Formative Evaluation of a Restaurant-Based Approach to Sodium Reduction in a Local Community

Stephanie Taylor, MPH
Karrie Isaacson, RD
Theresa Tibbett, MA
Andrew Deckert, MD, MPH
Jeremy Wilson, BS
(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose
Sodium reduction in restaurants

- Partner with local restaurants to help develop lower-sodium menu items
- Develop a Healthy Restaurant Toolkit
Background

Better choices. Healthy changes.
Healthy Shasta Initiatives

- Food Systems
- Healthy Schools
- Walk the Talk
- Walking/Biking
- Healthy Communities
Food Systems Initiative

- Sodium Reduction in Communities grant
- Healthy Kids Choice at Restaurants
  - 11 restaurants at 12 locations
Healthy Kids Choice Criteria

- Main course is a lean meat or protein
- Side dish includes fruit, vegetable, beans, or a whole grain option
- A fruit and/or non-fried vegetable substitution for French fries at no additional charge
- Low fat milk, water and/or 100% fruit juice as a substitution for a soft drink at no additional charge
- No sugar-added beverage
Formative Evaluation

Question

What are the barriers and facilitators for restaurants when reducing sodium?
What are barriers and facilitators when reducing sodium?

- Key informant interviews
- Conducted interviews between August and December 2011

Purpose:
- Gather information about barriers and facilitators
- Learn about resource and training needs
Importance of reducing sodium

- Majority of owners felt it was important to reduce sodium in restaurant meals
  - Health risks of excess consumption
  - Balanced health concern with concerns about change in taste and other barriers
Barriers to sodium reduction

- Product availability
  - Few low-sodium foods
  - Pervasiveness of high-sodium content food
  - Fresh foods that are out of season
- Increased preparation time
- Need for staff training
- Marketing of healthy options
- Ingredient cost
- Concerns about reputation and customer satisfaction
Facilitators for reducing sodium

- All felt that there were opportunities to reduce sodium in their restaurant
  - Increasing scratch cooking
  - Higher quality ingredients
  - New seasoning mixes to enhance flavor
  - Decrease sodium in side items
  - Target soup bases to accomplish sodium reduction across several menu items
Needs for training & resources to facilitate sodium reduction

□ Greatest training needs:
  ■ Cooking low-sodium items from scratch
  ■ Purchasing low-sodium food items
  ■ Modifying recipes to lower sodium content
  ■ Marketing lower sodium items to consumers

□ Suggestions for “Healthy Restaurant Toolkit”:
  ■ Ingredient substitutions
  ■ Low-sodium recipes
Formative Evaluation

Question

What are the attitudes of restaurant consumers toward sodium reduction?
What are consumer attitudes toward sodium reduction?

- Paper, self-administered consumer survey
- Target group: Shasta County residents who eat at restaurants at least once per month
- Also assessed demand for low-sodium menu items
- Survey conducted in 2011 at Healthy Shasta Walk this Way event
- 187 responses to pre-survey, 117 in target group
- Follow-up survey to be conducted in 2013
Respondent profile

- 63% of all 187 Shasta County respondents eat out at least once per month
- Of the 117 in the target group:
  - 35% choose locally owned, sit-down restaurants
  - 75% live in Redding
  - 79% female
  - 74% had at least some college education
  - 65% aged 20-40
Have you ever chosen to eat at a restaurant specifically BECAUSE it was a “Healthy Kids Choice” restaurant?

- Yes: 35.0%
- No: 31.6%
- I haven’t previously heard of Healthy Kids Choice: 31.6%
- I don’t eat out: 1.7%
Attitudes about sodium in restaurant meals

- Concerned with amount of sodium in processed and restaurant foods: 80.3%
- Think restaurants should be encouraged to reduce sodium: 93.2%
- Would like restaurants to label "Heart-Healthy" or reduced-sodium items on menu: 92.3%
Would you be more or less likely to order a menu item if it is labeled on the menu as...

- **Heart-Healthy**
- **Reduced Sodium**

- **More Likely**
  - Heart-Healthy: 85.5%
  - Reduced Sodium: 76.9%

- **Less Likely**
  - Heart-Healthy: 4.3%
  - Reduced Sodium: 6.0%

- **No Difference**
  - Heart-Healthy: 10.3%
  - Reduced Sodium: 17.1%
Formative Evaluation

Question

What is the current amount of sodium in menu items at Healthy Kids Choice restaurants?
What is the current amount of sodium in menu items? (Restaurant A)

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Sodium Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken Nuggets</td>
<td>710</td>
</tr>
<tr>
<td>Italian Chicken Sandwich</td>
<td>750</td>
</tr>
<tr>
<td>Veggie Tofu Sandwich</td>
<td>800</td>
</tr>
<tr>
<td>Turkey Cranberry Sandwich</td>
<td>850</td>
</tr>
<tr>
<td>Turkey Pesto Sandwich</td>
<td>880</td>
</tr>
</tbody>
</table>
What is the current amount of sodium in menu items? (Restaurant B)

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Sodium Content (per slice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margarita Pizza</td>
<td>390</td>
</tr>
<tr>
<td>Veggie Pizza</td>
<td>420</td>
</tr>
<tr>
<td>Farmers Special Pizza</td>
<td>450</td>
</tr>
<tr>
<td>Hawaiian Pizza</td>
<td>460</td>
</tr>
<tr>
<td>Pepperoni Cheese Pizza</td>
<td>470</td>
</tr>
<tr>
<td>Combination Pizza</td>
<td>570</td>
</tr>
</tbody>
</table>
Strategies for Sodium Reduction in Restaurants

- Incorporate sodium guidelines into Healthy Kids Choice meal criteria
- Increase participation in Healthy Kids Choice program
- Work with restaurants to make broad changes that affect adult menu items
Healthy Kids Choice Criteria

- Main course is a lean meat or protein
- Side dish includes fruit, vegetable, beans, or a whole grain option
- A fruit and/or non-fried vegetable substitution for French fries at no additional charge
- Low fat milk, water and/or 100% fruit juice as a substitution for a soft drink at no additional charge
- No sugar-added beverage
- Sodium $\leq 770$mg per meal
Healthy Restaurant Toolkit

Cut the Sodium, Keep the Flavor

- Sodium reduction tips
- Recipes
- Tips for specific cuisines
- Distribution to restaurants
- Provided to attendees at training
- Healthy Shasta website
  - http://healthyshasta.org/saltsavvy
- Healthy Shasta Facebook page
- Healthy Dining Finder
- Nation’s Restaurant News article
Local Success Stories

- Restaurant A – **New Healthy Kids Choice partner!**
  - Expanded kids menu
  - Using lower sodium turkey deli meat, chicken nuggets, tomato paste
  - Decreased or eliminated salt added in several recipes including sauces and soups
  - Don’t automatically add mayo on kids sandwiches
  - Adjusted portion sizes of some menu items
<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Before</th>
<th>After</th>
<th>% Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken Nuggets</td>
<td>710</td>
<td>580</td>
<td>18.3%</td>
</tr>
<tr>
<td>Italian Chicken Sandwich</td>
<td>750</td>
<td>720</td>
<td>4.0%</td>
</tr>
<tr>
<td>Veggie Tofu Sandwich</td>
<td>800</td>
<td>590</td>
<td>26.3%</td>
</tr>
<tr>
<td>Turkey Cranberry Sandwich</td>
<td>850</td>
<td>550</td>
<td>35.3%</td>
</tr>
<tr>
<td>Turkey Pesto Sandwich</td>
<td>880</td>
<td>540</td>
<td>38.6%</td>
</tr>
</tbody>
</table>
Restaurant B – Sodium Reduction

<table>
<thead>
<tr>
<th>One Medium Slice</th>
<th>Before</th>
<th>After</th>
<th>%Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pepperoni Cheese Pizza</td>
<td>470</td>
<td>430</td>
<td>8.5%</td>
</tr>
<tr>
<td>Farmers Special Pizza</td>
<td>450</td>
<td>410</td>
<td>8.9%</td>
</tr>
<tr>
<td>Margarita Pizza</td>
<td>390</td>
<td>340</td>
<td>12.8%</td>
</tr>
<tr>
<td>Hawaiian Pizza</td>
<td>460</td>
<td>420</td>
<td>8.7%</td>
</tr>
<tr>
<td>Veggie Pizza</td>
<td>420</td>
<td>380</td>
<td>9.5%</td>
</tr>
<tr>
<td>Combination Pizza</td>
<td>570</td>
<td>530</td>
<td>7.0%</td>
</tr>
</tbody>
</table>
Evaluation Challenges

- Coordinating interviews with key informants
- Recruiting non-Healthy Kids Choice restaurant participants
- Limitations of convenience sample consumer survey
- Timing to conduct 2013 follow-up survey
- Gathering information for recipe analysis
Implementation Challenges

- Demands on time of restaurant owners/managers
- Concerns about loss of profit
- Availability of lower-sodium ingredients
Lessons Learned

- Incorporate sodium reduction gradually into recipes
- Increase scratch cooking
- Try out recipes on employees first
- Use vendors as a resource for finding new products
Next Steps

- Continue expanding Healthy Kids Choice program
- Provide TA to restaurants to help them reduce sodium in adult menu items
- Marketing of restaurants
Stephanie Taylor
smtaylor@co.shasta.ca.us
530-229-8488
http://healthyshasta.org/saltsavvy

building a healthier community
Shasta County Public Health
www.shastahhsa.net