Promotions for Healthy and Unhealthy Foods in Minnesota Schools, 2008-2012

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# Acknowledgements

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## Affiliations

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  - Dept. of Family Medicine & Community Health¹
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**NO CONFLICT OF INTEREST TO REPORT**
Acknowledgements

Funding:
National Institute of Child Health and Human Development (5R01HD070738-02, PI: M.S. Nanney).

Publications:
Best Practices for Promoting Healthy Foods

**Engagement Strategies**
- Provide calorie and nutrition information for foods available at school
- Conduct taste tests
- Provide nutrition lessons in school cafeteria
- Identify preferred healthy foods

**Environmental Strategies**
- Price healthy foods at a lower cost
- Label healthy foods with appealing names
- Display fruits and vegetables accessibly
- Display fruits and vegetables attractively
Advertising for Unhealthy Foods

• Food and beverage marketers spent $149 million on in-school marketing in 2009
• Students are vulnerable to marketing, particularly when it is lent legitimacy by placement in school settings
• Policies are needed to limit in-school exposure to advertising for energy-dense, nutrient-poor foods (e.g., soft drinks)
Outline

• Have there been secular changes in the implementation of healthy food promotion strategies from 2008-2012?
  – Overall rates
  – Disparities by school characteristics

• Have there been secular changes in policies that prohibit advertising for unhealthy food from 2008-2012?
  – Overall rates
  – Disparities by school characteristics

• Are school efforts to coordinate health improvements related to implementation of strategies and policies?

• Are schools that implement healthy food promotion strategies more likely to implement advertising policies?

• Do food promotion strategies and advertising policies support healthy dietary behaviors?
Engagement Strategies, 2008-2012

- Provide calorie and nutrition information:
  - 2008: 52%
  - 2010: 54%
  - 2012: 53%

- Conduct taste tests:
  - 2008: 29%
  - 2010: 27%
  - 2012: 38%

- Provide nutrition lessons in cafeteria:
  - 2008: 21%
  - 2010: 23%
  - 2012: 22%

- Identify preferred healthy foods:
  - 2008: 60%
  - 2010: 62%
  - 2012: 61%

ScOPE
School Obesity-related Policy Evaluation
Environmental Strategies, 2012

- Price healthy foods at lower cost: 22% in 2008, 18% in 2010, 17% in 2012
- Label healthy foods with appealing names: 37% in 2012
- Display fruits and vegetables accessibly: 75% in 2012
- Display fruits and vegetables attractively: 68% in 2012
Healthy Food Promotion Strategies:
Significant trends over time by school location and free/reduced-price meal eligibility

Conduct Taste Testing

Price Healthy Foods at Lower Cost
Disparities in Implementation, 2012

• School location
  – Town/rural: fewer environmental strategies overall

• School level
  – Middle schools: less use of price incentives

• Free/reduced-price lunch eligibility
  – >40% eligible: lower accessibility of fruits and vegetables, less likely to provide nutrition lessons
## Policies Banning Advertising, 2008-2012

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2010</th>
<th>2012</th>
<th>p value</th>
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</thead>
<tbody>
<tr>
<td><strong>Prevalence by school location (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building</td>
<td>61.0</td>
<td>63.2</td>
<td>61.2</td>
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<tr>
<td>Grounds</td>
<td>48.7</td>
<td>50.5</td>
<td>46.1</td>
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<tr>
<td>Buses</td>
<td>70.0</td>
<td>70.8</td>
<td>69.1</td>
<td>0.46</td>
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<td>57.9</td>
<td>60.9</td>
<td>56.6</td>
<td>0.02</td>
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<tr>
<td><strong>Banned advertising score (mean)</strong>*</td>
<td>2.4</td>
<td>2.5</td>
<td>2.3</td>
<td>0.07</td>
</tr>
</tbody>
</table>

*Number of locations where advertising of unhealthy foods and beverages were banned
Significant trends over time by school location

Prohibit advertising in school publications

- City
- Suburb
- Rural

Percentage

2008 2010 2012

Slg. diff from Rural

ScôPE
School Obesity-related Policy Evaluation
Disparities in Advertising Policies, 2008-2012

• School location
  – Town/rural: less likely to prohibit advertising on school grounds

• School level
  – High schools: less likely to prohibit advertising in the school building, on school grounds, on buses, and in publications

• Free/reduced-price meal eligibility
  – No disparities observed
Linkages with School Efforts to Coordinate Health Improvement

Banned Advertising Policies:
No association with any measure of efforts to coordinate school health improvements

Healthy Promotion Strategies:
Implementation linked to greater diversity of stakeholders on school health councils
Advertising Policies and Environmental Strategies

Number of locations where advertising of unhealthy foods/beverages was banned

Number of implemented strategies

0 1 2 3 4

1.4 1.6 1.5 1.7 2
Linkages with Students’ Dietary Behaviors

**Banned Advertising Policies:**
No association with student fruit/vegetable or sugar-sweetened beverage intake

**Healthy Food Price Incentives:**
Implementation linked to greater fruit/vegetable intake only among 12th grade students

No association with student sugar-sweetened beverage intake
Conclusions

• Little change from 2008-2012 in the use of strategies to promote healthy eating
• Little change in efforts to limit exposure to advertising for unhealthy foods
• Town/rural schools lagged behind city and suburban schools
• Positive influence of school health councils
• Price incentives promoted healthy choices