



**'Smart Healthcare' in my hand**

# **GHEALTH FAMILY**





**Time of Self-  
Management!**

**Manage yourself  
whenever and  
wherever with  
Ghealth!**



## Quality Of Optimal Life System



**Ghealth for Diet!!  
Diagnose and Manage Together!!**



Why do we have  
to check  
'Body Fat'  
not  
'Weight' ?



Same  
Weight

VS

Different  
Look



Body-fat Decrease  
Muscle Increase

=

Successful  
Diet!

Fat  
2.27kg

VS

Muscle  
2.27kg



But!

These are  
not ALL

To be  
continued



Why do we have  
to check  
'Body Fat'  
not  
'Weight' ?



## Obesity

From Wikipedia, the free encyclopedia

*For the medical journal, see Obesity (journal).*

**Obesity** is a medical condition in which excess body fat has accumulated to an extent that it may have a negative effect on health.<sup>[1]</sup> People are generally considered obese when their body mass index (BMI), a measurement obtained by dividing a person's weight by the square of the person's height, is over 30 kg/m<sup>2</sup>; the range 25–30 kg/m<sup>2</sup> is defined as overweight.<sup>[1]</sup> Some East Asian countries use lower values.<sup>[8]</sup> Obesity increases the likelihood of various diseases and conditions, particularly cardiovascular diseases, type 2 diabetes, obstructive sleep apnea, certain types of cancer, osteoarthritis, and depression.<sup>[2][3]</sup>

Obesity is most commonly caused by a combination of excessive food intake, lack of physical activity, and genetic susceptibility.<sup>[1][4]</sup> A few cases are caused primarily by genes, endocrine disorders, medications, or mental disorder.<sup>[9]</sup> The view that obese people eat little yet gain weight due to a slow metabolism is not medically supported.<sup>[10]</sup> On average, obese people have a greater energy expenditure than their normal counterparts due to the energy required to maintain an increased body mass.<sup>[10][11]</sup>

Obesity is mostly preventable through a combination of social changes and personal choices.<sup>[1]</sup> Changes to diet and exercising are the main treatments.<sup>[2]</sup> Diet quality can be improved by reducing the consumption of energy-dense foods, such as those high in fat or sugars, and by increasing the intake of dietary fiber.<sup>[1]</sup> Medications can be used, along with a suitable diet, to reduce appetite or decrease fat absorption.<sup>[5]</sup> If diet, exercise, and medication are not effective, a gastric balloon or surgery may be performed to reduce stomach volume or length of the intestines, leading to feeling full earlier or a reduced ability to absorb nutrients from food.<sup>[6][12]</sup>

Obesity is a leading preventable cause of death worldwide, with increasing rates in adults and children.<sup>[1][13]</sup> In 2015, 600 million adults (12%) and 100 million children were obese in 195 countries.<sup>[7]</sup> Obesity is more common in women than men.<sup>[1]</sup> Authorities view it as one of the most serious public health problems of the 21st century.<sup>[14]</sup> Obesity is stigmatized in much of the modern world (particularly in the Western world), though it was seen as a symbol of wealth and fertility at other times in history and still is in some parts of the world.<sup>[2][15]</sup> In 2013, the American Medical Association classified obesity as a disease.<sup>[16][17]</sup>

The obesity is 'Disease'

The obesity should be solved by changes of the life-style. 'Ghealth' will help it.



**How does  
Ghealth  
Help to manage  
The Body-Fat**



- **From Diagnosis to Analysis and Management,  
Ghealth will make you the specialist of the Diet.**

- ◆ Systematic Healthcare By Precise Analysis
- ◆ Enjoy Daily Solution!

- **Simple and Smart Healthcare whenever and wherever**

- ◆ Low Energy Design – About 1,500 times measurement  
(Without Batteries replacement)
- ◆ Compact Design – Latest remote tech, Micro, Light weight
- ◆ Easy app to use

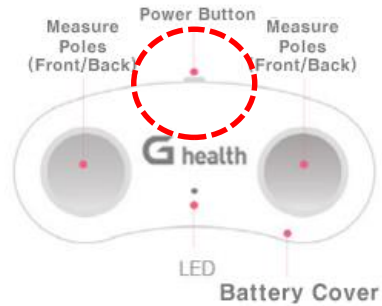
- **Precise Impedance and High Reproducibility**

- ◆ 4 poles, 5 factor model, BIA Body-Mass Analysis
- ◆ Huge amount of Test Data
- ◆ 95% similarities to 'I' company

# √ Product Manual – Ghealth

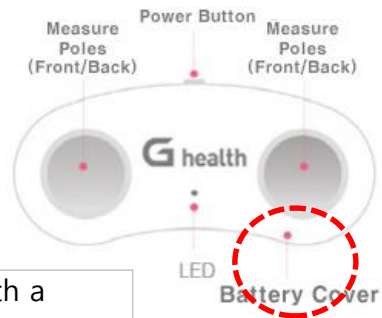
## Power-on

1. Press the button on the top part for few seconds.
2. If the blue LED light blinks, it is normal  
**If it does not blink, need to be replaced.**



## Battery Replacement

1. Take the battery cover off.
2. Put the battery when the (+) pole of the battery and the battery hold are matched.
3. If the blue LED light blinks, it is normal.



Size/Weight	76 x 33 x 18(mm) / 22g (With a battery)
Battery	CR2032 Coin Cell Battery
Communication	Bluetooth 4.0 (Bluetooth Low Energy)
Components	Product, Battery(CR2032), Manual

## How to hold poles

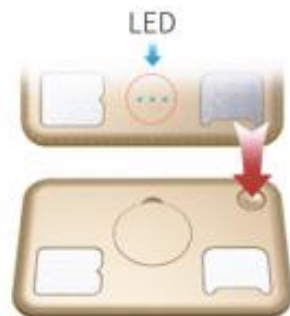


**√ Please make sure your fingers cover poles perfectly !**

# √ Product Manual – Ghealth Card

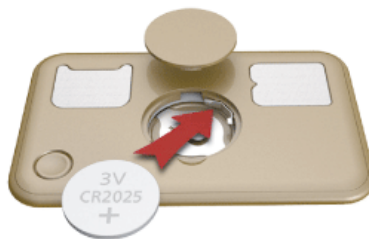
## Power-on

1. Press the button on the top part for few seconds.
2. If the blue LED light blinks, it is normal  
**If it does not blink, need to be replaced.**



## Battery Replacement

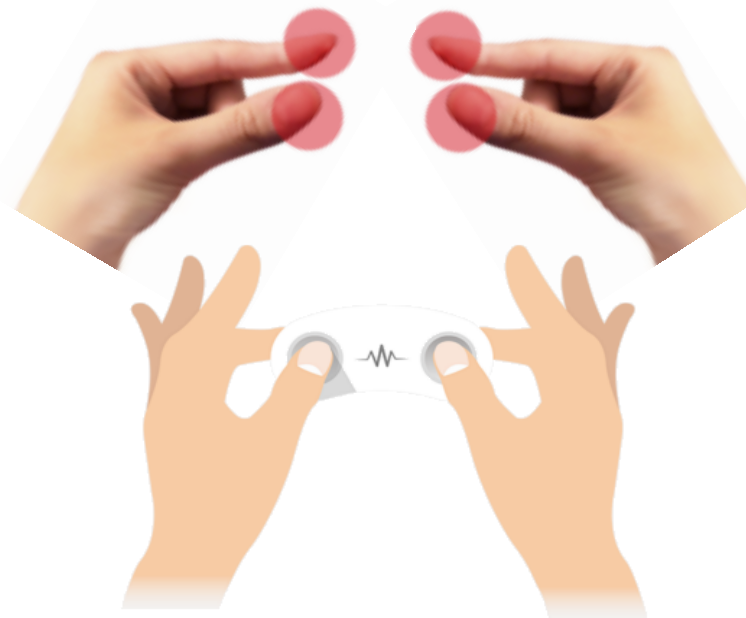
1. Take the battery cover off (with nails or equipments).
2. Put the battery when the (+) pole of the battery and the battery hold are matched.
3. If the blue LED light blinks, it is normal.



Size/Weight	80 x 20 x 5(mm) / 22g (With a battery)
Battery	CR2025 Coin Cell Battery
Communication	Bluetooth 4.0 (Bluetooth Low Energy)
Components	Product, Battery(CR2025), Manual

## How to hold poles

With Thumbs and forefingers  
**Hold 4 poles(front/back).**



**√ Please make sure your fingers cover poles perfectly !**

# √ Product Manual – Correct Position

## Correct Position

1. Raise arms as 90 degree, and hold straightly.
2. Keep the position until the measurement finished.

## Caution

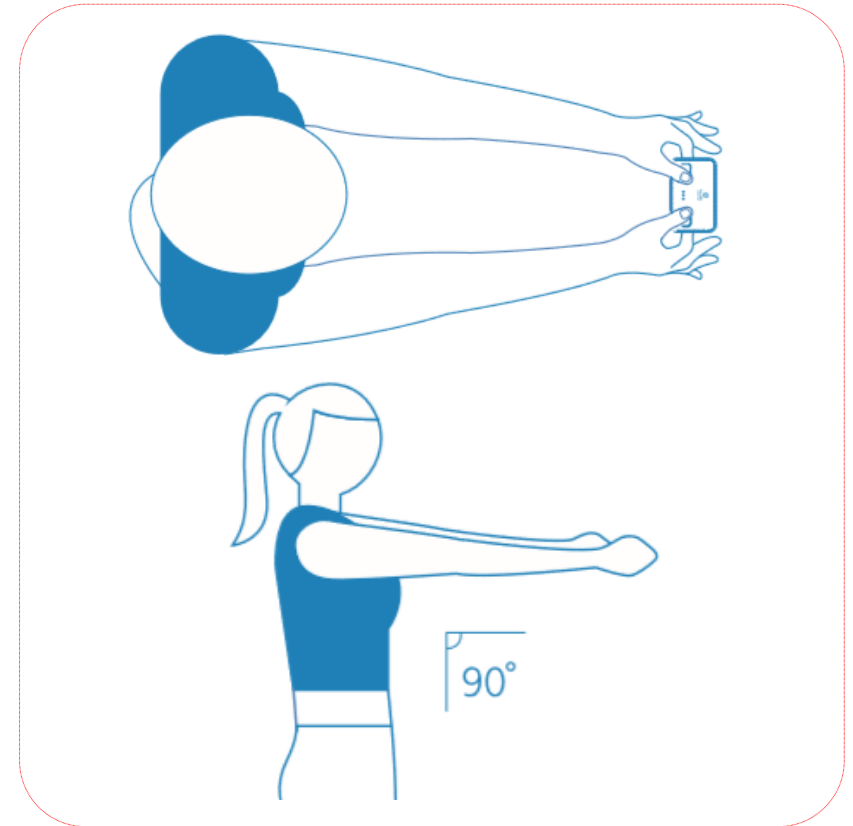
### ※Do not use with below medical devices

1. Implantable medical devices such as pacemaker.
2. Life-support medical devices such as heart-lung machine.
3. Electrical life-support devices such as electrocardiograph.

### ※Cases below can cause any error

1. Pregnant
2. The old and infirm
3. The mental and physical disorder
4. Remodeling devices on purpose

## Detail



√ Please make sure your fingers cover poles perfectly !

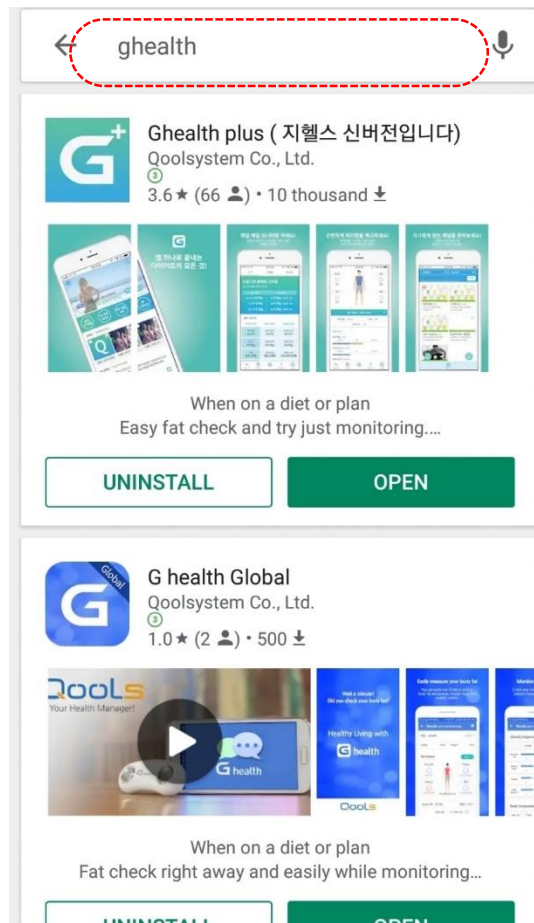
# √ How to install the app

Andoid

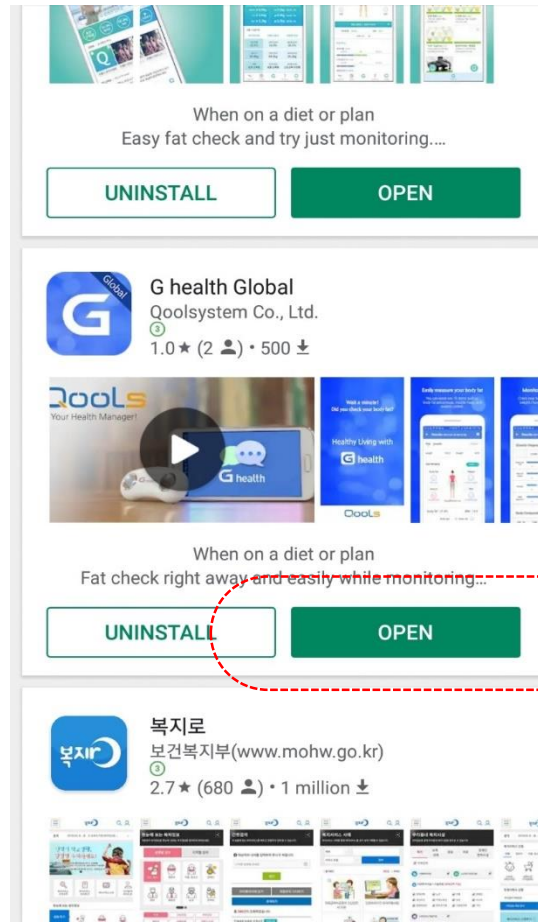
1. Play Store



2. Search 'Ghealth'



3. Download 'Ghealth Global'



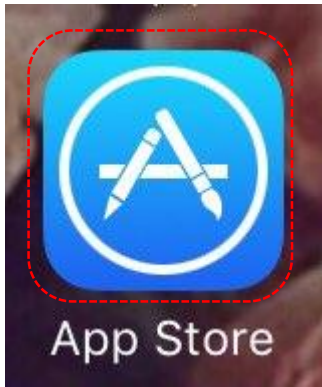
Completed!



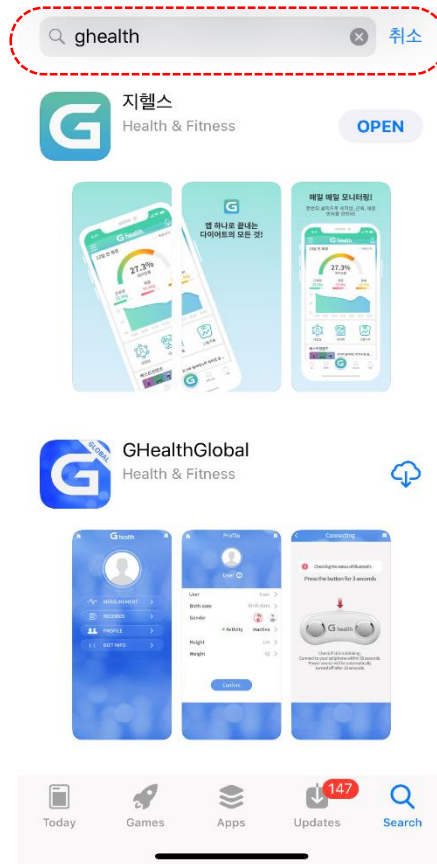
# √ How to install the app

i-Phone

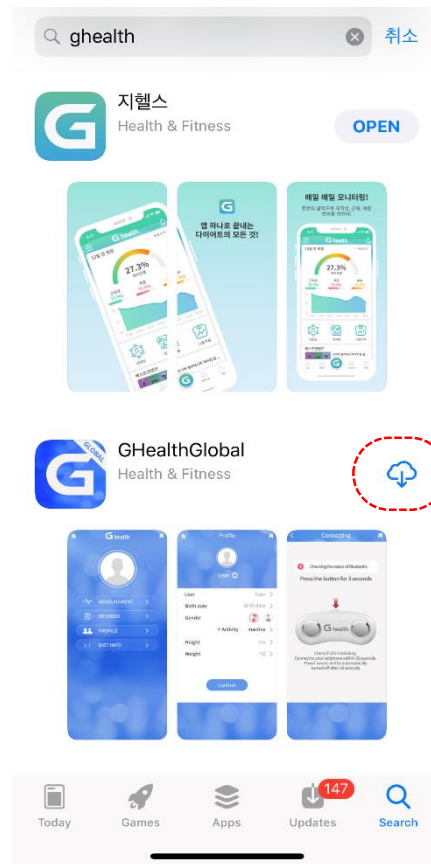
1. App Store



2. Search 'Ghealth'



3. Download 'Ghealth Global'



Completed

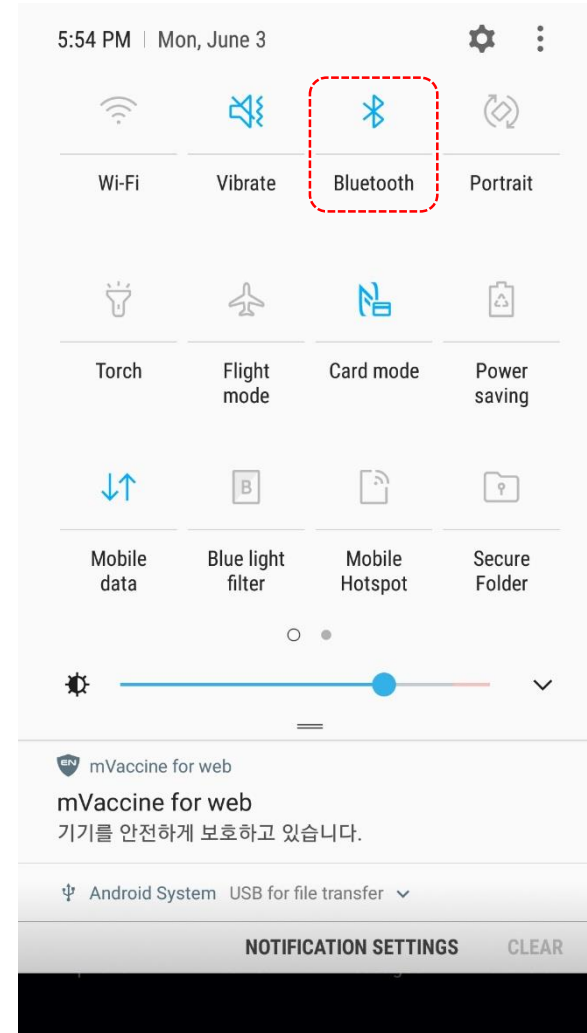
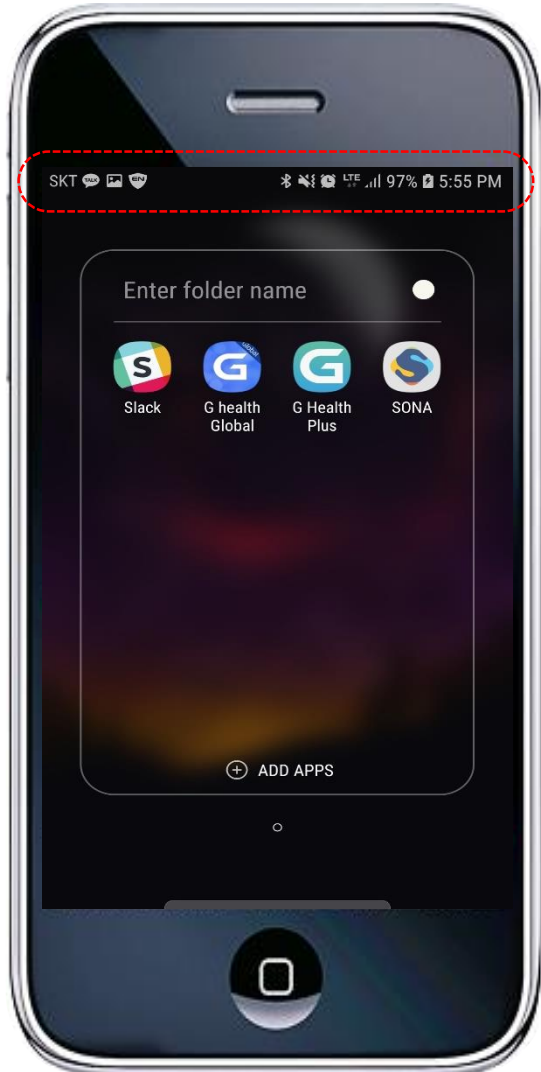


# ✓ How to turn on the Bluetooth?

1. Swipe the screen upside to downside(i-Phone : downside to upside)



2. Touch the Bluetooth





# √ How to Measure

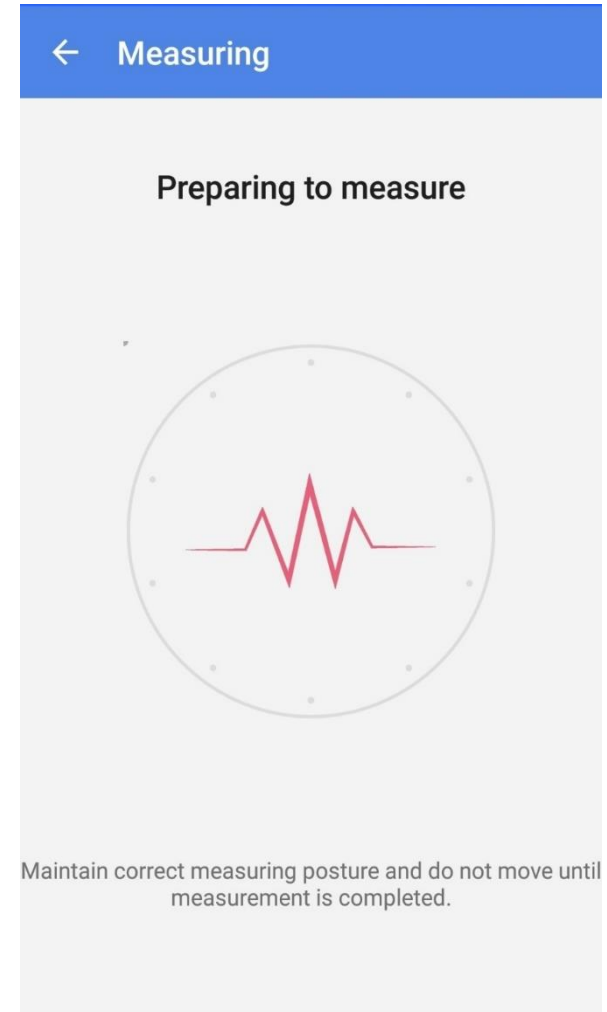
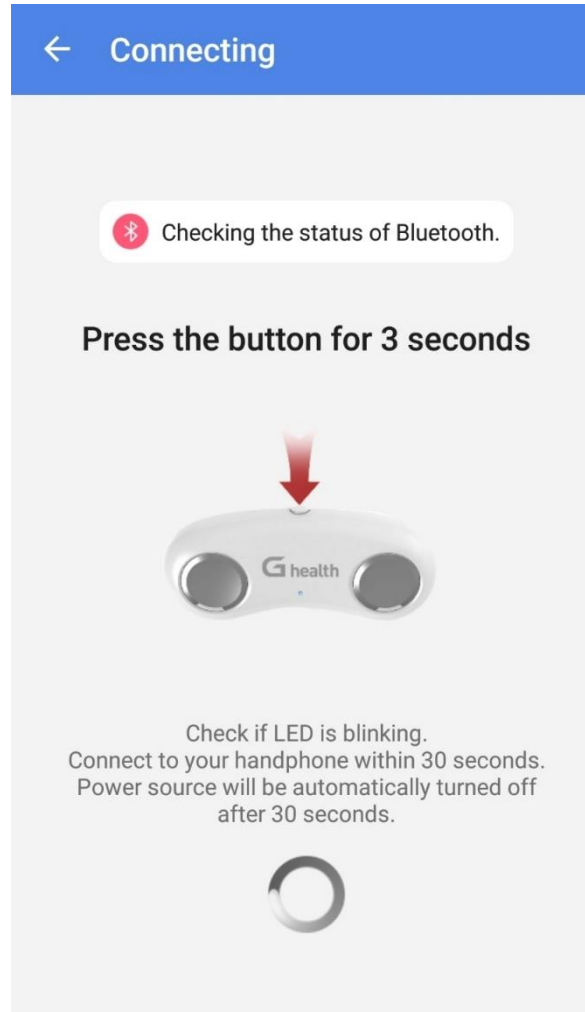
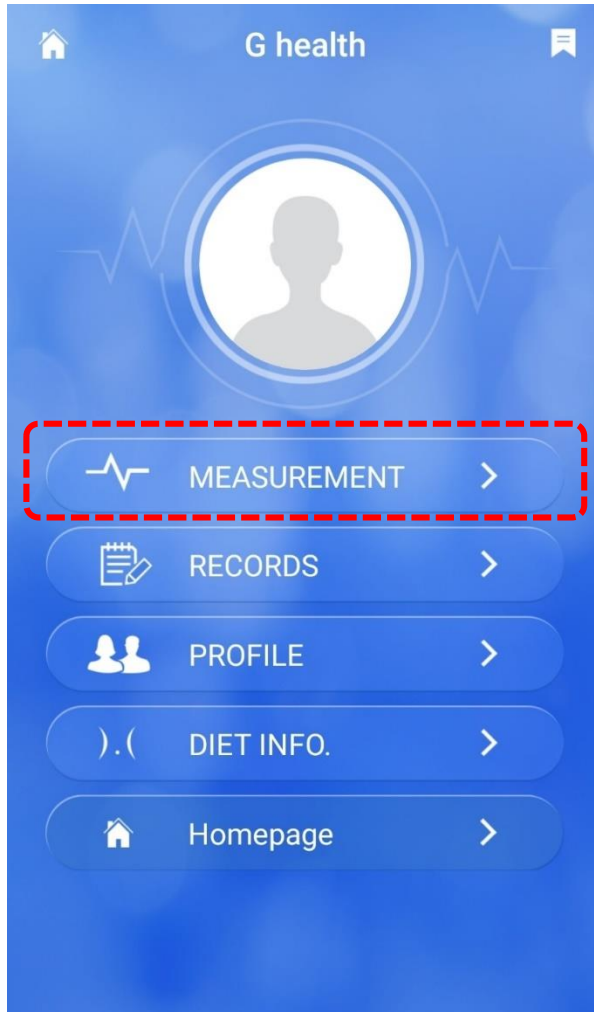
1. Click MEASUREMENT




2. Turn Bluetooth On




3. Measure



# Result

← Results (2019-04-12 AM10:41) 






 User Delete

---

Height 178.0 | Weight 68.0

---


**Summary** result >

Body Fat  Normal	 Standard type	Weight  Normal
Muscle  Normal		BMI  Normal


---


body fat : 13.8%      BMI : 21.5

---

Body age | 30 Years old 

---

← Results (2019-04-12 AM10:41) 


 User Delete

---

Height 178.0 | Weight 68.0

---

**Summary** result >

Body Fat  Weight

Close 

Your Body Fat Mass(9.4kg), body fat percentage(13.8%) is within the normal range (12.0%~19.9%). Manage constantly to maintain current level. Complications caused by various obesity-related illnesses can be decreased as body fat is decreased little by little. Your Muscle Mass(33.3kg) is within the normal range. Building muscle strength is important because muscle mass increases until 30 years old but decreases from around 40 years old. Considering the formation of your current body composition, your standard weight is 69.7kg. We recommend that you gain 0.6kg of your Muscle Mass and gain 1.1kg of Body Fat Mass to better balance your body composition. Your body age(metabolic age) is 30 years old and

# Obesity Diagnosis

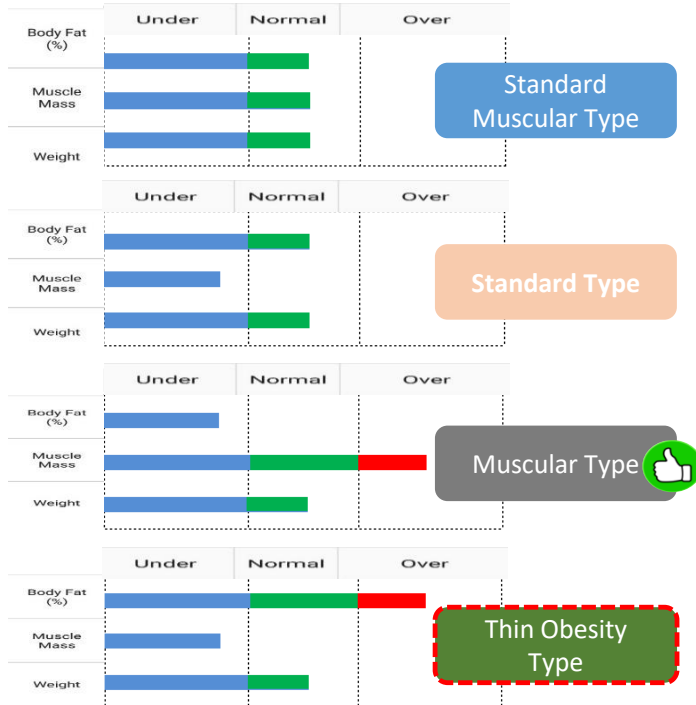


✓ **The mass of the body fat and muscle is most important.**  
 ->The successful diet is to increase the muscle and decrease the body-fat

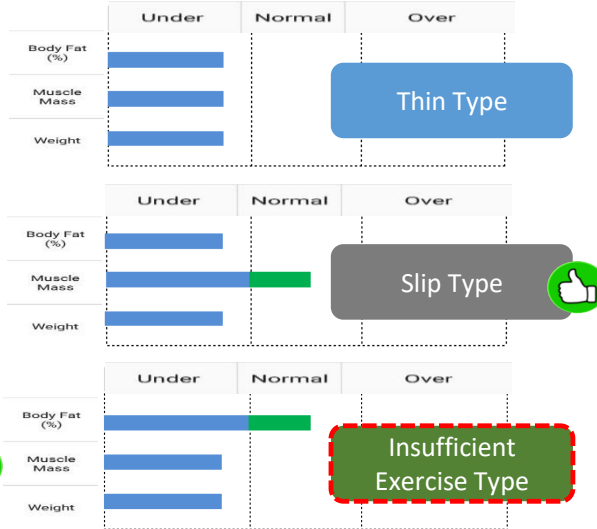
**TIP** Please increase the muscle ratio rather than the body-fat

- TIP**
1. BMI(Body Mass index= $\text{weight(kg)}/\text{height(m}^2\text{)}$ )is the index that shows the weight per the height.
  2. If BMI is over 25, please take care of lifestyles.

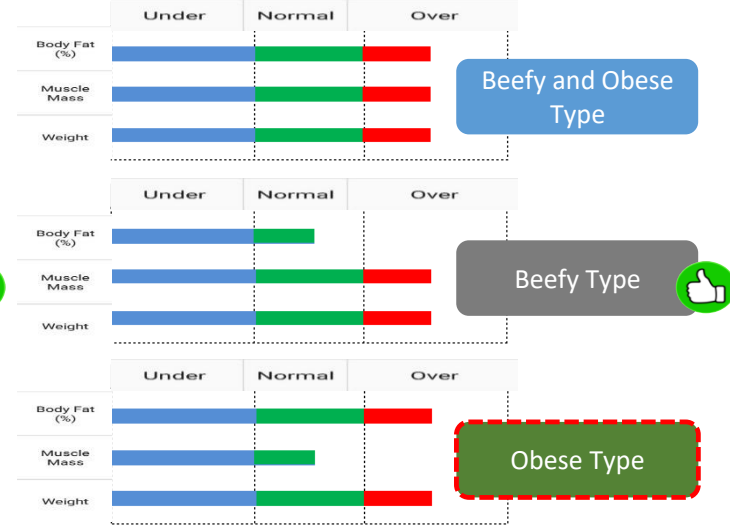
< Body-Fat/Muscle ratio when normal weight >



< Body-Fat/Muscle ratio when low weight >



< Body-Fat/Muscle ratio when high weight >



**TIP** "Hidden Obesity" cannot be discovered by the weight and BMI  
 There is a case that BMI is the standard type, but decided eventually as the obese type. In this case, it is called "Hidden Obesity", because the weight is normal, but the body-fat is over. "Hidden Obesity" can be dangerous due to the visceral fat.

Body Composition Analysis

Body Composition Analysis				
Unit : kg	Total	Protein	Mineral	Body fat
Amount	42.9	11.6	3.98 (est.)	9.4
Normal	39.2 ~47.9	10.6 ~12.9	3.65 ~4.46	8.2 ~13.5
Assessment	Good	Good	Good	Good

- ✓ **3 compositions of the body**
- ✓ For the correct diet and the improvement of body-types, the analysis of the body composition is required.
- ✓ Check your body composition

● **Protein**

For the improvement of the muscle, the ingestion of the good protein and exercises are required. The protein is the second largest composition of the muscle(20%).

● **Muscle (Body Water + Protein)**

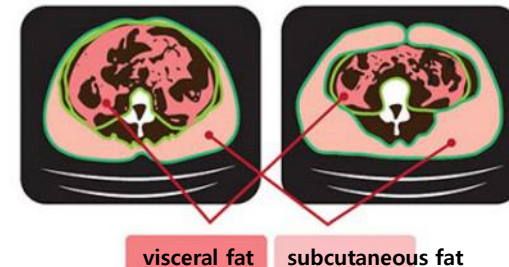
Muscle consists of the body water and the protein, and it takes the most of the energy daily. If the mass of muscle increases, the basal metabolic rate also increases. Therefore, it can prevent "Yo-yo Effect".

● **Mineral**

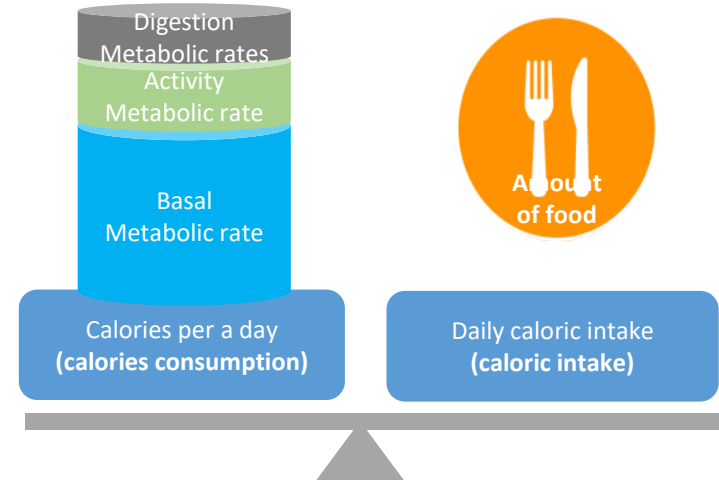
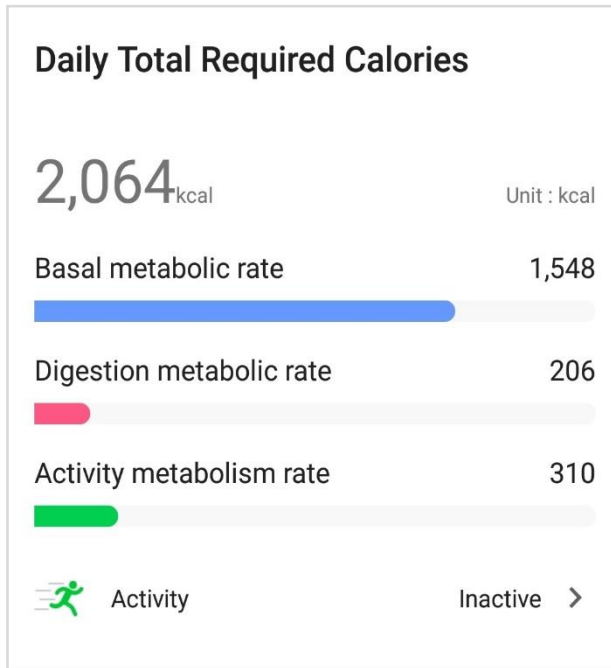
When the body-fat is dismantled, required factors are transformed to vitamins and minerals. Therefore, it is helpful to intake vitamins and minerals through various food.

● **Body-Fat**

- Main energy with Carbohydrate and Protein
- Remained body fat is accumulated to the visceral fat and subcutaneous fat
- Low : Main reason of unstable female hormone issues such as menstrual irregularity, constipation, osteoporosis.
- Over : Main reason of adult diseases such as cardiovascular disorder, high blood pressure, cerebral stroke.



## Calories Per a day



#### ◆ Daily suggested calories required the balance of calories.

If the food intake is more than daily suggested calories, it will be accumulated into the body. Therefore, exercises are required for the balanced condition.

To increase metabolic rates, the mass of muscle is most important.

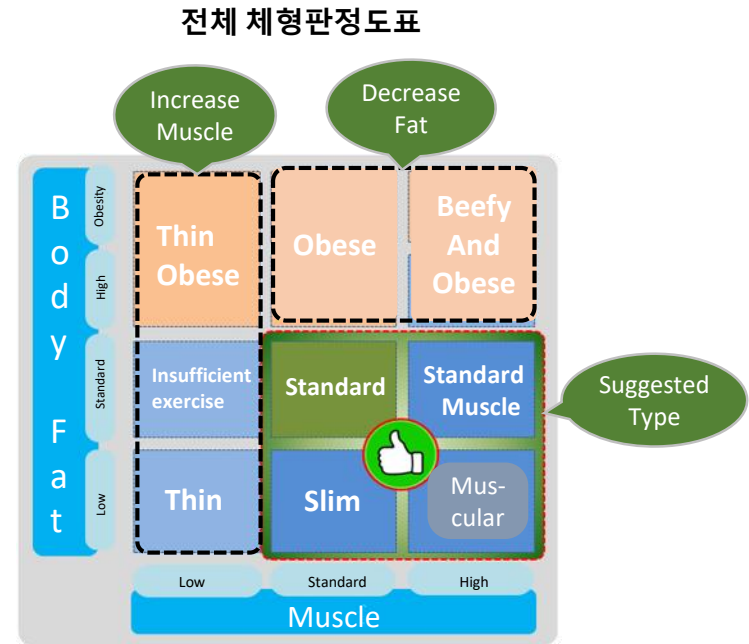
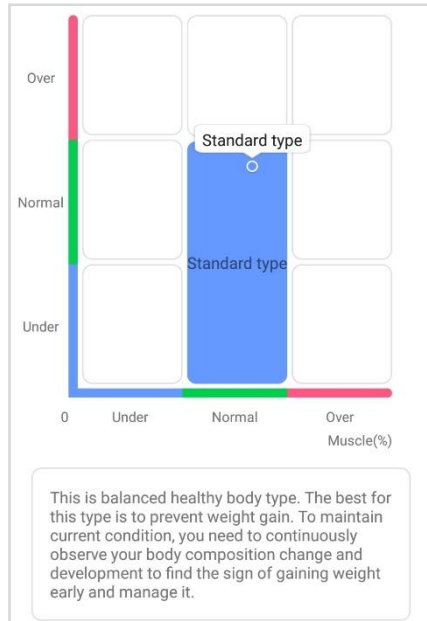
- Basal metabolic rate : The energy for vital activities. The largest part of daily energy.
- Activity metabolic rate : The energy depend on lifestyles such as works, habits and etc.
- Digestion metabolic rate : The energy for the digestion, ingestion and etc.

**TIP** Daily Suggested Calories of ordinary adults  
Male 2,200kcal ~ 2,600kcal  
Female 1,800kcal ~ 2,100kcal

**TIP** 1kcal is to increase the temperature of 1ml of water.

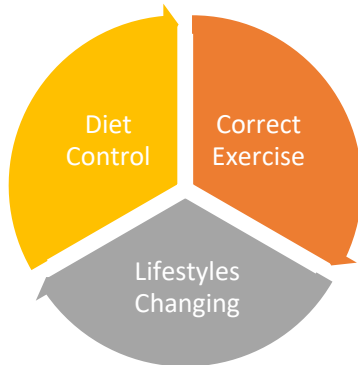
# Body-Type

**Body-type** is the evaluation of the current body based on the body composition analysis and obesity diagnosis.



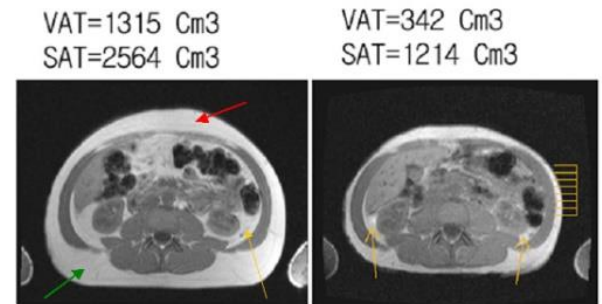
◆ Suggestion of correct lifestyles and solutions depend on body-types

✓ Customized Diet Program



### ◆ Fat, Muscle, and Viscera CT Picture

Through the CT picture which shows the white part [fat], the black [muscle], and the viscera part, the current body type can be evaluated by the body-fat analyzer such as G-Health.



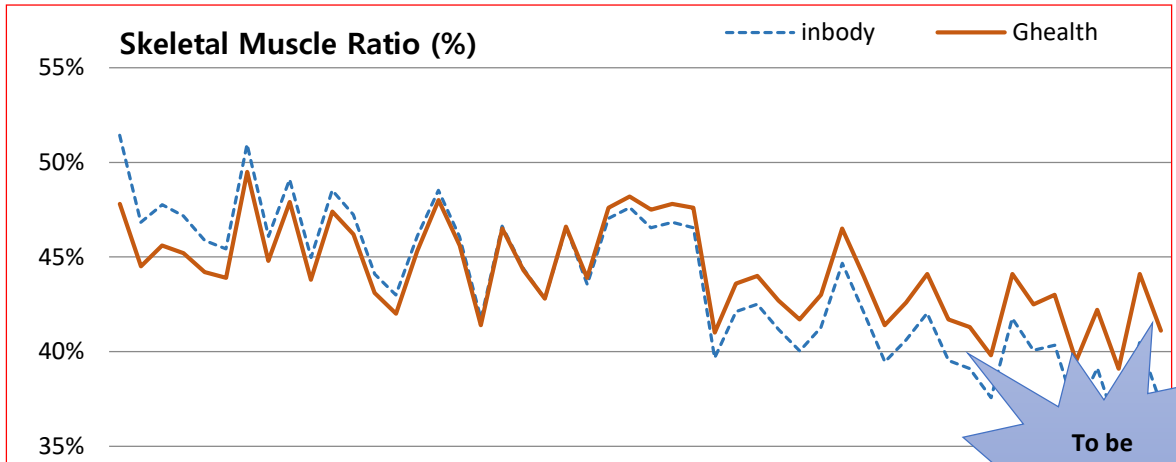
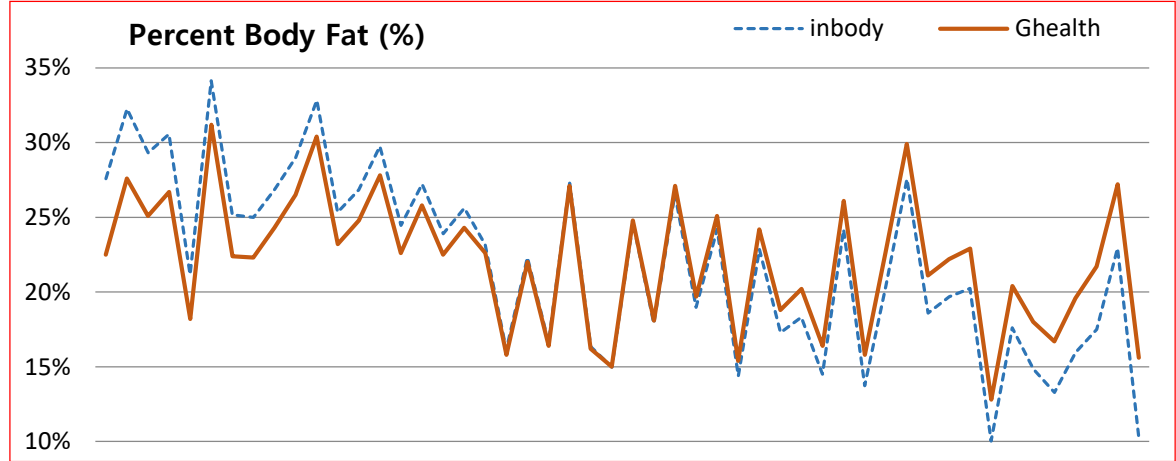
Before/After pic of 12 month exercise.



Is  
this small analyzer  
precise?



• We compared G-health to popular 'I' company!



To be continued



How much

Is this

Precise?



<b>Percent Body Fat</b>	Under +/- 3%	Under +/- 5%	Over +/- 5%	maximum error	Average error
	40 people	8 people	2 people	5.3%	0.1%
	<b>95%</b> People in the range of -5% ~ 5% compared to *inbody value				
<b>Skeletal Muscle Ratio</b>	Under +/- 2%	Under +/- 3%	Over 3'+/- %	maximum error	Average error
	35 people	10 people	5 people	3.9%	0.6%
	<b>100%</b> People in the range of -5% ~ 5% compared to *inbody value				
<b>FFM (Fat Free Mass)</b>	Under +/- 3%	Under +/- 5%	Over +/- 5%	maximum error	Average error
	28 people	16 people	6 people	7.0%	0.0%
	<b>88%</b> People in the range of -5% ~ 5% compared to *inbody value				
<b>Body Composition Analysis</b>	Under +/- 3%	Under +/- 5%	Over +/- 5%	maximum error	Average error
	<b>88%</b> People in the range of -5% ~ 5% compared to *inbody value				
Total Body Water	28 people				
Protein	27 people	17 people	6 people	7.4%	0.4%
<b>BMR (Basal Metabolic Rate)</b>	Under +/- 3%	Under +/- 5%	Over +/- 5%	maximum error	Average error
	41 people	9 people	0 people	5.0%	-0.3%
	<b>100%</b> People in the range of -5% ~ 5% compared to *inbody value				



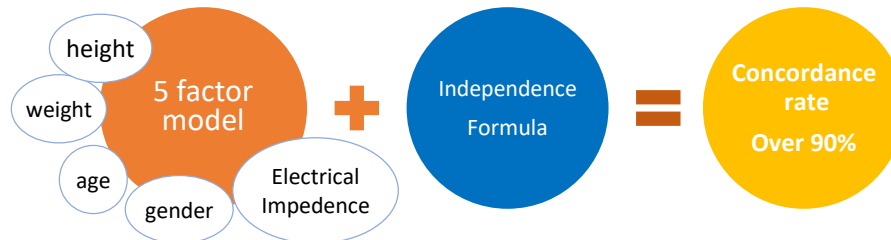
- Independent and verified formula of the body composition



How can  
this small analyzer  
be precise?



Formula of the body composition based on the development technology of **Health Keeper** for medical purpose and **SEOUL NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY** 'Underwater Weighing' Verification / **Inje University Paik Hospital** 'DEXA' Verification





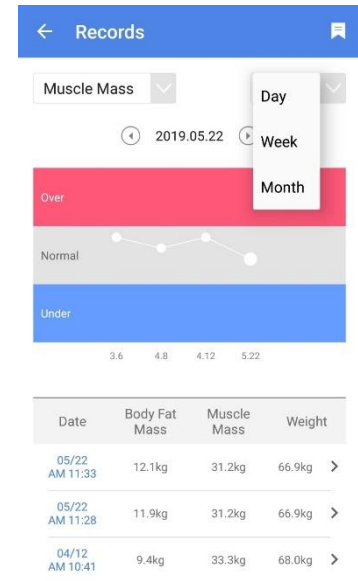
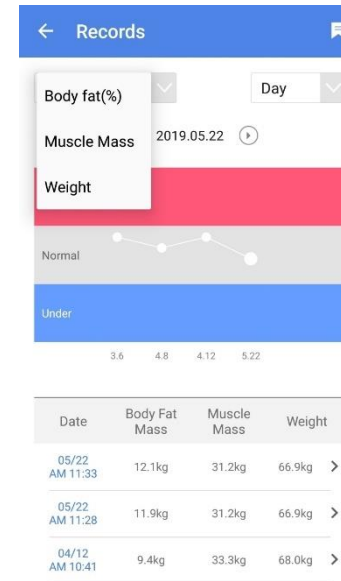
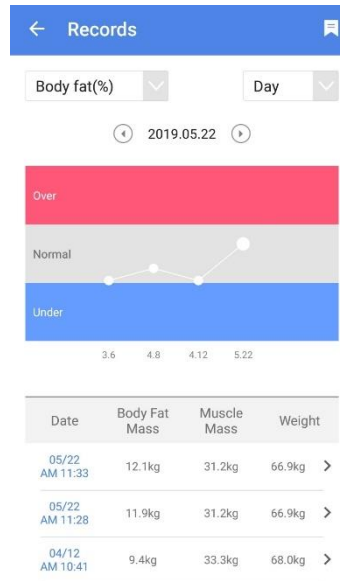
How can use

G-health

Effectively?



- Simply check the result of body-fat changings.

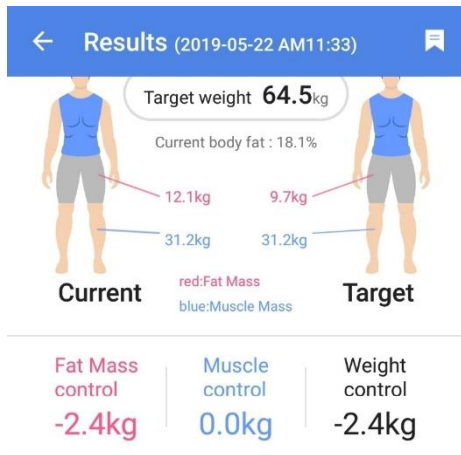


- The reason of using body-fat analyzers is not only for measuring the mass of muscle and body-fats, but it is also to get healthy life by monitoring the health condition.

# ✓ Share my result

## · Share to counsel with specialists!

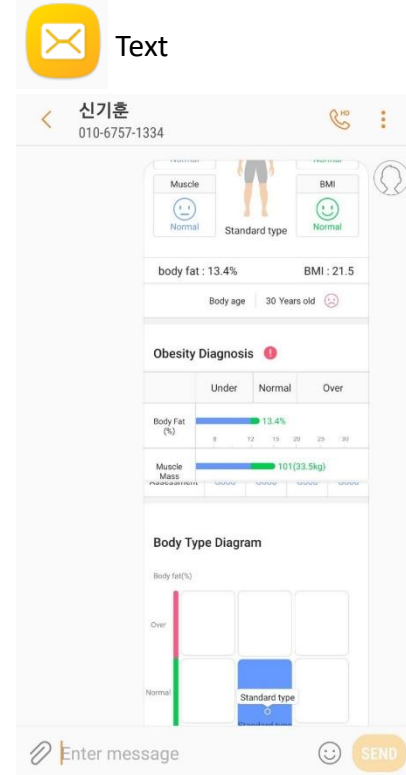
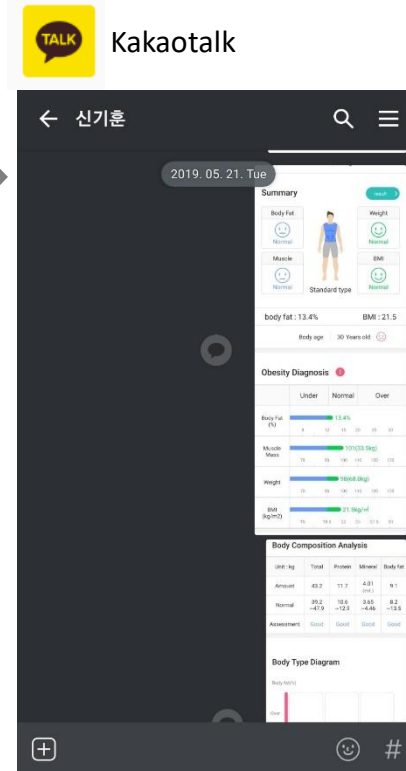
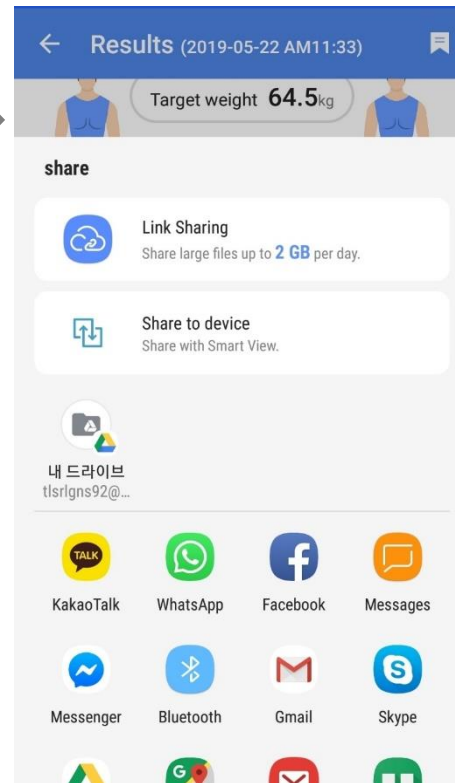
### 1. Click Share Icon



(Note) It is not a mechanical error that an error occurs depending on the time of measurement, such as during meals or before and after exercise. If you have any questions about the measurement, please contact the call center. Consult your physician for prescriptions for body composition results.

www.qoolsystem.com 82-2762-8977

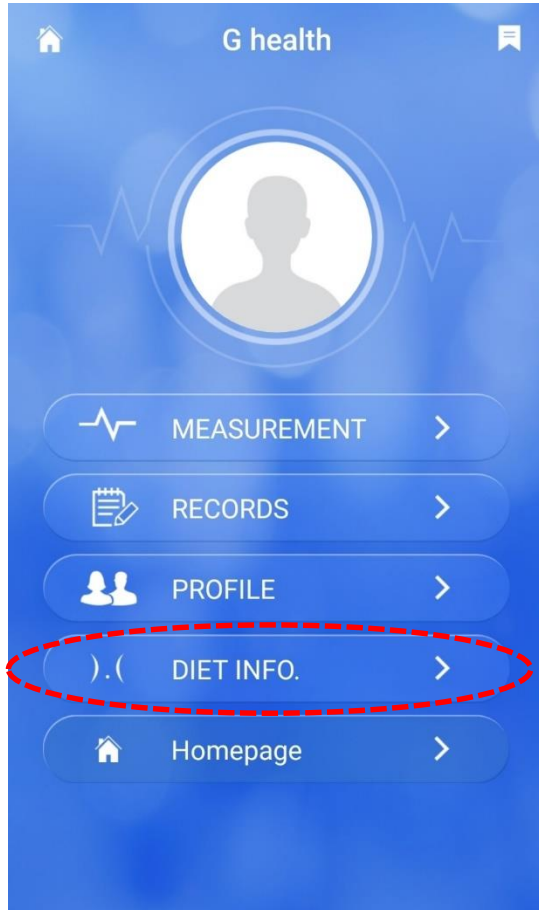
### 2. Click where to share



# √ Diet Contents

## · Get self-solutions by Diet Contents

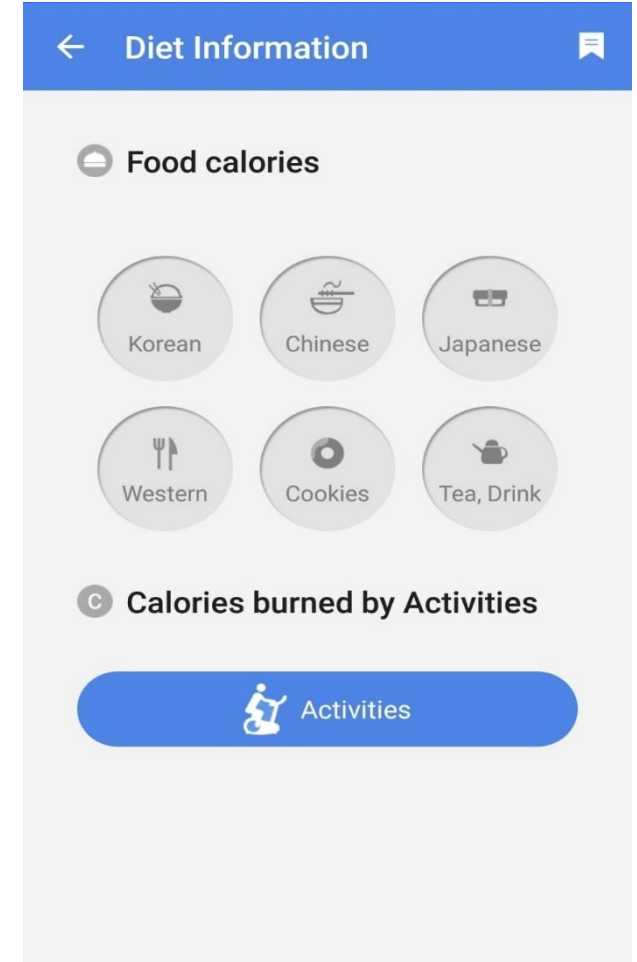
1. Click Diet Info



2. Calculate Diet Info by yourself!

The screenshot shows the 'Activities' screen with a table of activities. The table has three columns: 'Activities', 'kcal/30min.', and 'Kg/1Month'. The activities listed are Walking, Jogging, Biking, Swimming, Tennis, Badminton, Basketball, Jumping rope, Mountain climbing, and Aerobic.

Activities	kcal/30min.	Kg/1Month
Walking	134 kcal	0.5kg
Jogging	234 kcal	0.9kg
Biking	201 kcal	0.7kg
Swimming	234 kcal	0.9kg
Tennis	201 kcal	0.7kg
Badminton	151 kcal	0.5kg
Basketball	201 kcal	0.7kg
Jumping rope	234 kcal	0.9kg
Mountain climbing	218 kcal	0.8kg
Aerobic	234 kcal	0.9kg



Tip

Consumed Calories can be difference by the weight



Most Popular  
Body-Fat Analyzer  
In Korea!



- Hot in SNS
- Popular Off-Line Market



Thank You