Using Policy Systems and Environmental Change (PSE) Interventions to Build Healthy Communities
FNEE Pre-Conference 2016 San Diego, CA

Case Study #1. [Eat] Improving Carryouts in Baltimore; Johns Hopkins University

**Instructions:** All of these case studies come from real scenarios. They were selected in part because of their role in strengthening PSE interventions in the Extension and Nutrition Education community. Read each case carefully and discuss with your group the following questions.

- What problem is this intervention addressing?
- Who is the target audience?
- What strategies were used for Policy, Systems, and/or Environmental Change?
- How would you expand or complement this project?

**Setting Description:** Food access and obesity are a growing concern in urban low income areas. One in four of Baltimore City residents live in areas identified as food deserts and 32% are classified as obese.1-2 African Americans have disproportionately lower access to healthy food and are the most likely of any racial or ethnic group to live in a food desert neighborhood.2

**Problem Statement:** There are many small food sources in these food desert areas including carryouts. These often provide a lot of calorically dense foods to the community surrounding them. There is the additional challenge in that these owners are not from the community, which causes many language and cultural barriers.

**Program Description:** The Baltimore Healthy Communities for Kids (BHCK) project is a multilevel, multi-component obesity prevention trial that operates at multiple levels of the Baltimore City food environment. These components include a policy working group (to sustain changes and support new policies at the city level), a wholesaler component (to increase the supply of healthier foods where small storeowners shop), a corner store/carryout component (to stock healthier items, educate owners and customers, and create a demand for healthier foods), a recreation center component (where a nutrition curriculum is delivered by peer leaders in an after school program), and a social media component (to engage and educate parents and community members through Facebook, text messaging, and Instagram, and stakeholders through twitter). The goal of the project is to increase access to, demand for, and consumption of healthier foods in 28 low income food desert communities.

The project has a carryout interventionist who works with small carryouts. The carryouts are independently owned fast food businesses and a common source of prepared foods in the community. Owners often have handwritten menus and would benefit from a new menu. The program works with the owners to revise their menus to highlight healthier options. During the menu design phase of the program, BHCK staff shows the owner training videos to increase the store owner’s knowledge of food safety, business, cooking methods and nutrition label reading. Next, the program helps the owner to bring in new healthy beverages, sides and entrees by educating on cooking and food preparation techniques. Once the owner has hung the menu and has started to stock healthier options the program conducts educational sessions and taste tests with customers to build demand. For stocking new items and watching the training videos the program provides store owners with structural incentives (i.e. blenders, fridges). The program also works with local wholesale distributors to make sure healthier items are in stock for carryout owners to purchase.
The carryout level of the intervention was evaluated with 20 process evaluation standards evaluating reach (e.g. # of customer interactions), dose (e.g. # of samples, handouts etc.) and fidelity (e.g. # of promoted products stocked, posters hung etc.). Process evaluation standards were used to evaluate and improve the program over the course of the intervention.

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For more information:


Healthy Stores Website: Healthystores.org
Store owner training videos: https://www.youtube.com/channel/UC2TYlH237PSKL6HNZ2AeEmQ
Follow B’more Healthy Communities for Kids!
Case Study #2. [Live]

Faithful Families Eating Smart and Moving More; North Carolina State University

Instructions: All of these case studies come from real scenarios. They were selected in part because of their role in strengthening PSE interventions in the Extension and Nutrition Education community. Read each case carefully and discuss with your group the following questions.

- What problem is this intervention addressing?
- Who is the target audience?
- What strategies were used for Policy, Systems, and/or Environmental Change?
- How would you expand or complement this project?

Faithful Families Eating Smart and Moving More (Faithful Families) is a practice-tested health promotion intervention that promotes healthy eating and physical activity in communities of faith. The program is a partnership between the North Carolina Division of Public Health and Extension at NC State University. Faithful Families helps individuals and families to adopt healthy behaviors like eating smart and moving more. Additionally, Faithful Families facilitators work with each faith community to help them adopt environmental supports for healthy eating and physical activity.

The Faithful Families curriculum is co-taught by nutrition and physical activity educators (usually from Extension or public health) and trained lay leaders from faith communities in small group sessions. Connecting faith and health is an integral part of the program. Lay leaders from the faith community bring the spiritual elements into each session, through discussion questions and activity prompts in each lesson.

The Faithful Families curriculum was updated in 2016 to include updated nutrition information, social media connections, recipe videos for each lesson, a guide to carrying out family-based classes, and tips on incorporating fresh, local foods through farmers’ market tours. The curriculum includes everything you need to implement the program, including ready-to-use PowerPoint slides and scripts for the nine-session series, a Lay Leader Training Guide and evaluation tools. Additionally, the kit includes Move More activities, guides to carrying out family-based classes, grocery store tours, and farmers’ market tours, recipes for each lesson, recipe videos for each lesson, and faith-based discussion questions. The Planning Guide is included as well, and available for free download on our website. The Planning Guide assists faith leaders in adopting policy and environmental change for their faith community and establishing health committees.

Faithful Families has been accepted as a "Practice-Tested Intervention" by the Center of Excellence for Training and Research Translation (Center TRT) at UNC Chapel Hill. Center TRT, in collaboration with the Centers for Disease Control and Prevention's (CDC) Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases, has
developed a process for reviewing, translating and disseminating interventions. This process is applied to obesity prevention interventions that have been tested through research studies or have been developed and evaluated in practice. Interventions are recommended by expert reviewers and CDC for dissemination. Faithful Families is the first faith-based intervention to achieve this status. Additionally, Faithful Families was designated as the Signature Project for the Southern Regional Center for Excellence in Nutrition Education and Obesity Prevention. In addition to North Carolina, Faithful Families is being implemented in other states as well, including Florida, Arkansas, South Carolina, New Jersey, Illinois, and Tennessee.

Between 2014 and 2015, Faithful Families was implemented by the North Carolina Expanded Food and Nutrition Education Program (EFNEP) with 110 program families representing 522 people. Data from EFNEP-based Faithful Families classes shows that:

- 83% (91 of 110) of participants showed improvement in one or more food resource management practices (i.e. plan meals, compare prices, does not run out of food or uses grocery lists).
- 86% (95 of 110) of participants showed improvement in one or more nutrition practices (i.e. plans meals, makes healthy food choices, prepares food without adding salt, reads nutrition labels or has children eat breakfast).

In addition to these individual level results, faith communities have adopted environmental supports to improve healthy eating and physical activity among their members. Over 250 policy and environmental changes to encourage eating smart and moving more have been implemented in faith communities in North Carolina as a result of this program. These include changes like:

- Establishing policies to serve water at all events
- Replacing sodas in vending machines with bottled water
- Establishing guidelines that all meals offered at the faith community must be low-fat, low-sugar and low-sodium
- Establishing physical activity breaks for all meetings
- Creating walking trails
- Designating spaces (like playgrounds or fitness centers) for physical activity for the community as a whole
- Establishing community gardens

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Learn more about the program by visiting our website: www.FaithfulFamiliesESMM.org
Case Study #3. [Learn] Implementing Smarter Lunchrooms; Cornell University

Instructions: All of these case studies come from real scenarios. They were selected in part because of their role in strengthening PSE interventions in the Extension and Nutrition Education community. Read each case carefully and discuss with your group the following questions.

• What problem is this intervention addressing?
• Who is the target audience?
• What strategies were used for Policy, Systems, and/or Environmental Change?
• How would you expand or complement this project?

The Florence School District has 21 schools which serve eight communities with a population around 75,000, covering 284 square miles. The District offers universal free breakfast and lunch for all of their students; yet, participation is only ~74%. The foodservice director recently attended a conference and heard about the Smarter Lunchrooms Movement, a collection of over 100 evidence-based suggestions for rearranging the school lunchroom environment that increase consumption and participation in school food programs. The director reached out to the local state agency and the Extension staff member in their area to see if there are resources available in their state to help implement these suggestions.

The local Extension agent had attended a two-day Smarter Lunchrooms Movement workshop and was a certified Smarter Lunchrooms Technical Assistance Provider. The Extension agent began working with the foodservice director to implement Smarter Lunchrooms.

First, the Extension agent offered to train all of the staff members within the District on the Smarter Lunchrooms Movement. Two trainings were offered at the summer school foodservice conference. These trainings introduced the principles of the Smarter Lunchrooms Movement in addition to empowering the staff to get involved in making changes to their lunchroom to encourage kids to eat healthfully. All school foodservice staff participated in goal-setting and creating a plan of action for their own lunchrooms.

After training all the staff, the Extension agent went into a random sample of schools within the District to assess the space using the Smarter Lunchrooms Self-Assessment Scorecard and to take photos. These assessment tools were reviewed with staff from different cafeterias and the foodservice director, then compared to the action plans that staff members had made for their space. Staff from each location then selected a behavioral economics intervention to complete in their lunchroom for the following school year.

Interventions varied but included: adding signage and menu boards featuring student artwork throughout the school buildings encouraging participation, bundling meals into Grab and Go packages so that students could still participate in the meal program if they didn’t wish to stay in the lunchroom, and placing healthful components of reimbursable meals at multiple locations on the service line so that students could easily and conveniently create a reimbursable meal during their lunch period.
After implementing the interventions the Smarter Lunchrooms Self-Assessment Scorecard was completed and the lunchrooms were photographed again. Additionally, sales and production records were collected across the District to measure selection of healthful food items and participation rates.

Following the intervention, participation increased from 74% to 80%; and the students were selecting three times as many fruits and vegetables.

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**Case Study #4. [Work] Farm to Work; Sustainable Food Center (SFC)**

**Instructions:** All of these case studies come from real scenarios. They were selected in part because of their role in strengthening PSE interventions in the Extension and Nutrition Education community. Read each case carefully and discuss with your group the following questions.

- What problem is this intervention addressing?
- Who is the target audience?
- What strategies were used for Policy, Systems, and/or Environmental Change?
- How would you expand or complement this project?

Farm to Work (FTW) is a program wherein area farmers are paired up with urban worksites to make weekly deliveries (or bi-weekly depending on the demand of the site) of fresh boxes of their produce to site employees (as well as students in the case of University partner sites) that choose to order for that delivery. It is much like a Community Supported Agriculture (CSA) model wherein each box contains a set variety of items, yet there is no commitment for participants to purchase a box of produce – the option to purchase is simply made available to them on a weekly or bi-weekly basis.

Anyone can express interest in having the program at their workplace by filling out a brief inquiry at [www.farmtowork.org](http://www.farmtowork.org), and the vetting process continues from there. SFC is currently operating this program in the greater Austin area as well as some sites in San Antonio and Houston. For each viable worksite, SFC goes through an onboarding process to train one or more dedicated volunteers at the worksite to assist as site Coordinators, then matches each worksite up with one of SFC’s partner farmers. SFC facilitates program level communications between the worksites and the farmers and manages the website interface and financial transactions for all parties.

To be a viable participant in the program, worksites must have an onsite coordinator able to facilitate communications between SFC and their farmer to their site participants, as well as coordinate produce deliveries from the farmer and pickups by customers. Site Coordinators often seek additional volunteers to assist with these tasks. Anyone at the worksites can sign up to receive Order Reminders days before the next delivery, which tells participants what items are expected to be in the box that week. If the site Coordinator is able to assist in promoting the program at their site beyond SFC’s automatic Order Reminders, this has proven to increase awareness of and participation in the program which makes the program more successful and sustainable long-term for the site. The produce provided in each Farm to Work box is a variety of 6-9 different seasonal vegetables and occasional fruits. The box contents change at least partially every week and are what is able to be locally grown in that season at the time. Contents between boxes are the same each delivery week, though some farmers provide “trade boxes” where customers can trade an item they do not want for something they would prefer. Customers are also encouraged to share their box with a friend or colleague if it seems to be too much produce for one person or family.
The price of a box of produce is set by the farmer and is between $20 - $25/each. The idea is that the quantity and variety of produce included in the box would add up to the cost of the FTW box, if not more, if purchased at a local Farmers’ Market, and the delivery is free. The produce is farm fresh – harvested day of or the day before delivery. The program is sustainable if the worksite can sustain a consistent level of orders per delivery – typically 10 orders minimum. Each farmer sets the order minimum necessary for deliveries to be economically sustainable for them since there is no delivery fee being charged. When the orders do not meet the necessary minimum, SFC must rearrange and/or refund orders and the farmers’ schedule must be adjusted.

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Sustainable Food Center cultivates a healthy community by strengthening the local food system and improving access to nutritious, affordable food.
Case Study #5. [Play] Physical Education and Nutrition Education Working Together (PE-Nut™); Michigan Fitness Foundation

Instructions: All of these case studies come from real scenarios. They were selected in part because of their role in strengthening PSE interventions in the Extension and Nutrition Education community. Read each case carefully and discuss with your group the following questions.

- What problem is this intervention addressing?
- Who is the target audience?
- What strategies were used for Policy, Systems, and/or Environmental Change?
- How would you expand or complement this project?

Developed by the Michigan Fitness Foundation, PE-Nut™ is a multi-component, whole-school intervention that focuses on health behavior change at both the classroom and school levels, and in the home, and provides both teachers and students input on those changes. PE-Nut™ consists of four program components including 1) Healthy Classrooms, Healthy Schools; 2) Health Through Literacy; 3) Exemplary Physical Education Curriculum; and 4) Fit Bits. The overall program outcomes were assessed on implementation along with the administrator and parent materials as a whole-school intervention. The success of PE-Nut™ comes from the multi-level approach to the intervention that not only promotes physical activity and teaches nutrition concepts, but also offers students opportunities to apply what they learn by enjoying the benefits of physical activity throughout the day, trying healthy foods, and sending the messages into the home for a long lasting impact.

Healthy Classrooms, Healthy Schools (HCHS) equips teachers with the tools they need to transform their classrooms, and ultimately their school into environments that allow students to readily learn and practice physical activity and healthy eating habits that will lead to a healthier lifestyle. The program supports the Centers for Disease Control’s Coordinated School Health model and consists of 8-10 units for use in K-2nd or 3rd-5th grades, respectively. HCHS focuses on transforming the classroom environment through healthy snack policies; healthy school meal and vending machine options; visual cues and messaging in the classroom and throughout the school; role modeling by teachers and students; classroom policies for not using food as rewards; and healthy classroom party policies as examples that collectively result in positive shifts in social norms in schools.

Health Through Literacy (HTL) utilizes high quality children’s literature to reinforce physical activity and nutrition concepts to students in grades K-5. Books coupled with support materials make them easy to use for educators and families. A HTL classroom book set assists teachers in reinforcing the messages that are taught within HCHS. A HTL take-home book bag of a set of books and other resources encourages family reading, discussion and suggestions for children and their families to be more physically active and to try new foods together. The HTL physical activity book bag includes a set of books (one book for each grade level K-5) with positive messages about physical activity. Each book has suggestions for educators about how to reinforce physical activity concepts, and review and discussion questions to use after reading to students. Short activities or games that enhance the message are also provided. The use of book sets assists educators in reinforcing the messages that are taught within Healthy Classrooms, Healthy Schools.
Exemplary Physical Education Curriculum (EPEC) is a standards-based curriculum that teaches the knowledge, skills and attitudes that will enable children to be active for life. EPEC includes 136 Nutrition Reinforcing Activities, which involve students in practicing the motor control skills, knowledge, fitness and personal/interpersonal skills) through activities that contain nutrition messages. The concepts covered are consistent with the USDA Dietary Guidelines for Americans and MyPlate. EPEC includes 258 learning progression steps that teach 35 skills; 48% of the steps include at least one activity that reinforces nutrition concepts.

Another very popular component of PE-Nut™, Fit Bits, is an innovative, best practice resource that gets students up out of their seats and moving for 7-10 minutes while, at the same time, reinforcing health concepts that are aligned with the Dietary Guidelines, grade level National Health Standards and MyPlate. The activities are arranged into four content areas: Healthy Bodies, Food Groups, Fruits and Veggies and Healthy Snacks within three different age-appropriate books: Kindergarten, Lower Elementary and Upper Elementary. Fit Bits includes a feature called the “Apple Core.” Each activity has a grade-specific “Apple Core” which teachers can use to further reinforce Common Core Educational Standards for Math and English Language Arts.

Program outcome evaluations have built the evidence base to establish the PE-Nut™ program as a best practice intervention for increasing student physical activity and student consumption of healthy foods.

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Case Study #6. [Shop] Farmer’s Market; *Utah State University Extension*

**Instructions:** All of these case studies come from real scenarios. They were selected in part because of their role in strengthening PSE interventions in the Extension and Nutrition Education community. Read each case carefully and discuss with your group the following questions.

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The Cache Valley Gardeners Market (CVGM) is a farmers’ market in Utah that is known for providing a wide variety of locally sourced foods such as fruit and vegetables, honey, meat, cheese, and more. The CVGM operates on Saturdays from 9am-1pm during the growing season, which runs from May to October. The market is located in a city park off Main Street that is in a safe and easy to access part of town. The city provides free public transportation to residents and has a scheduled bus stop within a block of the CVGM. Farmers’ market patrons can pay for purchases using cash, check, or credit card. This market also accepts Supplemental Nutrition Assistance Program (SNAP) benefits, which allows SNAP participants to use federal nutrition benefits for locally sourced foods sold at the market. All vendors that sell SNAP approved food at the market accept the SNAP tokens as a form of payment.

In 2014, the CVGM partnered with Utah State University and nonprofit organization to offer the Double Up Food Bucks (DUFB) program. The DUFB program is a farmers’ market incentive program that provides SNAP participants the opportunity to receive a $1 match in incentives for each dollar spent in SNAP benefits at the market, up to $10 each week. This program allows SNAP participants to double their purchasing power and encourages the purchase of nutrient dense foods. The CVGM also partners with Utah State University Supplemental Nutrition Assistance Program-Education (SNAP-Ed), a federally funded nutrition education program that educates low-income individuals and families about healthy eating on a budget. Each week there is a SNAP-Ed booth at the market where farmers’ market patrons can go to learn more about how to select, store, prepare, and cook fruits and vegetables that are in season that week. Patrons have the opportunity to try a sample each week from a recipe that includes ingredients purchased from local farmers and growers. Patrons are provided with the recipe and have the opportunity to ask questions of the nutrition educators and are encouraged to ask questions when they purchase food from the vendors. Lastly, the CVGM organizes a Farm to Table Banquet each year, which is an opportunity for farmers’ market patrons, farmers and growers, and other community members to come together to eat a meal made with all locally sourced foods.

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