Feasibility study on dietary recommendations for older adults in the European Union

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Workshop JRC Ispra
23-24th October 2014
Dietary recommendations

For the purpose of this workshop, the term “dietary recommendations” is used to represent nutrition or dietary guidelines/advice/guidance, whether nutrient-based or food-based for older adults in Europe (65 years +), they should:

- Have significant contribution to human health, to help maintain cultural diversity and to optimize nutritional status (prevent malnutrition) in a sustainable environment (Joint FAO/WHO consultation, 1998)

- Be appropriate for the region or country, culturally acceptable and practical to implement; they should be consistent, easily understood and easily memorable (EFSA 2010)
What we know...

Diet has an important role to play in healthy ageing

- JRC Science and Policy report
- Council conclusions

Council conclusions on nutrition and physical activity

EMPLOYMENT, SOCIAL POLICY, HEALTH and CONSUMER AFFAIRS Council meeting

Luxembourg, 20 June 2014
Council recognises:

19. That the elderly are vulnerable to malnutrition, particularly because their nutritional requirements change and physical activities tend to decline with age affecting their energy requirements; and that the nutritional requirements for the elderly need further attention.

22. That overall dietary patterns may be more relevant than specific foods in the etiology of diet-related diseases; healthy dietary patterns are characterised by high consumption of fruits and vegetables, consumption of fish and by giving preference to low-fat dairy, whole grains, lean meat and poultry and using vegetable oils as replacement of solid fats where possible, as in the Mediterranean diet or any other diets, following relevant national dietary guidelines/nutrition recommendations;
Council invites the member states to:

#30. **Promote policies and initiatives aiming at healthy diet and sufficient physical activity throughout the lifespan**, starting from the earliest stages of life... and later on during adulthood and **older age**

#32. **Empower citizens and families to make informed choices on diet and physical activity, providing information for all ages** and socio-economic groups, particularly the most vulnerable such as children, adolescents and **elderly**...

Council invites the member states and the Commission to:

#41. **Support the development and/or implementation of national Food and Nutrition Action Plans, other actions and policies to address** common health challenges related to **unhealthy dietary patterns, obesity, malnutrition** and physical inactivity of EU citizens of all age groups, with a **special focus** on children and **elderly**, and where appropriate the implementation of cost-effective solutions;
What we want to know...

Are there dietary recommendations targeting older people in Europe?

- Partially explored this in the JRC report
  - At global level – WHO keeping fit for life (2002)
  - At EU level - EFSA scientific opinions

- Member states?
  - Flaminia Mussio carried out exploratory exercise to identify dietary recommendations targeting older adults in European countries
Overview of Dietary Recommendations for Older Adults in the EU28.

Flaminia Mussio

23rd October 2014

DG JRC, Ispra

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Background
• Given the importance of diet and nutrition in promoting active and healthy ageing, are there targeted dietary recommendations for older people in EU28?

Objective
• To describe the current landscape of dietary guidelines/recommendations for the elderly population across the EU28

• How well are these dietary recommendations translated into targeted advice/messages for older people?
Methodology

• **Search strategy:**
  - Internet-based exploratory search
  - Main focus on National sources: *e.g.* Ministries & Departments of Health, Food & Agriculture, country-specific Nutrition Societies, Institutes for Public Health....

• **Search terms:**
  - Dietary and/or nutritional +
  - guidelines and/or recommendations and/or advice +
  - older and adults or people
  - or elderly +
  - 'country'
Methodology

• Identification of:
  1. (National) dietary recommendations for the elderly population
  2. General (National) dietary recommendations for the adult population
  3. NGO/charity recommendations (where 1 & 2 were not available/identified)

• Differentiation between:
  • Nutrient-based guidelines
  • Food-based guidelines
  • General dietary advice
Findings:

<table>
<thead>
<tr>
<th>(National) dietary recommendations specific to the elderly and/or included in (National) guidelines for adults (n=12)</th>
<th>(National) dietary recommendations not specific to the elderly (n=7)</th>
<th>No recommendations identified (n=9)</th>
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<tbody>
<tr>
<td>Belgium</td>
<td>Bulgaria</td>
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<td>Spain</td>
<td>UK</td>
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<td>(Scotland)²</td>
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² literature review: Older People living in the Community - Nutritional Needs, Barriers and Interventions
Types of guidelines for the Elderly

- Nutrient-based: 10
- Food-based: 1
- General advice: 1

n=12
Our recently published JRC report on nutrition in active and healthy ageing (AHA)

- Determinants of AHA
- Undernutrition and functional decline
- Key nutrients important for AHA
- Whole diet approach
- Future research directions

Nutrients commonly addressed in AHA

**Macronutrients**

- Energy
- Prot
- Fat
- CHO

**Micronutrients**

- B6
- B12
- Folic Acid
- Vitamin D
- Calcium
- Vitamin A
- Vitamin C
- Vitamin E
- Selenium
- Zinc

N = 10
How have recommendations been translated into dietary advice for the elderly?

The French example:

- Addresses nutritional and physical activity needs of older adults
- Gives practical examples of which foods should be consumed by providing explanations, tips, menu suggestions and recipe ideas
- Emphasis on protein, emphasis on fluid intake.
**The French example**

**Idées menus**

<table>
<thead>
<tr>
<th>Menu 1</th>
<th>Menu 2</th>
<th>Menu 3</th>
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<tbody>
<tr>
<td><strong>Petit-déjeuner</strong></td>
<td><strong>Petit-déjeuner</strong></td>
<td><strong>Petit-déjeuner</strong></td>
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<tr>
<td>Thé nature</td>
<td>Café au lait ou café noir</td>
<td>Chicorée ou café</td>
</tr>
<tr>
<td>Pain complet + beurre</td>
<td>Pain grillé + miel</td>
<td>Pain de campagne</td>
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<tr>
<td>+ confiture</td>
<td>1 œuf à la coque</td>
<td>+ tomate de Savoie</td>
</tr>
<tr>
<td>1 fromage blanc + pruneaux</td>
<td>1 kwa</td>
<td>1 fruit pressé ou 1 jus de fruit sans sucre ajouté</td>
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<table>
<thead>
<tr>
<th>Déjeuner</th>
<th>Déjeuner</th>
<th>Déjeuner</th>
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</thead>
<tbody>
<tr>
<td>Salade d'endives et emmental</td>
<td>Salade de lentilles</td>
<td>Salade de tomates et feta</td>
</tr>
<tr>
<td>Poulet basquaise</td>
<td>Saumon de bœuf aux olives et légumes</td>
<td>Persil et cabillaud au micro-ondes</td>
</tr>
<tr>
<td>Riz complet aux petits légumes</td>
<td>Saint-Nectaire</td>
<td>Haricots verts</td>
</tr>
<tr>
<td>Pain</td>
<td>Pain</td>
<td>Pommes de terre vapeur</td>
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<tr>
<td>1 verre de vin</td>
<td>Café</td>
<td>Pain</td>
</tr>
<tr>
<td>Café + 1 carré de chocolat</td>
<td>Compteur de pommes</td>
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<tr>
<th>Goûter</th>
<th>Goûter</th>
<th>Goûter</th>
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</thead>
<tbody>
<tr>
<td>Tisane</td>
<td>Gâteau de riz aux kiwis et cuillers de fruits rouges</td>
<td>Thé</td>
</tr>
<tr>
<td>1 gaufre</td>
<td>1 orange</td>
<td>Pain d'épice</td>
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<tr>
<td>Quelques biscuits secs</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Dîner</th>
<th>Dîner</th>
<th>Dîner</th>
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</thead>
<tbody>
<tr>
<td>Potage aux légumes et vermicelles</td>
<td>Salade de mâche et de berceau rouge</td>
<td>Tagliatelles à la sauce tomate + fromage râpé</td>
</tr>
<tr>
<td>Céleri aux pommes de terre</td>
<td>2 petites-oisé</td>
<td>1 poire</td>
</tr>
<tr>
<td>3 tranches d'ananas en bonne</td>
<td>Pain</td>
<td>Pain</td>
</tr>
</tbody>
</table>

**Fiche recettes**

**Gratin de potiron**

**Préparation : 15 minutes**

- Cuisson : 10 + 15 minutes
- 1 tranche de potiron, 2 oignons, 1 gousse d’ail, 1 sachet de fromage râpé (émmental ou parmesan), sel, poivre.

2. Dans un pli à griller, frottez d’une cuillère d’ail, disposez les couches alternées d’oignon et de potiron, assaisonnez et répartissez de nouveau. Cuisez au four 15 minutes.

**Riz complet aux petits légumes**

**Préparation : 30 minutes**

- Cuisson : 30 minutes
- Pour 2 personnes : 300 g de riz complet, 1/2 poireau, 1 oignon, 1/2 pouce rouge, 2 cuillères à soupe d’huile d’olive, sel, poivre.

How have recommendations been translated into dietary advice for the elderly?

USA example: My Plate for Older Adults

- highlights the nutritional and physical activity needs of older adults
- gives examples of nutrient-rich foods
- Informs on limiting foods that are high in TFA and SFA, limiting salt and added sugars, and eating plenty of whole grains

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3 Tufts University (2011)
Conclusions

• 12 recommendations identified across the EU28

• Of these 10 were nutrient-based, 1 food-based and 1 general advice

• None of the 10 cover all nutrients considered as important for AHA
What we want to know…

Are there dietary recommendations targeting older people in Europe?

- Partially explored this in the JRC report
  - At global level – WHO keep fit for life (2002)
  - At EU level - EFSA scientific opinions

- Member states?
  - Flaminia Mussio carried out exploratory exercise to identify dietary recommendations targeting older adults in European countries
Feasibility analysis of dietary recommendations for older adults in Europe

• How We Design Feasibility Studies.  
  ▪ 8 key areas of focus: Acceptability; demand; implementation; practicality; adaptation; integration; expansion; limited-efficacy testing

• Scientific Opinion on establishing Food-Based Dietary Guidelines  
  European Food Safety Authority. EFSA Journal 2010; 8(3):1460  
  ▪ Scientific process of developing food-based dietary guidelines (FBDG) for the diverse European populations, should follow a stepwise approach of 7 steps

• Keep fit for life : Meeting the nutritional needs of older persons.  
  WHO 2002
Discussions

Is there a demand for dietary recommendations for older adults?

What are the limitations and/or barriers to introduce or promote dietary recommendations?

Identify possible strategies to promote better diet to combat malnutrition

Propose roadmaps to move towards such recommendations in the EU
Discussion 1

Is there a demand for dietary recommendations for older adults?

• Is it too late to start at 65y?
• Will they be useful to optimise intake?
• How will they be used?
• Who would be the end users? Older individuals or carers or health professionals? Free-living vs. institutionalised?
• Is there data to support its use?

• **Consensus?**
**Discussion 2**

What are the limitations and/or barriers to introduce or promote dietary recommendations to specific groups (of older adults)?

- **Stratification:** we discussed this, how will we stratify/what to stratify?

- **How would you introduce or promote dietary recommendations in your region? What would be the challenges?**

- **Tip:** It may help to develop dietary recommendations applicable to your region, in doing so think about the process and potential barriers
  - Acceptability, implementation, adaptation (existing dietary rec. from neighbouring countries), food availability/ accessibility
## 3 groups

<table>
<thead>
<tr>
<th>South</th>
<th>Middle</th>
<th>North</th>
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<tbody>
<tr>
<td>Ines</td>
<td>Isabelle</td>
<td>Elisabet R</td>
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<tr>
<td>Patrizia</td>
<td>Mojca</td>
<td>Susanna</td>
</tr>
<tr>
<td>Claudio</td>
<td>Elizabeth A</td>
<td>Susanne</td>
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<td>Giuseppe</td>
<td>Monika</td>
<td>Anja</td>
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<td>Neile</td>
<td>Andrea</td>
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<tr>
<td>Cristina</td>
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<td>Petros</td>
<td>Theodora</td>
<td>Stefan</td>
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<tr>
<td>Flaminia</td>
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Discussion 3

Can we identify possible strategies to promote better diet for the elderly?

• Ideas for solutions to overcome limitations/ barriers

• Possible strategies/ activities, interventions to promote better diet
Welcome to Day 2
Recap – Discussion 1 (Demand)

- Existing dietary recommendations for healthy adults (except for some nutrients) are sufficient for the healthy older adult population.
- There is a demand for DR for specific groups of older adults.
- Specifying these groups is complex, stratification could be based on age, functional (cognitive and physical) status, frailty, at risk of malnutrition etc.
- Lack of evidence to support that healthy older adults need different dietary recommendations (except for some).
- Pressing need to stratify age groups, especially older old adults.

Public health issue  health care issue
Recap - Discussion 2 (limitations)

- Geriatricians and nutritionists don’t talk to each other
- Nutrition education/ awareness is not part of medical disciplines
- Lack of multidisciplinary approaches
- Well-informed people/ professionals don’t adopt/apply guidelines
- Lack of participatory approach from all key stakeholders
- Lack of comprehensive detection/ screening process for onset of malnutrition outside clinical settings
Recap – Discussion 3 (Strategies)

Strategy 1: Implement comprehensive malnutrition screening

Strategy 2: Develop targeted dietary recommendations

Strategy 3: Implement general screening based on multi-disciplinary teams

Strategy 4: Implement person-centred public health interventions

Additional research

Address contradicting policies
Votes

Strategy 1: 6 votes
Strategy 2: 12 votes
Strategy 3: 9 votes
Strategy 4: 7 votes
Additional research: 9 votes
Contradictory policies: 3 votes

Develop roadmaps in discussion session 4
Discussion 4

Propose roadmaps to move towards strategies to combat malnutrition in older Europeans

Some ideas for discussion

- Define your objectives
- Who is your target audience?
- Where will you implement your strategy? Which level? What setting?
- What's the budget? who is funding it?
- Do you have evidence to support the need of your proposal? If not, where/how will you get it?
- Sustainable long term?
- Monitor process and evaluate success?
- Plan B?