Unequal weight: equity oriented policy responses to the global obesity epidemic

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The National Centre for Epidemiology and Population Health, Australian National University

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Capital Hilton, Washington, DC

Name of Speaker: Sharon Friel

No Relevant Financial Relationship
Outline of talk

1. Inequities in obesity
2. Equity through the Food system
3. Equity through the Social system
4. Equity through the Health system
Inequities between countries

Undernutrition and obesity by the level of GDP per capita

WHO 2006
Inequities within countries

Monterio et al. 2005
INEQUALITIES IN OBESITY RATES

INDIVIDUAL LEVEL FACTORS
- Food Consumption
- Nutrient Intake
- Energy Expenditure
- Psychological factors
- Biological factors

SOCIAL SYSTEM
- Financial capacity
- Living conditions
- Working conditions
- Urban planning & design
- Public facilities
- Social capital
- Eating practices
- Social norms

SOCIAL STRATIFICATION
(e.g. Income, Education, Occupation, Gender, Ethnicity)

Differential Exposure and Vulnerability

FOOD SYSTEM
- Trade agreements
- Production
- Processing
- Distribution
- Advertising
- Price

Adapted Friel, Chopra & Satcher. 2007;335;1241-1243 BMJ
<table>
<thead>
<tr>
<th>Policy arena</th>
<th>Impacts on obesity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>Supply of obesogenic ingredients and foods in the food system</td>
</tr>
<tr>
<td>Cultural</td>
<td>Beliefs, values, social norms that determine diet and PA</td>
</tr>
<tr>
<td>Education</td>
<td>Public understanding of healthy lifestyle choices – ‘health literacy’</td>
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<tr>
<td>Economic</td>
<td>Economic levers that influence supply and demand.</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Content (ingredients), portion sizes and availability of commodities</td>
</tr>
<tr>
<td>Planning</td>
<td>How the built environment shapes diet and physical activity</td>
</tr>
<tr>
<td>Political</td>
<td>Governance and power relations</td>
</tr>
<tr>
<td>Social</td>
<td>Norms, values and ideologies are influenced by government policy</td>
</tr>
<tr>
<td>Trade</td>
<td>Product pricing and terms of trade</td>
</tr>
</tbody>
</table>

1. Inequities in obesity

2. Equity through the Food system

3. Equity through the Social system

4. Equity through the Health system
THE FOOD SYSTEM

AVAILABILITY

AFFORDABILITY

ACCEPTABILITY
Globalised food systems

- Liberalisation of international food policy and trade
- Vertical food supply chains
- Increased foreign direct investment
The role of trade agreements
In 2004 mutton flap consumption was about 600 g per week per adult and comprised 18% of total meat consumption. Draft legislation for import quota to any product that had >40% energy from fat. Restriction justified because of health effects. Under WTO trade rules quotas are perceived as highly trade distorting. WTO accession negotiations resulted in postponement of legislation.
In a 5 year period, the volume of sales of high fat high sugar foods almost doubled in Thailand – foods that were provided by an American Transnational Corporation

Hawkes 2006
### Energy density and fat concentration of available foods, The Gambia

<table>
<thead>
<tr>
<th></th>
<th>Energy density (kJ 100 g⁻¹)</th>
<th>Fat content (g 100 g⁻¹)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Burgers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fried chicken</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S'market pies, pasties</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>S'market ready meals (Indian)</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>S'market ready meals (Italian)</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Fries (chips)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S'market pizzas</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>SUPERMARKET READY MEALS</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>GAMBIAN + HEALTHY CHOICE</strong></td>
<td></td>
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<tr>
<td><strong>S'market healthy options</strong></td>
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</tbody>
</table>

*Prentice & Jebb 2003*
THE FOOD SYSTEM

AVAILABILITY

AFFORDABILITY

ACCEPTABILITY
Perverse incentives

http://www.pcrm.org/magazine/gm07autumn/health_pork.html
Relative Price Changes for select food items, USA 1978–2009

Brownell and Frieden 2009
Taxation policy

$1.00 increase in the price

Rising food prices in Australia - inequitable impact?

Proportion of Food to Total Household Income

**1998-1999**

- **Q1, Q2, and Q3**
- **Q4 and Q5**
- **All**

**2003-2004**

- **Q1**
- **Q2**
- **Q3**
- **Q4 and Q5**
- **All**

Bilenkiji et al, in press
Feeding the demand

Source: Rabobank International

Rabobank 2007
## Table 1: Examples of grocery retail concentration figures

<table>
<thead>
<tr>
<th>Country</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>Five major retailers account for 61% of all food grocery shopping</td>
</tr>
<tr>
<td>France</td>
<td>Five main retailers account for 80% of all food shopping</td>
</tr>
<tr>
<td>Germany</td>
<td>Four major retailers account for 80% of all food shopping</td>
</tr>
<tr>
<td>Ireland</td>
<td>Three major retailers account for 59% of all food shopping</td>
</tr>
<tr>
<td>Finland</td>
<td>Two major retailers account for 79% of all food shopping</td>
</tr>
<tr>
<td>Sweden</td>
<td>Three major retailers account for 61% of all food shopping</td>
</tr>
<tr>
<td>Australia</td>
<td>Two major retailers account for 76% of all food shopping</td>
</tr>
</tbody>
</table>
Poverty of choice

Taste and acceptability - having the ability to choose what is preferable, familiar and culturally appropriate
1. Inequities in obesity

2. Equity through the Food system

3. Equity through the Social system

4. Equity through the Health system
1. Improve daily living conditions

2. Tackle the unequal distribution of power, money and resources

3. Measure and understand the problem and assess the impact of action
An urban planning issue

Fast food provision is closer in more deprived areas

<table>
<thead>
<tr>
<th>Comparison of the Socio-Economic Index for Areas (SEIFA) between areas with shorter travel time to a supermarket, to a fast food outlet or equal travel time to both a supermarket and fast food outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEIFA index</td>
</tr>
<tr>
<td>Areas with shorter travel time to a supermarket</td>
</tr>
<tr>
<td>Areas with equal travel time to both supermarket and fast food outlets</td>
</tr>
<tr>
<td>Areas with shorter travel time to a fast food outlet</td>
</tr>
</tbody>
</table>

Statistical comparison ANOVA

\[ F(\text{df} 242) = 12.8, \]
\[ p = 0.000 \]

Burns & Inglis 2007
1. Time and strain pressures associated with precarious employment conditions correspond with:
   • sedentary work
   • disinclination to use active transport and
   • ready access to energy dense foods

2. More fundamentally, less job control, security, work hour flexibility, and access to paid family leave - undermines the material and psychosocial resource necessary to support healthy behavioural choices
Responsive social policy
Healthy Food Basket Cost as Proportion of Weekly Welfare Entitlements

Friel et al. JECH 2006
% in work living on less than 1US$ per day, Asia Pacific

Proportion of employed people (%)
Power and voice
Participatory urban governance

South American network of Just and Sustainable Cities

- São Paulo, Rio, Recife, Belém, Belo Horizonte, Salvador, Florianópolis and 15 smaller cities
- Incorporated a network of 200 smaller cities against corruption
- Latin America: Colombia, Argentina, Chile, Ecuador, Peru

Meeting community needs
Fair representation of people affected by decisions

Slide: Daniel Becker
1. Inequities in obesity
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Dietary guidelines


Advising consumers on what to eat

- Food needs to be readily available, affordable and socially acceptable
Policy Coherence?
Coherent public policy

- Health oriented food trade and production is critical
- Issues of nutrition security, equity and cultural practice
- Requires inter-sectoral action and re-focused food governance

“Food Matters”. UK Cabinet Office 2008