Local Strategies to Address Hunger through School Breakfast

Libby Stegger

Susie Nanney

Cancer Health Equity Conference
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Learning objectives

- Identify ways to improve access to the School Breakfast Program (SBP) in rural Minnesota high schools.

- Describe the extent of hunger among rural Minnesota adolescents

- Learn the size of the breakfast meal gap and intervention methods effective at shrinking the gap.
Outline

• Identify the extent of hunger in the U.S.

• Describe 2 ways to address healthy food access and hunger through the School Breakfast Program
  • breakfast study
  • Challenges/Incentives for schools

• Discuss ways to effectively engage schools
Trends in the prevalence of food insecurity and very low food security in U.S. households, 1995-2011

Prevalence rates for 1996 and 1997 were adjusted for the estimated effects of differences in data collection screening protocols used in those years.

About the School Breakfast Program (SBP)

- Evidence that SBP participation:
  - Improves dietary intakes
  - Decreases risk of food insecurity
  - Improves academic performance
  - May protect against childhood obesity

- Access to school breakfast decreases the risk of marginal food insecurity and breakfast skipping, especially among low income children.

- Generally low participation
  - Much less participation than the School Lunch Program
  - Decreases with grade level
breakFAST
fueling academics & strengthening teens
Study Purpose

- Test whether improving access to the school breakfast program improves participation
  - Improved access =
    - Service outside the traditional cafeteria,
    - Eating outside of the traditional cafeteria
  - Marketing campaign
Key Strategies

- All inclusive School Breakfast Expansion Team (SBET)
- Grab n’ Go service and menu
- 2\textsuperscript{nd} chance breakfast (after the bell)
- Hallway, classroom eating
- Kick-off
- Taste testing
- Student-driven marketing
- \textit{UMN Extension (training and school liaison/support)}
Rural High School Focus

Map by: Minnesota Population Center
What does expanded access look like?
What does marketing look like? School Spirit

HUTCH Breakfast

Grab N’ Go Breakfast is located at the Main Entrance
It’s served from 7:10am - 7:30am
Breakfast costs $1.15

WILLMAR GRAB ‘N’ GO BREAKFAST

BREAKFAST

PAWS FOR BREAKFAST

GRAB N’ GO BREAKFAST

Served
7:35-8:10

located at the Commons area

$1.30
What does marketing look like? Movies
What do communications/other promotions look like?

- Daily morning announcements
- Assembly skits
- T-shirts, water bottles
- Homecoming parade float w/gift cards
- Student and staff meeting taste testing
- Free breakfast
- Newspaper and TV PR
What schools are saying...

- Decline, steady increase, instant doubling and tripling of participation
  - Both full paid and have free/reduced students
  - Upper classmen
- Most schools have from 2-5 additional hallway carts
- Teachers report more attentive students
- Custodial service reports little to no added mess
- Food service staff like the program and report student “thank you’s”
- Principal report of decrease in disciplinary events near breakfast cart
- Food Service Director reports of turn around among “nay sayers”
Measurements: 2 Sources

- All 9th and 10th graders
  - SBP participation, free/reduced priced lunch status, grades, absences, disciplinary events
    - School-level: 3%-17% SBP participation, 37% free/reduced price lunch

- A cohort of 900 students “breakfast skippers”
  - Weight and height, body fat
  - Dietary intakes
  - Survey

- Cohort: 31% students of color, 36% overweight/obese
  - 2x higher among girls
  - 3x higher among boys
Trivia: How many miles traveled?

A. 6,532 miles
B. 11,276 miles
C. 14,016 miles
D. 18,429 miles
14,016 miles
### Students reported barriers to eating school breakfast

*Note: students can check more than one choice*

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Not hungry early in the morning</td>
<td>57%</td>
</tr>
<tr>
<td>School breakfast tastes bad</td>
<td>51%</td>
</tr>
<tr>
<td>Too Busy</td>
<td>46%</td>
</tr>
<tr>
<td>Takes too much time</td>
<td>43%</td>
</tr>
<tr>
<td>Not “easy”</td>
<td>35%</td>
</tr>
<tr>
<td>Cost</td>
<td>26%</td>
</tr>
<tr>
<td>Bus arrives too late</td>
<td>24%</td>
</tr>
</tbody>
</table>
Trivia: How many students are food insecure?

A. 1 in 5 (20%)
B. 1 in 6
C. 1 in 7 (14%)
D. 1 in 9
E. 1 in 10 (10%)
Trivia: How many students are food insecure?

A. 1 in 5 (20%)
B. 1 in 6
C. 1 in 7 (~14%)
D. 1 in 9
E. 1 in 10 (10%)

109 students reported being food insecure
What do the food insecure students look like?

- Mostly female (64% vs 53%)
- Students of color (42% vs 29%)
- Participated in government supported meal programs (54% vs 32%)
- Compared to food secure adolescents, food insecure students were less likely to report
  - excellent or very good health
  - half hour of weekly exercise
  - eat dinner as a family at home
  - participate in sports teams during past year
Food Insecure Students...

- Higher participation in the school breakfast program
- Reported fewer barriers to eating school breakfast
- No differences between groups for
  - weight status
  - perceived benefits of eating breakfast
  - hours of sleep
  - attendance rates
Preliminary Findings
Food security and Grades: Cross Sectional Analysis

- Food insecure students had lower GPA’s than food secure students

<table>
<thead>
<tr>
<th></th>
<th>Cum GPA$^{1,2}$</th>
<th>GPA Percentile $^{2,3}$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LS Means (SE)</td>
<td>LS Means (SE)</td>
</tr>
<tr>
<td>Food Secure</td>
<td>2.76 (0.04)</td>
<td>50$^{th}$ (1.21)</td>
</tr>
<tr>
<td>Low Food Security</td>
<td>2.44 (0.10)</td>
<td>41$^{st}$ (3.37)</td>
</tr>
<tr>
<td>Very Low Food Security</td>
<td>2.22 (0.16)</td>
<td>33$^{rd}$ (5.35)</td>
</tr>
</tbody>
</table>

$^1$ Cumulative, unweighted GPA, 12 schools (N=596 students)
$^2$ Adjusted for gender, grade level, and free/reduced priced meal status
$^3$ 14 schools (N=701 students)
Next Steps

• Complete study implementation and evaluation
  • *Who did the “intervention” work for?*

• Identify best practices

• Work with partners to share findings and materials
  • Phased dissemination plan
The study was funded in February 2013 by the National Institutes of Health

Kathleen Milbrath
School Meals Specialist
School Breakfast Initiative
Hunger-Free Minnesota
Hunger-Free Minnesota
Our Campaign to Fight Hunger in Minnesota

STATEWIDE

Corporate

Government

Not-for-Profit
Hunger-Free Minnesota
Key Community Partners

Child Hunger Partners (selected list)

Statewide Partnerships (selected list)
Our Approach:
Hunger as a Distribution Issue

**SUPPLY**
- Food production
- Programs that enable acquisition of food

**DEMAND**
- 100 million missing meals
- 600,000 food insecure
Hunger-Free Minnesota
Our Campaign to Fight Hunger in Minnesota

Key Data Takeaway
Bulk of School Breakfast Program missing meals are in school districts with the largest number of children

Sources:
Minnesota Department of Education
Hunger-Free Minnesota Analysis (2012)
School Breakfast Program
The Business Situation

**Business Situation:** Large gap exists in Minnesota utilization of School Breakfast Program for low-income students

- **Total Meal Potential:**
  - 2009-10: 49,648,717
  - 2010-11: 48,381,033
  - 2011-12: 50,363,860

- **Millions of Meals Served**
  - 2009-10: 17M
  - 2010-11: 19M
  - 2011-12: 20M

- **Meal Gap**
  - 2009-10: 32M
  - 2010-11: 29M
  - 2011-12: 29M

Sources: Minnesota Department of Education, EnSearch Analysis (2009-11), HFMN Analysis (2011-12)
School Breakfast Initiative

Overview

Opportunity

29 million missing breakfasts in Minnesota

Goal

Add an additional 4 million meals for low-income Minnesota children by the end of the 2014-15 school year through increasing utilization of the School Breakfast Program in public schools.

Since 2010, 2 million school breakfasts have been added for low-income kids in Minnesota.
School Breakfast Program
Key Barriers

Two sets of barriers

Institutional Barriers
Financial
Program logistics

• Revenue/ Expense Balance
• Instructional Time NOT reduced
• Meal timing
• Bus scheduling
• Supervision
• Meal distribution/pickup
• Cleanup

External Barriers
Awareness
Political/stigma

• Low awareness of school breakfast missing meals
• Low awareness among parents and families of free-/reduced-price breakfast availability, price, and time
• Nutritional meal quality
• Stigma for free-/reduced-price eligibility

HUNGER-FREE MINNESOTA
School Breakfast Program
Student Access Models

<table>
<thead>
<tr>
<th>Breakfast Venue</th>
<th>Types of School Districts</th>
<th>Keys to Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the Classroom</td>
<td>• Most common in school districts with at least 50% of students F/R eligible&lt;br&gt;• More common in elementary and middle schools</td>
<td>• Universal school breakfast served free to all kids saw biggest gains&lt;br&gt;• Support of school administrators&lt;br&gt;• Teacher acceptance &amp; buy-in</td>
</tr>
<tr>
<td>Hallway Grab ‘n Go</td>
<td>Available in a range of different sized school districts, levels and F/R eligibility rates</td>
<td>• Offering variety of foods&lt;br&gt;• School admin support&lt;br&gt;• Finding right locations</td>
</tr>
<tr>
<td>Cafeteria Grab ‘n Go</td>
<td>More prevalent in small-sized school districts</td>
<td>• Offering variety of foods&lt;br&gt;• School admin support&lt;br&gt;• Good marketing</td>
</tr>
<tr>
<td>Second Chance Breakfast</td>
<td>More common in high schools</td>
<td>• Scheduling adjustments for longer passing period&lt;br&gt;• School admin support&lt;br&gt;• Offering variety of foods</td>
</tr>
</tbody>
</table>
School Breakfast Initiative

Overview

School Breakfast Initiative

In partnership with Children’s Defense Fund-Minnesota, Hunger-Free Minnesota aims to increase School Breakfast Program participation among low-income students by:

- Promoting successful models of making school breakfast more accessible
- Direct outreach and marketing to schools
- Incentivize schools to increase school breakfast participation
School Breakfast Challenge

Overview

Overview of the School Breakfast Challenge

Unrestricted grants for adopting best practice model (Breakfast in Classroom or Grab ‘n Go) plus financial incentive for every additional meal served over the prior school year.
School Breakfast Challenge

Program Results

Program Measurement
Hunger-Free Minnesota measures increases in school breakfast participation among participating schools based on data from the MN Department of Education.

Pilot Program Results
The pilot program for the current school year has already demonstrated success:

- 93% (37 schools) of participating pilot schools showed increased participation
- Added nearly 123,000 meals
- Demonstrated 14% increase in average participation per site
School Breakfast Challenge
Lessons Learned

What makes incentive programs like this successful?

✓ Funds **enable schools** to make necessary investments such as serving carts, additional points of sale, marketing materials

✓ Incentives **mobilize support** from multiple in-school stakeholders

✓ Challenge made possible with **private-public partnership** – need private funds, stakeholder participation, and partnership with state

✓ Combining the incentive with technical assistance has demonstrated greater participation increases, as much as 10 percentage points

HUNGER-FREE MINNESOTA
In what ways have you engaged schools?

- Hunger-related programs?
- Other types of programs?
- What worked?
- What didn’t work?