Height, Weight, Body Mass Index (BMI) & Waist Circumference
Clinical Screening Procedure

Supplies
- Stadiometer
- Scale
- Flexible Tape Measure
- BMI Chart
- Clipboard
- Privacy Screens

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
- Ask participant to sit down and remove shoes, hats should also be removed.
  - If the participant is uncomfortable removing their shoes, allow them to keep their shoes on.
- Ensure participant is standing straight with their back against the stadiometer post.
- Move stadiometer platform until it touches participant’s head.
  - Ensure platform is touching the top of the head and not just the top of the participant’s hair.
- Record reading rounding to the nearest inch (round down at .4 inches and under, round up at .5 inches and over).
  - Make sure you record the reading where the red arrows point on the stadiometer.
  - Generally, you will record the reading in feet and inches, meaning 5 feet 6 inches.
  - This may require you to convert total inches to feet and inches (remember there are 12 inches in 1 foot).

Weight
- Participants should remove shoes, hats, and anything heavy out of pockets.
- To turn on the scale, tap on scale until scale displays 0.00.
- Ask participant to stand on scale.
- Record reading rounding to the nearest pound (round down at .4 lbs and under, round up at .5 lbs and over).

BMI
- Determine BMI by looking at the BMI chart.
- For individuals not on the chart, calculate their BMI using the BMI formula listed on the BMI chart.

Waist Circumference
- Have participant place the tape measure end at their belly button, on the lowest layer of clothing.
  - Make sure the participant places the zero end of the tape measure at his/her belly button.
- Instruct the participant to spin in a circle, so the tape measure wraps around him/her.
- Ensure that the tape measure is snug but does not push tightly into the skin.
- Measure waist circumference as participant is breathing out normally; ensure the 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).
  - The flexible tape measure includes inches on one side and centimeters on the other side, make sure you utilize and record inches.
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>

**Pregnant Woman Policy**
The participant consent form will indicate if the participant is pregnant or not. If the participant is pregnant measure her height and weight. Do not calculate BMI or measure waist circumference on pregnant women.

**Important Tips**
- 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 the participant may lose .5 inches – 1 inch.
- If a participant questions a value, re-test it. Ensure the participant knows you are re-testing as a double check and not because of faulty or inaccurate equipment.
- BMI is not always a reliable measure of health. It does not consider a person’s muscle or bone mass.
- 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.