



body fat scale +

complete body analysis scale



Instruction Manual

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Safety instructions



Please read these operating instructions carefully before using the device for the first time, paying special attention to the safety information.

This device should only be used as designated and described in these instructions.

Please keep these instructions in a safe place for future reference. Always include these instructions if passing the device on.

About this device

As well as measuring your weight, your Welby body fat scale+ allows you to carry out comparative measurements of body fat, body water, muscle mass and bone mass.

This device is not a medical product and is not intended for clinical use. Do not use this device for medical diagnosis. It is intended solely for personal home use. You should discuss any health concerns with a licensed health care provider.

To avoid possible harmful side effects, the following people may not use this scale:



- Pregnant women
- Those who have fitted pacemakers
- Those who are suffering from fever
- Individuals with swollen legs or oedema
- Individuals with severe water retention or those who are heavily dehydrated
- Children under six.

General

- Only place the scales on an firm level surface.
- Do not store the scale in a vertical position.
- Do not put weights on the scale unless you are measuring them and do not store items on it.
- Protect the scale from moisture.
- Do not stand on the scale when your feet or body are wet. Always stand on the center of the scale. Place your feet on the metal measuring surfaces so the scale can measure your body fat and water.
- Do not continue using the device under any circumstances if it is damaged as you could injure yourself.

Handling batteries properly

The device is powered by a 3 V button cell battery, size CR 2032.

- Batteries can be fatal if swallowed. If a battery is swallowed, please obtain immediate medical assistance.
- Before inserting the battery, check that the contacts in the device and on the battery are clean and, if necessary, please clean them.
- Only use new batteries.
- Do not use rechargeable batteries.
- Never try to recharge normal batteries. There is a risk of explosion.
- Store batteries in a cool, dry place. Strong direct heat can damage batteries. Therefore, never place the device on sources of heat (e.g. radiators) or in direct sunlight.
- Never throw batteries into a fire.
- If the scale is not going to be used for long periods of time, remove the batteries.
- Remove dead batteries immediately from the device.
- Remove a leaking battery from the device immediately. Clean the contacts before inserting a new battery. There is a risk of chemical burns due to battery acid.

Never carry out repairs yourself



Please note!

Never try to open and/or repair the device yourself. In the event of a fault, contact our Service Center or another suitable professional repair workshop.

Package contents

After unpacking, ensure that the following parts have been supplied:

- Body Fat Scale+
- 1 x 3 V button cell battery, size CR 2032
- Instruction Manual & Warranty

Notes on measurements

Functionality

The body fat scale displays the percentage of muscle mass, body fat, body water and bone mass in relation to total body weight. The standing area of the scale has electrodes which measure body fat by means of the body's electric resistance. Lean body tissue has a lower resistance than fatty body tissue. The scale automatically compares the body fat measured to the person's body height, age, sex and total weight. This results in the body fat value.

Body fat

Too much body fat is unhealthy. What is more important is that a high body fat level is usually accompanied by an increased blood fat level and this dramatically increases the risk of various illnesses, such as diabetes, coronary artery disease, high blood pressure, etc.

However, if the body fat percentage is too low this is also unhealthy. In addition to subcutaneous fat tissue, the body also creates important fat deposits to protect internal organs and safeguard important metabolic functions. If these essential fat reserves are used, it can lead to metabolic disorders, for instance, an increased risk of osteoporosis.

The normal body fat level varies with age and gender. The normal value for women is around 10% higher than for men. As we get older, our bodies break down muscle mass and this increases the body fat level.

Percentage of body fat to total weight

Female				
Age	Low body fat percentage	Normal body fat percentage	High body fat percentage	Very high body fat percentage
6–12	< 7	7–19	19–25	> 25
13–19	< 20	20–31	31–37	> 37
20–39	< 21	21–32	32–38	> 38
40–59	< 23	23–34	34–40	> 40
60 and older	< 25	25–36	36–42	> 42
Athlete		12–25		

Male				
Age	Low body fat percentage	Normal body fat percentage	High body fat percentage	Very high body fat percentage
6–12	< 7	7–18	18–25	> 25
13–19	< 8	8–19	19–25	> 25
20–39	< 9	9–20	20–26	> 26
40–59	< 11	11–22	22–28	> 28
60 and older	< 13	13–24	24–30	> 30
Athlete		3–15		

Body water

About 60% of an adult's body is made up of water. This varies according to certain factors: older people have a lower water level than younger people, and men have a higher water level than women. The difference between men and women is based on women's higher body fat mass. As the majority of the body water is found in the fat-free mass (73% of the fat-free mass is water) and the water content of fat tissue is naturally very low (around 10% of fat tissue is water), when the body fat ratio is high the body water ratio falls automatically. A 5% loss of water can reduce body energy by 20–30%. Drink at least 8 cups of liquid every day.

Normal percentage of body water

	Female	Male
Child	> 58	> 60
Adult	> 52	> 58
Athlete	> 56	> 60

In general, athletes have 5% more body water. With increasing age, the amount of water falls by around 10%.

Muscle mass

The muscle mass is the body's motor. The most of the energy we use is consumed by muscles. The muscles ensure that the body temperature is maintained and are the basis of our physical performance.

Checking the muscle mass is particularly important for people with weight or fat problems. As the body needs muscles to remove excess energy reserves or fat deposits, weight reduction can only be successful in the long term if muscles are built up at the same time.

Age	Female	Male
6~12	>36	>40
13~79	>30	>34
Athlete	>38	>42

Athlete mode

Your scale has a special setting for well-trained and muscular people ("athletes"). As muscle cells have a similar bioelectric resistance to fat cells, the scale could interpret muscles as fat. This problem only occurs if the muscle mass is large; if a person has a normal range of muscles the scale do not measure this as fat.

The athlete mode prevents this incorrect interpretation. In this mode, the actual body fat values are measured using a different mathematical formula.

Reasons for imprecise measurement results

The analysis is based on measuring electrical body resistance. Eating and drinking habits over the day and your personal lifestyle affect the level of water. This is noticeable from variations in the measurements displayed.

In order to achieve an analysis result that is as precise and repeatable as possible, ensure that the measurement conditions are the same because this is the only way to observe changes over a longer period of time. You will receive the most reliable measurement results if you always take the measurement in the morning after waking up. This is the best way of detecting a trend.

Other factors can also affect the level of water:

- After bathing you may get a result where the displayed body fat level is too low and the body water level too high.
- The result may be higher after a meal.
- Women experience differences as a result of their menstrual cycle.
- A loss of body water as a result of illness or physical exertion (sport). After sporting activity you should wait 6 to 8 hours before taking another measurement.

Variances or implausible results can occur for:

- Individuals with osteoporosis
- Individuals being treated with dialysis
- Individuals taking cardiovascular medicine
- Thick calluses on the feet
- Athletes who do over 10 hours of intensive training per week and have a resting pulse of less than 60 beats per minute
- Top athletes and body-builders
- Young people under 17 years of age

The athlete mode is designed for individuals who train frequently and/or intensively. Please see “Athlete mode“on page 9).

Inserting batteries

The scale is operated with a 3 V button cell battery, size CR 2032.

The battery is inserted in the device at the factory. In order to activate the device, pull the flap of the protective foil to remove it from the battery compartment.

- ▶ To remove or change the battery, open the battery compartment cover under the device.
- ▶ When inserting the battery, ensure that the +/- terminals are correct (with the positive pole facing up).
- ▶ When the battery has been inserted and the battery compartment is closed, place the scale on the floor and place a little weight onto the scale. Wait until the scale switch off. The scale is now calibrated.

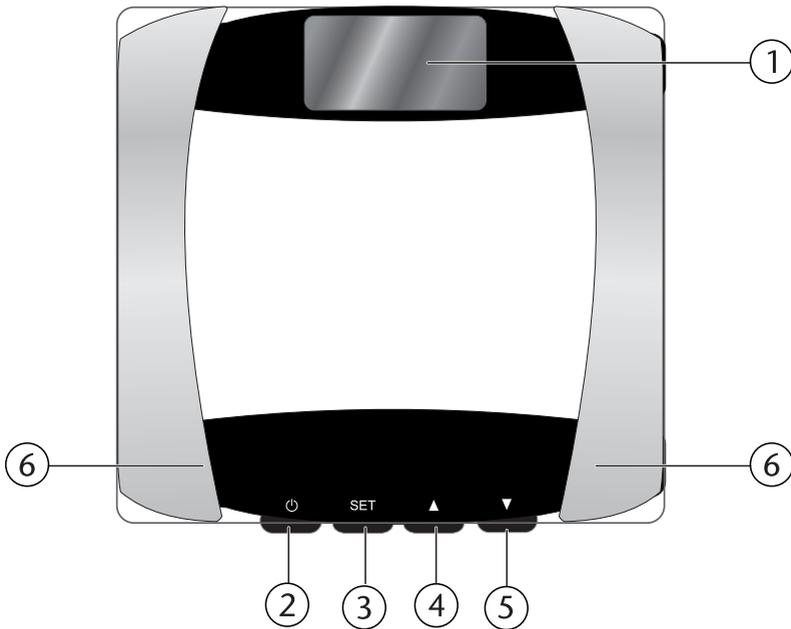
If the screen shows “Lo” or the display’s intensity falls, the battery must be replaced.

- ▶ Only insert one new battery.
- ▶ Do not expose a device containing a battery to direct heat or sunlight. For example, do not place the device on a radiator.
- ▶ If the scale is not going to be used for long periods, remove the battery.

Please also note the section “Handling batteries properly” on page 5 to ensure you use the batteries correctly.

Overview

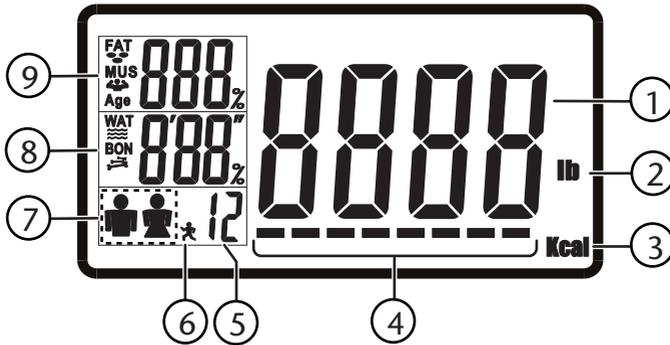
Device



- 1 Display
- 2 ⏻ : On/Off Switch
- 3 **SET**: Confirm entry
- 4 Set a higher value
- 5 Set a lower value
- 6 Standing surface with measuring sensors

The display

The following list shows all the possible screen displays:



- 1 Digits for displaying the weight
- 2 Weight in pounds
- 3 Calorie requirement
- 4 Body analysis
- 5 Memory space
- 6 Athlete
- 7 Male user/female user
- 8 **WAT**: Water percentage, **BON**: Bone percentage, **x'xx"**: Size in inches
- 9 **FAT**: Fat percentage, **MUS**: Muscle percentage, **Age**: numeric value

Measuring weight

- ▶ Stand on the scale.
- ▶ The scale switches on automatically and measures your weight.
- ▶ The weight is displayed.
- ▶ The scale switches itself off again automatically.

If the scale does not register any weight within 10 seconds, it switches itself off automatically.

If the scale shows the **Err2** message, remove the weight immediately from the scale and carry out the measurement again.

Saving personal data

The scale interprets your body fat, body water and muscle mass values on the basis of your personal data. Therefore, you have to enter your personal data before measuring your muscle mass, body fat and body water. Twelve memory spaces are provided for this purpose.

The personal data is: sex, body structure, age and height. If no entries are made for around 20 seconds, the scale will switch off automatically.

Enter your personal data as follows:

- ▶ Press \downarrow .
- ▶ Press **SET**. Memory space 1 will flash on the display.
- ▶ Now select a memory space with the \blacktriangle or \blacktriangledown buttons and confirm your entry with the **SET** button.
- ▶ Select the sex and body structure with the \blacktriangle or \blacktriangledown buttons. In athlete mode, the athlete symbol will be displayed in addition to the sex symbol. Confirm with **SET**.
- ▶ Use the \blacktriangle or \blacktriangledown buttons to select your age and confirm by pressing **SET**.
- ▶ Use the \blacktriangle or \blacktriangledown buttons to select your height in inches and confirm by pressing **SET**.

The display will now show the data entered, while the positions for displaying your weight will be set to zero. You can now take a measurement (see “Carry out a body analysis measurement“ on page 15

Deleting memory values

- ▶ Press \downarrow .
- ▶ Using the \blacktriangle or \blacktriangledown buttons, select the memory space you wish to delete.
- ▶ Press the \blacktriangle and \blacktriangledown buttons at the same time. The values for this memory space will be deleted.

Carrying out a body analysis measurement

Important notes on correct measurement

To measure body fat, body water and muscle mass you have to stand barefoot on the measuring points on the scale where the electrodes are located. Your feet must be dry and free of any skin lotions or moisturizers.

Stand on the scale with straight legs and without bending your knees; ensure that your knees do not touch each other.

Carrying out measurements

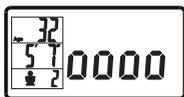
- ▶ Press \cup to switch the scale on and wait until the device displays **0.0**.
- ▶ Select the desired memory space using the \blacktriangle or \blacktriangledown buttons.
- ▶ Now stand on the scale and wait until the device has finished measuring your weight.

The measured weight is displayed together with your personal data (age, height)



Measured weight

The measurement of body fat percentage, muscle mass percentage and bone mass percentage will then start, as well as the calculation of the calorie requirement.



Carrying out other measurements. Remain standing on the scale.



Measured percentage of body fat and body water



Measured percentage of muscle mass and bone percentage in pounds, as well as a display of the daily calorie requirement for this weight.

The measured values will be shown a number of times on the display and afterwards the scale will switch off automatically.

The sum of the values for body fat, body water and muscle mass can amount to more than 100%. This is possible because body fat and muscle mass also contain water, which is taken into account in the measurement of body water. This does not constitute an incorrect measurement.

Body analysis

A body analysis is carried out using the measurements for body fat, body water and muscle mass, as well as body weight. The corresponding measurement bars are shown on the display to indicate whether you are underweight, normal weight, slightly overweight or extremely overweight:

- Two bars: Underweight
- Four bars: Normal weight
- Six bars: Slightly overweight
- Eight bars: Extremely overweight

Error messages

Display	Error message
Err0	Initialization error. Carry out the measurement again to achieve a proper result.
Err1	Incorrect use or unstable base. Take the measurement again.
Err2	Overloading Remove the weight from the scale immediately otherwise permanent damage may occur.
Err3	The measurable electricity is beyond the measurement range. Clean the soles of your feet with a dry cloth and carry out the measurement again.
Err4	The body fat level is outside the measurable range. Clean the soles of your feet with a dry cloth and carry out the measurement again.
Lo	Battery level too low. Replace the battery.

Cleaning the device

Only use mild soap solutions for cleaning. Avoid the use of chemical solutions and cleaning products because these may damage the device's surface or markings. Always dry the scale off completely. There is a risk of slipping.

Disposal



Packaging

Your device has been packaged to protect it from damage in transit. Packaging materials are raw materials and can therefore be reused or recycled. Keep plastic bags out of the reach of children.



Device

At the end of its life, the device should not be disposed of in the normal household trash. Please consult your local authority for advice on correct and eco-friendly methods of disposal. Before disposal remove the battery.



Batteries

Do not dispose of used batteries in household trash. Batteries should be taken to a collection point for used batteries.

Technical data

Electricity supply	1 x 3 V button cell battery CR 2032
Min. weight	11 lbs
Max. weight	396 lbs
Tolerance	11 – 44 lbs: +/- (1%+3 1/2 oz) 45 – 396 lbs: +/- 1%
Measurable fat percentage	3 ~ 50%
Measurable water percentage	25 ~ 75%
Measurable muscle mass percentage	25 ~ 75%
Measurable bone mass percentage	1 ~ 15%
Age range	6 ~ 100 years
Height range	2'7" ~ 7'2"
Operating temperature	50 ~ 95F



Specifications subject to change without notice!

Limited Warranty

PLEASE READ THIS LIMITED WARRANTY CAREFULLY TO UNDERSTAND YOUR RIGHTS AND OBLIGATIONS.

MEDION warrants that the Welby® Body Fat Scale + (MD 13242, Item 6553) accompanied by this limited warranty is free from manufacturing defects in material or workmanship for a period of 36 months from the date of original purchase. Please save your original cash register receipt as it may be required to validate original date of purchase. The limited warranty period also applies to any implied warranties that may exist under applicable law. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This limited warranty does not apply to products that have been opened, repaired (except by MEDION or its authorized Service representatives), or otherwise altered. This limited warranty does also not apply to defects resulting from misuse, abuse, accident, neglect, improper maintenance or handling.

If you believe the product is defective please return it to MEDION in the manner described below within the limited warranty period. If MEDION determines a defect covered by this limited warranty, MEDION will, at its option, repair or replace the product. This limited warranty extends to repaired products and replacement products only through the end of the original limited warranty period.

In no event shall MEDION or any of its distributors or resellers be liable for incidental, indirect or consequential damages relating to the product (including any repaired product or replacement product) or its use. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you.

This limited warranty gives you specific legal rights, and you may have other rights which vary from State to State.

To make a claim under this limited warranty you must first contact MEDION Customer Care using one of the options below to obtain a return merchandise authorization (RMA) number. Once you have received the RMA, please return the product as instructed by the RMA. This warranty does not apply to any products returned to MEDION without a RMA.

To obtain a RMA please contact MEDION Toll Free Customer Care at:

866-633-4660

Daily 8:00 am - 12:00 am CST

except holidays

Email Support (Available 24 hours a day, 7 days a week, with response in 24 hours or less)



TOLL-FREE
CUSTOMER CARE
HELP LINE
866-633-4660
Daily*
8:30 am–12:00 am CST
*except national holidays

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