Nutrition & Diet for Healthy Lifestyles in Europe

Supported by the European Commission,
Directorate General for Health & Consumer Protection
&
The Ministry of Health, Greece.

Organized by
University of Crete
School of Medicine
State of the art:
- the relationships between health and nutrients
- translating nutrient targets into effective food-based dietary guidelines (FBDG)
- effective ways of encouraging health promoting changes in eating and physical activity patterns and
- the opportunities and barriers posed by the broader policy framework

Actions:
required to take the scientific recommendations forward

Added value of EU level policy and structures.
### Population goals for nutrients and features of lifestyle consistent with the prevention of major public health problems in Europe

<table>
<thead>
<tr>
<th>Component</th>
<th>Population goals</th>
<th>Levels of evidence&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Activity Levels (PAL)</td>
<td>PAL &gt; 1.75&lt;sup&gt;3&lt;/sup&gt;</td>
<td>++</td>
</tr>
<tr>
<td>Adult Body Weight as BMI</td>
<td>BMI 21-22</td>
<td>++</td>
</tr>
<tr>
<td>Dietary Fat % E</td>
<td>&lt;30&lt;sup&gt;3&lt;/sup&gt;</td>
<td>++</td>
</tr>
<tr>
<td>Fatty Acids % total E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturated</td>
<td>&lt; 10</td>
<td>++++</td>
</tr>
<tr>
<td>Trans</td>
<td>&lt;2</td>
<td>++</td>
</tr>
<tr>
<td>Polyunsaturated (PUFA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n-6</td>
<td>4-8</td>
<td>+++</td>
</tr>
<tr>
<td>n-3</td>
<td>2 g linolenic + 200 mg very long chain</td>
<td>++</td>
</tr>
<tr>
<td>Carbohydrates Total % E</td>
<td>&gt;55</td>
<td>+++</td>
</tr>
<tr>
<td>Sugary food consumption, occasions per day&lt;sup&gt;4&lt;/sup&gt;</td>
<td>≤ 4</td>
<td>++</td>
</tr>
<tr>
<td>Fruit and Vegetables (g.d&lt;sup&gt;-1&lt;/sup&gt;)</td>
<td>&gt;400</td>
<td>++</td>
</tr>
<tr>
<td>Folate from food (µg.d&lt;sup&gt;-1&lt;/sup&gt;)</td>
<td>&gt;400</td>
<td>+++</td>
</tr>
<tr>
<td>Dietary Fibre (g.d&lt;sup&gt;-1&lt;/sup&gt;)</td>
<td>&gt;25 (or 3g/MJ)</td>
<td>++</td>
</tr>
<tr>
<td>Sodium (expressed as sodium chloride) (g.d&lt;sup&gt;-1&lt;/sup&gt;)</td>
<td>&lt;6</td>
<td>+++</td>
</tr>
<tr>
<td>Iodine (µg/d)</td>
<td>150 (infants - 50)(pregnancy - 200)</td>
<td>+++</td>
</tr>
<tr>
<td>Exclusive Breast Feeding</td>
<td>About 6 months</td>
<td>+++</td>
</tr>
</tbody>
</table>
Range of nutrient intakes

% fat energy

% SFA energy
Range of nutrient intakes

**Fibre (g/day)**

- GER: 20
- FIN: 25
- GR: 30
- NL: 35
- A: 40
- B: 45

**Folate (µg/day)**

- UK: 300
- IT: 350
- SP: 400
- NL*: 300
- IRL: 250
- SW: 200
- FIN: 150
- IRL: 100
- SP: 50
- NL*: 0

*The range of nutrient intakes is indicated by the bars for each country.
Prevalent health conditions

- cardiovascular diseases
- cancer
- obesity
- osteoporosis
- iron deficiency disorders
- iodine deficiency disorders
- dental caries

Genetic variations
Population sub-groups

- infants
- elderly
- pregnant woman
- immigrants

Lifestyle factors

- breastfeeding
- physical activity

Particular nutrients

- selenium
- folate
# Suggested strategies for key target groups, settings, and approaches

<table>
<thead>
<tr>
<th><strong>Key Target Groups</strong></th>
<th><strong>Key Settings</strong></th>
<th><strong>Key Approaches</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ From the General Public to population subgroups</td>
<td>✓ Schools</td>
<td>✓ Advocacy</td>
</tr>
<tr>
<td>✓ Professionals: health service, education and other sectors</td>
<td>✓ Health Care</td>
<td>✓ Local/Community Food projects</td>
</tr>
<tr>
<td></td>
<td>✓ Workplace</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Commercial Sector</td>
<td></td>
</tr>
</tbody>
</table>
PUBLIC HEALTH NUTRITION STRATEGIES

- Legislation
- Community Development
- Fiscal Change
- Re-orientation of Services
- Organizational Change
- Health Education
The European Policy Framework: Barriers and Opportunities

Structures
A new nutrition committee for the European Union

Policy Development

Special issues
- Fruit & vegetable consumption
- Breast feeding
- Physical activity

Policy Components
- Education
- Consumer Protection
- Food labeling
- Food composition
- Agricultural policy
Monitor progress over time in Europe and comparisons between member states.

Pan European evaluation system is needed to assess morbidity, mortality, health and nutritional status as well as social and environmental variables. Assessing knowledge, attitudes, lifestyles and channels of communication.
1968
First Nordic nutritional recommendations

Target groups:
- Finnish population
- Pupils and students at schools
- Students in Universities
- Students of vocational schools
- Hospital patients
- Working places
- Pregnant women
- Mothers with infants and children
- Elderly persons
- Military personnel and prisoners
- Daycare children
- Athletes

Wide range of policy decisions:
- Agriculture
- Health and Welfare
- Social Affairs
- Trade and Commerce
- Fisheries and Finance

*having direct and indirect impact on food consumption in Finland*
The national policy in Nutrition in its infancy
Life expectancy at birth, in years, males, in selected EU countries (from WHO, 2000)

EJCN 2002; 56: 796-809
Age-standardized 25-year Mortality per 1000 from Coronary Heart Disease in 16 Cohorts of the 7 Countries Study

CHD Mortality per 1000

- East Finland
- West Finland
- The Netherlands - Zutphen
- Serbia - Zrenjanin
- Serbia - Belgrade
- Italy - Crevalcore
- Italy - Rome
- Croatia - Slavonia
- Italy - Montegiorgio
- Dalmatia - Croatia
- Japan - Tanushimaru
- Greece - Crete
Age-standardized premature death rate (SDR) trends in Greece, Finland, Netherlands and Italy for ischaemic heart disease and cerebrovascular disease (from WHO, 2000)
Males <65 y/100,000

EJCN 2002; 56: 796-809
BODY MASS INDEX IN MEN OF FINLAND AND CRETE (GREECE)

Seven countries Study

Farmers

Lawyers
SERUM TOTAL CHOLESTEROL IN MEN OF FINLAND AND CRETE (GREECE)
SATURATED FAT INTAKE (% of energy) IN MEN OF FINLAND AND CRETE (GREECE)
European nutrition policy: the Roadmap?

- Council Resolution on health and nutrition (2001)
  Food based dietary guidelines for the Europeans (framework)
  EURODIET 1998-2001

But …

momentum within the EU appears to have stalled rather than the anticipated action plan geared to ‘the development of a comprehensive and coherent nutrition policy’

- Status Report on the European Commission’s work in the field of nutrition in Europe (October 2002).
- EU recently endorsed to WHO European Region Action Plan for food and nutrition policy
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