PANEL DISCUSSION: DIET AND PHYSICAL ACTIVITY. CRITICAL ISSUES AND BARRIERS TO REACH THE GOALS

Laura Rossi, Ph.D.

*Istituto Nazionale di Ricerca per gli Alimenti e la Nutrizione, Roma*
Main causes of death in parts of the European Region

![Bar chart showing the main causes of death in different parts of the European region, with data from various regions and years. The chart includes categories such as cardiovascular diseases, cancer, infectious & parasitic diseases, and ill-defined conditions.]

Source: European Health For All Database, WHO Regional Office for Europe, 2001

EuroHeart II Project Workshop, Milan, June 25th, 2012
### Summary of strength of evidence on lifestyle factors and risk of developing cardiovascular diseases

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Decreased risk</th>
<th>No relationship</th>
<th>Increased risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Convincing</strong></td>
<td>Regular physical activity</td>
<td>Vitamin E supplements</td>
<td>Myristic and palmitic acids</td>
</tr>
<tr>
<td></td>
<td>Linoleic acid</td>
<td></td>
<td>Trans fatty acids</td>
</tr>
<tr>
<td></td>
<td>Fish and fish oils (EHA and DHA)</td>
<td></td>
<td>High sodium intake</td>
</tr>
<tr>
<td></td>
<td>Vegetables and fruits (including berries)</td>
<td></td>
<td>Overweight</td>
</tr>
<tr>
<td></td>
<td>Potassium</td>
<td></td>
<td>High alcohol intake (for stroke)</td>
</tr>
<tr>
<td></td>
<td>Low to moderate alcohol intake</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(for coronary heart disease)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Probable</strong></td>
<td>$\alpha$-Linolenic acid</td>
<td>Stearic acid</td>
<td>Dietary cholesterol</td>
</tr>
<tr>
<td></td>
<td>Oleic acid</td>
<td></td>
<td>Unfiltered boiled coffee</td>
</tr>
<tr>
<td></td>
<td>NSP</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wholegrain cereals</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nuts (unsalted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plant sterols/stanols</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Folate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Possible</strong></td>
<td>Flavonoids</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Soy products</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inufficient</strong></td>
<td>Calcium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Magnesium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vitamin C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The International Conference on Nutrition (ICN) Rome, 1992
Plan of action: action oriented strategy:
“Promoting Appropriate Diets And Healthy Lifestyles”

...on the basis of energy and nutrient recommendations to provide advice to the public by disseminating quantitative and/or qualitative dietary guidelines relevant to different age groups and lifestyles and appropriate for the country’s population.

Joint FAO/WHO Expert Consultation on Preparation and Use of Food-Based Dietary Guidelines (Cyprus, 2-7 March 1995)

Overall aim:
Establish scientific basis for food based dietary guidelines (FBDGs) to improve food consumption patterns & nutritional well-being of individuals and populations.
Pilot Action 1

Determinants of Diet and Physical Activity
Building a European Knowledge Hub

The Italian Contribution

Diet and Physical Activity
Diet and Food
Diet and Disease

EuroHeart II Project Workshop, Milan, June 25th, 2012
Summary of Public health Situation In Italy -1

**Italian nutritional profile vs recommendations**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>INRAN/SCAI 2005-06</th>
<th>International Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (Kcal)</td>
<td>2109</td>
<td>-</td>
</tr>
<tr>
<td>Protein (%)</td>
<td>15</td>
<td>10-15</td>
</tr>
<tr>
<td>Fat (%)</td>
<td>36</td>
<td>25-30</td>
</tr>
<tr>
<td>Carbohydrates (%)</td>
<td>49</td>
<td>55-60</td>
</tr>
<tr>
<td>Fiber (g)</td>
<td>18</td>
<td>25-30</td>
</tr>
<tr>
<td>Fruit and Vegetable (g)</td>
<td>420</td>
<td>400</td>
</tr>
</tbody>
</table>

**Prevalence of overweight and obesity**

22.9% overweight
11.1% obesity
Summary of Public health Situation In Italy-2

Physical activity

6 -10 years old

- sport less than 1 h/w
- TV/Videogames more than 3 h/d

Adults (18 – 69 years old)

- sufficient physical activity: 33%
- insufficient physical activity: 37%
- sedentary: 30%

EuroHeart II Project Workshop, Milan, June 25th, 2012
CONSUMPTIONS VERSUS RECOMMENDATIONS
SCIENTIFIC + PRACTICAL CRITERIA

Dietary Reference Intakes
- Protein, fat, fatty acids, carbohydrates, dietary fibre, vitamins, minerals, water

Prevention nutrition related diseases
- e.g. obesity, diabetes, osteoporosis, coronary heart diseases, gout, cancers, dental caries

Food-Based Dietary Guidelines

Traditional meal habits
- Three meals
- Two snacks

Food selection
- Common, non-fortified food
- Few convenience products

Food preferences
- Fruit and vegetables,
  French fries, fast food, soft drinks

EuroHeart II Project Workshop, Milan, June 25th, 2012
OBSTACLES FACED:

Nutrient goals
Nutrient requirements/recommendations

Bottleneck

Food-Based Dietary Guidelines

Food guides & other educational materials
PUBLIC HEALTH NUTRITION STRATEGIES

- Legislation
- Community Development
- Health Education
- Fiscal Change
- Re-orientation of Services
- Organizational Change
Expectations and actions for the future:

- Networking for coordination of regional-based initiatives.
- Standardization and harmonization of data collection methods
- Valorization of existing data bases and capitalization of secondary data e.g. EPIC (epidemiological and clinical data on nutrition, diet, life styles and cancer); Healthy aging (epidemiological, biological and clinical databases); Genetics isolates for chronic diseases. Initiatives that see the participation of several national and European research centers.
- Application of public health cycle of surveillance:
  
  Measuring the physical activity level and nutritional status of population *(Priority: children, elderly, women)*

  Evaluation of programme impact

  REVISED RECOMMENDATIONS AND PUBLIC HEALTH INTERVENTIONS (nutrition and physical activity)