Looking beyond BMI and the bathroom scale

BMI and weight can be misleading because neither distinguishes how much fat versus muscle patients have. Body composition testing is the process of measuring the components of the body – what your patients are made of. By regularly monitoring body fat and muscle mass, you and your patients can better understand how diet, lifestyle and exercise programs are influencing their body composition. Knowing what’s working for each patient can help you and them target and reach their wellness, appearance and longevity goals.

GE Lunar InBody 230

- Quick, convenient and easy to use
- Lightweight foldable design for portability
- 2-frequency direct segmental measurement
- No dependency on empirical estimations
- 550-pound weight limit
- Pre-printed colorful results sheets
- Measures weight, total body fat, lean mass and water, total body skeletal muscle mass, percent body fat, segmental lean mass, estimated resting metabolic rate, and more

“The InBody has been an incredible asset to our practice. The information provided by the machine is both very accurate and helpful to patients. The unit is simple to use, takes very little time, and yet provides a very impressive report. The machine has worked flawlessly since we purchased it with no downtime.”

- Jeffrey I. Barke, M.D., Newport Medical Consultants
GE Lunar InBody BIA technology

8-point tactile electrodes
8 contact points allow the measurements to repeatedly start at a fixed point, regardless of where the electrodes are placed, to increase accuracy and reproducibility. This method assists in the ability to measure the body as five separate segments.

Direct segmental measurement
One of the assumptions generally taken in BIA is that the measured body is one cylinder. InBody considers the body as five separate cylinders and can differentiate each cylinder as a separate region, including the trunk.

Multiple high frequencies
Instead of using a single low frequency, InBody uses a low and high frequency to penetrate the cell membrane and accurately measure intracellular water. By using multiple frequencies, InBody can accurately measure a broad range of body types without imparting a size, age, or gender bias.

No empirical estimations
Empirical estimation is defined as taking certain factors such as age, gender, or body type into consideration when measuring. These estimations are based on the average statistical data and are useful as comparative reference data or to determine healthy expected ranges. InBody uses only the direct acquired data from each patient and does not rely on empirical estimations.

Weight capacity
InBody accommodates up to 550 pounds

Built In pre-printed result sheet
InBody prints on a colorful pre-printed result sheet that is easy to interpret.

Easy, quick and convenient
InBody uses a color LCD screen that is easy to operate and assists the operator from start to finish. InBody takes up little space, scans quickly, automatically prints, and requires little maintenance.

“The InBody is an excellent resource for my practice. It allows me to easily and accurately determine my patient’s body composition. I am able to design a program for my patients to follow, monitor, and track their progress.”

– Mark Czamecki, D.O., Columbia River Medical Clinic
Lunar InBody230 specifications

- Frequencies: 20, 100 kHz
- Measurement: 10 impedance measurements
  - 2 frequencies at each of 5 segments (right arm, left arm, trunk, right leg, left leg)
  - Tetrapolar 8-point tactile electrode system
- Test duration: 30 seconds
- Weight range: 22 – 551 lbs. (10-250 kg)
- Age range: 3 – 99 years
- Height range: 3 ft. 1.4 in. – 7 ft. 2.6 in. (95-220 cm)
- Database: 1,000 entries
- Dimensions: 14 x 33.2 x 38.7 (W x L x H) : in.
  - 356 x 843 x 984 (W x L x H) : mm
- Weight: 32 lbs. (14.5 kg)
- Warranty: 1 year manufacturer
- Compatible Printers: Laser/inkjet PCL 3 or above and SPL
- Additional features: Folds for portability
- Options: Carrying case, thermal printer, InBody test poster, results sheets, electrolyte tissues
- Outputs: Total body water, dry lean mass, lean body mass, weight, skeletal muscle mass, body fat mass, BMI, percentage of body fat, segmental lean analysis, basal metabolic rate (BMR), impedance of each segment per frequency
Sample report:

<table>
<thead>
<tr>
<th>Name (I.D.)</th>
<th>Gender</th>
<th>Age</th>
<th>Height</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX00000</td>
<td>Female</td>
<td>31y</td>
<td>5ft. 3.0in.</td>
<td>00:00:0000</td>
<td>00:00:00</td>
</tr>
</tbody>
</table>

**Body Composition**

<table>
<thead>
<tr>
<th></th>
<th>Values</th>
<th>Lean Body Mass</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Body Water</td>
<td>57.0 lbs.</td>
<td>78.0 lbs.</td>
<td>111.4 lbs.</td>
</tr>
<tr>
<td>Dry Lean Mass</td>
<td>21.0 lbs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Fat Mass</td>
<td>33.4 lbs.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Body Composition Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Under</th>
<th>Normal</th>
<th>Over</th>
<th>UNIT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>111.4 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skeletal Muscle Mass</td>
<td>41.6 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Fat Mass</td>
<td>33.4 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Obesity Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Under</th>
<th>Normal</th>
<th>Over</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI Body Mass Index (kg/m²)</td>
<td>19.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBF Percentage of Body Fat (%)</td>
<td>30.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Segmental Lean Analysis**

Use this section to understand how your muscle mass is distributed throughout your body. Your segmental distribution could indicate that you have maintained or developed muscle mass proportionately. You may discover that you have a tendency toward a disproportionate amount of muscle in your legs or your trunk and arms. Genetically there are inherent tendencies toward more or less musculature in any of these areas. It’s true that you can’t “spot lose” fat but you can develop or maintain certain muscles by using them more.

**Impedance**

<table>
<thead>
<tr>
<th>_FREQ</th>
<th>RA</th>
<th>LA</th>
<th>TR</th>
<th>RL</th>
<th>LL (Q)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 kHz</td>
<td>440</td>
<td>469</td>
<td>31.2</td>
<td>323</td>
<td>323</td>
</tr>
<tr>
<td>100 kHz</td>
<td>404</td>
<td>435</td>
<td>28.0</td>
<td>292</td>
<td>291</td>
</tr>
</tbody>
</table>

**Basal Metabolic Rate**

| BMR | 1134 kcal |

Body Fat & LBM

<table>
<thead>
<tr>
<th>Body Fat</th>
<th>5.5 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBM</td>
<td>15.4 lbs.</td>
</tr>
</tbody>
</table>

Fat: + (need more body fat mass)
- (lose body fat mass)

LBM: +(need more lean body mass)
0.0 lbs. (maintain current LBM)

The BMR is the minimal number of calories needed to sustain life at a resting state. BMR is directly correlated with Lean Body Mass. With age muscle depletes and BMR steadily decrease.
About GE Healthcare:

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our “healthymagination” vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality and efficiency around the world. Headquartered in the United Kingdom, GE Healthcare is a $16 billion unit of General Electric Company (NYSE: GE). Worldwide, GE Healthcare employs more than 46,000 people committed to serving healthcare professionals and their patients in more than 100 countries. For more information about GE Healthcare, visit our website at www.gehealthcare.com.