Nutrition and inequalities in health: the role of prevention policy

Marion Devaux
OECD – Health Division
Athens, 25th February 2014
OECD Work on Prevention

Obesity and the Economics of Prevention
FIT NOT FAT
Franco Sassi

"Non-communicable diseases have been a silent killer for too long. They are a major cause of poverty, a barrier to economic development, and a serious threat to achievement of the Millennium Development Goals."
Health Risk Factors

- Nutrition and physical activity important determinants of health
- Risk factors for a number of chronic diseases
- Unequal distribution of healthy lifestyle habits across SES groups
Unhealthy Dietary Behaviours

**Insufficient Fiber consumption**
- **US**: Higher rates, peaking around age 70.
- **England**: Moderate fluctuation, lower rates compared to US.
- **Canada**: Steady lower rates through all ages.
- **Korea**: Very low rates, almost negligible.

**High Fat consumption**
- **US**: Highest rates, increasing significantly with age.
- **Canada**: Moderate rates, with a slight decrease with age.
- **Korea**: Low rates, with a slight increase towards the end of the age range.

*Source: OECD estimates on national survey data.*
Fruit and vegetable consumption by Education level

People in urban areas are less likely to have sufficient levels of physical activity.

Note: insufficient level of physical activity is defined as less than WHO recommended levels

Strong correlation within households

- People living in the same household share lifestyles.

Obesity: a Growing Problem

- Past projection
- New data points

Source: OECD Obesity Update 2012
Inequalities in Overweight by Level of Education

Relative index of inequality

Men

Women

Source: OECD Fit Not Fat 2010
Social Disparities in Child Obesity

Odds ratios for obesity among boys and girls in different countries, categorized by socio-economic status (SES). The source of the data is OECD Fit Not Fat 2010.
## Interventions

<table>
<thead>
<tr>
<th>Health education and health promotion</th>
<th>Regulation and fiscal measures</th>
<th>Primary-care based interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass media campaigns</td>
<td>Fiscal measures (fruit and vegetables and foods high in fat)</td>
<td>Physician counselling of individuals at risk</td>
</tr>
<tr>
<td>School-based interventions</td>
<td>Government regulation or industry self-regulation of food advertising to children</td>
<td>Intensive physician and dietician counselling of individuals at risk</td>
</tr>
<tr>
<td>Worksite interventions</td>
<td>Compulsory food labelling</td>
<td></td>
</tr>
</tbody>
</table>

11
Expectations Must Be Realistic

• Does prevention improve health?
• Does it reduce health expenditure?
• Is it cost-effective?
• Does it improve health inequalities?
Does Prevention Improve Population Health?
Health Outcomes of Prevention

Average health effects per year

- mass media campaigns: 1 LY/DALY every 115/121 people
- food advertising self-regulation
- school-based interventions
- food advertising regulation
- worksite interventions
- food labelling
- physician counselling
- fiscal measures
- physician-dietician counselling: 1 LY/DALY every 12/10 people

Disability-adjusted life years and Life years
Does Prevention Reduce Expenditure on Health Care?
Economic Effects of Prevention

Million (Euro)

phys-diet couns  physician couns  worksite  school-based  mass media  food adv reg  fiscal measures  food adv self-reg

- intervention costs
- Reduction of health expenditure
Economic Effects of Prevention

[Bar chart showing economic effects of different prevention strategies, with categories such as physician rounds, worksite, school-based, mass media, food adv reg, fiscal measures, and food adv self-reg. The chart indicates intervention costs, reduction of health expenditure, and production gains.]
Is Prevention Cost-Effective?
Cost-Effectiveness of Prevention

![Graph showing cost-effectiveness ratios for different interventions over time.](image-url)
Does Prevention Improve Health Inequalities?
Impact on Inequalities

Different social groups have:

- Different risk profiles:
  - Larger benefits in those most at risk (~)

- Different responses to interventions:
  - Larger benefits with a greater response
Impact on Inequalities

% Health gain

- high SES
- low SES

- mass media camp
- food adv self-reg
- school-based int
- food adv reg
- worksite int
- food labelling
- physician couns
- fiscal measures
- phys-diet couns

Impact on inequalities over the life course

**Worksite interventions**

**Fiscal measures**

Policy Implications

• Prevention is an effective and cost-effective way to improve population health

• Prevention can decrease health expenditure and improve inequalities, but not to a major degree

• Comprehensive strategies combining population and individual approaches provide best results

• Multi-stakeholders approach is key to the success of prevention
Thanks for your attention

- OECD Health Prevention work
  [www.oecd.org/health/prevention](http://www.oecd.org/health/prevention)

- OECD Health Statistics
  [www.oecd.org/health/healthdata](http://www.oecd.org/health/healthdata)

- OECD Health Working Papers
  [www.oecd.org/els/health/workingpapers](http://www.oecd.org/els/health/workingpapers)