Changing the Food Environment to Reduce Cardiovascular Disease Risk

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NYC Department of Health and Mental Hygiene
Opportunities

- Trans Fat
- Calorie Labeling
- Salt
NYC Trans Fat Regulation
People Are Eating Out More

Heart Disease Is New York City’s Leading Cause of Death

Data Source: NYCDOHMH Bureau of Vital Statistics, 2005
Health Code Amendment Passed to Restrict Artificial Trans Fat

- Restriction of trans fat phased in over 18 month period
  - July 1, 2007: frying oils and spreads
  - July 1, 2008: all other foods

- Foods served in manufacturers’ original sealed, packaging are exempt

- Applies to all NYC restaurants and mobile vending commissaries
Implementation Success

July 1, 2007 Deadline
• Fry oils & spreads
• Violations largely due to failure to order ZGTF spreads

July 1, 2008 Deadline
• All other foods
• Violations largely due to lack of appropriate documentation

Compliance
• 93% as of January 2009
• Only 3% of violations due to trans fat use
Trans Fat Help Center: What We Heard From Industry

- **Helpline:**
  - Predominant topic is enforcement
  - A few bakers calling with technical questions

- **Website:**
  - Range between 7,000 - 9,000 hits per month

- **Class attendance:**
  - First 1.5 years – averaged ~45 attendees per month
  - Mostly institutional, but interest is fading

- **Reformulation Issues:**
  - Frying and spreading
    - None
  - Baking
    - Some technical challenges but all appear surmountable
    - Instances of supply issues resolved quickly by the market
Replacements Continue to Enter the Market

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### 0 Grams Trans Fat Fry Oils and Shortenings

**Light/Medium Duty**

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>DESCRIPTION</th>
<th>SATURATED FAT %</th>
<th>KOSHER CERTIFIED AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENOVA</td>
<td>Soybean and canola blend; interesterified</td>
<td>4%</td>
<td>YES</td>
</tr>
<tr>
<td>CANOLA OIL</td>
<td>at brands</td>
<td>7%</td>
<td>YES</td>
</tr>
<tr>
<td>CANOLA WITH TBHQ AND DIMETHYL POLYISOBUTANE</td>
<td>at brands</td>
<td>7%</td>
<td>YES</td>
</tr>
<tr>
<td>SUNFLOWER OIL</td>
<td>at brands</td>
<td>11%</td>
<td>YES</td>
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<tr>
<td>SAFFLOWER OIL</td>
<td>at brands</td>
<td>12%</td>
<td>YES</td>
</tr>
<tr>
<td>GRAPE SEED OIL</td>
<td>at brands</td>
<td>13%</td>
<td>YES</td>
</tr>
<tr>
<td>OLIVE OIL</td>
<td>at brands</td>
<td>15%</td>
<td>YES</td>
</tr>
<tr>
<td>SOYBEAN OIL</td>
<td>at brands</td>
<td>15%</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Heavy Duty**

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>DESCRIPTION</th>
<th>SATURATED FAT %</th>
<th>KOSHER CERTIFIED AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANOLA HARVEST</td>
<td>High oleic canola; TBHQ and dimethyl polyisobutane</td>
<td>7%</td>
<td>YES</td>
</tr>
<tr>
<td>CARROLL</td>
<td>High oleic canola</td>
<td>7%</td>
<td>YES</td>
</tr>
<tr>
<td>CARROLL</td>
<td>High oleic canola</td>
<td>7%</td>
<td>YES</td>
</tr>
<tr>
<td>FRY-ON 2T</td>
<td>Canola and corn blend; TBHQ and dimethyl polyisobutane</td>
<td>7%</td>
<td>YES</td>
</tr>
<tr>
<td>IOWA NATURAL LOW SAT</td>
<td><a href="http://www.iowanatural.com">www.iowanatural.com</a></td>
<td>7%</td>
<td>YES</td>
</tr>
</tbody>
</table>
Product Reformulation Results in Overall Decrease of Trans Fat + Saturated Fat in Canada

Trans Fat Regulation Spread

Trans Fat Restriction Approved

States
• California

Cities
• Albany County, NY
• Boston, MA
• Seattle/King County, WA
• Baltimore, MD
• Brookline, MA
• Montgomery County, MD
• Nassau County, NY
• Philadelphia, PA
• Wilmington, MA
• Westchester County, NY
www.nyc.gov/transfat
NYC Calorie Labeling Regulation
Fast Food Associated with Higher Caloric Intake & Obesity

• Fast food $\rightarrow$ higher calorie intake
  – Adults: 205 more calories/day
  – Children: 155 more calories/day
  – At once/week, would lead to 3 pound weight gain/year

• More fast food $\rightarrow$ higher BMI
  – Higher BMI associated with children in families that primarily eat fast food
  – Among adolescents, more days of fast food predicts increases in BMI

Calorie Information Makes a Difference in Amount People Eat

Did not see calorie info

Saw calorie info and said it changed purchase

765.5 Calories

646.9 Calories

118.6 fewer calories purchased when info seen and used*

Average calories of purchased food

* 99 fewer calories compared to those who saw information but said it did not influence purchase.
Calorie Labeling Regulation

- Applies to all chains with > 15 locations nationally

- Calories must be posted prominently on menu boards and menus is association with menu item

- Calories must be posted on item tags as well where present

- Calories must be posted for combo meals
Strategies to Reduce Salt Intake
Outline

• Background
  – Scientific and historical context
• U.K. model
• U.S. nationwide effort
• Next steps
High Blood Pressure Leads to Heart Attack and Stroke

- Heart disease is leading cause of death in NYC and the U.S.
- 25% of NYC adults have high blood pressure
- High blood pressure is the single largest contributor to health disparities
- Even people without high blood pressure benefit from lower blood pressure
Even people with “normal” blood pressure have many strokes and heart attacks.

Scientific Evidence:
Dietary Sodium and Blood Pressure
DASH-Sodium Trial

Blood pressure decreases in response to lower levels of sodium intake

Systolic Blood Pressure

Salt Intake

High 3,450 mg/day
Intermediate 2,300 mg/day
Low 1,200mg/day

Sacks F. et al. Effects on BP of Reduced Dietary Sodium and the DASH Diet. NEJM. Vol. 344, No. 1. 1/04/01
Distribution of BP Levels in U.S. Adults, Ages 18 and Older (NHANES III)

- "Normal" <120/80: 42%
- Prehypertension SBP 120-139 or DBP 80-89: 31%
- Hypertension SBP ≥140 or DBP ≥90: 27%

Chart source: Appel, L
Data Source: Wang, Hypertension 2004
Small Reductions Across the Population Can Save Many Lives


<table>
<thead>
<tr>
<th>Reduction in SBP (mm Hg)</th>
<th>% Reduction in Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stroke</td>
</tr>
<tr>
<td>2</td>
<td>-6</td>
</tr>
<tr>
<td>3</td>
<td>-8</td>
</tr>
<tr>
<td>5</td>
<td>-14</td>
</tr>
</tbody>
</table>
Most Adults Eat More than Twice the Adequate Intake of Sodium

Most Salt Comes from Processed and Restaurant Foods

- Processed and restaurant foods: 77%
- Naturally occurring: 12%
- Home cooking: 5%
- While eating: 6%

Source: CSPI. Adapted from: http://www.cspinet.org/salt/saltreport.pdf
UK Campaign

• Goal: Reduce salt intake by 1/3 from 2005 to 2010
  – >50 commitments from all sectors of food industry
  – Gradual reductions across product categories

• Salt reductions achieved in processed and restaurant foods
  – Heinz: 28% to 33% ↓ in some canned products
  – Kellogg’s: 25% ↓ in cornflake cereals
  – Kraft: 30% ↓ in cheese and cheese snacks
  – Nestle: 25% ↓ in soup mixes and bouillons
  – KFC: 15% ↓ in baked beans
  – McDonald’s: 30% ↓ in chicken nuggets

• Population salt intake reduction is encouraging:
  9.5 g in 2000-2001 to 8.6 g in 2008 (3,800 mg to 3,440 mg)

• Industry is proud of progress

Proposed U.S. Strategy

- Government-industry collaboration
- Set targets for reduction that are:
  - Substantive
  - Achievable
  - Gradual
  - Voluntary
  - Measurable
Steps with Industry and Partners

- Extensive discussions with UK
- Attendance at ASTHO-NACCHO, GMA and NRA salt conferences
- One-on-one meetings with industry over past year
- Discussions with city and state public health agencies
- NYC–hosted meetings with industry
Goal: 50% Reduction in Salt in Restaurant and Processed Foods over 10 Years

Reduce salt in restaurant and processed foods by 50%

~40% reduction in population salt intake

Decrease in blood pressure

= 150,000 lives saved each year
Toward a 40% Reduction in Intake

Interim goal: 20% reduction in intake in 5 years

• 4-year food category targets for sodium content in restaurant and processed foods
  – Targets correspond to population intake goal

• 2-year *interim* food category targets for sodium content in restaurant and processed foods
  – *Interim* targets assure progress toward 4-year targets
Setting Targets

1. Define categories by food type
2. Prioritize categories by percentage contribution to sodium intake
3. Establish targets
Nationwide Effort

Leading national health organizations have signed on to become partners:

- American College of Cardiology
- American College of Epidemiology
- American Heart Association
- American Medical Association
- American Public Health Association
- American Society of Hypertension
- Association of Black Cardiologists
- International Society of Hypertension in Blacks
- Joint Policy Committee, Societies of Epidemiology
- National Hispanic Medical Association
- National Kidney Foundation, Inc.
- New York State Chapter, American College of Cardiology
- Preventive Cardiovascular Nurses Association
- World Hypertension League

Nationwide Effort

Association of State and Territorial Health Officials
National Association of County and City Health Officials
National Association of Chronic Disease Directors

States
- Alaska Department of Health and Human Services
- California Department of Health Services
- District of Columbia Department of Health
- Delaware Health and Social Services, Division of Public Health
- Maine Center for Disease Control and Prevention
- Massachusetts Department of Health
- Michigan Department of Community Health
- New York State Department of Agriculture and Markets
- New York State Department of Health
- North Carolina Department of Health and Human Services, Division of Public Health
- Oregon Department of Health and Human Services, Division of Public Health
- Pennsylvania Department of Health
- Tennessee Department of Health
- West Virginia Department of Health and Human Resources, Bureau of Public Health

Cities
- Chicago Department of Public Health
- Los Angeles County Department of Health Services
- New York City Department of Health and Mental Hygiene
- Philadelphia Department of Public Health
- Public Health, Seattle and King County

Next Steps

• Setting sodium targets by food category is already taking place in the U.K. and other countries

• Industry-wide reformulation would likely require collaborative effort

• Government action is warranted

• Industry reductions can be achieved. Reductions have happened in other countries and are starting here.
Thank You