Within Our REACH
Healthy Food & Beverage Organizational Guidelines at Faith-Based Organizations
Evaluation Results
**Overall Goal**

- **Evaluate impact** of healthy food & beverage organizational guidelines at faith-based organizations (FBOs) that serve African Americans in Stockton, CA

- **6 participating FBOs**
  - Harvest Christian Church
  - O Taste and See Ministries
  - Open Door House of Prayer
  - Shiloh Delta Valley Church
  - Wells of Living Water
  - Wings of Healing Christian Church
Evaluation of Ongoing Community Program

- **Practical** approach
- Balance **Rigor** with **Acceptability and Feasibility**
- **Try not to interfere** with planned activities or programs of the project or any participating FBO
- Goal is to **add value**
Evaluation Components

- Reach*
- Actual Use*
- Actual Use as Intended*
- Nutrition Behavior Change

*Components required by CDC
- **Reach** - # of people that the program/guidelines have the *ability* to reach.
- We considered *reach* in terms of the total number of FBO members.
Actual Use

- **Actual Use** - # of people actually exposed to the program/guidelines

- We considered *actual use* in terms of the # and % of FBO members in attendance at events where guidelines implemented (e.g., healthy foods/beverages served).

- **Evaluation Questions:**
  - How many members of faith-based organizations have **access to healthy foods**?
  - How many members of faith-based organizations have **access to healthy beverages**?
Actual Use as Intended - # of people exposed to the program/guidelines who actually participate in the desired way

We considered *actual use as intended* in terms of the # and % of FBO members in attendance at events where water and healthy foods are served who actually consume the healthy foods and/or beverages.

**Evaluation Questions:**

- How many members of participating FBOs *consume healthy foods* at organization sponsored events?
- How many members of FBOs *consume healthy beverages* at organization sponsored events?
Summary of Evaluation Results:
Reach, Actual Use, Actual Use as Intended

<table>
<thead>
<tr>
<th></th>
<th>REACH</th>
<th># Events</th>
<th>ACTUAL USE</th>
<th># (%) Attended</th>
<th>#(% ) Consumed Healthy Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>170</td>
<td>14</td>
<td>943 (&gt;100%)</td>
<td>707 (75%)</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>405</td>
<td>46</td>
<td>3061 (&gt;100%)</td>
<td>1934 (63%)</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>575</td>
<td>29</td>
<td>1531 (&gt;100%)</td>
<td>1097 (78%)</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>575</td>
<td>84</td>
<td>5585 (&gt;100%)</td>
<td>3817 (68%)</td>
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</tr>
</tbody>
</table>

- **Actual Use:** Greater than 100% of members at participating FBOs attended events where healthy foods and beverages were served
- **Actual Use as Intended:** More than 2/3 of FBO and other community members present at events where healthy foods and beverages were served actually consumed the healthy items offered
Assessment of Nutrition Behaviors

- Brief Survey
- Administered **Pre- and Post-** Program/Guideline Implementation

**Evaluation Questions:**
- Are members of FBOs with healthy food and beverage guidelines more likely to **consume healthy foods** than members of FBOs that have not implemented such guidelines?
- Are members of FBOs with healthy food and beverage guidelines more likely to **consume healthy beverages** than members of FBOs that have not implemented such guidelines?

**Bonus:** Additional Post-tests allowed us to examine impact over time in smaller number of FBOs
## Survey Implementation

<table>
<thead>
<tr>
<th>FBO</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
<th>Time 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBO A</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>FBO B</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>FBO C</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>FBO D</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>FBO E</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>FBO F</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- One FBO with Pre-Program Survey Only
- Two FBOs with Pre- and Post- Program Surveys
- Three FBOs with one Pre-Program Surveys and 2 Post-Program Surveys
Survey Assessed FBO Members’ Consumption of:

- Fruits
- Vegetables
  (Green salad, Potatoes, Carrots, Other vegetables)
- Sugar-Sweetened Beverages
  (SSBs: Soda/Pop, 100% Fruit Juice, Sweetened Fruit/Sports/Energy Drinks)
- Water
Survey Instrument: Target Demographics

- **Zip Code**
  - Target census tracts include 8 zip codes
  - 95210, 95209, 95207, 95206, 95205, 95204, 95203, 95202

- **Racial/ethnic identity**
  - Target population is African American

- **Gender**
  - Aim for 50/50: male/female

- **Proportion of FBO Members**
  - Additional goal to survey approximately 30% of members at each administration
Survey Instrument: Fruits and Vegetables

During the past 7 days, how many times did you eat:

1. **Fruit**  
   (fresh, frozen or canned – do not include fruit juice)

2. **Green salad**  
   (including any salad that contained lettuce)

3. **Potatoes**  
   (do not count French fries, fried potatoes or potato chips)

4. **Carrots**

5. **Other vegetables**  
   (fresh, canned or frozen – do not include green salad, potatoes or carrots)
During the past 7 days, how many times did you drink:

6. **Soda or pop**, such as Coke, Pepsi, or Sprite
   (A can, bottle or glass; Do **not** count diet soda or diet pop.)

7. **100% fruit juices** such as orange juice, apple juice, or grape juice
   (Do **not** count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)

8. **Sweetened fruit drinks, sports, or energy drinks**, did you drink?
   (includes drinks like lemonade, Gatorade, Snapple or Red Bull)
9. **Water** at work, school, home, and everywhere else?
   Count 1 cup as 1 glass and count 1 bottle of water as 2 glasses.

*Count only a few sips, like from a water fountain, as less than one glass. Your best guess is fine. Include tap water, like from a sink, faucet, fountain, or pitcher, and bottled water like Aquafina®. Also include “infused water”, or water infused with only fruits and vegetables. Do not include flavored sweetened water.*
A. I did not eat fruit during the past 7 days
B. 1 to 3 times total during the past 7 days
C. 4 to 6 times total during the past 7 days
D. 1 time per day for the past 7 days
E. 2 times per day for the past 7 days
F. 3 times per day for the past 7 days
G. 4 or more times per day for the past 7 days
Total of 450 FBO members completed surveys*
- 161 in Year 1; 153 in Year 2; 136 in Year 3
- On Average, 43% of church members responded at each survey administration
  --Range from 20-86% of church members at each survey administration
- 356 members included in Pre/Post Program Comparisons
- 2nd Post-Program Survey with 94 members

- 80% in target zip codes
- 84% African American
- 67% reside in target zip code and are African American
- 65% Females

*some members represented more than one time
Results: What Changed?

Members ate MORE FRUIT

- Ate none
- Ate 1-3 times/week
- Ate 4-6 times/week
- Ate 1+ times/day

Before policies implemented
After policies implemented

- Ate none: 9% vs. 3%
- Ate 1-3 times/week: 34% vs. 21%
- Ate 4-6 times/week: 16% vs. 18%
- Ate 1+ times/day: 41% vs. 58%
Results: What Changed?

Members ate MORE SALAD

- Before policies implemented:
  - Ate none: 23% → 16%
  - Ate 1-3 times/week: 46% → 43%
  - Ate 4-6 times/week: 18% → 18%
  - Ate 1+ times/day: 13% → 24%
Results: What Changed?

Members at LESS POTATOES

Before policies implemented

<table>
<thead>
<tr>
<th>Eating Frequency</th>
<th>Before Policies</th>
<th>After Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ate none</td>
<td>32%</td>
<td>40%</td>
</tr>
<tr>
<td>Ate 1-3 times/week</td>
<td>56%</td>
<td>53%</td>
</tr>
<tr>
<td>Ate 4-6 times/week</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Ate 1+ times/day</td>
<td>5%</td>
<td>2%</td>
</tr>
</tbody>
</table>
Results: What Changed?

Members drank MORE WATER

- Before policies implemented:
  - Drank 1-6 times/week: 13%
  - Drank 1+ times/day: 4%
- After policies implemented:
  - Drank 1-6 times/week: 86%
  - Drank 1+ times/day: 96%
Results: What Changed?

Members drank LESS SODA

San Joaquin Valley = 18%
California = 12%
### Results: What Changed?

**Members drank LESS 100% JUICE**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Before policies implemented</th>
<th>After policies implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drank None</td>
<td>42%</td>
<td>14%</td>
</tr>
<tr>
<td>Drank 1-3 times/week</td>
<td>36%</td>
<td>16%</td>
</tr>
<tr>
<td>Drank 4-6 times/week</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Drank 1+ times/day</td>
<td>14%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Drank None: 42% before, 14% after
Drank 1-3 times/week: 36% before, 16% after
Drank 4-6 times/week: 8% before, 8% after
Drank 1+ times/day: 14% before, 16% after
Results: What Stayed the Same?

- **Vegetable Consumption**
  - Carrots and all other vegetables
  - Potential Target for future activities

- **Sweetened Fruit/Sports/Energy Drinks**
  - Over 45% drank NONE pre and post, but no changes pre or post program
  - Already pretty good, but still room for improvement
Fruit and Vegetable Consumption

- **Recommended number of servings per day** is at least 5
  - Many groups now recommend 5-9 servings per day
  - Others recommending 7-11 servings per day

- **FBO members reported** 6 servings of fruits & vegetables **per week**, on average, by the end of the program
  - Fruit consumption increased over the program period
  - Still room for improvement, especially with veggies!
Comparisons with Local and State-Level Data*

<table>
<thead>
<tr>
<th>SODA</th>
<th></th>
<th>WATER</th>
<th></th>
<th>FRUITS &amp; VEGETABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our data showed 89% drinking less than one time per day and 53% drinking NONE at the end of the program</td>
<td></td>
<td>Our data showed 96% drinking at least once per day at the end of the program</td>
<td></td>
<td>Our data showed average of 6 servings/week at the end of the program</td>
</tr>
<tr>
<td>Drank on average NO soda per week</td>
<td></td>
<td>Drank at least 1 glass of water in the past day</td>
<td></td>
<td>Ate 5+ servings of fruit &amp; vegetables per day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>San Joaquin Valley</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Adults</td>
<td>51%</td>
<td>59%</td>
</tr>
<tr>
<td>African Americans</td>
<td>45%</td>
<td>54%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>San Joaquin Valley</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Adults</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>African Americans</td>
<td>98%</td>
<td>98%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>San Joaquin Valley</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Adults</td>
<td>48%</td>
<td>49%</td>
</tr>
<tr>
<td>African Americans</td>
<td>46%</td>
<td>44%</td>
</tr>
</tbody>
</table>

* 2015 California Health Interview Survey
Maintenance of Changes over Time

Green salad and carrot consumption increased; Potato consumption decreased
Maintenance of Changes over Time

Sugar Sweetened Beverage Consumption Decreased

<table>
<thead>
<tr>
<th>Beverage Type</th>
<th>Baseline (A)</th>
<th>Baseline (B)</th>
<th>Time 1 (A)</th>
<th>Time 1 (B)</th>
<th>Time 2 (A)</th>
<th>Time 2 (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soda/pop (did not drink)</td>
<td>31%</td>
<td>51%</td>
<td>50%</td>
<td>50%</td>
<td>47%</td>
<td>76%</td>
</tr>
<tr>
<td>100% juice (did not drink)</td>
<td>31%</td>
<td>44%</td>
<td>43%</td>
<td>56%</td>
<td>50%</td>
<td>62%</td>
</tr>
</tbody>
</table>

*Two churches
Maintenance of Changes over Time

Water Consumption Increased

<table>
<thead>
<tr>
<th>Drank 1+ Times/Day</th>
<th>Drank 4+ Times/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline 86%</td>
<td>Time 1 71%</td>
</tr>
<tr>
<td>Time 1 95%</td>
<td>Time 2 69%</td>
</tr>
<tr>
<td>Time 2 97%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>84%</td>
</tr>
</tbody>
</table>
Take Home Messages

• Exceptional Participation
  • Events with Healthy Foods/Beverages Served
  • Surveys
  • *Most participants fit the target population*

• Terrific job by PHA team and community partners in conducting surveys!
  • Reminder: This entire piece of the evaluation was NOT REQUIRED by CDC
  • “Going the extra mile” to complete this work demonstrate great results of the *Within our REACH* program

• Remarkable results related to fruit and SSB consumption
  • Program only influenced items served at church, but members reported overall changes in diet – very impressive to observe changes with “modest intervention” and “short time period”
The UCLA Evaluation Team (Herrmann & Glenn) would like to thank the Within our REACH program team and Steering Committee for engaging us in this process.

CONGRATULATIONS ON A JOB WELL DONE!!
Please feel free to contact me with any questions or comments – email tends to be best for initial contact and we can schedule phone follow-up as needed.