Health promotion meets sustainability: the challenge of food

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Adelaide Thinker in Residence 2007

2nd Southgate Oration - Wednesday, 7 April 2010
Health perspective: A global health crisis with two dimensions:

Projected prevalence of obesity in adults by 2025

Undernourishment in 2009, by region (millions)
Source: FAO, 2009
Global food crisis – global health crisis

- the global food crisis is a threefold threat:
  - a moral and humanitarian threat,
  - a development threat and
  - a strategic threat (CSIS 2008).

- The World Health Organization has warned of the multiple consequences of the global chronic disease crisis
The Global Strategy has 4 main objectives:

- Reduce risk factors for chronic diseases that stem from unhealthy diets and physical inactivity through public health actions.
- Increase awareness and understanding of the influences of diet and physical activity on health and the positive impact of preventive interventions.
- Develop, strengthen and implement global, regional, national policies and action plans to improve diets and increase physical activity that are sustainable, comprehensive and actively engage all sectors.
- Monitor science and promote research on diet and physical activity
Impact of global food system

- Natural resources such as water, land and energy as well as human and animal health have come under great strain through the way the present food system operates.
- There is increasing recognition that the global food system creates considerable environmental strain and contributes significantly to global warming.
- The global food system contributes to the increase of chronic disease world-wide and thus endangers overall productivity as well as the sustainability of health systems.

Failure of modern politics at all levels of governance
Interdependence – systems approach

Impact of other Sectors on health

New challenge: impact of health on other systems!!!
Challenge: Building a bridge between the health promotion and the sustainable development agenda

In many cases, the best choices for health are also the best choices for the planet; and the most ethical and environmental choices are also good for health.
○ Conceptual starting points
Sustainable development

- “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
- It contains within it two key concepts:
  - the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given;
  - and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.”

(Our Common Future - Brundtland Report, 1987)
Health Promotion

- *Health promotion is the process of enabling people to increase control over, and to improve, their health.*

- Health is created in the context of everyday life – that means it is part of the social dynamics of social organization, lifestyles and patterns of consumption, but also (and this is frequently neglected) part of the interaction with the bio-physical environment.

- Health promotion focuses in particular on the social determinants of health and the capabilities for health – empowerment for health.

Ottawa Charter for Health Promotion (1986)
Health promotion and sustainable development are both normative concepts which aim to bring about a significant paradigm shift in how societal development is understood: they aim at nothing less than to redefine the interface of society with biological and ecological systems. They want to achieve transformative change in society and propose new governance mechanisms and a new futures orientation. “meet present and future needs”

How we live and how we conceive ourselves (Hamilton 2010)
SD and HPR share important similarities:

- a commitment to equity within and between societies and between generations,
- the responsible use of resources – natural and societal,
- policy approaches that recognize the interdependence between sectors with accountability for impact.
Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.”

Rio Declaration 1992
Social sustainability

“The overall guiding principle for the world, nations, regions and communities alike, is the need to encourage reciprocal maintenance - to take care of each other, our communities and our natural environment. The conservation of natural resources throughout the world should be emphasized as a global responsibility.”

Ottawa Charter for Health Promotion 1986
Unsustainable health development

1. ageing of societies without health gains – breakdown of systems and solidarities
2. the generation of children born at the turn of the 21st century could be the first to have a lower health and life expectancy than their parents. (Olshansky, J. et al., 2005).
3. health systems organisation and financing is not sustainable without major reorientation
4. threat of global infectious disease pandemics
5. increasing health inequalities
The combined impacts

- The effects of poor nutrition are life-long, intergenerational and irreversible; they include reduced life expectancy, impaired cognitive development, impaired immunity, and increased maternal and child mortality.

- The global cost burden is estimated at $180 billion annually. The 10-year productivity loss from iron deficiency alone is estimated at $25 billion in 5 Asian countries (ADB, 2004). This puts into question health gains for the next generation.

- It is estimated that better nutrition could save China and India $5bn and $2.5bn respectively, in terms of savings in health care costs, with indirect gains for productivity (Shekar and Lee, 2006).
Key questions we need to consider

- 1) how can joint policy goals be developed so that health promotion can contribute to addressing major challenges facing humankind such as food, water, fuel, changing consumption patterns, climate change and the environment?
- 2) through which strategies can a high level of complementarity and integration be achieved between health and the environmental, economic and social impacts?
- 3) what conceptual framing and common language can help move a shared agenda forward?
Starting point: the systemic nature of the challenge

- From eating to food
- From food to food systems
In the 21st century the goal of governance should be healthy and sustainable development to move from a “silos” to “sustainable systems” approach.
The promotion of a more sustainable, healthier, and more equitable food system is a primary public health goal and key to the environmental agenda.

From a public health and health promotion perspective, the long standing concern with nutrition and diet must be widened to an approach that is concerned with the food system in its many dimensions.
Public health perspective

- A "sustainable food system" is "one that provides healthy food to meet current food needs while maintaining healthy ecosystems that can also provide food for generations to come with minimal negative impact to the environment.

- A sustainable food system also encourages local production and distribution infrastructures and makes nutritious food available, accessible, and affordable to all.

- Further, it is humane and just, protecting farmers and other workers, consumers, and communities."  (APHA, 2007)
- Perspectives on governance
- Equity – health - sustainability
The governance of sustainable food systems requires:

- **Value-base and ethics**: a commitment to human rights, equity and sustainability
- **Horizontal governance**: multi-level interactions (i.e. local/national/ international/global) and multi-actor involvement - both formal and informal - based on an accepted set of rules, procedures, processes, and widely-accepted behavior;

- **Integrated policy approaches**: the formulation and implementation of policies in response to issues related to food, health and the environment.
A more equitable food system

- The present food economy does not deliver enough food to major parts of the growing world population: the number of people lacking access to food has risen.

- For many people in the developing world, food and water are not safe
- Undernutrition is responsible for more than a third of all deaths of children under the age of five - there is an increase in child poverty in the developed nations
- Climate change will hit the poorest countries hardest.
A healthier food system

- Changes in the way food is produced and consumed – combined with low levels of physical activity - have led to a global epidemic of chronic disease: salt, sugar, energy density, portion size
- Food systems that promote increased food intake, non healthful foods, and together with physical inactivity lead to “obesogenic societies”.
- Malnutrition and obesity often exist side-by-side
- Healthier diets could save millions of lives every year and support the environment.
A more sustainable food system

- The present food system delivers low cost food at a high cost to the environment and to human and animal health.

- Today, the entire food system is highly vulnerable to global fossil fuel depletion resulting from the industrialization of agriculture.

- The environmental effects of different dietary patterns are significant.

- Meat production is a powerful contributor to negative environmental impacts, particularly in relation to the use of energy and water.
The global debate

- Three policy concepts - **food justice, food security and food sovereignty** - have emerged in the global food policy debate which link to similar concepts in the health debate: **health as a human right, health security and empowerment for health**.

- These concepts provide an excellent starting point for joint action between health promotion and sustainability in relation to sustainable food policies based on equity.
Socio – political context: the power of the market
Individual choice vs policy action on obesogenic environments
In health as in the environmental debate there is a tendency to individualize the issues at stake.

- Eat less food
- Consume less energy
Consumer society
Make the healthy/green choice the easier choice

Public policy

Market mechanisms

Empowerment of the consumer
Individual Choices
Germany: The Sustainable Shopping Basket

- “The best choice is always a food product that features three specific characteristics: organic, regional, and seasonal.
- It is not always easy to find such products, of course. You should ensure that a product meets at least one of these criteria.”
Growing consumer awareness is creating new patterns of consumption in developed countries. Affluent consumers are increasing their individual commitment to purchase food that is healthy, and that has been produced in accordance with social and ecological principles. It is estimated that the global sales of organic food and drink reached US $46 billion in 2007; and the global fairtrade product sales exceeded US $3.5 billion in 2008 (Organic Monitor, 2009). Consumers are not only keen on identifying the composition but also the provenance of food; and retailers have responded by marketing ‘food from somewhere’
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<th>‘Old’ food poverty</th>
<th>‘New’ food poverty</th>
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<td>Lack of food</td>
<td>Over-abundance of processed foods</td>
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<td>Price pressures</td>
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<td>Fantasy role model</td>
<td>Plump/fat royalty</td>
<td>Thin celebrities</td>
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Lang et al. (2009). Food Policy-Integrating health, environment & society
New products in the market place

- Greenwash
- Health claims
Equation of market behaviour with democracy

- consumer
- citizen

Hamilton 2010   Barber 2007
Strategy of industry – the tobacco wars

- Erode confidence in the science
- Question the links // cause and effect
- Create doubt – establish controversy – create ideological division
- ridicule

- „astro turfing“: give the impression of a popular movement opposed to overregulation and in support of individual freedom

Hamilton 2010
Response:
Health promotion must make the promotion of healthy and sustainable food systems a priority so that healthy and sustainable diets become possible.
National action
### SOME POSSIBLE POLICY RESPONSES

**LANG ET AL. (2009). FOOD POLICY- INTEGRATING HEALTH, ENVIRONMENT & SOCIETY**

<table>
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<th>Policy sector</th>
<th>Goal to ensure nutrition include</th>
<th>Means available</th>
<th>Examples</th>
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<td>Land-use policy</td>
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<td>Animal and plant breeding</td>
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<td>Processing</td>
<td>Food supply</td>
<td>Contracts and specifications</td>
<td>Product reformulation. Change fat content in meat regulations</td>
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<td>Retail</td>
<td>Improving access to health-enhancing foods</td>
<td>Retail and town planning</td>
<td>Food pricing. Location of stores through town planning</td>
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<tr>
<td>Culture</td>
<td>Change thinking about food to reshape demand</td>
<td>Health education. Marketing. Social marketing</td>
<td>Public education on obesity. Controls on marketing at children.</td>
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<td>Society</td>
<td>Equitable access and re-balancing circumstances</td>
<td>Welfare system</td>
<td>School meals</td>
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Governments need an

- “overarching vision” for food, which identifies the roles of all players in the food chain and provides detail of what changes are expected, and how success will be measured.

- cross-Government strategy for food with both the health and sustainability aspects identified
Making diets more sustainable

- A recent study (SDC, 2009) highlighted the changes most likely to have the most significant and immediate impact on making diets more sustainable, in which health, environmental, economic and social impacts were more likely to complement each other. These were:

- reducing consumption of meat and dairy products,
- reducing consumption of food and drink of low nutritional value (i.e. fatty and sugary foods) and
- reducing food waste. All imply significant societal, environmental and economic challenges and significant conflicts, particularly with producers.
Revise food pyramids

Recommandations alimentaires pour adultes, alliant plaisir et santé Pyramide alimentaire

Food Miles
How well travelled is your dinner?
The priority areas include the need to define an environmentally sustainable diet, the need for the government to set an example via public procurement and the need for a strategy to increase production of fruit and vegetables.

Consumers must be provided with more information on the environmental and social impacts of their food purchases and said the government should design a sustainable diet based on evidence from health, economic and environmental sources, it says.

2009 Report of UK Council of Food Policy Advisors reports to Minister of the Environment
The Swedish National Food Administration: 'Environmentally-smart Food Choices'

- The first national food agency to build a new set of guidelines that takes on board the environmental aspects of human food choices alongside individual health matters.

- Priority areas: “Meat – beef, lamb, pork and chicken – is the foodstuff with the greatest impact on the environment,” - cooking fat: reduce palm oil which has the greatest impact on the environment, opt for more olive oil and rape oil, - eat fish and shellfish two to three times a week – but choosing fish from stable stocks, and that show it has been fished or farmed sustainably.

- **BUT:** the European Commission has asked for a revision because the recommendations to eat locally produced food were found to contravene principles of free movement of goods with the EU internal market (USDA, 2009).
Animal protein worldwide

- If the American level of meat consumption (217 pounds per year) were to be replicated worldwide, the global grain harvest could just support 40% of the present world population (Roberts, 2009).
- With a well-balanced plant-based diet, a growing global population could be fed without additional strain on the environment and without increased cost of food (Duchin, 2005).
- Cutting back on beefburgers and bacon could wipe $20 trillion off the cost of fighting climate change.
How Meat Contributes to Global Warming

Industrial animal production consumes especially large amounts of energy, requiring 35 calories of fossil fuel to produce 1 calorie of food energy—not counting the energy required for processing, packaging, cold storage, and transportation of meat.

| CO$_2$-equivalent emissions from producing half a pound of this food... |
|-----------------------------|-----------------------------|
| Potatoes                    | 0.17 mile (0.13 pound of CO$_2$ equivalent) |
| Apples                      | 0.20 mile (0.15 pound of CO$_2$ equivalent) |
| Asparagus                   | 0.27 mile (0.20 pound of CO$_2$ equivalent) |
| Chicken                     | 0.73 mile (0.55 pound of CO$_2$ equivalent) |
| Pork                        | 2.52 miles (1.90 pounds of CO$_2$ equivalent) |
| Beef                        | 9.81 miles (7.40 pounds of CO$_2$ equivalent) |

Scientific American 2009
Low nutritional value
Taxation - litigation
Reduce Waste

- The City of San Francisco in 2007 prohibited city departments and agencies from purchasing single service bottles of water and required that they switch from large bottle dispensers to water-less dispensers that use the city’s tap water. The directive highlights the wastefulness and unnecessary drain of environmental resources caused by the production, transport and disposal of bottled water.

In the US, for instance, as much as 30 percent of food, worth some USD 48.3 billion, is thrown away each year.
- Local level
Local action

- empower communities to engage for healthier food production and consumption.

- Establishing local **Food Policy Councils or Community Food Security Coalitions** in order to develop policies and programs promoting access to health and sustainable food

- Encouraging local authorities and local action groups to embark jointly on **Community food system initiatives** with a particular focus on cooperation with local and regional producers and the provision of targeted food programs and healthy nutrition in schools, health services and work places, as well as food safety and safe drinking water and sanitation.

- Further developing the concept of **food literacy** and linking it to other health promotion concepts – such as health literacy – and health promotion action at the local level.
Local and national policies

Healthy and Sustainable Food for San Francisco Project Organization

Nutritional Standards
- Lending
- Leases
- Mobile permits
- Events/meetings

Project Management Office
- Paula Jones, Director of Food Systems
- Project oversight
- Coordination
- Communication

Policy
- Ordinances
- General Plan integration
- Administrative policy

Food Policy Council
- Integration of directive into municipal code, general plan and other policy related areas
- Monitor progress of implementation
- Provide guidance and oversight

Food Business
- Action plan
- Recognition program
- Wholesale Produce Mix

Hunger/Food Security
- HSA food stamp remote sites
- Benefits SP
- School lunch program

Regional Food
- Farmer’s Markets
- Procurement

Urban Agriculture
- Land audit
- Education & support

Fisheries
- Fish Market project
- Aquaculture

Reporting, Evaluation & Transition
The critical health settings – obesogenic environments

Fast food
Supermarkets
Canteens
School food
hospitals
New policy approaches

- Los Angeles: One year Moratorium on fast food outlets in South Los Angeles
- Consider zoning laws (density of outlets)
- Restrictions on points of sale (schools)
- Legislate transfats
- Require information on calories
Global action
Food policy could well be the next frontier of global politics championed by the international civil society.
Global action

- develop an understanding that the “food system” is a critical determinant of health
- **improve the global regulatory environment** address factors that contribute to diet related diseases, such as global marketing.
- i.e. the development of new global instruments such as an International Code on Marketing of Foods and Non-Alcoholic Beverages to Children and such as children’s television standards
Frontier of global politics

- The economics of the food system are a part of geopolitics and global reconfigurations of power.
- The food and nutrition industry is one of the largest industries in the world: 10% of global gross domestic product, which makes for about $4.8 trillion.
- Food crises have become matters of security and foreign policy: strategic threat of lack of food and water.
- The liberalization and globalization of the food market have strengthened industrial food production. Large scale food producers, traders and retailers have become important players in the global market.
Public Health Trends

- Big Food
- Big Tobacco
“The most political act we do on a daily basis is choosing what to eat”

Professor Jules Pretty, University of Essex, UK
Equation of market behaviour with democracy

- consumer
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Hamilton 2010  Barber 2007