“The role of the dietitian in the Geriatric team”

Elisabet Rothenberg, Assistant professor, Kristianstad University
Associate professor, Sahlgrenska Academy
elisabet.rothenberg@hkr.se

Högskolan Kristianstad
Healthy → Frail → Sick

- Retired at 59 yrs (mean in Eu)
- Many reach their 100s
- Older adults cover more than a generation
- More healthy and sick individuals
  - The trajectory from health to sickness is individual

- Nutrition part of both prevention and treatment.
The problems of the geriatric patient:

- Cognitive
- Functional
- Oral
- Metabolic
- Nutritional
Malnutrition is reported present in:

- 5% of the entire population
- 10% in those over 65 years
- 15% in ages 75-80 living at home
- 35-40% of all hospital admissions
- up to 60% in care homes
- 20 million in EU
What is the added value of the dietitian?
The role of the dietitian

Briefing Paper on the Role of the Dietitian in the Prevention and Management of Nutrition-related Disorders in Older Adults

Dietitians play a key role in the prevention and management of nutrition-related disorders in older adults (i.e. in this paper referred to as individuals aged over 65 years). Dietitians, as members of integrated multidisciplinary teams, are uniquely qualified to apply scientific evidence to the promotion of healthy eating, individualised nutritional therapy and counselling to individuals and groups (Arvantitakis et al., 2009).
Dietetic core competences working with older adults

• Knowledge, skills and attitudes which underpin gerontology and geriatric nutrition.

• Understanding of basic principles of gerontology and geriatrics, age-related changes in physiology and metabolism.
Dietetic core competences working with older adults

A ‘person-centred’ approach that requires an understanding of food habits for this age group.
What are the nutritional problems?
Nutritional problems in relation to age

- Appetite regulation
  - Anorexia of ageing: An unintentional decline in food intake, and, as a result, loss of body weight, that begins near the end of life; it represents a sign of failure to preserve steady levels of body weight and energy stores.*

- Inflammation
  - Loss of fat free mass and weight
  - ↓ appetite

- Sensory properties impaired

* Donini et al. International Psychogeriatrics, Vol 15 No 1, 2003, pp 73-78
Nutritional problems in relation to age

- Dysphagia
- Alterations in metabolism and body comp
  - ↑ insulin resistance
  - ↓ muscle protein synthesis
  - ↑ body fat ↓ muscle mass
- Cognitive impairment
  - eating disabilities

Negative energy balance
Disease - physical or mental

Disability

Treatment - mainly drugs

Eating behaviour ↓
↓EI

Requirements

Etiology

Symptoms

Signs

Weight loss

Diagnosis

Disease Related Malnutrition
What does the dietitian do?
The nutritional care process

- Malnutrition risk screening
- Nutritional assessment
- Diagnostic procedure
- Nutritional care plan
- Nutritional care
  - Nutrition therapy
- Monitoring and evaluating
- Documentation

Screening is the entry to a structured process

- **MNA** (Minimal Nutrition Assessment)
- **NRS 2002** (Nutrition Risk Screening)
- **MUST** (Malnutrition Universal Screening Tool)
- **SGA** (Subjective Global Assessment)
Nutrition Assessment

• Client History
  – Social situation

• Biochemical Data e.g.
  – Glucose, D-vit status, Albumin

• Anthropometric Measurements
  – BW, BMI, body composition, HGS
Nutrition Assessment

• Nutrition-Focused Physical Findings
  – Weight loss, dysphagia, food and nutrition intake, GI, cognition, eating behaviour etc

• Food/Nutrition-related history e.g.
  – Food habits
  – Food preferences

• Calculation of energy and protein needs
Eating behaviour causing malnutrition

- Eating all meals *but too little*
- Limited food choice
- Eating only one or few meals
- *Can’t eat* without assistance
- Eating behaviour differs from day to day

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>++</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>+++</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--</td>
<td>---</td>
<td>-</td>
<td>--</td>
<td>-----</td>
<td>-</td>
<td>-----</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

HKR
Nutrition diagnosis statement

Inadequate oral intake (NI-2.1)
related to
reduced appetite, altered taste, pain, and sore mucosa due to medication;
as evidenced by
• 4% weight loss in 2 weeks
• Energy intake covering 40% of estimated energy needs
Nutrition diagnosis

Unintended Weight Loss \((NC\ 3.2)\)

related to

inappropriate food choices

as evidenced by

• 10% weight loss in 4 weeks

• Energy intake covering 65 % of estimated energy needs
Intervention - Nutrition Prescription

• 1800 kcal high energy, high protein diet with modified texture

• Oral nutrition supplements high energy/high protein (2 kcal/ml)
  – 50 ml x 4 times per day
Nutrition therapy

Oral nutrition
- Diet
  - Food choice
  - Meal pattern
  - Cooking methods
- ONS

Medical Nutrition
- Tube feed
- Parenteral nutrition

Enteral nutrition
- Feeding assistance

Special diets
- Food modification:
  - Food fortification
  - Texture modification
# Meal pattern

<table>
<thead>
<tr>
<th>Meal</th>
<th>Time</th>
<th>Distribution of energy (%)</th>
<th>kcal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>07.00-08.30</td>
<td>15-20</td>
<td>320-430</td>
</tr>
<tr>
<td>In between</td>
<td>09.30-10.30</td>
<td>10-15</td>
<td>210-320</td>
</tr>
<tr>
<td>Lunch</td>
<td>11.00-13.00</td>
<td>20-25</td>
<td>430-540</td>
</tr>
<tr>
<td>In between</td>
<td>14.00-15.00</td>
<td>10-15</td>
<td>210-320</td>
</tr>
<tr>
<td>Dinner</td>
<td>17.00-18.30</td>
<td>20-25</td>
<td>430-540</td>
</tr>
<tr>
<td>Evening</td>
<td>20.00-21.00</td>
<td>10-20</td>
<td>210-430</td>
</tr>
</tbody>
</table>
Prescription defined by:

- Indication
- Goal
- Ethical considerations
- Type of therapy
  - Timing
  - Amount
- Evaluation
  - Outcome
Ethical considerations

"While reducing morbidity and mortality is a priority in younger patients, in geriatric patients maintenance of function and QoL is often the most important aims"
In the inter-professional care of older adults, dietitians should:

operate at all levels:
  prevention,
  diagnosis,
  intervention,
  monitoring

to maintain or improve nutritional health and promote active and healthy ageing and quality of life in older people.
Thank you