A Process Evaluation of a Food Access and Food Literacy Program to Increase Fruit and Vegetable Intake Among Low-Income Families

Jane Momoh, MS, DrPH\(^1\), Shreela Sharma, PhD, RD, LD\(^2,3\), Heather Kitzman-Ulrich, PhD\(^1\), Christine Markham, PhD\(^3\)

Texas Prevention Institute, Behavioral and Community Health, School of Public Health, University of North Texas Health Science Center, Fort Worth, Texas\(^1\); Michael & Susan Dell Center for Healthy Living\(^2\); School of Public Health, University of Texas, Houston, Texas\(^3\)

**Introduction**

Though diets rich in fruits and vegetables have been shown to increase academic performance and decrease the rate of chronic diseases, most school-aged children and their families fail to consume the recommended amount of five fruits and vegetables a day.

The Brighter Bites program is a collaborative community-academic effort uniquely designed to include the integration of food literacy with food access to increase healthy food options in low-income communities.

**Methods**

The intervention design consists of three components:

- CATCH, an evidence-based nutrition and physical activity program
- Nutrition education for families, which include weekly recipes and recipe demonstrations, and parent nutrition handbooks
- Weekly provision of 50 servings of a variety of fresh fruits and vegetables, donated by the food bank

The program was implemented for a total of 16-weeks, including 8-weeks in the fall and spring semesters.

A co-op concept was used during program implementation.

Self-reported questionnaires were collected from parents (N=462) after 8-weeks of program intervention to assess reach, dose, fidelity, and program satisfaction.

**Results**

Process evaluation results showed that over 79.2% of participating families received eight weeks of produce distribution.

A high program dosage in parent reported use of fruits (92.6%) and a lower dosage in the use of vegetables (88.5%) was reported.

Overall, all program components were implemented as intended and 81.3% of the families reported being satisfied with the various components.

The cost for the provision of the produce bags to families each week was estimated at $2.00 per family.

**Evaluation Processes**

<table>
<thead>
<tr>
<th>Evaluation Processes</th>
<th>Process Component</th>
<th>Instruments</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of all program components</td>
<td>Fidelity</td>
<td>Weekly distribution process survey</td>
<td>Weekly</td>
</tr>
<tr>
<td>Participants’ attendance</td>
<td>Reach</td>
<td>Attendance roster; Parent process survey</td>
<td>Weekly</td>
</tr>
<tr>
<td>Dose of intervention components</td>
<td>Dose delivered</td>
<td>Parent Process Survey; number of times families picked up produce, use of produce, read and used nutrition handbook</td>
<td>Twice (at mid-point and end of intervention)</td>
</tr>
<tr>
<td>Program effectiveness</td>
<td>Satisfaction</td>
<td>Parent Process Survey</td>
<td>Twice (at mid-point and end of intervention)</td>
</tr>
</tbody>
</table>

**Conclusion**

This project provides a model for evaluating programs to improve intervention delivery and outcomes related to food access and literacy in low-income communities.

Findings from the process evaluation show the importance of conducting formative evaluation to help identify gaps in program implementation, especially in multi-component interventions.