


RESULTS SHEET BREAKDOWN

SAMPLE RESULTS SHEET

This is the body composition results sheet that the InBody 270 prints out. Understand each output section in the following pages.


[InBody270]

ID	Height	Age	Gender	Test Date / Time
Jane Doe	5ft.01.8in.	51	Female	05.04.2015 09 : 46

Body Composition Analysis

Total amount of water in body	Total Body Water (lbs)	60.0
For building muscles and strengthening bones	Dry Lean Mass (lbs)	21.6
For storing excess energy	Body Fat Mass (lbs)	48.7
Sum of the above	Weight (lbs)	130.3

Muscle-Fat Analysis

Weight (lbs)	130.3
SMM (Skeletal Muscle Mass) (lbs)	42.6
Body Fat Mass (lbs)	48.7

Obesity Analysis

BMI (Body Mass Index) (kg/m ²)	24.0
PBF (Percent Body Fat) (%)	37.5

Segmental Lean Analysis

Left Arm	3.99 lbs	90.2 %
Right Arm	4.17 lbs	94.1 %
Trunk	36.9 lbs	92.2 %
Left Leg	10.16 lbs	72.8 %
Right Leg	10.36 lbs	74.3 %

Body Composition History

Weight (lbs)	143.9	139.9	137.6	136.2	137.3	134.3	133.4	130.3
SMM (Skeletal Muscle Mass) (lbs)	44.3	44.1	43.4	43.4	43.6	43.4	43.6	42.6
PBF (Percent Body Fat) (%)	41.3	40.7	39.2	39.0	39.4	38.6	37.8	37.5

SEE WHAT YOU'RE MADE OF

Body Fat-Lean Body Mass Control

Body Fat Mass - 22.0 lbs

Lean Body Mass + 8.4 lbs

(+) means to gain fat/Lean (-) means to lose fat/lean

Lean Body Mass 81.6 lbs

Basal Metabolic Rate 1168 kcal

Results Interpretation

Body Composition Analysis
The body weight is the sum of Body Fat Mass and Lean Body Mass, which is composed of Dry Lean Mass and Total Body Water.

Muscle-Fat Analysis
Compare the bar lengths of Skeletal Muscle Mass and Body Fat Mass. The longer the Skeletal Muscle Mass bar is compared to the Body Fat Mass bar, the stronger the body is.

Obesity Analysis
BMI is an index used to determine obesity by using height and weight. PBF is the percentage of body fat compared to body weight.


Segmental Lean Analysis
Evaluates whether the amount of muscle is adequately distributed throughout the body. Compares muscle mass to the ideal.

Body Composition History
Track the history of the body compositional change. Take the InBody Test periodically to monitor your progress.

Body Fat-Lean Body Mass Control
Based on current body composition, the recommended change in Lean Body Mass and Body Fat Mass for a good balanced ratio. The '+' means to gain and the '-' means to lose.

Basal Metabolic Rate
Basal Metabolic Rate is the minimum number of calories needed to sustain life at a resting state. BMR is directly correlated with Lean Body Mass.

Results Interpretation QR Code
Scan the QR Code to see results interpretation in more detail.



Impedance

	RA	LA	TR	RL	LL
20 mm	345.0	358.5	23.4	286.6	296.0
100 mm	322.0	335.5	21.2	273.2	282.6

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RESULTS SHEET BREAKDOWN

BODY COMPOSITION ANALYSIS

Body Composition Analysis		
Total amount of water in body	Total Body Water (lbs)	60.0
For building muscles and strengthening bones	Dry Lean Mass (lbs)	21.6
For storing excess energy	Body Fat Mass (lbs)	48.7
Sum of the above	Weight (lbs)	130.3

The InBody 270 applies a quantitative value to the various components of the body's composition. These values represent the weight of each compositional component that comprises the examinee's total body weight.

1) Total Body Water

The InBody 270 measures Total Body Water by using multi-frequencies. The multi-frequencies allow Intracellular Water and Extracellular Water to be measured as accurately as possible. Intracellular water (ICW) indicates the amount of water within the cellular membrane. Extracellular water (ECW) indicates the total amount of water in the interstitial fluid and blood.

2) Dry Lean Mass

Dry Lean Mass is the total body mass minus the water and the fat mass. It is composed primarily of proteins and mineral. Protein is solid in body cells, comprised of polymers of organic compounds, including nitrogen, and is a major component of muscle. Protein is directly related to intracellular water. A lack of protein can be indicative of poor nutrition.

3) Body Fat Mass

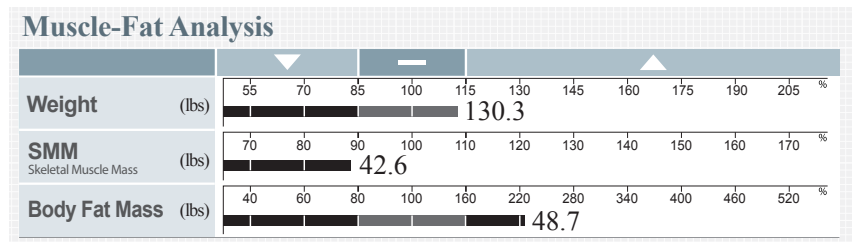
Body Fat Mass indicates the total quantity of lipids that can be extracted from fat and all other cells. BIA technology does not directly measure Body Fat Mass, but is determined as being the remaining poundage value after subtracting Lean Body Mass from the total body weight. Body Fat Mass is found stored under the skin, in visceral areas, and between muscles. When an examinee's fat mass is higher than the standard range, he/she is diagnosed as being obese. Monitoring the amount of body fat mass an individual has is critical to maintaining good health.

4) Weight

The InBody 270 technology provides the ability to separate body weight into Total Body Water, Dry Lean Mass, and Body Fat. Body weight is the total sum of these three components.

RESULTS SHEET BREAKDOWN

MUSCLE-FAT ANALYSIS



The Muscle-Fat Analysis uses bar graphs to provide a comparison between Weight, Skeletal Muscle Mass, and Body Fat Mass. The lengths of the bar graphs indicate the relationship between the current weight to the average value for that specific component, based on the examinee's height. Therefore, an individual with a score of 100% indicates the individual is at the average value, calculated based on the average weight based on their height for that particular segment.

1) Weight

The horizontal bar graph helps to visualize the examinee's current body weight in relation to the average weight. The numbers next to the bar graphs indicate the numerical values for that examinee's body weight. Standard weight indicates the average value in accordance with the examinee's height. The InBody 270 provides the standard weight range, based on the BMI (Body Mass Index) Standard Weight Index.

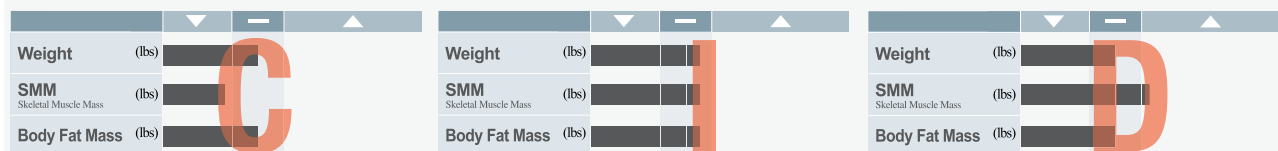
2) Skeletal Muscle Mass

In comparison to the average weight, 100% Skeletal Muscle Mass indicates the examinee being measured has reached the average weight in Skeletal Muscle Mass. The normal range of SMM is 90-110% of the standard SMM. Change in skeletal muscle, as the result of increased exercise and diet modifications, is the most effective indicator of health improvements.

3) Body Fat Mass

Body Fat Mass represents all of the fat cells an individual has in their body. 100% Body Fat Mass indicates the examinee being measured is at the average weight in Body Fat Mass, based on the examinee's height. The average range of Body Fat Mass is established by calculating an examinee's body fat mass and comparing it to the average total body weight and average Body Fat Mass.

Pay attention to the shape formed by the bars of Weight / Skeletal Muscle Mass / Body Fat Mass



Normal Weight - Weak Type

Normal Weight - Standard Type

Normal Weight - Strong Type

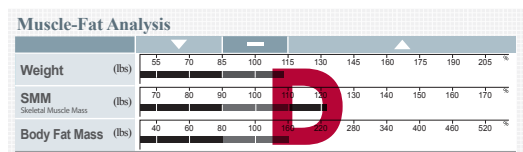
RESULTS SHEET BREAKDOWN

MUSCLE-FAT ANALYSIS

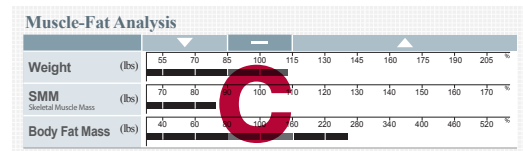
8 Different Body Types You May Encounter in Your Daily Practice:

The Muscle-Fat Analysis has been designed so the examinee can easily understand their current health status; this facilitates their ability to follow programs designated by their healthcare provider and/or fitness coach. The test administrator can apply alphabetical shapes, based on the length of the Weight, Skeletal Muscle Mass, and Body Fat Mass graphs, to provide simplified explanations to the examinees regarding their overall health.

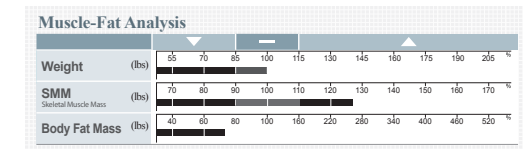
1. The varying lengths of the three bar graphs form a slight curved 'D', which occurs when the Skeletal Muscle Mass bar graph is longer than the Weight and Body Fat Mass bar graphs. This is the ideal body composition, and this examinee should strive to maintain this healthy state. In this case, the examinee should be aware that abdominal fat often increases as a person gets older, and there should be an emphasis on continuously monitoring their body to ensure that this healthy state is maintained.



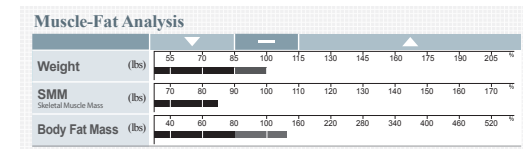
2. At the opposite end of the health spectrum, we find the 'C'-shaped graph, which is characterized by a Skeletal Muscle Mass graph that is shorter than the Weight and Body Fat Mass graphs. Although the examinee's body weight might be within the normal range and not be classified as obese, he/she does not have the ideal body shape. They might be experiencing difficulties managing the shape of their body through simple weight control measures. If a 'C' shaped individual begins making muscle-fat adjustments, they can maintain a satisfactory body shape without needing to necessarily lose any weight. The examinee can strive to achieve a 'D' shape in their body composition graphs by losing Body Fat Mass while gaining Skeletal Muscle Mass. Many adults who have a high level of Body Fat Mass are included in this category. It is important to note that abdominal obesity is a factor in the development of cardiovascular diseases, which includes individuals within the standard weight range.



3. This is an example of a healthy body type with well-developed SMM. However, people in this category need to be careful not to lose too much Body Fat Mass.



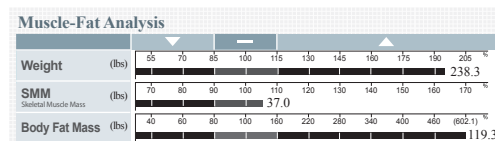
4. The varying lengths of the three bar graphs indicate a person whose weight is within the standard range; however, they cannot be regarded as being in ideal health due to their low skeletal muscle mass. As shown here, the length of the Skeletal Muscle Mass graph is shorter than the average range, while the Body Fat Mass is within the standard range. An examinee of this body type will also exhibit a 'C' shape. However, this specific type should be differentiated as being a weak "C" type, rather than an obese type. People who belong to this body type have lost intestinal and muscular protein, which is a situation caused by possible factors such as a lack of exercise, improper protein nutrition, or an increased metabolism as a result of injuries or disease. Symptoms of this include edema, the decomposition of muscle cells, changes in nerve tissues, secondary infections, and stunted growth in children.



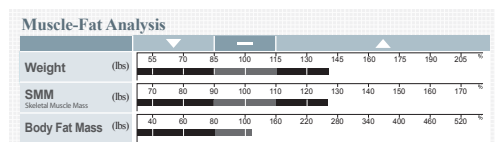
RESULTS SHEET BREAKDOWN

MUSCLE-FAT ANALYSIS

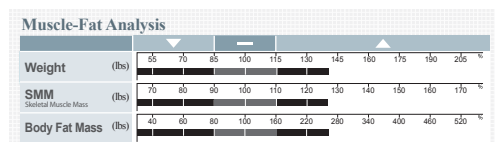
5. The varying lengths of the three bar graphs represent an individual whose weight and Body Fat Mass are above the standard range, but whose Skeletal Muscle Mass graph is within the normal range. An examinee of this body type also exhibits a ‘C’ shape. However, this specific body type should be characterized as being an obese “C” type. People who belong to this body type are commonly diagnosed as being obese. Apart from obesity being a disease itself, individuals with this body type are also at risk for developing many other diseases. People diagnosed as obese run a higher risk of developing a myocardial infarction, congestive heart failure, hypertension, diabetes (NIDDM), large intestinal cancer, rectal cancer, and in the case of males, prostatic carcinoma. Furthermore, many other additional problems have been recognized as being related to obesity such as a decrease in tolerance to exercise, osteoarthritis, as well as a decrease in lung function.



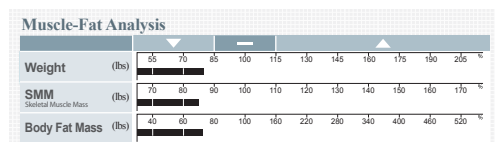
6. This shape represents an individual who is above the average weight and SMM but is within range for Body Fat Mass. These individuals exhibit athletic body types and are often times included in the overweight/muscular category. Individuals in this group can easily be categorized as being obese when the BMI method is used. This category of individuals is deemed to be overweight due to the increased weight of their skeletal muscle. It is important to clarify, however, that this type of person is not obese and does not need to undertake weight control measures.



7. This shape represents an individual who is over the average for weight, SMM, and BFM. Individuals who fall into this body type have an excessive amount of body weight and are diagnosed as being chronically obese. In these individuals, it is common to see the measured SMM over the average range. However, it is important to note that this is not developed through exercise: it is actually a result of the individual having excessive body mass compared to the average weight, which triggered muscle development as a response to the need to carry the excess weight. Those diagnosed as being chronically obese should seek medical treatment. It is suggested these individuals begin a weight reduction program that is designed to decrease their Body Fat Mass and work to treat and prevent any secondary diseases that may accompany this condition.

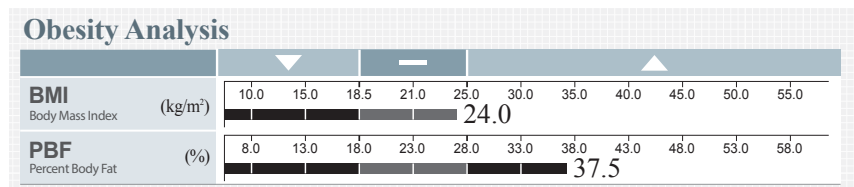


8. This shape represents an individual who is under the average weight for body weight, SMM, and BFM. Individuals within this group are identified as being underweight and having a weak body type. These individuals are at lower risk of developing secondary diseases. However, if these individuals continue to maintain this body type over a long period of time, an array of health complications may arise. These include a decrease in the body’s ability to absorb nutrients and prevent disease, poor nutrition caused by a loss of appetite, imbalanced nutrition due to a loss of intestinal protein, metabolic disorders, as well as other issues.



RESULTS SHEET BREAKDOWN

OBESITY ANALYSIS



1) BMI

Body Mass Index (BMI) is an index used to determine obesity by using height and weight. The BMI method has been widely relied on in general medicine, dietary, and sports medicine fields as the main means of diagnosing obesity. However, this method is flawed in that it cannot be applied to adults with high levels of LBM, children, those over the age of 65, or pregnant females. Nevertheless, as BMI has been the most commonly used index, research using the BMI method to prevent adult diseases has been conducted frequently. This is why InBody 270 also provides BMI-based information.

$$\text{BMI} = \text{Weight} / \text{Height}^2 (\text{kg}/\text{m}^2)$$

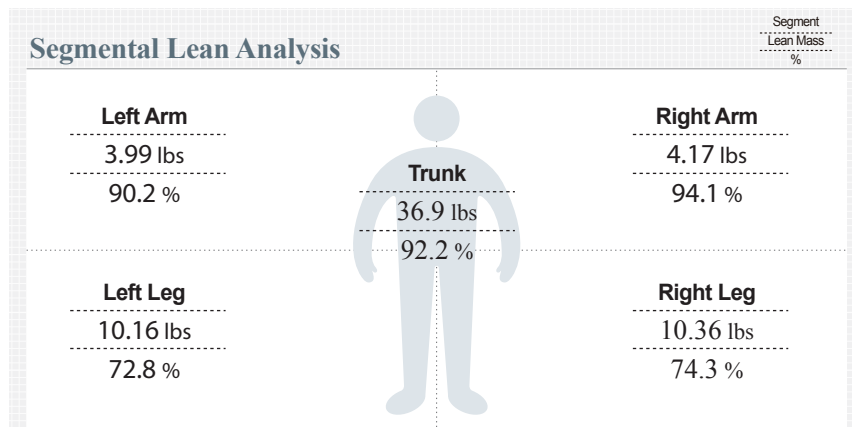
2) Percent Body Fat

The standard PBF is 15% for males and 23% for females, which are the respective midpoints of the standard ranges of Body Fat Mass in relation to standard weight: 10-20% of the standard weight for males and 18-28% for females. An individual with a calculated PBF that is greater than the standard range is regarded as having a high level of body fat. When an individual's PBF is below the standard range, they are regarded as having a low level of body fat. Individuals with low levels of body fat can be separated into two categories. The first has muscle mass that is deemed an appropriate amount for that individual's body composition. The second type has an inadequate amount of muscle mass in relation to their body composition. These individuals can be considered to be in an unhealthy state due to their imbalance of Body Fat Mass and LBM, and these individuals have a higher possibility of contracting clinical diseases.

$$\text{PBF} = \text{Fat}(\text{lb}) / \text{Weight}(\text{lb}) \times 100$$

RESULTS SHEET BREAKDOWN

SEGMENTAL LEAN ANALYSIS



There are two numbers for each body part in the Segmental Lean Analysis diagram. The display of the two numbers allow for a more effective and informed assessment of the current distribution of the lean mass the examinee has. The two numbers have different meanings, respectively.

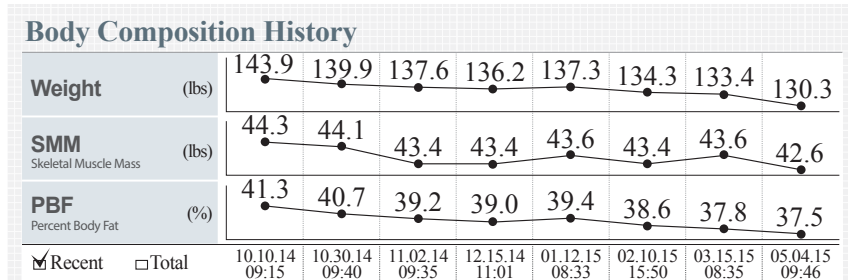
The poundage number right below the body part label indicates the lean mass weight of the examinee in the designated segment.

The percentage number below is to determine if the examinee is at the ideal lean mass in relation to his or her current weight. It is recommended to strive for 100%. The percentage will directly reflect changes in the examinee's weight, thereby allowing you to determine whether or not there is actual lean mass appropriate to his or her weight.

Segmental Lean Analysis provides examinees with the ability to observe their left/right lean balance, and lean body mass distribution, segmentally. This allows for close monitoring of the distribution of lean body mass to help determine if the distribution of lean mass is adequate or if changes need to be made.

RESULTS SHEET BREAKDOWN

BODY COMPOSITION HISTORY



After an InBody Test is taken on the InBody 270, the results will be saved onto the device only if an ID is entered at the beginning of the test. The saved test results allow for monitoring of weight, LBM, Body Fat Mass and Percentage of Body Fat. An individual measuring under the same ID will have their body composition results from the last 10 tests displayed on the bottom of the result sheet in a cumulative graph.

Below the cumulative graph, it also has a data table. The cumulative graph helps for a quick and easy understanding of changes in the examinee’s body composition and current condition. The body composition history allows an individual beginning a variety of health treatment plans such as dietary-exercise modifications to monitor and track their progress. This allows for body composition changes to be monitored over time, taking into account where the individual started, the progress being made, changes in the overall body composition, and the ability to identify if modifications need to be made to the treatment plan based on the body composition history.

RESULTS SHEET BREAKDOWN

BODY FAT-LEAN BODY MASS CONTROL

Body Fat-Lean Body Mass Control	
Body Fat Mass	- 22.0 lbs
Lean Body Mass	+ 8.4 lbs
(+) means to gain fat/lean	(-) means to lose fat/lean

Body Fat - LBM provides the examinee a gauge that allows them to optimize the InBody 270 Result for their dietary-exercise modification programs, allowing the examinee to make adjustments to the lean body mass-fat mass ratio rather than simply increasing or decreasing his/her weight. It explains to the examinee how to control his/her weight, especially by gaining or losing muscle or fat.

Here, '+' refers to the mass that must be increased, and '-' refers to the mass which should be decreased. These numbers, a unique index offered only by InBody, indicate how many pounds of Body Fat Mass should be lost / gained and how many pounds of LBM should be gained through exercise.

Many people give up in the middle of the process of treating their obesity because their weight has not changed. In many cases, the reason is that LBM has increased as much as the amount of Body Fat Mass lost. However, as their actual weight has not changed at all, the effectiveness of the weight management program may be difficult to ascertain without the use of InBody technology.

The InBody 270 makes it possible for the examinee to see how much Body Fat Mass has been lost and how much LBM has been gained during the weight management program. Therefore, the InBody 270 is a very useful device for identifying obesity, monitoring the weight management process, and facilitating the formation of a trust-based relationship between health professionals and their clients.

RESULTS SHEET BREAKDOWN

LBM, BMR, QR Code, IMPEDANCE

Lean Body Mass

81.6 lbs

Lean Body Mass refers to the entire body weight with the exception of Body Fat Mass. The InBody 270 provides both the fundamentals as well as the comprehensive data related to Lean Body Mass that can aid in the evaluation of the health status of the examinee. As reference, athletic body types will have a higher proportion of Lean Body Mass compared to normal body types. As such, it is important for all body types alike to monitor their Lean Body Mass.

Basal Metabolic Rate

1168 kcal

The Basal Metabolic Rate (BMR) indicates the minimum energy required to sustain vital functions while at rest. The InBody270 uses the Cunningham equation to determine the BMR using a known regression equation based on the amount of LBM an individual has. LBM is known to be closely related to BMR. BMR is usually calculated using indirect Calorimetry, which measures oxygen demand.

However, the InBody270 calculates BMR using Lean Body Mass. Therefore, should the examinee gain LBM during the weight management program, their BMR would also increase, which is a desirable result in any weight management program.

Results Interpretation QR Code

Scan the QR Code to see results interpretation in more detail.



Results Interpretation QR code allows an examinee to scan the code using a QR code reader app on his or her smart phone for more detail. It will take the examinee to a page that describes each section of the Results Sheet for future reference.

Impedance

	RA	LA	TR	RL	LL
$Z(\Omega)_{20\text{ kHz}}$	345.0	358.5	23.4	286.6	296.0
100 kHz	322.0	335.5	21.2	273.2	282.6

Impedance is the frequency-dependent opposition of a conductor to the flow of an alternating electric current. Impedance is composed of two main properties, resistance and reactance. InBody provides segmental impedance values at varying frequencies to allow for accurate analysis of the human body. Since reactance is the interrupting force of alternating current flow, it increases in proportion to the integrity of cell membrane. Therefore, reactance and phase angle decrease when the number of cells is low or the cell membrane is more permeable or unhealthy.