Leicestershire Nutrition & Dietetic Services

Medical Devices Competency Statement

Calculating Body Mass Index (BMI) in Adults

SELF-ASSESSMENT

Surname: ____________________________ Forename(s): ____________________________
Job title/Designation: ____________________________ Line Manager: ____________________________
Department / Base: ____________________________ Extension number: ____________________________

Self-Verification of competence is undertaken by assessment against the following statements:

• Responsibility for competency remains with the individual, so if you are in any doubt regarding your competence to perform this measurement, you should seek further training.
• To perform the measurement you must follow instructions below before considering yourself to be competent.
• If you are not competent, inform your Line Manager for further training and repeat self-verification by completing a new form.

To be able to undertake this self-assessment you must first be competent in measuring height and weight (see weight and height self-assessment competencies)

1. Obtain the patient’s weight in kilograms (kg), using approved scales. If it is not possible to weigh the patient a recalled or estimated weight should be used.

2. Measure the patient’s height in metres (m). If it is not possible to obtain an accurate height a recall height should be used. An estimated height should only be used if it is not possible to measure the patient or obtain a recall height.

3. To calculate the BMI the following calculation should be used:

\[ \text{Weight kg} \div \text{height in m}^2 = \text{BMI in kg/m}^2 \]

For example, for a patient weighing 70kg with a height of 1.73m:

Calculate height in m²:  \( 1.73 \text{m} \times 1.73 \text{m} = 2.99 \text{m}^2 \)

70kg ÷ 2.99m² = 23.4 kg/m²

4. BMI can also be calculated using a BMI chart:
<table>
<thead>
<tr>
<th>Height (m)</th>
<th>1.20</th>
<th>1.24</th>
<th>1.28</th>
<th>1.32</th>
<th>1.36</th>
<th>1.40</th>
<th>1.44</th>
<th>1.48</th>
<th>1.52</th>
<th>1.56</th>
<th>1.60</th>
<th>1.64</th>
<th>1.68</th>
<th>1.72</th>
<th>1.76</th>
<th>1.80</th>
<th>1.84</th>
<th>1.88</th>
<th>1.92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td></td>
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<tr>
<td>Weight (st/ lbs)</td>
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</tr>
</tbody>
</table>

**To Calculate BMI:**

1. Measure Height (m) x Height (m)
2. Use Height (m) x Height (m) to find the correct BMI
3. Use the Weight (kg) column to find the correct BMI

**Classification of Overweight and Obesity in Children**

The Child Growth Foundation Body Mass Index Percentile chart should be used to identify overweight and obese children.

**Overweight:** BMI > 85th centile

**Obese:**

- **Class I:** BMI > 95th centile
- **Class II:** BMI > 99th centile

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5. To interpret the BMI the following table should be used:

<table>
<thead>
<tr>
<th>Category</th>
<th>BMI</th>
<th>BMI Asian origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>&lt;18.5</td>
<td>&lt;18.5</td>
</tr>
<tr>
<td>Healthy</td>
<td>18.5 - 24.9</td>
<td>18.5 - 22.9</td>
</tr>
<tr>
<td>Overweight</td>
<td>25 - 29.9</td>
<td>23 - 27.4</td>
</tr>
<tr>
<td>Obese Class 1</td>
<td>30 - 34.9</td>
<td>27.5 - 32.4</td>
</tr>
<tr>
<td>Obese Class 11</td>
<td>35 - 39.9</td>
<td>32.5 - 37.4</td>
</tr>
<tr>
<td>Obese Class 111</td>
<td>&gt;40</td>
<td>&gt;37.5</td>
</tr>
</tbody>
</table>

**Statement**

I am able to perform the measurement & have taken into account my personal assessment of my competence with the measurement, I declare that:

I am competent to perform the measurement without further training.

Signature:   
Date:

I require further training before I can perform this measurement in a competent manner

Signature:   
Date:

**Pass this form to your manager to add to your personal records**