The Importance of Screening and the MNA®-SF

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Why Screening?

• To identify those that are **affected by malnutrition** as well as those **at risk**

• To **predict the probability** of a better or worse outcome due to nutritional factors

• To provide a **systematic and structured** approach

• To start therapy **as early as possible**
Outcomes Relevant to Screening

- **Improvement or at least prevention** of deterioration in mental and physical function

- **Accelerated recovery** from disease and shortened convalescence

- **Reduced consumption of resources**
  (e.g. length of hospital stay and other prescriptions)
Diagnostic & Therapeutic Process

- Screening
- Assessment
- Intervention
- Monitoring
Diagnostic & Therapeutic Process

Screening

Assessment

Examination of metabolic, nutritional and functional variables by expert clinician, dietitian or nutrition nurse.

Intervention

Monitoring
Diagnostic & Therapeutic Process

- Screening
- Assessment
- Intervention
- Monitoring
Diagnostic & Therapeutic Process

Screening

Assessment

Intervention

Monitoring
What Makes a Good Screening Tool?

- Addressing precisely **the issue in focus** (validity)
- High **reliability**
- High **practicability** and **applicability**
- Focus on the **relevant population**
- **Inexpensiveness**
- **High acceptance** among health care professionals
The Mini Nutritional Assessment – MNA®

The Established Nutrition Screening Tool in Older Persons

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### Mini Nutritional Assessment (MNA®)

**Screening**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>1 Point</th>
<th>2 Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Has your food intake declined over the past 3 months due to lack of appetite, digestive problems, chewing or swallowing difficulties?</td>
<td></td>
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<tr>
<td>B. Weight loss during the last 3 months</td>
<td></td>
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<tr>
<td>C. Mobility</td>
<td></td>
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<tr>
<td>D. Has your psychological stress or acute disease improved in the past 3 months?</td>
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<tr>
<td>E. Neuropsychological problems</td>
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<tr>
<td>F. Body Mass Index (BMI) weight in kg/height in m²</td>
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</tbody>
</table>

**Screening score**

- Normal: 11-15 points
- At risk: 8-11 points
- Malnourished: ≤<strong>7</strong> points

**Assessment**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
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<th>2 Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>G. Lives independently (not in a nursing home or hospital)</td>
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<tr>
<td>H. Takes more than 5 prescription drugs per day</td>
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<td></td>
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<tr>
<td>I. Pressure sores or skin ulcers</td>
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</tbody>
</table>

**Assessment score**

- Max: 15 points

**Total Assessment**

- Max: 30 points

**Malnutrition Indicator Score**

- ≤17 points: at risk of malnutrition
- >17 points: malnourished
The MNA®
A Reference Tool in Science and Practice

• > 400 Scientific Articles:
  Available at the website of the
  U.S. National Library of Medicine
  via www.ncbi.nlm.nih.gov/pubmed

• Recommended by:
  National & International Scientific Societies
  - The European Society for Clinical Nutrition and Metabolism (ESPEN)
  - The International Association of Gerontology and Geriatrics (IAGG)
  - The International Academy for Nutrition in the Aged (IANA)
Advantages of the MNA®

• Focusing the population at risk
  – The Older Individual

• Applicability in all settings:
  Hospital - Nursing home - Community – Rehabilitation

• Essential component of the Comprehensive Geriatric Assessment
Who Should be Screened?

- Routine yearly screening of all older persons **above age 65**
- **Absolute necessity** for
  - Frail older people
  - Older people with chronic diseases
  - Older people depending on social services or living in assisted living facilities
  - Older people in hospitals and nursing homes
The **NEW**
Mini Nutritional Assessment – Short Form
MNA®-SF

Optimising an established tool
The 2008 – 2009
MNA® International Initiative Initiative

D. Thomas
B. Langkamp-Henken
K. Charlton
R. Visvanathan
M. Kuzuya
A. Tsai
The MNA®-SF (Short-Form)

A: Appetite loss 0-2pts.
B: Weight loss 0-3pts.
C: Mobility 0-2pts.
D: Acute disease 0-2pts.
E: Depression/Dementia 0-2pts.

BMI available

F: BMI 0-3pts.

CC available

R: CC 0 - 3 pts.

12-14 pts. Well Nourished
7 -11 pts. At Risk
0 - 7 pts. Malnourished
Key features of the MNA®-SF

- **Stand alone** nutrition screening tool
- **Calf circumference** as an alternative to BMI
- **Three categories**
  - Well Nourished
  - At Risk
  - Malnourished
Conclusion

- Nutrition screening is **highly relevant** for maintaining and improving health in older people.

- A **universal screening** effort is necessary by all those involved in the care of older people.

- Nutrition screening with the new MNA®-SF is easy.
  
  Takes less than 4 minutes.

- Due to the **Specific Geriatric Focus**, the MNA® should be recommended as the basis for nutritional screening in older people.

- Successful screening will **improve the nutritional status** of the older population.