BODY MASS INDEX (BMI), HEIGHT, WEIGHT, & WAIST CIRCUMFERENCE

CLINICAL SCREENING PROCEDURES

Supplies
• Stadiometer
• Scale
• Flexible Tape Measure
• BMI Chart

Setup
Set up each station with 1 stadiometer, 1 scale, and 2-3 privacy screens. Setup the stadiometer against a wall. Place the scale on a hard surface, if available, and in a manner making it easy for you to see the display but difficult for other participants to see the display. Test both the stadiometer and scale to ensure both are measuring properly. Setup 2-3 privacy screens around the station creating a “U” shape and making the station as private as possible. Setup 1 chair inside the station for the participant to utilize. Clipboards are provided for contractors to use to write down participant results.

Definition & Purpose
• **Body Mass Index (BMI)** – Number calculated from a person’s height and weight. It is used to identify potential health risks due to being overweight or underweight.
• **Waist Circumference** – Measurement of the distance around the abdomen used to assess abdominal fat. If most of a participant’s fat is around the waist rather than the hips the participant is at higher risk for heart disease, certain cancers and type 2 diabetes.

Measurement
Height
• Participant should remove shoes and hats.
• Ensure participant is standing straight against the stadiometer.
• Move stadiometer platform until it touches participant’s head.
• Record readings rounding to the nearest inch (round down at .4 inches and under, round up at .5 inches and over).

Weight
• Participants should remove shoes, hats and anything heavy out of pockets.
• Tap on scale until scale displays 0.00.
• Ask participant to stand on scale.
• Record reading; round to the nearest pound (round down at .4 pounds and under, round up at .5 pounds and over).

BMI
• Determine BMI by looking at the BMI chart or by calculating it with the formula listed below.

\[
\text{BMI} = \frac{\text{[weight in pounds} \times 703]}{\text{height in inches}} \div \text{height in inches}
\]

Waist Circumference
• Have the participant place the tape measure at his/her belly button, on his/her lowest layer of clothing.
• Instruct the participant to spin in a circle, so the tape measure wraps around him/her.
• Ensure that the tape is snug but does not push tightly into the skin.
• Measure waist circumference as participant is breathing out normally; ensure participant does not “suck in” the stomach.
• Read the tape measure and record the waist circumference in inches, rounding to the nearest inch (round down at .4 inches and under, round up at .5 inches and over).

Interpreting Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Underweight</th>
<th>Normal</th>
<th>Overweight</th>
<th>Obese</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td>&lt; 18.5</td>
<td>18.5 – 24.9</td>
<td>25 – 29.9</td>
<td>30 +</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Men Normal</th>
<th>Men Increased Risk</th>
<th>Women Normal</th>
<th>Women Increased Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waist Circumference</td>
<td>40 inches or less</td>
<td>40.1 inches or more</td>
<td>35 inches or less</td>
<td>35.1 inches or more</td>
</tr>
</tbody>
</table>
BODY MASS INDEX (BMI), HEIGHT, WEIGHT, & WAIST CIRCUMFERENCE
PARTICIPANT EXPERIENCE PROCEDURES

Welcome
• Welcome the participant.
• Introduce yourself.
• Explain that you will be measuring his/her height, weight, and waist measurements today along with calculating his/her BMI.

Ask, Don’t Tell
• Ask the participant to remove his/her shoes and any heavy items; don’t tell him/her.
• Allow the participant to keep his/her shoes on if he/she is uncomfortable taking them off.

Watch for Signs
• If a participant seems to question a value, re-test it.
• Participants should walk away feeling that they received valuable information.
• Make sure they don’t want away thinking their values are incorrect.

Guide to Next Station
• Guide the participant to the next station/service ensuring he/she knows what is being offered next and where to go to participate in the service.

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Important Tips
• When measuring waist circumference ensure you are measuring at the belly button and not around the hips. Waist circumference is not the same as pant size.
• When measuring height be advised that many individuals have taken their height in the past with their shoes on. Without shoes it is logical that participant may lose .5 inches – 1 inch.
• BMI is not accurate for everyone. It does not take into account a person’s muscle or bone mass.
• Do not report BMI on pregnant women.