## TRANSTEK

# **User Manual**

Body Fat Analyzer LS208-B8





FCC ID:OU9LS208-B8



TEL:86-760-88282982 www.transtek.cn

- Thank you very much for selecting the Transtek Body Fat Analyzer LS208-B8.
- Please do read the user manual carefully and thoroughly so as to ensure the safe usage of this product, and keep the manual well for further reference in case you have problems.



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## Safety Information

## **♥** Safety and Usage Information

The warning signs and symbols are essential to ensure your correct and safe use of this product and protect you and others from injury. Please kindly find the meanings of the warning signs and symbols, which you may encounter in the label and user manual, as follows:

<b>(3)</b>	Symbol for "THE OPERATION GUIDE MUST BE READ"	<b>W</b>	Symbol for "MANUFACTURER"
Bluetooth*	The Bluetooth Combination Mark	===	Symbol for "DIRECT CURRENT"
★	Symbol for "TYPE BF APPLIED PARTS"	VOY	Symbol for "ENVIRONMENT PROTECTION – Waste electrical
SN	Symbol for "SERIAL NUMBER"		products should not be disposed of with household waste. Please recycle where
	Symbol for "MANUFACTURE DATE"		facilities exist. Check with your local authority or retailer for recycling advice"

## CAUTION CAUTION

The Body Fat Analyzer LS208-B8 offers you a seamless way to manage your health. Please be aware that this device is designed for adults' self-measuring and self-monitoring body fat level. Any information provided by this device is in no way meant to treat, cure or prevent any disease or illness from happening. This device should not be used by anyone who is acutely or chronically ill, suffering from a disease or taking medications that affect your water levels. The accuracy of readings for these patients has not been verified. Specific medical advice should be obtained from a physician.

Before diet and exercise, you must first find a professional medical guide.

The body fat analyzer is equipped with data transmission function. It may emit electromagnetic energy so as to perform its intended function. Nearby portable and mobile RF communications equipment can affect the performance of the device.

Portable and mobile RF communications equipment can affect the measuring accuracy of the body fat analyzer.

Kindly note that the use of accessories, transducers or cables other than those specified, with the exception of transducers and cables sold by the manufacturer as replacement parts for internal components, may result in increased EMISSIONS or decreased IMMUNITY of the device.

Be aware that misuse of electrical equipments can cause electric shock, burns, fire and other hazards. Please do not use the device in flammable gas environment.

Warning that the body fat analyzer should not be used adjacent to or stacked with other

Manufacturer will make available on request circuit diagrams, component parts list, etc. WARNING: No modifications of this equipment is allowed.

During using the analyzer, the patient will contact with the surface and the electrode of the Analyzer. The surface and the electrode of the analyzer is type BF Applied part.

The device doesn't need to be calibrated in five years lifetime.

Do not touch the output of batteries when using the analyzer.

The patient is an intended operator. The patient can perform all the operations in the manual, such as measurement, data transmitting, changing batteries.

#### INDICATIONS FOR USE

- · The Transtek Body Fat Analyzer measures weight and estimate BMI and calories, and uses bio-electrical impedance analysis (BIA) technology to estimate body fat, total body water percentage, bone mass, and muscle mass in generally healthy children 10-17 years old and healthy adults.
- · It is intended for use in the domestic setting only.

#### CONTRAINDICATIONS

- 1. This device is contraindicated for any female subject who may be suspected of, or is pregnant. Besides provided inaccurate readings, the affects of this device on the fetus are unknown.
- 2. This device is contraindicated for any person who is connected to a wearable or implantable electronic device or instrument such as a pacemaker or defibrillator.

#### **♥** Your Scale and Its Environment

To ensure your safety as well as the service life of your scale, please avoid using the scale under the following circumstances:

- · Slipperv floor such as tile floor
- . Jumping onto the platform immediately after bath or with wet feet
- · Near a cell phone or microwave oven

#### Avoid storage in the following locations:

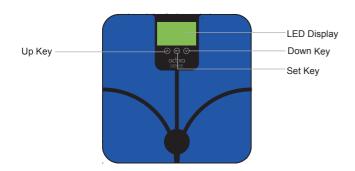
- · Where there is water
- · Where the device may be exposed to extreme temperatures, humidity, moisture, direct sunlight, dust, or salt air
- · Where there is risk of shock or drop
- · Where you store chemicals or full of corrosive gases
- · Where in reach of the infants or children

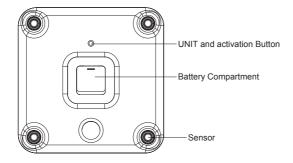
### ♥ Efficient Use of Your Scale

To ensure the accuracy of measurement, please follow below instructions when you start measurement.

- Place the scale on a flat, hard surface. Soft surface such as carpet will affect the performance of the scale.
- Step onto the platform with bare feet. Stand still and keep full contact with the scale until the measurement is complete.
- · Start measurement at least two hours after Getting up or Dinning.
- · Avoid measurement immediately after strenuous exercise, sauna or bath, drinking, and dinning.
- · Always start measurement in the same time slot and on the same scale located on the same flat, hard surface.

## **♥** Device Components

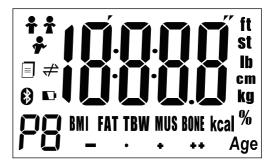




## **♥** List

- 1. Body Fat Analyzer LS208-B8
- 2. Four AAA-size Batteries (1.5V per each)
- 3. User Manual

## **♥** LED Display



FAT	Body Fat Analysis Result	÷	Male
TBW	Total Body Water Analysis Result	Ť	Male Athlete
MUS	Muscle Mass Analysis Result	Ť	Female
BONE	Bone Mass Analysis Result	÷Ť	Female Athlete
kcal	Calorie Analysis Result	kg	Kilogram
BMI	Body Mass Index	St Ib	Stone
Age	Age	lb	Pound
ft	Foot	%	Percentage
cm	Centimeter	P8	User ID (Rangr form P1 to P8)
	Body Fat Level: Underfat	*	Successful Bluetooth Connection
•	Body Fat Level: Healthy		Data transmitting / pending to transmit to wireless wellness system
+	Body Fat Level: Overfat		Low Battery
**	Body Fat Level: Obese		

#### General Instructions

Transtek Body Fat Analyzer LS208-B8 applies BIA (Bio-impedance Analysis) technology. A small amount of weak current flows through the human body so as to detect the bio-impedance and estimate calorie, BMI, body fat, body water, muscle mass and bone mass. The electrical current is small and may not be felt.

This BIA technology is cheap, safe, non-invasive, toxic-free and harmless. It also possesses the characteristics of simple operation and abundant information.

The current mentioned above is less than 0.5mA. However, please be aware that anyone with an wearable or implantable medical electronic instrument, such as a pacemaker, must avoid using this device.

The intended use of this device is for healthy children 10-17 years old and healthy adults.

#### Insert the Batteries

- · Open the battery door in the back of the scale.
- Insert the batteries (4 x 1.5V AAA) into the battery compartment according to the polarity indications marked inside the compartment.









- When the symbol and "Lo" appear, the device will power off. Then you shall replace with a new set of batteries. Please replace all four batteries at the same time. Do NOT mix the old batteries with the new one
- · Worn batteries are hazardous waste. Do NOT dispose of them together with the household garbage.
- Please refer to the local ordinances and recycling instructions regarding disposal of the worn batteries and scrapped device.
- If you do not intend to use this unit for a prolonged period of time, it is advisable to remove the batteries before storing.

## ♥ Install APP and Pair-Up

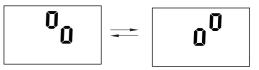
With the advanced Bluetooth 4.0 technology applied, the mobile or portable equipments, which are equipped with Bluetooth function in line with BLE Technical Specifications as well as BLP Protocol established by global organization Bluetooth SIG, are capable to receive your personal health data.

Just simply install the specially-designed app and pair up your scale with your mobile or portable equipments. Then you may enjoy the comprehensive health solution provided by Transtek

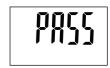
Note: It is only available for the device which supports Bluetooth 4.0 technology.

- · Turn on Bluetooth and the App. Make sure both are ON when pair-up is proceeding.
- · Press and hold "UNIT" button in the back of the scale to start pair-up.

Symbol  $_0$   $^0$  and symbol  $^0$   $_0$  will be shown on the LED alternatively, indicating pair-up is proceeding.



If SUCCEED, symbol "PASS" will be shown on the LED.



If FAIL, symbol "FAIL" will be shown on the LED.



## Initial Start-Up

## **♥** Set Up Your Profile

The body fat analyzer LS208-B8 supports multiple users (Up to 8). You may follow below instructions to assign User ID and set up your own profile, including Gender, Stature, and Age.

#### 1.Assigning User ID

- With batteries correctly installed, press "SET" key to enter setting mode when the scale is off. Or when the LED displays 0.0, press and hold "SET" keyto enter setting mode.
- The system will request User ID selection first. As pictured below, "P1" blinks. The operator may press the function key 

  or 

  to select User ID among P1 to P8.
- · Press "SET" key to confirm User ID.



#### 2.Setting Gender

- $\cdot$  After confirming User ID, the system will divert to Gender setting automatically.
- As pictured below, the portrait  $\frac{\bullet}{\bullet}$  blinks. The operator may press the function key  $\bigcirc$  or  $\bigcirc$  to select Gender.( Male/Female/Male Athlete/ Female Athlete).
- · Press "SET" key to confirm Gender.

#### Athlete Mode:

An athlete is considered as a person who does 10 hours or more per week of aerobic activity and has a resting heart rate of 60 beats per minute. These individuals should select Athlete Mode for the most accurate measurement results. The body fat analyzer are not calibrated for professional athletes or body builders.



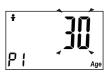
## 3.Setting Stature

- $\cdot \text{After confirming Gender, the system will divert to Stature setting automatically}.$
- · As pictured below, the digits " 165 " blinks. The operator may press the function key  $\bigcirc$  or  $\bigcirc$  to increase or decrease the numeral.
- $\cdot$  You may press and hold the function key  $\otimes$  or  $\otimes$  for fast changing the numeral.
- · Press "SET" key to confirm Stature.



#### 4.Setting Age

- · After confirming Stature, the system will divert to Age setting.
- · As pictured below, the digits "30" blinks. The operator may press the function key ⊘ or ⊘ to increase or decrease the numeral.
- You may press and hold the function key Oor of for fast changing the numeral.
- · Press "SET" key to confirm Age.



5. After confirming the Age, the LED will display "0.0", then you can start measuring.



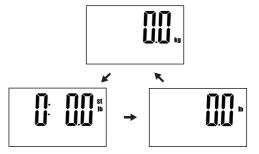
6. Repeat procedure for a second user, or to change user details.

Note: To update or overwrite the memorised data, follow the same procedure, making changes as required.

Note: You may also set up your profile in the APP, when your smartphone is successfully paired with your scale, the personal profile will be transmitted to your scale via Bluetooth.

### **♥** Select Measurement Unit

With batteries correctly installed, press "UNIT" button in the back of the scale to select measurement unit. The default measurement unit is "kg". You may press "UNIT" button to choose among kilogram, stone and pound.



## **♥** Initialising Your Scale

- 1. Press the platform centre and remove your foot.
- 2. "0.0" will be displayed.



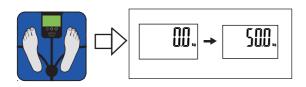
The scale will switch off and is now ready for use.
 This initialisation process must be repeated if the scale is moved.
 At all other times step straight on the scale.

## **♥** Weight Only Operation

Your TRANSTEK Body Fat Analyzer will operate as a conventional weight - reading scale. No special programming steps are required.

Once the scale is initialized, as previously described, you may simply step on the scale to measure your current weight. For only weight reading.

- Position the scale on a flat, hard surface. Carpeted or uneven floors may affect accuracy.
- 2. Step onto the scale platform and remain still while the scale computes your weight.
- 3. The scale will display your weight value.



4. The scale will automatically turn off after a few seconds.

Note: The weight value won't be saved in the scale, and won't be transmitted to the APP.

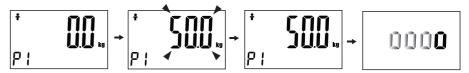
#### **♥** First Measurement

Please process the user setting before your first measurement.
 (Refer to Set Up Your Profile for more details)

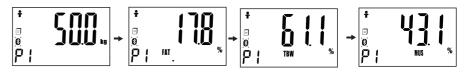
**STEP 1:** Step on the platform barefooted when the LED display "0.0".



STEP 2: Stand still and the weight data will be locked with blinking twice when the weight is stable. Keep full contact with the scale until the LED stops displaying moving "o".



STEP 3: The measurement results will be displayed followed by Weight, Body Fat, Total Body Water, Muscle Mass, Bone Mass, Kcal and BMI. The data will be displayed three times and then turn off.





- \* If it fails to complete the analysis, the LED will only display the weight data.

  (To find out the solutions, please refer to <u>Troubleshooting</u> for more details.)
- When your scale is successfully paired with your smartphone and the Bluetooth is ON, LS208-B8 will process data transmission instead.

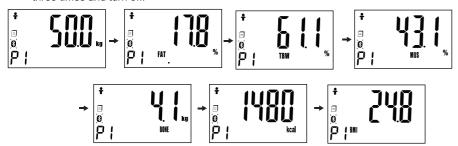
(Please refer to <u>Data Transmission</u> for more details.)

## **♥** Daily Measurement

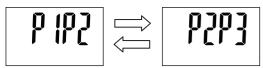
- With original SENSE ON patent technology, LS208-B8 will switch on as you step on the platform barefooted.
- Stand still and keep full contact with the scale until the LED stops displaying moving "o".



- After the weight is locked, if identify the stored weight is during this weight within+/-3 kg, it will identify the specific user ID.
- If it identifies one user, it will skip the step about user selection, then display the Weight, Body Fat, Total Body Water, Muscle Mass, Bone Mass, Kcal and BMI data sequentially three times and turn off.



If it identifies two or more users,for example,P1,P2 and P3, the LED will display these
users altermately two times, you may press the function key or oto choose the
User ID. The measuring results will then be sorted into the User ID you selected and
displayed sequentially three times. If you don't choose the user, it will display the weight
again and turn off.



• If it fails to identify the possible User ID, the LED will only display the weight data then shutdown.

(To find out the solutions, please refer to Troubleshooting for more details.)

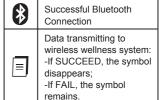
 When your scale is successfully paired with your smartphone and the Bluetooth is ON, LS208-B8 will process data transmission instead.

(Please refer to <u>Data Transmission</u> for more details.)

#### **♥** Data Transmission

 With LS208-B8 successfully pair-up with your smartphone, the measurement data will be transmitted to your mobile via Bluetooth.

- ONLY when the measuring results are attached to a specific User ID will it be transmitted to your mobile after measurement
- The symbol will disappear after successful data transmission, and you may check your personal health data stored in your smartphone.
- If the data transmission fails, the symbol will remain. The pending measurement data will be temporarily kept in the scale and transmitted to your smartphone when next measurement is complete.





#### CAUTION

- Interference may occur in the vicinity of equipment marked with the following symbol ((2)) And the Analyzer may interfere vicinity electrical equipment.
- To enable the data transmission function, this product should be paired to a Bluetooth 4.0 end.

#### How to mitigate possible interference?

- The range between the Analyzer and the Bluetooth end should be reasonably close, from 1
  meter to 10 meters. Please ensure no obstacles between the Analyzer and the Bluetooth end
  so as to obtain quality connection.
- 2. To avoid interference, other electronic devices (particularly those with Bluetooth transmission / Transmitter) should be kept at least 1 meter away from the Analyzer.

## **♥** Error Prompt

Error	Description	Solution				
	Overload. The device will power off.	Stop using this scale for measurement.				
. Lo	Low Battery. The device will power off.	Replace all four batteries in the same time. Please purchase the authorized batteries for replacement.				
FAIL	Failure of pairing up your scale with your smartphone.	Please check below items: -Bluetooth is ONApp Collector is ONBoth devices are within the transmission distance of Bluetooth.				
	There has data doesn't upload. (The notebook icon will be displayed.)	Upload the data.				

## **♥** When Measuring ...

Problem	Root Cause	Solution
Abnormal measuring results: - Too high; OR	Incorrect posture.	Please step on the platform barefooted and stand still.
- Too low; OR - Huge difference between two recent measurement.	The device is located on the soft ground such as a carpet OR on a rugged surface.	Please place the device on a flat, hard surface.

Problem	Root Cause	Solution		
Abnormal measuring results: - Too high; OR - Too low; OR - Huge difference between two recent measurement.	Your feet are too dry.	Wipe your feet with a damp cloth, keeping them slightly damp when starting measurement.		
No display on	Batteries not yet installed.	Install the batteries. (Please refer to <u>Insert the</u> <u>Batteries</u> )		
LED when the device powers on.	Worn batteries.	Replace all four batteries at the same time. Please purchase the authorized batteries for replacement.		
	Step onto the platform wearing socks or shoes.	Please keep barefooted during the measurement, and keep full contact with the scale as well.		
CANNOT proceed to analyze calorie, BMI, body fat, total body water, muscle mass and bone	The system cannot identify the possible User ID with most similar data.	Please assign a User ID following the instruction in <u>Set Up</u> Your Profile.		
mass.	The user fails to select the User ID from what the system found.	Please assign a User ID following the instruction in <u>Set Up</u> <u>Your Profile</u> .		
The device powers off.	Low battery.	Replace all four batteries at the same time. Please purchase the authorized batteries for replacement.		

## **♥** When Data Transmitting ...

Problem	Root Cause	Solution
	Bluetooth is OFF.	Turn ON the Bluetooth via Setting.
Data transmission	The App is OFF.	Press the icon to turn ON your app.
	Out of range of Bluetooth transmission.	Place your smartphone closer to the scale.
	None of the user ID is assigned.	Please assign a User ID following the instruction in <u>Set Up Your Profile</u> .

## **♥** Specifications

<u> </u>	
Product Name	Body Fat Analyzer (LS208-B8)
Dimension	Scale: 320x320x26mm (Approximately)
Net Weight	Approximately1.98kg
Display	Digital LED
Measurement Unit	Kilogram / Stone/ Pound
Measurement Range	5kg to 180kg / 0st: 11lb to 28st: 5lb / 11lb to 397lb
Division	0.1kg / 0.2lb/1lb (≥20st)
Accuracy	50kg: ±0.3kg; 100kg: ±0.4kg; 150kg: ±0.5kg; 180kg: ±0.7kg
Working Environment	Temperature: 5 ℃ to 40 ℃ Relative Humidity: ≤90% RH Atmospheric pressure: 86kPa to 106kPa
Storage Environment	Temperature: -20 ℃ to 60 ℃ Relative Humidity: ≤90% RH Atmospheric pressure: 50kPa to 106kPa
Power Source	6V (Four AAA-size Batteries)
Turn on Method	SENSE ON technology
Auto-OFF	The scale will turn off after about 15 seconds if there is no operation
Accessories	Four AAA-size batteries     User Manual
Mode of Operation	Continuous Operation
Degree of protection	Type BF applied part
Software Version	A0
Protection Against Ingress of Water	IP21

About the Accuracy of This Product

<sup>•</sup> This product passes strict inspection before delivery and therefore its accuracy is guaranteed by the manufacturer. Please refer to the above table for the descriptions on accuracy.

This product is specially designed for body fat analysis as well as weight measurement. It should NOT be used by anyone during the process of transaction for verification of goods' weight.

Maintenance

## **Appendix**

#### **♥** Maintenance

When carrying out usual maintenance, please ensure practice of the following Do's and Don'ts:

- DO use a dry soft cloth to wipe the dust.
- DO use a wet soft cloth, dipped into water and wrung out, to wipe the dirt. Then use a
  dry soft cloth to dry up the device.
- DON'T wash the device with water or immerse it in water.
- DON'T use propellant, abrasive or other chemicals to wipe the dirt in avoidance of discolor or malfunction.
- DON'T disassemble this device. If you have any problems, please contact Transtek. (*Please refer to Warranty for contact information*)

## Warranty

- Transtek warrants its products free of defects in materials and workmanship in normal use for a period of FIVE years from the date of retail purchase.
- This warranty does NOT cover damages caused by misuse or abuse, including but not limited to:
- → Failure caused by unauthorized repairs or modifications;
- → Damage caused by shock or drop during transportation;
- → Failure caused by improper operation inconsistent with the instructions stated in this user manual:
- → Malfunction or damage from failure to provide the recommended maintenance;
- → Damage caused by improper use of power supply.
- Should this device require maintenance (or replacement at our option) under warranty, please deliver the original package to ZHONGSHAN LIFESENSE ELECTRONICS CO., LTD prepaid. Please return the store receipt (with the retail purchase date) and a note with reasons to return on it as well.

ZHONGSHAN LIFESENSE ELECTRONICS CO., LTD 23, Jin'an Road, Minzhong, Zhongshan, 528441, Guangdong, China Tel: 86-760-88282982
Website: http://www.transtek.cn

## **♥** FCC Regulations

#### **FCC User Guide Information**

#### Radio Frequency Interface Requirements - FCC

Note: 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. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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, the user is encouraged to try to correct the interference by one or more of the following measures:

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

## Radio Transmitters (Part 15)

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

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

### **FCC RF Exposure Guidelines**

## **Safety Information**

### Reducing RF Exposure - Use Properly

Only operate the device in accordance with the instructions supplied.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment

## ♥ Health Tips - About Body Fat

Human body is made up of, amongst other things, a percentage of fat. Body fat is vital for a healthy, functioning body, protects vital organs, helps regulate body temperature, stores vitamins and helps the body sustain itself when food is scarce. However, too much body fat or indeed too little body fat will damage to your health. It is difficult to gauge how much body fat we have in our bodies simply by looking at ourselves in the mirror.

This is why it is important to measure and monitor your body fat percentage. Body fat percentage gives you a better measure of fitness than weight alone—the composition of your weight loss could mean you are losing muscle mass rather than fat-you could still have a high percentage of fat even when a scale indicates normal weight'.

The table as follows may be used as a guide:

Table of Body Fat Level (Unit: %)

a) The body fat percentage (%): 5%-60%/0.1%

#### Standard for Men

#### Standard for Women

Rating			Age			Rating	Age					
	20-29 30-39 40-49 50-59 60+			20-29	30-39	40-49	50-59	60+				
low	<13 <14 <16 <17 <18		low	<19	<20	<21	<22	<23				
Normal	13-20	14-21	16-23	17-24	18-25	Normal	19-28	20-29	21-30	22-31	23-32	
Moderately High	20.1-23	21.1-24	23.1-26	24.1-27	25.1-28	Moderately High	28.1-31	29.1-32	30.1-33	31.1-34	32.1-35	
High	>23	>24	>26	>27	>28	High	>31	>32	>33	>34	>35	

Source: University of Illinois Department of Food Science and Human Nutrition. Body Fat Percentage Calculator.

www.ag.uiuc.edu/~food-lab/ai/bfc.html

## ♥ Health Tips - About Body Water

Body water is the single most important component of body weight. It represents over half of your total weight and almost two thirds of your lean body mass (predominantly muscle). Water performs a number of important roles in the body:

All the cells in the body, whether in the skin, glands, muscles, brain or anywhere else, can only function properly if they have enough water. Water also plays a vital part in regulating the body's temperature balance, particularly through perspiration.

The combination of your weight and fat measurement could appear to be 'normal' but your body hydration level could be insufficient for healthy living.

The table as follows may be used as a guide:

Table of Body Water Level (Unit: %)

b) The body water percentage (%): 43%-73%/0.1%

Source: Derived from Wang & Deurenberg: "Hydration of fat-free body mass". American Journal Clin Nutr 1999.69833-841.

	BF % RANGE	OPTIMAL TBW % RANGE						
Men	4 to 14%	70 to 63%						
	15 to 21%	63 to 57%						
	22 to 24%	57 to 55%						
	25 and over	55 to 37%						
	4 to 20%	70 to 58%						
Women	21 to 29%	58 to 52%						
vvomen	30 to 32%	52 to 49%						
	33 and over	49 to 37%						

## **♥** Health Tips - About Muscle Mass

According to the American College of Sports Medicine (ACSM), lean muscle mass may decrease by nearly 50 percent between the age of 20 and 90. If you do nothing with it you're losing muscle and increasing fat. It is also important to know your muscle mass % during weight reduction. At rest, the body burns approximately 110 additional calories for each kilo of muscle gained. Benifits of gaining muscle mass include:

- Reversing the decline in strength, bone density and muscle mass with aging
- · Maintenance of flexible joints
- · Guide weight reduction when combined with a healthy diet.

The table as follows may be used as a guide:

Muscle Mass Percentage

(Source: International Commission on Radiological Protection, 1975)

Men	Approximately 40% of total body weight
Women	Approximately 30% of total body weight

## Health Tips - About Bone Mass

Regular exercise and a balanced diet can help maintain healthy bones. Like muscle, bone is a living tissue that can respond to exercise by becoming stronger. For most people, bone mass peaks in their thirties. Then people begin to lose bone. Regular exercise can help prevent that loss.

Calcium and vitamin D, good sources of which are dairy products, green leafy vegetables and fish, contribute to healthy bones.

The bone mass readings given by this product are anestimation of the amount of bone in your body. Those with osteoporosis or low bone densities may not get accurate estimations. If you have any concern regarding your bones please consult your doctor timely.

The table as follows may be used as a guide:

Bone Mass Percentage

(Source: Rico et al.1993)

The average bone mass percentage for both men and women is between 4 to 5%.

## **♥** Health Tips - About BMI

Maintaining proper weight is essential to healthy living. Obesity has been linked to a higher risk of heart disease, diabetes and some forms of cancer. The Body Mass Index (BMI) is the most widely accepted measurement of weight according to health professionals. The Analyzer will calculate your BMI on your height and weight.

The table as follows may be used as a guide:

		Normal							Overweight					Obese					
								Во	dy W	eight (	(poun	ds)							
	58	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	
	59	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	
	60	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179	
	61	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	
	62	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	
	63	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	
	64	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	
(S)	65	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	
Height (inches)	66	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216	
ght (	67	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223	
Hei	68	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230	
	69	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236	
	70	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243	
	71	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250	
	72	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258	
	73	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	<i>2</i> 57	265	
	74	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272	
	75	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279	
	76	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	
		19	20	21	22	23	24	25	<i>26</i>	27	28	29	30	31	32	33	34	<i>35</i>	

**Body Mass Index** 

## **♥** Health Tips - About Calorie

The device uses your age, height, gender and an activity level setting to calculate the estimated number of calories you can consume a day to maintain your present weight. This estimation may gradually help you with a weight loss, gain or maintenance plan.

### **♥** EMC Guidance

Table 1 Guidance and MANUFACTURER's declaration – ELECTROMAGNETIC EMISSIONS- for all ME EQUIPMENT and ME SYSTEMS

Guidance and manufacturer's declaration – electromagnetic emissions					
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.					
Emissions test	Compliance	Electromagnetic environment - guidance			
RF emissions CISPR 11	Group 2	The device must emit electromagnetic energy in order to perform its intended function. Nearby electronic equipment may be affected.			
RF emissions CISPR 11	Class B				
Harmonic emissions IEC 61000-3-2	Not applicable				
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable				

Table 2 Guidance and MANUFACTURER's declaration – electromagnetic IMMUNITY – for all ME EQUIPMENT and ME SYSTEMS

	ed for use in the electromag user of the device should a			
IMMUNITY test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance	
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.	
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	Not applicable	Mains power quality should be that of a typical commercial or hospital environment.	
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	Not applicable	Mains power quality should be that of a typical commercial or hospital environment.	
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% U <sub>T</sub> (>95% dip in U <sub>T</sub> ) for 0.5 cycle 40% U <sub>T</sub> (60% dip in U <sub>T</sub> ) for 5 cycles 70% U <sub>T</sub> (30% dip in U <sub>T</sub> ) for 25 cycles <5% U <sub>T</sub> (>95% dip in U <sub>T</sub> ) for 5 cycles	Not applicable	Mains power quality should be that of a typical commercial or hospital environment. If the user of the device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or a battery.	
Power frequency (50/60Hz) magnetic field IEC 61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.	

Table 4 Guidance and MANUFACTURER's declaration – electromagnetic IMMUNITY – for ME EQUIPMENT and ME SYSTEMS that are not LIFE-SUPPORTING

Guidance and manufacturer's declaration – electromagnetic immunity						
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.						
IMMUNITY test IEC 60601 TEST LEVEL		Compliance level	Electromagnetic environment - guidance			
			Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.			
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	Not applicable	Recommended separation distance $d = [\frac{3.5}{V_1}]\sqrt{P}$			
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	$d=1.167\sqrt{P}$ 80 MHz to 800 MHz $d=2.333\sqrt{P}$ 800 MHz to 2,5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range. Unterference may occur in the vicinity of equipment marked with the following symbol:			
NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.  NOTE 2 These guidelines may not apply in all situations. Electromagnetic						

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

<sup>a</sup> Field strengths from fixed transmitters, such as base stations for radio (cellular / cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the device.
b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than

Table 6 Recommended separation distances between portable and mobile RF communications equipment and the ME EQUIPMENT or ME SYSTEM – for ME EQUIPMENT and ME SYSTEMS that are not LIFE-SUPPORTING

# Recommended separation distances between portable and mobile RF communications equipment and the device.

The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmittlers) and the device as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)					
	150 kHz to 80 MHz 80 MHz to 800 MHz		800 MHz to 2.5 GHz			
	$d = \left[\frac{3.5}{V_1}\right]\sqrt{P}$	$d=1.167\sqrt{P}$	$d = 2.333\sqrt{P}$			
0.01	Not applicable	0.117	0.233			
0.1	Not applicable	0.369	0.738			
1	Not applicable	1.167	2.333			
10	Not applicable	3.690	7.378			
100	Not applicable	11.67	23.33			

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80MHz and 800MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.