# Screening is a ‘MUST’

## Practical Workshop

Demonstrate the use of ‘MUST’ from the front.

### Step 1  BMI
- **Current Weight**: __________ kg
- **Height**: __________ m
- **BMI**: __________ kg/m²
- **Score**: __________

### Step 2  Recent Weight Loss
- **Assume 3kg**
- **% weight loss**: __________
- **Score**: __________

### Step 3  Acute Disease Effect
- **Likely to result in no food intake > 5 days?**: __________ Yes/No
- **Score**: __________

### Step 4  Overall Score/Risk Category
- __________
WORKING IN PAIRS

Step 1: BMI

Weight (kg)

- Ask partner to recall current weight.
- Weigh partner using scales provided.
- Note weights and comment on similarities and differences.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Recalled</th>
<th>Measured</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>1</td>
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Height (m)

- Ask partner how tall he/she is.
- Measure partner's height using stadiometer provided.
- Note heights and comment on similarities and differences.

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<thead>
<tr>
<th>Subject</th>
<th>Recalled</th>
<th>Measured</th>
<th>Comments</th>
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<tbody>
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BMI/BMI SCORE

Despite obtaining height and weight in different ways, you should find that most subjects will fall within the same BMI “band” and therefore have the same BMI Score.

- Calculate BMI for yourself and your partner using recalled values and measured values and complete table below.

<table>
<thead>
<tr>
<th></th>
<th>Subject 1</th>
<th>Subject 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BMI (kg/m²)</td>
<td>BMI Score</td>
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<tr>
<td>Recalled weight and height</td>
<td></td>
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<tr>
<td>Measured weight and height</td>
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STEP 2: RECENT WEIGHT LOSS

- Assume each of you has lost 5kg over the past 3-6 months. Calculate the percentage weight loss using the ‘MUST’ weight loss tables provided and score. (i.e. previous weight = current weight + 5kg).

<table>
<thead>
<tr>
<th>Subject</th>
<th>Current Weight (kg)</th>
<th>Previous Weight (kg)</th>
<th>% Weight Loss</th>
<th>Weight Loss Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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- Consider the clinical significance of the % weight lost.

STEP 3: ACUTE DISEASE EFFECT

- Clinical conditions that are likely to or have resulted in no or virtually no food intake for more than 5 days.
- Most likely to occur in patients admitted to acute hospitals.
- Which clinical conditions might apply?

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STEP 4: OVERALL RISK SCORE

- Add together scores from Steps 1, 2 & 3 to obtain overall malnutrition risk score.

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<tr>
<th>Score</th>
<th>Subject</th>
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<tbody>
<tr>
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<td>1</td>
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<tr>
<td>BMI</td>
<td></td>
</tr>
<tr>
<td>Weight Loss</td>
<td></td>
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<tr>
<td>Acute Disease Effect</td>
<td></td>
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<tr>
<td>Overall Score</td>
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</table>
Alternative measurements

Ulna length to estimate height

- If height cannot be measured or reliably reported, ulna length can be used to estimate height.
- Measure length of partner’s ulna (forearm) using tape measure, following instructions given in ‘MUST’ Explanatory Booklet.
- Convert ulna length (cm) to height (m) using table in ‘MUST’ Explanatory Booklet.
- Use this calculated height (m) with current weight (kg) to calculate BMI and BMI Score.
- How does the score compare with the score obtained using recalled or measured height?

Same Score? ___________________________ Yes/No
SUBJECTIVE CRITERIA

If you cannot obtain values for weight and height to calculate BMI and recent weight loss, the following factors which relate to them can help you form an overall clinical impression of the individual’s risk category (low, medium or high risk). These criteria should be used collectively not separately but are NOT designed to enable you to assign a score. Mid Upper Arm Circumference (MUAC) may be used to estimate likely BMI category in order to support your impression of the individual’s nutritional risk.

Looking at your client,

- Is he/she thin, of acceptable weight or overweight?
- Have clothes/jewellery become loose fitting?
- Is there a recent history of reduced food intake or swallowing problems?

Mid Upper Arm Circumference (MUAC): use to estimate likely BMI category and as an aid to use of subjective criteria

- If neither height nor weight can be measured or obtained, BMI can be estimated using MUAC. (See ‘MUST’ Explanatory Booklet).
  - If MUAC is less than 23.5cm, BMI is likely to be less than 20kg/m² (underweight)
  - If MUAC is more than 32.0 cm, BMI is likely to be more than 30kg/m² (obese).
- % changes in MUAC measurements over time denote % change in BMI and weight.