meter. The meter will turn off by itself. Unscrew the adjustable tip of the puncturer.
12. Put the protective cover of the lancet back on the lancet. Grip the puncturer holder firmly and pull the lancet out.

13. Discard the used lancet in an appropriate container with a lid.
14. Screw the adjustable tip back on the puncturer.
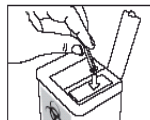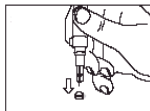
Understanding Your Blood Uric Acid Test Results

The expected blood uric acid value is as following:
Male：3 ~ 7.2 mg/dL（179~428μmol/L）
Female：2 ~ 6 mg/dL（119~357μmol/L）

However, the above range is just a reference, and it may not apply for every person.

Consult your doctor for the appropriate range for you.

Testing Your Blood Hemoglobin Level

CAUTIONS:
You can only use NESCO *All New* MultiCheck blood hemoglobin test strips and check strip on NESCO *All New* MultiCheck GCUHb meter.

1. When you first time use the NESCO *All New* MultiCheck GCHb meter or open a new test strip vial, insert the code key from the test strip vial. Each test strip vial contains one code key. Make sure the number on the code key matches the code number on the vial of test strips you use.

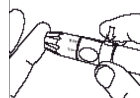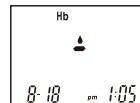2. Take one strip from the vial. Close the vial quickly.

Caution:
The test strips can be damaged when they are not capped and stored properly.

3. Insert the test strip into the test strip slot on the meter. The meter will first display code number, then the blood symbol "💧".

4. When the screen shows blood symbol "💧", clean your finger with alcohol swab. Let it dry completely.

5. Place the puncturer on your finger.

NOTE:
The best puncture site is on the side of fingertip, because it has the best blood supply.
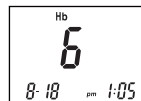
6. Press the trigger on the puncturer.
7. Lift up the puncturer.
8. Get a drop of blood.
9. Put the drop of blood on the test strip target area. The blood will be absorbed and cause the target area to turn red. The testing reaction starts when the meter beeps. The meter will start to count down 6 seconds then show your result on the screen. The meter stores your result in its memory automatically.

NOTE:
**How much blood should be applied?**
Although only a small amount of blood is needed, it is very important that you put enough blood on your test strip so that the entire reaction zone is covered with blood. This ensures that your meter can give accurate and reliable results.

10. In about 6 seconds, the screen will display measured Hemoglobin value. Record the Hemoglobin value in your log book.

11. Pull the test strip out of the meter. The meter will turn off by itself. Unscrew the adjustable tip of the puncturer.

12. Put the protective cover of the lancet back on the lancet. Grip the puncturer holder firmly and pull the lancet out.

14. Discard the used lancet in an appropriate container with a lid.

15. Screw the adjustable tip back on the puncturer.
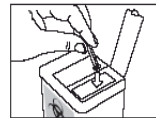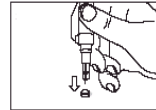
Understanding Your Blood Hemoglobin Test Results

The expected hemoglobin value is as following:
Male：13.5~16.5 g/dL（8.4~10.2mmol/L）
Female：12.1~15.1 g/dL（7.5~9.4mmol/L）

However, the above range is just a reference, and it may not apply for every person.

Consult your doctor for the appropriate range for you.

Using the Meter Memory

NESCO *All New* **MultiCheck** **GCUHb** Meter can automatically store glucose, cholesterol, uric acid and hemoglobin most recent test results. You can review the test results in order from the newest to the oldest. If the memory is full, the oldest result is deleted as the newest result is added. The memory is not affected by replacing/removing the batteries.

Review the Stored Glucose Test Results
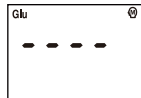
1. Please enter the glucose test mode first. Insert the glucose code key (green color) and press "M" button.
2. Pressing and releasing the "M" button, the 7-day average, 14-day average and 28-day average will be displayed on the screen in order.
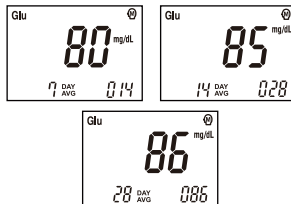
3. After the 28-day average, the newest blood glucose test result with date will be displayed via pressing and releasing the "M" button.
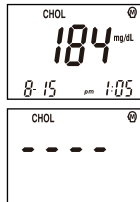
4. The stored results with date are displayed in order from the most recent to the oldest via pressing and releasing the "M" button.   The meter will turn off automatically in 3 seconds when the symbol "----" is displayed on the screen.

5. If you decide to stop checking the results, stop pressing the "M" button. The meter will turn off automatically in 30 seconds or via pressing "S" button.

6. No test can be performed when you are checking the stored results. If you wish to perform a new test, please turn off the meter first and restart the steps described in the section 【Blood Glucose/Cholesterol/Uric Acid/Hemoglobin Testing】.
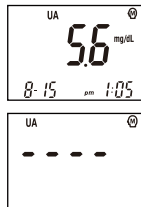
Review the Stored Cholesterol Test Results

1. Please enter the cholesterol test mode first. Insert the cholesterol code key (blue color) and press "M" button.
2. The stored results with date are displayed in order from the most recent to the oldest via pressing and releasing the "M" button.   The meter will turn off automatically in 3 seconds when the symbol "----" is displayed on the screen.
3. If you decide to stop checking the results, stop pressing the "M" button. The meter will turn off automatically in 30 seconds or via pressing "S" button.
4. No test can be performed when you are checking the stored results. If you wish to perform a new test, please turn off the meter first and restart the steps described in the section 【Blood Glucose/Cholesterol/Uric Acid/Hemoglobin Testing】.

Review the Stored Uric Acid Test Results

1. Please enter the uric acid test mode first. Insert the uric acid code key (orange color) and press "M" button.
2. The stored results with date are displayed in order from the most recent to the oldest via pressing and releasing the "M" button.   The meter will turn off automatically in 3 seconds when the symbol "----" is displayed on the screen.

3. If you decide to stop checking the results, stop pressing the "M" button. The meter will turn off automatically in 30 seconds or via pressing "S" button.
4. No test can be performed when you are checking the stored results. If you wish to perform a new test, please turn off the meter first and restart the steps described in the section 【Blood Glucose/Cholesterol/Uric Acid/Hemoglobin Testing】.
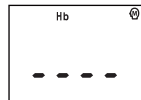
Review the Stored Hemoglobin Test Results

1. Please enter the hemoglobin test mode first. Insert the hemoglobin code key (pink color) and press "M" button.
2. The stored results with date are displayed in order from the most recent to the oldest via pressing and releasing the "M" button. The meter will turn off automatically in 3 seconds when the symbol "----" is displayed on the screen.

3. If you decide to stop checking the results, stop pressing the "M" button. The meter will turn off automatically in 30 seconds or via pressing "S" button.
4. No test can be performed when you are checking the stored results. If you wish to perform a new test, please turn off the meter first and restart the steps described in the section 【Blood Glucose/Cholesterol/Uric Acid/Hemoglobin Testing】.

60

Deleting the Stored Memory of Blood Glucose/Cholesterol/Uric Acid/Hemoglobin Test Results

1. When the newest blood glucose/cholesterol/uric acid/hemoglobin test result is displayed, press "S" button for 3 seconds. The newest blood glucose/cholesterol/uric acid/hemoglobin test result is deleted as soon as you hear the "Beep" sound from the meter.
2. The stored results can be deleted in order from the most recent to the oldest via press "S" button for 3 seconds.
3. If you decide to stop deleting the results, stop pressing the "S" button. The meter can automatically turn off in 30 seconds or via pressing "S" button.

Taking Care of Your Meter

Maintaining the Meter

- Do not drop, hit or smash your meter.
- Keep your meter between 14°F and 140°F (-10°C and 60°C) and below 95% of relative humidity. Do not store meter in areas such as the kitchen, bathroom, laundry room or car.
- Keep the meter away from water.
- Do not use glass/household-cleaning solutions to clean the meter. Simply use an alcohol pad to wipe the surface of the meter, but do not wipe the test strip slot or code key slot.
- Do not disassemble the meter
- If you have any questions, please contact Customer Service or your healthcare provider.

The Battery Replacement

When the symbol" ▭ " is displayed on the screen, please replace batteries immediately.
1. Slide battery cover off from the back of the meter.
2. Remove old battery and insert **One LITHIUM CELL** (CR2032, 3V) into the battery compartment.
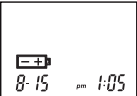3. Slide battery cover back and turn on your meter

Cleaning the Meter

You can clean your meter with 70% isopropyl alcohol swab
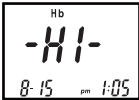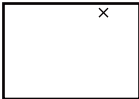
CAUTIONS:
◎ DO NOT spray any cleaning solution directly onto the meter.
◎ DO NOT dampen the code key slot or the test strip slot.
◎ DO NOT soak the meter in liquid.
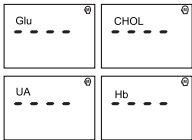
Troubleshooting Guide

SYMBOL	WHAT IT MEANS	ACTION
	The battery power is low.	Replace new battery.
	"LO" flashes 5 times before the meter turning off automatically. The battery is dead.	Replace new battery
	The environmental temperature is too low to perform a test.	Repeat the test in a warm place about 57.2˚F~104˚F (14˚C~40˚C). You may need to wait as long as 20 minutes for the meter to warm up before testing again.

64

SYMBOL	WHAT IT MEANS	ACTION
-HI- 8-15 pm 1:05	The environmental temperature is too high to perform a test.	Repeat the test in a cool place about 57.2°F~104°F (14°C~40°C). You may need to wait as long as 20 minutes for the meter to cool down before testing again.
Glu **241** mg/dL KETONES? 8-15 pm 1:05 (Example)	If the test result is over 240 mg/dL, the blood glucose test result with a suggestion to check your ketone levels.	Re-check your blood glucose level. Follow the instructions of your healthcare professional regarding ketone testing.
Glu **HI** KETONES? 8-15 pm 1:05	Your blood glucose level is higher than 600 mg/dL (33.3 mmol/L). The blood glucose test result with a suggestion to check your ketone levels.	Re-check your blood glucose level. If "HI" is displayed again, call your doctor immediately.

SYMBOL	WHAT IT MEANS	ACTION
Glu -LO- 8-15 pm 1:05	Your blood glucose level is lower than 20 mg/dL (1.1mmol/L).	Re-check your blood glucose level. If "LO" is displayed again, call your doctor immediately.
CHOL -HI- 8-15 pm 1:05	Your blood cholesterol level is higher than 400 mg/dL (10.4 mmol/L).	Re-check your blood cholesterol level. If "HI" is displayed again, call your doctor immediately.
CHOL -LO- 8-15 pm 1:05	Your blood cholesterol level is lower than 100 mg/dL (2.6 mmol/L).	Re-check your blood cholesterol level. If "LO" is displayed again, call your doctor immediately.
UA -HI- 8-15 pm 1:05	Your blood uric acid level is higher than 20 mg/dL (1190 μ mol/L).	Re-check your blood uric acid level. If "HI" is displayed again, call your doctor immediately.

SYMBOL	WHAT IT MEANS	ACTION
UA `-LO-` 8-15 pm 1:05	Your blood uric acid level is lower than 3 mg/dL (179 μ mol/L).	Re-check your blood uric acid level. If "LO" is displayed again, call your doctor immediately.
Hb `-HI-` 8-15 pm 1:05	Your blood Hemoglobin level is higher than 26 g/dL (16.1mmol/L).	Re-check your Hemoglobin level. If "HI" is displayed again, call your doctor immediately.
Hb `-LO-` 8-15 pm 1:05	Your blood Hemoglobin level is lower than 7 g/dL (4.3mmol/L).	Re-check your blood Hemoglobin level. If "LO" is displayed again, call your doctor immediately.
×	Operating procedure is incorrect. The test strip has been used, or the meter is not performing correctly.	Repeat the test with a new test strip. If the symbol is displayed again, contact Customer Service.

SYMBOL	WHAT IT MEANS	ACTION
Glu CHOL UA Hb - - - -	The oldest glucose/cholesterol/uric acid/hemoglobin test result stored in memory appears. The meter will be turned off automatically after 3 seconds.	No action required.
E01	1. Using a wrong code key or the code key is inserted improperly. 2. New meter hasn't been code.	1. Check the code key. Be sure the code key is inserted into the code key slot completely. 2. Insert the code key.
E02	The code key is damaged.	Contact Customer Service.

Specifications

NESCO® All New MultiCheck GCUHb Multi-Function Monitoring System

Function	Glucose	Cholesterol	Uric acid	Hemoglobin
Measuring Range	20 ~ 600 mg/dL (1.1 ~ 33.3 mmo/L)	100 ~ 400 mg/dL (2.6 ~ 10.4 mmo/L)	3 ~ 20 mg/dL (179 ~ 1190 μmo/L)	7 ~ 26 g/dL (4.3 ~ 16.1 mmo/L)
Calibration	Plasma equivalent			
Test Time	10 seconds	150 seconds	20 seconds	6 seconds
Memory Capacity	200 test results	*50/100 test results	*50/100 test results	*50/100 test results
Operating Condition Temperature Humidity	57.2 ~ 104℉ (14 ~ 40℃) ≦ 85% Relative Humigity			
Meter Storage Condition (Transportation Condition) Temperature Humidity	14 ~ 140℉ (-10 ~ 60℃) ≦ 95% Relative Humigity			
Sample Volume	≧ 0.8 μl	≧ 15 μl	≧ 0.8 μl	≧ 2.6 μl
Sample Type	Finger capillary whole blood			

Specifications (cont.)

Function	Glucose	Cholesterol	Uric acid	Hemoglobin
Heamtocrits Range	30 ~ 55%			
Power Supply	LITHIUM CELL (CR2032, 3V) x 1			
Meter Dimension HxWxD (mm)	92 x 67 x 17			
Display	LCD Display (34 x 46 mm)			
Weight	52 grams, without Batteries			
Life of Battery	More than 1000 Times			
Technology Used	Electrode-based Biosensor			

* There will be 100 test results memories for dual-function meter or mono-function meter.
* There will be 50 test results memories for triple-function meter.
* The Meter has been safety and EMC tested and approved according to the requirement for EN 61010-1/EN 61010-2-101/EN60601-1-2/EN61326.

Customer Services

Thank you for choosing the **NESCO** *All New* **MultiCheck** **GCUHb** Blood Glucose/Cholesterol/ Uric Acid/Hemoglobi n Multi-Function Monitoring System.

Kernel Int'l Corp. is honored to present this new product to you. Our customer services include:

(1) Our customers are entitled to free repair and replacement of spare parts. If you have problems with the product, please contact local distributor/agent for further information. However the following damages resulted from improper use or accidents are excluded (such as smash, moisture, unauthorized repair, disassemble, and natural catastrophes).

(2) Kernel Int'l Corp. is not responsible for any accidents and worsening illness resulted from buyers'/users' improper use of device without the instructions of professionals (e.g. medical personnel). Consumers may not request for compensation in this regard.

(3) Please read this manual thoroughly before using this monitoring system. If you have any questions, please contact local distributor.

Labeling and Information

⊘ Do not reuse

🌡 Temperature limitation

🏭 Manufacturer

⚠ Caution, consult accompanying documents

LOT Batch code

SN Serial number

IVD In vitro diagnostic device

☂ Keep dry

📖 Consult instruction for use

☀ Keep away from sunlight

⧗ Used by

EC REP Authorised representative in the European Community

REF Catalogue number

CONTROL Control

STERILE R Sterilized using irradiation