Evidence for Government Action on Nutrition
Implications for Canadian Policy

CSPI Championing Public Health Nutrition
Ottawa, Oct 25-26, 2010

Mary R. L’Abbé, PhD
Earle W. McHenry Professor and Chair,
Dept of Nutritional Sciences,
University of Toronto
Some Important Canadian Nutrition Policy Issues “on the table”

- Sodium
- Obesity – calories and portion size
- Trans fat – What’s next?
- Simplified or front-of-package labelling; restaurant labelling

All Require

- Understanding the Canadian food supply
  - Pre-packaged foods
  - Restaurant foods and other foods consumed outside the home
- Understanding the consumer
- Follow-up, monitoring, and public reporting to sustain progress
1. Sound scientific basis for government action

- Establish the science/health case/commitment to action
2. Understand the food supply – Where’s the Salt?

Used with permission – www.CartoonStock.com
Sodium content in some foods sold in the Canadian Market

- 1357 mg of Na (57% of DV) per 1 tray (320 g)
- 650 mg of Na (27% of DV) per 1 can (284 mL)
- 330 mg of Na (14% of DV) per 50 g serving
- 620 mg of Na (26% of DV) per 1 pogo (75 g)
- 480 mg of Na (20% of DV) per 125 mL serving
- 280 mg of Na (12% of DV) per ¼ cup (61 g)
- 12-inch sub* with 6 grams of Fat or Less (include wheat bread (9-grain), lettuce, tomatoes, onions, green peppers, pickles and olives)
- 1357 mg of Na (57% of DV) per 1 tray (320 g)
- 309 mg of Na (13% of DV) per 2 slides (71 g)
- 2120 mg Na (88% DV) 12-inch sub*
Sodium in the same food varies internationally (example)*

### Kelloggs Breakfast Cereals (Sodium mg/100 g)

<table>
<thead>
<tr>
<th>Country</th>
<th>All Bran</th>
<th>Corn Flakes</th>
<th>Special K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>861</td>
<td>733</td>
<td>931</td>
</tr>
<tr>
<td>USA</td>
<td>258</td>
<td>714</td>
<td>710</td>
</tr>
<tr>
<td>Netherlands</td>
<td>500</td>
<td>720</td>
<td>450</td>
</tr>
<tr>
<td>France</td>
<td>500</td>
<td>700</td>
<td>450</td>
</tr>
<tr>
<td>Australia</td>
<td>380</td>
<td>720</td>
<td>536</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>450</td>
<td>700</td>
<td>450</td>
</tr>
</tbody>
</table>

*Source: WASH International Products Survey, July 2009*
Why tackling sodium alone is not enough

Example – Canadian Breakfast cereals with and without sodium claims [2]

<table>
<thead>
<tr>
<th>Per NFT serving</th>
<th>Na (mg)</th>
<th>Calories</th>
<th>Fat (g)</th>
<th>Sugar (g)</th>
<th>Fibre (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No claim (n=111)</td>
<td>175 ± 82</td>
<td>149 ± 42</td>
<td>2.1 ± 1.9</td>
<td>8.4 ± 4.3</td>
<td>3.6 ± 2.8</td>
</tr>
<tr>
<td>With Claim² (n=37)</td>
<td>61 ± 55</td>
<td>193 ± 51</td>
<td>3.7 ± 3.6</td>
<td>10.0 ± 4.7</td>
<td>4.3 ± 1.2</td>
</tr>
<tr>
<td>Significance (P)</td>
<td>.005</td>
<td>ns</td>
<td>.001</td>
<td>ns</td>
<td>.001</td>
</tr>
<tr>
<td>% Change</td>
<td>↓ 65%</td>
<td>↑ 23%</td>
<td>↑ 43%</td>
<td>↑ 16%</td>
<td>↑ 16%</td>
</tr>
</tbody>
</table>

Source: [1] L’Abbe et al, Food Label Information Program (unpublished data); collected spring-summer, 2010. [2] Claims such as low sodium, sodium reduced, or no added salt

Sodium-reduced cereals have more fat, more sugar and, therefore, more calories.
And portions have gotten larger

<table>
<thead>
<tr>
<th>Item</th>
<th>CNF</th>
<th>Kids</th>
<th>Small</th>
<th>Med</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size mL (oz)</td>
<td></td>
<td>340(12)</td>
<td>454(16)</td>
<td>625(22)</td>
<td>900(32)</td>
</tr>
<tr>
<td>mL / cals Calories</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk (2%)</td>
<td>250 / 129</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange juice</td>
<td>125 / 58</td>
<td>130</td>
<td>180</td>
<td>260</td>
<td>360</td>
</tr>
<tr>
<td>Shake chocolate</td>
<td>250 / 223</td>
<td>270</td>
<td>440</td>
<td>640</td>
<td>950</td>
</tr>
<tr>
<td>Cola/soft drink</td>
<td>250 / 110</td>
<td>110</td>
<td>160</td>
<td>230</td>
<td>320</td>
</tr>
<tr>
<td>Diet Cola/soft</td>
<td>250 / 0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
It all starts to add up ...

<table>
<thead>
<tr>
<th>Item</th>
<th>Serv (g)</th>
<th>Cals</th>
<th>Fat</th>
<th>Sat fat (g)</th>
<th>Sodium (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bk sandwich</td>
<td>150-270</td>
<td>400-700</td>
<td>21-49</td>
<td>6-18</td>
<td>800-1600</td>
</tr>
<tr>
<td>Hash browns (med)</td>
<td>50-150</td>
<td>160-450</td>
<td>10-30</td>
<td>1-4</td>
<td>360-850</td>
</tr>
<tr>
<td>Breakfast meal</td>
<td>200-420</td>
<td>560-1150</td>
<td>30-79</td>
<td>7-22</td>
<td>1100-2450</td>
</tr>
<tr>
<td>Hamburger (sing-triple)</td>
<td>100—481</td>
<td>250-1240</td>
<td>8-83</td>
<td>3-32</td>
<td>510-1470</td>
</tr>
<tr>
<td>Fries (med)</td>
<td>115</td>
<td>350</td>
<td>17</td>
<td>2-3</td>
<td>270-790</td>
</tr>
<tr>
<td>Hamburger meal</td>
<td>215-600</td>
<td>600-1600</td>
<td>25-100</td>
<td>5-35</td>
<td>800-2260</td>
</tr>
</tbody>
</table>
Restaurant Foods (analyzed vs CNF) (i) Fish and Chips

Why such high sodium? – probably portion size

- Approximately 2x portion size (422 g vs 210 g)
- Contains the expected sodium levels for portion size (from the 2x weight, 2x calories; 2x fat levels)

Source: Toronto Midtown Post (Jan 2010) analyzed data
Restaurant Foods: (ii) Pad Thai

Why such high sodium? – probably portion size + additional sodium from – the sauce??

- Approximately 3 to 4 x portion size (754g vs 171 g in the CNF)
- But (9x fat level; 9x sodium level)

Source: Toronto Midtown Post (Jan 2010) analyzed data
3. Trans - Monitoring Progress over time (2005 to 2009)

Major Food Sources of Trans – success at removal

- Muffins: ~89-100%
- Donuts: ~29%
- Rice: ~82%
- French fries: ~79%
- Croissant: ~25%
- Bread: ~100%
- Margarine: ~0%
- Cookies: ~68%
- Crackers: ~94%
- Pizza: 67%-100%
- Pasta: ~62%

What next for trans?

- For many categories significant progress has been made
  - Regulations to capture the rest; overall cost minimal
- A few categories with significant challenges
  - What is needed to help those few categories to eliminate trans?
- Regulations ensure a level playing field and prevent slippage or non-compliant imports from seeking price advantage
- Prevents regional standards being introduced
The power and importance of labels and claims on the front of food packages
Industry/NGO led instruments – Symbols / Logos

Can depict

- Generally “healthy” choices
- Disease risk reduction claims e.g. heart symbol
- Nutrient content claims e.g. “0 trans fat”
- Highlight specific healthful ingredients e.g. fibre
- Quantitatively depict part of the Nutrition Facts Table
Concerns ...

- Lack of consistency among programs
  - No standardized criteria exist
- Oversimplification of complex messages, particularly when symbol refers to a health benefit
- Criteria used for any particular program are not readily identifiable by the consumer
- Less consideration given to Nutrition Facts table, i.e. overall nutritional profile of the food, calories or portion size
As a Result ...

- Consumers not able to compare one product to another because of varying criteria
- Consumers may misinterpret similar symbols as having the same meaning when in fact may be based on different criteria
- Consumers may view these products as “healthier” than those without symbols
- Criticism from health professionals and consumers when symbols are on foods with “negative” attributes (added sugars, high sodium ...
5. Media/consumer awareness –
All contribute to government action

- Political/government leadership or reaction
- Government or health led social marketing/consumer awareness campaigns
  - A – Awareness - of food component / health link
  - B – Action - what consumers can do themselves
  - C – Information - what to look out for e.g. high trans or high sodium or high calorie foods
    (i) types/classes of foods or (ii) brand comparisons within categories
- Media led campaigns / in-depth TV or news articles / series of articles,
- Health / consumer / NGO – led (partnered) campaigns, public service announcements
- Industry led “health campaigns” or company or product specific marketing campaigns
Collective Public Health Nutrition requires effort from all sectors
Thank You!

mary.labbe@utoronto.ca
www.utoronto.ca/nutrisci/faculty/Labbe