breakFAST
fueling academics & strengthening teens
Project breakFAST
Fueling Academics and Strengthening Teens

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Partnering Organizations

The study was funded in February 2013 by the National Institutes of Health.
Project breakFAST schools are located across the state!
Study Design

16 Schools

Wave 1
School Year 2013-2014
8 Schools

4 Schools Intervention
4 Schools Control

Wave 2
School Year 2014-2015
8 Schools

4 Schools Intervention
4 Schools Control
Larger Study Purpose – The Big Picture

Goal: To increase participation in the SBP among high school students

- Expand SBP serving and eating locations
  - Grab-and-go breakfast
  - Serving line in main building entry
  - Eating in the hallway

- Healthy SBP menu
  - Whole grains, calories, no trans fats, monitoring (SY 2013-14)
  - Fruit, sodium (SY 2014-15)

- SBP marketing campaign
  - Breakfast kick-off
Marketing and Promotion

- Marketing - Intervention schools were provided a full marketing package
  - Community Blueprint
  - Student involvement

- Promotion - Schools were expected to get the word out to their students, staff, and communities
  - Parent and staff meetings
  - Breakfast week
  - Newsletters and other communications
Project breakFAST Grab n’ Go Consultant

Kathy Milbrath

Operational help can include:
1. Menu options including brands, portion size, vendors
2. Menu cycles from other districts
3. Financial considerations
4. Conversation on set-up of lines
5. Operational choices that encourage speed of service
6. Selection of food items that meet the New Meal Patterns for next year and encourage the best nutritional choice
7. Disposable items that help the Grab n Go concept
8. Equipment that helps the program and possible ways to have the equipment paid for
9. Other questions and concerned that happen after you start
10. "Second Chance" between 1 and 2 hour
11. Best Practices of Grab n Go
Kick-off!

- Breakfast participation numbers will skyrocket!
What Happened

Wave 1

- Training: Spring 2013
- SBET Development: Spring 2013
- Grab n' Go Kick Off: Fall 2013
- Breakfast Promotional Events
- Second Chance Breakfast! Spring 2014

Marketing and Promotion
Training

“The training day was the biggest piece for me in really understanding what the study included.” – Study FSD

“The training day should be at the beginning of the study…. Once I attended the training in late March the process became more clear on what we needed.” – Study FSD
What Happened

Wave 1

- Training: Spring 2013
- SBET Development: Spring 2013
- Grab n’ Go Kick Off: Fall 2013
- Breakfast Promotional Events
- Second Chance Breakfast!: Spring 2014

Marketing and Promotion
3 of 4 developed a School Breakfast Expansion Team.

2 Food Service Directors reported consulting with others such as, student groups, maintenance and administration, but the “planning was done alone.”

One school marked “No” to developing an SBET and noted that there was consultation only with the school Principal.
Responding to Feedback

- Enhanced training for 2014
  - More focus on SBET

- Enhanced support of SBET development by Extension

- ‘Tips’ for developing an SBET without Extension
  - Identify a school ‘champion’ to lead the process
    - Wellness Committee lead
    - School Nurse
    - School Counselor
    - Head Cook/Kitchen Manager
What Happened

Wave 1

Training: Spring 2013
SBET Development Spring 2013
Grab n' Go Kick Off Fall 2013
Breakfast Promotional Events
Second Chance Breakfast! Spring 2014
Grab n Go Planning

- Many of the schools purchased a laptop for wireless POS and a key pad.
- Menu meeting USDA regulations

<table>
<thead>
<tr>
<th>Blueberry Muffin</th>
<th>Breakfast Pizza</th>
<th>Warm Cinnamon Roll</th>
<th>Blueberry Glazed Pancakes</th>
<th>Egg &amp; Cheese Omelet</th>
</tr>
</thead>
<tbody>
<tr>
<td>String Cheese</td>
<td>Applesauce Cup</td>
<td>Marble Cheese Stick</td>
<td>Yogurt</td>
<td>Whole Wheat Bread</td>
</tr>
<tr>
<td>Fruit Juice</td>
<td>Milk</td>
<td>Fruit Juice</td>
<td>Fresh Fruit</td>
<td>Tri Tater</td>
</tr>
<tr>
<td>Milk</td>
<td></td>
<td>Milk</td>
<td>Milk</td>
<td>Milk</td>
</tr>
</tbody>
</table>

| Blueberry Muffin  | Whole Grain Breakfast| Whole Wheat Bagel  | Warm Cinnamon Roll         | Whole Grain Maple           |
| String Cheese     | Wrap                 | w/Cream Cheese     | Trix Yogurt                | Pancakes                    |
| Fruit Juice       | Tri Tater            | String Cheese      | Fresh Fruit                | Cheese Stick                |
| Milk              | Milk                 | Fruit Juice        | Milk                       | Fruit Juice                 |

Milk
Grab n’ Go Kick Off
Top Selling Grab n’ Go Menu Items

- Breakfast Pizza
- Yogurt Parfait (School-made)
- Hot Apple Pastry
- Banana Bread
- Great Northern Blueberry Muffin
- Lenders White WG bagel with Cream cheese
- Super Bakery Mini Cinnis
- BeneFIT Oatmeal Chocolate Chip Bars
- Breakfast Burrito (School-Made)
- Cinnamon Roll, WG, Rich’s
Grab n’ Go Throughout the Year

- After Grab n’ Go was initiated 2 out of the 4 schools still served their traditional in the cafeteria breakfast line. By Nov 3 of the 4 schools were serving a traditional breakfast line.

- Different locations such as the hallway and commons areas were tested out for optimal location of the Grab n’ Go cart at each school.

- Two of the four schools offered a la cart items on their Grab n’ Go breakfast cart.
What Happened

Wave 1

- Training: Spring 2013
- SBET Development Fall 2013
- Grab n' Go Kick Off Fall 2013
- Breakfast Promotional Events
- Second Chance Breakfast! Spring 2014

Marketing and Promotion
Marketing Examples

- **JOIN BREAKFAST CLUB**
  - Grab N' Go Breakfast is located.
  - It's served from 7 AM.
  - Breakfast cost is $1.30.

- **HUT BREAKFAST**
  - Breaks the cycle.

- **Vote For Breakfast**
  - Breakfast is available daily.
  - Served from 7:30 AM to 7:55 AM.
  - Located in the upper commons.
  - Only $1.35...sweet!
Breakfast Promotional Events

T-Shirt Screen Printing

Taste Testing
What Happened?

Wave 1

- Training: Spring 2013
- SBET Development: Spring 2013
- Grab n’ Go Kick Off: Fall 2013
- Breakfast Promotional Events
- Second Chance Breakfast!: Spring 2014

Marketing and Promotion
## Students reported barriers to eating school breakfast

**Note: students can check more than one choice**

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Percentage</th>
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</thead>
<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>
Adolescent Sleep Patterns

- Biological changes in puberty lead to shift in circadian “phase preference” from “morning” to “evening”
- This leads to the typical adolescent having difficulty falling asleep
- Sleep needs remain at 8-10 hrs. a night
- Typical adolescent falls asleep between 11pm – 12am, should wake about 8am for appropriate amount of sleep

Ref: J Dev Behav Pediatr 35:11–17, 2014
Adolescent Biological Response to Short Sleep

- 21 healthy males, avg. age 17
- Randomized to long sleep or short sleep
- Short sleep associated with decreased motivation to eat breakfast

Breakfast service times

- Traditional Breakfast times:
  - 7:10 – 7:45am start
  - 7:30 – 8:10am finish

- Second Chance time ranged from:
  - 9:15 – 9:25am start time
  - 9:22 – 9:32am finish
  - (all were served between 1st and 2nd periods/blocks)
Second Chance Breakfast

Schools that have 2nd chance breakfast

Has 2nd Chance Breakfast

Shared Student Data
Cambridge-Isanti High School

- Strong promotional efforts with teachers, students, staff and food service
- Two 2nd Chance Breakfast cart locations – busy hallways
- Pre-bagged items for 2nd chance breakfast
- Easy wireless POS keypad
LeSueur-Henderson High School

- 2nd Chance Breakfast cart in main busy high school hallway upstairs
- Attractive banner on cart
- Strong support and promotion by Principal
- Second breakfast during 2nd Chance cost increase ($2.20 if it is the 2nd breakfast purchased in one day)
Brought back cafeteria hot breakfast for am breakfast (7:10 – 7:30am)

Lots of posters

Pre-bagged items

Enthusiastic food service staff!

Easy wireless POS keypad
Owatonna High School

- Attractive, colorful cart
- Homemade Muffins and whole fresh fruit!
- Catchy slogan: “Grab n’ Go 2.0”
- Easy, wireless POS keypad
Meal’s Sold – Case Study

**Meal counts were given by food service staff during unannounced visits in Oct. and Nov. (before 2nd chance bk) and again in Feb. and April.**
Case Study Cont.

- Heavy involvement by the Principal
- Special promotional materials
- School-wide promotion efforts
  - Student group announcing in classrooms
  - Taste testing and food item surveys during lunch

- This was not just a food service effort/initiative
- Two cart locations, pre-bagged items for easy, speedy pick-up
- Wireless POS keypad for quick check out

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Bluejackets Second-Chance Breakfast!

Cambridge-Isanti High School is presenting another opportunity for students to fuel up for their academics!

2nd CHANCE Breakfast!

Not Hungry at 7:45am?
Try our new Grab-and-Go breakfast during 1st passing time!
9:20-9:26
West entrance lobby and Media Center (checkered hallway)
Other Communications and Promotion

Breakfast

Do you want a chance to get breakfast?

Breakfast starting Monday and period in the second period in the second and reduced for students.

If you get a second breakfast you will be charged more.
Communication and Promotion

Schools completed between 11 to 15 promotional items or events. Some of these included:

- Twitter/Tweets
- School Website
- Outside Media
- Postcards
- Newsletters (to parents, staff, faculty)
- Kick-Off (Breakfast Week and/or 2nd Chance Breakfast kick off)
- Sampling/Taste Testing
- T-Shirt screen printing

“There is a second chance breakfast cart between 1st and 2nd hours in the upstairs senior hallway. Be sure to check it out! Remember breakfast is really important!” - Principal adds this to the announcement 2-3 times per week.

- At assemblies
- In daily announcements/Presentation
- At Faculty/Staff meetings
- In a memo/email/voicemail
- At student orientation
Our class has been asked to help expand and get the word out about the School Breakfast Program (SBP). Your goal is to help expand the student body knowledge about the program. But…it’s hard to expand if you don’t know what knowledge the students already have.

You will work in a team to create recommendations for the SBP committee to follow. Each group needs to pick one research question from the list below, a maximum of three groups may research the same topic:

- Will the use of marketing affect my decision to participate in the SBP?
- Will the ease of use/availability of SBP affect my decision to participate in the SBP?
- What factors help my decision in terms of buying, participating in, and eating the SBP?

There is additional information in this packet that could potentially be helpful when doing your market research and creating your marketing campaign. Read the materials carefully. Be sure to utilize the Q&A time with Ms. Ivers wisely. She may potentially have other information, examples, or ideas that could help you along the way.

Be sure to use your resources! The “winning” team as chosen by Ms. Ivers and the SBP committee will not have to do a marketing story in May and will be allowed to complete the final project with a partner (and trust me….the final project is a doozy!)

Remember, the recommendations, advertisements, and brand images/logos will actually be used in the SBP…plan carefully. You are representing this class, Ms. Ivers and yourselves! Follow the table on the next page to learn about guidelines and due dates.
# Data Collection

#1 From the school/district:
- *all students*: SBP participation, grade point average, days in session etc., disciplinary events

#2 From the student with parent permission:
- *a sample of students*: phone calls to record diet, height/weight and percent body fat at school and online survey for knowledge, beliefs, attitudes and food security.

#3 From other school personnel:
- Nurses visits
Measurement team
How far is 14,015.6 miles?
Student Enrollment - Measurements

- Enrolled – 904 Students
  - Baseline BMI measurements – 890 (98%)
  - Baseline surveys – 833 (92%)
  - Baseline diet interviews – 738 (82%)
  - Completed hts/wts, survey, and at least 1 dietary recall – 711 (79%)
Baseline Data - All 9th and 10th graders

- Demographic data on all 9th and 10th grade students – 16 Schools, 7780 students
  - 48% Female
  - 13% non-white
  - 37% FRPL
Baseline Data- All 9th and 10th graders

Classroom screener among all 9th and 10th graders, 16 schools (5,767 students)

During a normal school week
- 44% eat breakfast all 5 days
- 17% eat no breakfast
- 17% eat breakfast 1-2 days

Among those who eat breakfast
- 67% eat breakfast at home
- 22% eat at school
- 6% eat on the way to school
Baseline Data - Study Cohort

- Demographic Data for Study Cohort – 16 schools, 904 students
  - 54% Female
  - 30% non-white
  - 37% FRPL
Baseline Data
BMI Percentile Status – N=890

<table>
<thead>
<tr>
<th>Weight Status</th>
<th>Boys = 405</th>
<th>Girls = 485</th>
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</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>4%</td>
<td>2%</td>
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<tr>
<td>Normal Weight</td>
<td>57%</td>
<td>64%</td>
</tr>
<tr>
<td>Overweight</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>Obese</td>
<td>24%</td>
<td>16%</td>
</tr>
</tbody>
</table>
Baseline Data
BMI Percentile Status N=890

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Overweight Study Boys</th>
<th>Overweight Study Girls</th>
<th>Overweight State Avg Boys (9th Grd.)</th>
<th>Overweight State Avg Girls (9th Grd.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
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<tr>
<td>5%</td>
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<td>25%</td>
<td>21%</td>
<td>11%</td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Obese Study Boys</th>
<th>Obese Study Girls</th>
<th>Obese State Avg Boys (9th Grd.)</th>
<th>Obese State Avg Girls (9th Grd.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>16%</td>
<td>12%</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>15%</td>
<td>24%</td>
<td>6%</td>
<td>24%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Study Boys
State Avg. Boys (9th Grd.)
Study Girls
State Avg Girls (9th Grd.)
Preliminary Findings
Beliefs About Breakfast N=833

- Eating breakfast helps me pay attention in class
  - Disagree: 38%
  - Agree: 63%

- I have more energy when I eat breakfast
  - Disagree: 29%
  - Agree: 71%

- If I miss breakfast, I feel more tired in the morning
  - Disagree: 45%
  - Agree: 55%

- Eating breakfast helps me control my weight
  - Disagree: 35%
  - Agree: 65%
Preliminary Findings
Benefits of Breakfast N=833

Student Perceived (likelihood) Benefits of School Breakfast

- Nutrients, vitamins and minerals: 84%
- Establishing healthy habits: 74%
- Improving cognitive skills: 73%
- Improving test scores: 72%
- Maintain healthy weight: 71%
- Reduce absences/tardiness: 59%
- Get along w/peers: 58%
Preliminary Findings

Food Insecurity

- **Food Insecurity**
  - 817 students completed questions for Food Security Survey Module
    - 14% (112) Students considered food insecure (FI)
      - 4% (32) considered insecure with hunger
      - 10% (80) considered insecure without hunger

- Food insecure adolescents were more likely to:
  - Receive public assistance (36% FI vs. 8% FS)
  - Get breakfast at school (18% FI vs. 5% FS)
Preliminary Findings

Dieting and Weight Control Behaviors

Data only from Wave 2 participants (N=417)
Students who agreed with the statement: “I skip breakfast because it might cause me to gain weight” were significantly more likely to have

- Gone on a diet at least once in the last year (84%)
- Used 1 or more extreme weight control behaviors (28%)
- Used 1 or more unhealthy weight control behaviors (86%)
Students reported being encouraged to eat breakfast at least one day a week by:

- Peers at school (20.5%), teachers (31.7%), and other school staff (21.7%).
- More students (52.7%) reported being encouraged at least one day a week to eat breakfast by their parent or guardians.
Student Reported Encouragement to Eat Breakfast

- Students participating in the Free and Reduced Price Lunch program (FRPL) reported higher levels of encouragement to consume school breakfast compared to students not participating in the FRPL program
  - By Parents - 63% FRPL vs. 47% full paid
  - By Adults at School – 35% FRPL vs. 30% full paid
Preliminary Findings
Family (Breakfast) Meals N=833

- Eating breakfast as a family
  - 53% never
  - 26% 1-2 times
  - 21% 3-7 times

More girls (71%) than boys (63%) reported that scheduling was a barrier to eating breakfast as a family.
Lessons Learned, Tips to share, Mistakes to Avoid

- Involve all stakeholders – Students are your best advocates
- Principal, Teachers, Nurses, Food Service, Custodians
- Contact Directors with successful programs
- Taste test food items with a group of students
- Seek out grant money
- Be selective in choices offered
- Advertize – throughout the year
- Location, location, location – it matters – high traffic areas
- Adjust and make changes
Thank You!
Questions?