Evaluation of the “Fun Bites” Initiative: A Community-Based Intervention to Provide Healthy Alternatives in Recreation Center Concession Stands in Pinellas County, Florida

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Introduction: What is PICH?

- Partnerships to Improve Community Health is a 3-year initiative funded by the Centers for Disease Control and Prevention.
- The grant supports implementation of evidence-based strategies to improve the health of communities and reduce the prevalence of chronic disease.
- Florida Department of Health in Pinellas County is one of 39 awardees nationwide.

Risk Factors:

- Poor Nutrition
- Physical Inactivity
- Tobacco Use and Exposure
- Clinical & Community Linkages
The food environment contributes to poor nutrition

With rising rates of child and adult obesity-related chronic diseases, supporting positive nutrition choices in public buildings, including recreation facilities, has become increasingly important (1)

Background: Why healthy concessions?

- Contradicting messages
  - Recreational facilities exist to enhance well-being by providing low-cost access to leisure activities and opportunities for physical fitness in communities; however, many offer foods inconsistent with recommendations for healthy eating (2).
    - Snacks offered at concession stands, snack bars, vending machines, and/or events are generally high in calories, fat, sugar, and salt.

Lack of data

In one study of recreation facility patrons, many noted the abundance of unhealthy choices, poor food quality/variety, and cost as reasons not to purchase food at concession stands (3).

However, not many studies examine this particular setting.

Intervention: What is “Fun Bites?”

- The Fun Bites Initiative was developed to provide healthier options at concession stands, snack bars, vending machines, and/or events.
- The goal is to make the healthy choice the easy choice by increasing healthy and affordable foods & beverages in public places.
Intervention: What is “Fun Bites?”

- Informed by principles of social marketing
Intervention: What is “Fun Bites?”

- The Concession/Vending Operator must agree to implement:
  - Product: Offer at least 5 (or minimum of 25%) snacks and beverages that meet the Fun Bites Nutritional Standards*
  - Promotion: Promote healthy options by displaying Fun Bites promotional material as well as other signage promoting healthy choices
  - Pricing: Make the healthier options more affordable than the unhealthy options (at a minimum 1 healthy snack and/or 1 healthy beverage must be priced competitively)
  - Placement: Place healthier items at the top of menus (if applicable) or in closer proximity/reach of the consumer

*Based on the USDA Smart Snacks in School Guidelines
Pinellas Partnerships to Improve Community Health (PICH) Healthy Concessions Logic Model

Increase the number of municipalities with improved availability of healthy foods and beverages in recreation facilities through the implementation of healthy vending and concession practices.

**Promote Health Equity**

- **Inputs**
  - FDOH Pinellas
  - Community Health Needs Assessment & Community Health Improvement Plan
  - Existing Infrastructure
  - Existing Data Sources
  - Qualified Staff
  - Established Partnerships with the community
  - CDC
    - Technical assistance, training, and guidance
  - Funding

- **Strategies/Activities**
  - Hire a food access coordinator
  - Present “Fun Bites” campaign idea to Parks and Recreation directors to obtain buy-in
  - Identify cities and recreation centers to implement “Fun Bites”
  - Create toolkit for community partners containing information about how to transform concession stands
  - Develop and implement a “Fun Bites” media campaign
  - Assess and evaluate use of “Fun Bites”
    - Intercept Survey
    - Observation
    - Cost Analysis
    - Nutrition Analysis

- **Short-Term Outcomes**
  - Access, availability, knowledge, attitudes
  - Increased access to healthy food and beverage options at municipal recreation center food service venues
  - Positive changes in attitudes, beliefs, knowledge, awareness, and behavioral intentions for eating healthier while engaging in physical activity

- **Intermediate Outcomes**
  - Behavior changes
  - Increased consumption of healthy foods and beverages at municipal recreation center food service venues
  - Increased daily consumption of fruits, vegetables, and healthier alternatives to common snack foods and beverages

- **Long-Term Outcomes**
  - Health outcomes
  - Reduced prevalence of obesity
  - Reduced rates of death and disability due to diabetes, heart disease, and stroke

- **Impact**
  - Improved quality of life
  - Premature deaths averted
  - Medical costs averted

Reduce Disparities in Implementation, Access, and Health Outcomes
## FUN BITES
### SNACK BAR MENU

Find this sticker 🍊 for healthy, fun choices

### DRINKS
- Vitamin Water $1.25
- ICE Water $1.00
- Bottled Water $1.00
- Diet Coke $1.50
- Coke $1.50
- Sprite $1.50

### SNACKS
- Pirate’s Booty $1.00
- Keebler 100 Calorie Snacks $1.00
- Planters Salted Nuts $1.00
- Pretzels $1.00
- Smart Mix Variety Pack $1.00
- Baked Chips $1.00
- Yogurt Dippin’ Dots $2.50

Fun Bites support a healthy lifestyle!
Energize your game

with Fun Bites

Find this sticker for healthy, fun choices
This snack bar stocks Fun Bites!

Fun Bites are snacks that have less:
- Calories
- Fat
- Sugar
- Sodium (salt)

than most snacks!

For more fun ideas, visit www.findthefunnnow.com

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## 2015 SPRING CONCESSION STAND MENU

### FOOD
- Hamburger (4 oz) $2.50
- Cheeseburger (4 oz) $3.00
- Chicken Strips (4) $3.50
- Beef Hotdog $2.00
- Nacho w/ Cheese $3.50

### COMBO MEALS
- Hamburger w/ fries $4.00
- Cheeseburger w/ fries $4.50
- Chicken Strips w/ fries $4.50
- Beef Hotdog w/ fries $3.50

### BEVERAGES
- Soda (Coke products) $1.00
- PowerAde $2.00
- Bottled Water $2.00
- Root Beer Float $2.00
- Coffee / Tea $1.00
- Hot Chocolate $1.00

### SIDE ORDERS
- French Fries (4 oz) $2.00
- Fried Cheese Sticks (4) $3.00
- Churro (10") $2.00
- Popcorn (microwave) $1.00
- Pretzel $2.00
- Chips $5.00
- Peanuts $1.00
- Sunflower Seeds $1.00

### DESSERTS
- Ice Cream Bars $1.50
- Ice Pops $0.50
- Cookies $0.50
- Large Candy $1.00
- Small Candy $0.50
- Gum / Extra Small Candy $0.10

**Limited Availability**
- Marco’s Pizza Slice $2.00
- Chick-Fil-A Sandwich $4.00

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### COMBO MEALS
- Chicken Nuggets, Baked Chips & Drink $5.00
- All Beef Hot Dog, Baked Chips & Drink $4.00
- Pizza Slice, Baked Chips & Drink $4.50
- Smart Pop Popcorn $1.00
- Baked Chips $1.00
- Frozen Chiller $1.00
- Dippin’ Dots Yodots $3.50
- Nachos & Cheese $2.50
- Pretzel $2.00

### SNACKS
- Gatorade - G2 $2.25
- Bottled Water $1.50
- Fruit Juice 100% $1.00
- Bottled Drinks $2.00
- Slushie $2.00
- Coffee $2.00

### PIZZA
- Whole 14" Cheese Pizza $10.00
- Whole 14" Pepperoni Pizza $12.00

### DRINKS
- INDIVIDUAL PRICING
- Chicken Nuggets 6 or 8 $3/3.50
- All Beef Hot Dog & Bun $2.00
- Cheese Pizza Slice $2.50
- Pepperoni Pizza Slice $2.75
- Pizza Stick $1.50

### OTHER
- Big Squirt Water Toy $7.00
- Swim Diapers (vinyl reusable) $3.00

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*WHILE SUPPLIES LAST / MENU SUBJECT TO CHANGE*
Evaluation Strategy

What we want to learn

1. How many people will this impact?
2. Does “Fun Bites” increase how often people buy healthy drinks and snacks?
3. Does “Fun Bites” increase the healthfulness of menus?
4. Does “Fun Bites decrease the cost of healthier drinks and snacks?”
Evaluation Strategy

- Cross-sectional, mixed-methods, pre and post-test design

- Instruments
  1. Food Services Audit
  2. Patron Survey
  3. Nutritional Content Analysis
  4. Cost Analysis
  5. Observation Guide
Sampling Plan

- Sample 100% of implementation sites preferred
- Minimum of 3 sites per city
  - If the number of sites implemented in one city is greater than 3 and time and resources do not allow for 100% evaluation of sites, we will assess at least 3 sites
  - If fewer than 3 sites in one city implement the intervention, we will evaluate 100% of sites
- Surveys per site: minimum of 30 per data gathering
- Surveys per community (municipality): 100
- Timing of observations: vary time of day and day of week
- Limitations: this is a convenience sample and thus not randomized; no comparison were used to measure attitudes of shoppers at non-Fun Bites locations
1. Food Services Audit

- A member of the PICH staff will meet with the recreation center manager or food service supervisor before modifying anything in the concession stand or snack bar.

- Determine a baseline

- Instrument includes items about preparation techniques, items in stock, and an overall description of the operations, including photos.
2. Patron Survey

- Get an idea of:
  - How many people patronize a recreation facility concession stand
  - Attitudes towards healthy eating in general and specifically in this setting
  - What barriers patrons face when choosing healthy options
  - Demographic information

- Instrument was developed by the Stay Active Eat Healthy® program, an evidence-based capacity building initiative developed in British Columbia, Canada, and adapted by FDOH-Pinellas for Fun Bites.
  - The program aims to increase the provision of healthy food and beverages while restricting unhealthy options in municipal and community recreation facilities

http://stayactiveeathealthy.ca/
3. Nutritional Content Analysis

- Work with a nutrition educator to measure the content of the enhanced menus to determine if they do offer any nutritional benefit.

4. Cost Analysis

- Measure whether the implementation of Fun Bites results in a reduced cost to consumers who choose to eat healthy.
5. Observation Guide

- Describe activities of the recreation center concession stand in the natural setting
- Provide context for analyzing and interpreting patron surveys, cost analysis, etc.
- Instrument was developed by the Stay Active Eat Healthy® program, an evidence-based capacity building initiative developed in British Columbia, Canada, and adapted by FDOH-Pinellas for Fun Bites.

http://stayactiveeathealthy.ca/
Early Results – and Some Limitations

- As the PICH grant is a 3-year project, the time span of this evaluation exceeds that of the Academy of Research Excellence
  - Additionally, delays with approval of evaluation plan and PICH funding uncertainties hampered implementation efforts
- Data are still being collected, and “post” data are also forthcoming
“We cut through all the red tape, but a new shipment came in this morning.”
Early Results

- 124 “pre” surveys entered into database
  - 5 different sites
  - 68 females, 50 males (6 no response)
  - 65% of respondents were under 18 years old
Patrons usually spend about $3-5 at the concession stand
Generally speaking, patrons value healthy eating.
Of those who identified a barrier to healthy eating, **lack of selection, cost, and disliking the selection available** were the most common.

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Number of Respondents</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Selection</td>
<td>68</td>
<td>55%</td>
</tr>
<tr>
<td>Cost</td>
<td>27</td>
<td>22%</td>
</tr>
<tr>
<td>Dislike Selection</td>
<td>17</td>
<td>14%</td>
</tr>
<tr>
<td>I Already Buy Healthy, No Barriers</td>
<td>15</td>
<td>12%</td>
</tr>
<tr>
<td>Unclear Which Options Are Healthy</td>
<td>9</td>
<td>7%</td>
</tr>
<tr>
<td>Options Do Not Seem Fresh</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Nowhere to Sit and Eat</td>
<td>1</td>
<td>1%</td>
</tr>
</tbody>
</table>
What healthy products do people want?

The most desired healthy products were fruit, nuts/trail mixes, veggies & dip, and fruit juice

<table>
<thead>
<tr>
<th>Product</th>
<th>Number of Respondents</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit</td>
<td>79</td>
<td>64%</td>
</tr>
<tr>
<td>Nuts/Trail Mixes</td>
<td>37</td>
<td>30%</td>
</tr>
<tr>
<td>Veggies &amp; Dip</td>
<td>35</td>
<td>28%</td>
</tr>
<tr>
<td>Fruit Juice</td>
<td>34</td>
<td>27%</td>
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<tr>
<td>Yogurt</td>
<td>20</td>
<td>16%</td>
</tr>
<tr>
<td>Frozen Yogurt</td>
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<td>16%</td>
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<tr>
<td>Whole grain products</td>
<td>12</td>
<td>10%</td>
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<tr>
<td>Diet Drinks</td>
<td>8</td>
<td>7%</td>
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<td>Caffeine Free Drinks</td>
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<td>6%</td>
</tr>
<tr>
<td>Plain Milk</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Flavored Milk</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Vegetarian Options</td>
<td>5</td>
<td>4%</td>
</tr>
</tbody>
</table>
Next Steps

- Fun Bites has been implemented in 12 sites, with plans for 5 additional sites in 2016
Thanks!