



Building and Implementing
HEALTHY FOOD SERVICES



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Introduction

Food services make food and beverages available to purchase in almost all of the places where we spend our days, including at work, in school, at the park and at other points where daily activities take place. Meals and snacks are increasingly being purchased and consumed away from home. With overweight and obesity rates at an all-time high in the United States, both the public and private sectors are beginning to critically examine their role in the problem and are taking action to address the solution by helping to create a healthier food environment for their workforce and residents. Creating healthy food service policies and programs are promising strategies to improving health through the food environment. This approach closely aligns with Institute of Medicine recommendations to accelerate progress in addressing the obesity epidemic by working to create environments where healthy food and beverage options are the easy choice.ⁱ



Public and private sector institutions are beginning to think about how they can increase access to healthy food and beverage options sold or served in their facilities. Innovative strategies to improve food choices are emerging across the country, from hospitals and schools to parks and museums—and everywhere in between. The public sector refers to government-run agencies, services or properties that serve the government or citizens, whether national, regional or local/municipal. Private sector refers to agencies or services run by private individuals or groups. The common goal of these projects is to increase access to nutritious foods while decreasing consumption of excess calories and excess sodium. In part because of the size and reach of government agencies, the public sector is leading by example by implementing policies that create healthy food environments for its employees and citizens.

Many local, state and federal entities are beginning to create healthy food environments in line with the current 2010 Dietary Guidelines for Americans by introducing practices to assist employees and residents in making informed, healthy food and beverage choices when faced with so many options. In 2011, the U.S. Department of Health and Human Services (HHS) and the U.S. General Services Administration (GSA) released the “Health and Sustainability Guidelines for Federal Concessions and Vending Operations” to assist contractors in increasing healthy food and beverage choices and sustainable practices at federal worksites.ⁱⁱ Private companies are also testing out innovative strategies to improve the food environment through workplace wellness policies, healthy meeting and catering guidelines, nutrition education, labeling, incentives and procurement strategies. While public and private sector groups may have different requirements, resources and goals for implementing a program to improve the food environment, these sectors can learn lessons from each other.

This document is intended to provide an introductory framework to guide federal, state and municipal agencies as well as private sector institutions in identifying, planning and implementing healthy food service programs and policies. This product includes information on the four components typically considered to plan, implement and evaluate healthy food services. Included throughout are best practices and example programs and strategies from a range of agencies and organizations throughout the country.

The framework is organized into the following sections:

- Assessing the Needs and Opportunities
- Implementation: Food Service Guidelines and Policies
- Supportive Strategies
- Evaluating Healthy Food Services

CONCESSIONS AT A GLANCE

Focusing on healthy food services is an opportunity to improve the food environment where people spend their days.

17 MILLION PEOPLE ACROSS THE UNITED STATES ARE EMPLOYED AT STATE AND LOCAL GOVERNMENT WORKSITES WHERE MANY PURCHASE MEALS AND SNACKS DURING THE WORKDAY.

FROM 2010 TO 2011, THE PERCENTAGE OF U.S. ELEMENTARY, MIDDLE AND HIGH SCHOOLS WITH VENDING MACHINES MORE THAN DOUBLED FROM 6.8% IN 2010 TO 13.7% IN 2011.ⁱⁱⁱ

IN NEW YORK CITY, APPROXIMATELY 500 PUBLIC CONCESSIONS OPERATE ACROSS THE 5 BOROUGHES SERVING THOUSANDS OF RESIDENTS AND VISITORS EACH DAY.^{iv}

IN LOS ANGELES COUNTY, NEARLY 150 PARKS SELL FOOD TO RESIDENTS AND VISITORS DAILY.^v

SANTA CLARA COUNTY SERVES MORE THAN 6 MILLION MEALS EACH YEAR OUT OF THEIR COUNTY RUN FACILITIES.^{vi}



Assessing the Needs and Opportunities

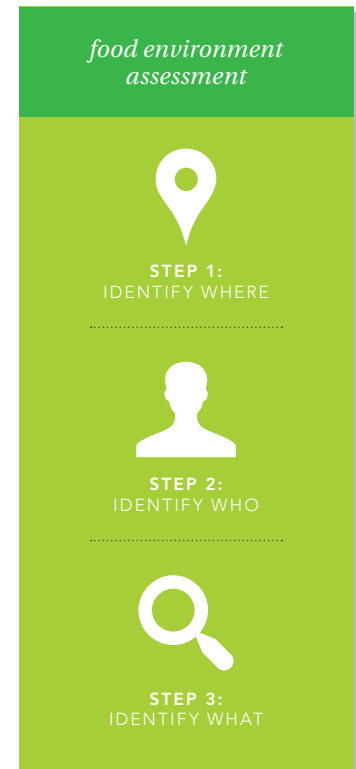
For the purposes of this guide, the food environment is broadly defined as food services that include concessions, vending machines, sundry shops, pre-packaged and on-site snack bars, grills, cafes, cafeterias and restaurants operated across workplace and recreational settings.

Conducting a needs assessment in the targeted organization is the first step to identifying the opportunities and barriers that may exist for creating a healthier food environment. The needs assessment is critical to any population-level intervention. It ensures that implemented interventions—whether programs, policies, systems changes or environmental changes—are well-informed, developed with consensus and have a good chance of success. Municipal and public sector settings each provide unique challenges, as they require approaches tailored to each entity, require different levels of approval and often have different levels of funding available to assist the program. For example, the process needed to achieve healthy concession or vending changes in county recreation centers may differ greatly from the process required to achieve healthy vending changes in a local school district.

The following steps outline general considerations for tailoring the assessment to support projects in a variety of settings.

Identify Where To Target the Program

There are numerous intervention opportunities when it comes to creating a healthier food environment. The first step is to determine where food is purchased and served within the community. Consider where people spend their days, where there is a priority need and which venues might yield the greatest impact.



Example entities can include both municipal and non-municipal settings such as:

- Schools and universities
- Worksites
- Parks
- Recreation centers
- Hospitals
- Museums
- Sports arenas
- Libraries
- Bus and train stations



Identify Who Are the Key Stakeholders

At the heart of any successful intervention are the individuals responsible for crafting, supporting, championing and implementing the proposed changes. Individuals serving with the core team of stakeholders may include local public health officials, departmental staff (e.g., parks, recreation), staff from the mayor's or commissioner's office and experts from local nonprofit or non-governmental agencies. Additional stakeholders may include school or worksite health staff, along with vendors, concessionaires and other food services personnel. You may want to interview several potential folks to get a sense of who would best serve as part of this team. It is important to identify a representative group that can own this work and to outline the responsibilities of team members.



Some key questions to consider when building your team include:

- Who is the champion of this issue (e.g., coalition, community organization and leadership team)?
- Who will evaluate the implementation process and outcomes?
- Will it require funding to implement this project?
- Who will staff it?
- What standards and expectations are realistic?

Examples of types of representatives to include in healthy concessions projects include:

- Governmental public health officials
- Staff from complementary departments (e.g., parks and recreation, school districts and representatives from mayor's office or the commissioner's office)
- School nutrition directors
- Nutritionists or dietitians
- Food vendors
- Food purchasers
- Consumers
- Community members
- Workplace health program staff/committee members

Identify Opportunities for What Can Be Changed

Once the targeted location is identified and a team is assembled to work on the initiative, the next step is to assess the baseline food environment. If time and resources permit, some projects choose to collect baseline information and document what types of food and beverages are available in vending machines, cafeterias and concession stands. Taking an inventory of what foods are currently available and consumed can help identify potential product categories to target to identify healthier alternatives. There are many examples of inventory tools available to help with this piece. At this point it is also beneficial to assess the opinions and receptivity of current customers, employees or students to identify some of the key drivers for purchasing from concessions as well as which healthier products they would be interested in purchasing. There are many inexpensive or free online survey tools available, such as Survey Monkey and Survey Share, which can be used to administer the survey to customers, students and employees. At right are some questions used to assess customer opinions. If planning to work with food service on government property, special attention needs to be paid to understanding the requirements and implications of The Randolph Sheppard Act (see page 8) as well as other resources developed by CDC for healthy vending in state facilities (see page 9).

How to assess consumer opinions:

example questions

- How often do you buy food/beverages from vending machines in the cafeteria or from concession stands?
- How important is price when making a food choice?
- How important is health when purchasing a snack from a vending machine?
- What role does convenience play?
- Are you able to determine which foods/beverages are healthier choices in your vending machines or at other concessions?
- Which items would you purchase if made available in your vending machine, cafeteria or concession area (e.g. granola bars, dried fruit and coconut water)?

Sample Tools to Assess the Food Environment

As public health interest is growing around healthy concessions and vending, so are the measures and tools to assess the food environment.^{viii}

- The National Collaborative on Childhood Obesity Research Measures Registry is a searchable database of diet and physical activity measures relevant to childhood obesity research.
<http://tools.nccor.org/measures/>
- The Centers for Disease Control and Prevention School Health Index is a self-assessment and planning tool that schools can use to improve their health policies and programs.
<http://www.cdc.gov/healthyyouth/shi/>
- The Alliance School Beverage Inventory was developed by the Alliance for a Healthier Generation to assess the school beverage environment.
https://schools.healthiergeneration.org/_asset/x7c9dn/07-264_BevInventory.pdf
- Eat Well Work Well, a Minnesota coalition established in 2003 by representatives from health-oriented organizations to address obesity and chronic disease in worksites, developed a Vending Machine Inventory Tool to assess the number of healthier choices available in the vending machines organizations.
<http://www.eatwellworkwell.org/pdfs/Vending%20machine%20inventory%20tool%20edits.pdf>
- The Nutrition Environment Measures Vending Survey (NEMS-V) was developed to evaluate the worksite vending machine environment. It builds on the nationally recognized Nutrition Environment Measurement Survey (NEMS) tools from Emory University that measure the availability of healthy food and beverage choices in the grocery store, convenience store or restaurant.
<http://www.nems-v.com/>
- CDC Worksite Health Scorecard is a tool for employers to identify opportunities and strategies to strengthen their health promotion programs including nutrition in the workplace.
http://www.cdc.gov/dhds/pubs/docs/HSC_Manual.pdf

Implementation: Food Service Guidelines

Food Service Guidelines is an overarching term used to describe several factors to consider when planning to sell or serve food in both municipal and non-municipal settings. Components of food service guidelines include: procurement, business planning, implementation and marketing.

PROCUREMENT

Food procurement standards or guidelines can be adopted by an organization “requiring that the food it purchases, provides or makes available contains key nutrients at levels that meet and do not exceed standards established by public health authorities.”^{ix} For example, it may set parameters for “the maximum amount of sodium allowed in foods purchased, contracted for or served by a day care center, nursing home or school.”^{ix} Private companies can also establish their own procurement practices that align with their wellness goals. Establishing such food service guidelines is a common and promising strategy to support healthful changes to foods that are procured, prepared and served on municipal or private property. Some governments and organizations already have standards related to the foods they offer and serve and this might vary state to state depending on the organization. For instance, the U.S. Department of Health and Human Services (HHS) and the General Services Administration (GSA) developed worksite guidance affecting food served in federal cafeterias and vending machines.^x

Since there are many differences in the size and nature of local government and school district operations, and in the dollar value of their procurements, management should carefully consider what procedures are appropriate for their operations. The practices and its procedures should be well designed and developed specifically to benefit the locality and its residents. Food and nutrient standards may differ depending on the setting and target population. For example, “schools may require nutrient standards that are different from nursing homes or entertainment venues.”^{ix} Some jurisdictions already have procurement standards in place, including New York City, the State of Massachusetts and, most recently, HHS.

Food procurement practices may be implemented in different settings and venues.^{xi} “For example, the establishment of such a policy or changes to existing policies can be made by:

- State and local governments
- School systems
- Worksites
- Hospitals
- Institutionalized populations (e.g., those in nursing homes or correctional facilities)
- Assisted living communities
- Colleges and universities
- Community-based organizations (including faith-based organizations)
- Day care centers^{ix}

RANDOLPH SHEPPARD ACT

The Randolph Sheppard Act is a law that operates in most states and gives legally blind vendors preference to operate vending machines, concession stands and cafeterias on federal property. More information on how healthy vending is impacted by the Randolph Sheppard Act is available at:

[http://www.
publichealthlawcenter.
org/sites/default/
files/resources/
PHLC%20Healthy%20
Vending%20and%20
the%20Randolph%20
Sheppard%20Act%20
2.12.2013.pdf](http://www.publichealthlawcenter.org/sites/default/files/resources/PHLC%20Healthy%20Vending%20and%20the%20Randolph%20Sheppard%20Act%202.12.2013.pdf)



Graphic courtesy of Corvus Shu, from The Nourish Project



CDC has developed a series of guides titled *Under Pressure* showing how to implement strategies to reduce sodium in a variety of settings including:

- Schools:
http://www.cdc.gov/salt/pdfs/sodium_reduction_in_schools.pdf
- Worksites:
http://www.cdc.gov/salt/pdfs/Sodium_Reduction_Worksites.pdf
- Hospitals:
http://www.cdc.gov/salt/pdfs/sodium_reduction_in_hospitals.pdf
- Institutionalized populations:
http://www.cdc.gov/salt/pdfs/Institutional_Sodium_Reduction_Guide.pdf

Additional Procurement Resources

- Improving the Food Environment Through Nutrition Standards: A Guide for Government Procurement
http://www.cdc.gov/salt/pdfs/dhdsp_procurement_guide.pdf
- Health and Sustainability Guidelines for Federal Concessions and Vending Operations
http://www.cdc.gov/chronicdisease/pdf/Guidelines_for_Federal_Concessions_and_Vending_Operations.pdf
- Understanding Healthy Procurement: Using Government's Purchasing Power to Increase Access to Healthy Food
<http://changelabsolutions.org/publications/healthy-procurement>
- Local Food for Local Government: Considerations for Giving Preference for Locally Grown Food
<http://changelabsolutions.org/publications/local-food-local-government>
- Healthier Vending Machine Initiatives in State Facilities
http://www.cdc.gov/obesity/stateprograms/pdf/Healthy_Vending_Machine_Initiatives_in_State_Facilities.pdf

City of Chicago

Mayor Rahm Emanuel announced that new healthy vending machines will be located across all City departments and buildings starting in January 2013. Guidelines are being established for fat, sugar and calorie content of food and beverages in vending machines in buildings owned and leased by the city of Chicago. The new guidelines will apply to 157 snack machines on city property and will require that at least 75% of the food options sold in each machine contain 250 calories or less. Also, each machine must have at least five items that contain 250mg or less of sodium-per-serving, and one each gluten-free and nut-free. The new guidelines will also address pricing; the prices for the healthier items can not exceed the prices charged for less healthy items.



BUSINESS PLANNING

Important to any new food service project is the development of a business plan. Basic business planning includes a review of anticipated startup costs, market demand analysis and a break-even analysis that anticipates revenue. It should also incorporate complimentary cost-saving practices such as waste reduction strategies. It starts with a general statement of purpose, such as “the concession stand will sell more healthy food items that will benefit the community and turn a profit.” Implementing a healthy concession stand can range from a small project to a large multi-year endeavor. The following example showcases planning for a large-scale concessions project in Hunting Park in Philadelphia.



BASIC BUSINESS
PLANNING INCLUDES
A REVIEW OF
ANTICIPATED STARTUP
COSTS, MARKET
DEMAND ANALYSIS
AND A BREAK-EVEN
ANALYSIS THAT
ANTICIPATES REVENUE.

Community Profile: Business Planning for Concessions

Fairmount Park Conservancy, Hunting Park – Philadelphia, PA

Hunting Park is a park in North Philadelphia that is core to the surrounding community and many of its residents. In 2009, a master plan for the revitalization of Hunting Park was commissioned by the Fairmount Park Conservancy and provided an outline for the community, working in partnership with organizations and city departments, to transform its 87 acres of open space into a vibrant site for increased recreation, healthy food access and community cohesion. As part of this revitalization, one goal was to develop a plan outlining the opportunities for community management of the park’s concession building as a healthy food resource. The business plan would provide a framework to achieve this goal. This plan would also serve as a learning tool for other community organizations and a model to be used at sites throughout the 10,600 acres managed by the Philadelphia Parks and Recreation Department.

In this case, the concession stand in the park had not been operating for over eight years and was in need of major renovations in addition to the planning for procurement standards for healthy food and beverages. The project team underwent a comprehensive business planning process, which is outlined on the next page.



In the case of Hunting Park, business planning included the following steps, which need not occur linearly:

1. Evaluating the history of stand operations
2. Working alongside community and park system administrators to identify workable frameworks for stand operation (e.g., identify operator criteria and operational structure, model Request for Proposals (RFPs) to select a concessionaire)
3. Assessing facility needs and upgrades
4. Listing potential menu items
5. Completing a competitive analysis including review of illegal vending (vending taking place in the park without required licenses and permits from the park department), other food in the community and surveys of customer preferences and products consumed in the park.

Many of the decisions and activities listed here are intertwined. For example, it is nearly impossible to determine equipment needs and costs without a menu, and menus depend on operators. However, an operator may not be willing to come to the table if a concession stand is in extreme disrepair. In these instances it is important to make “best guess” determinations as to how to proceed.

Below is an example of estimated startup costs for a partially operational stand—a 2,200 square foot space that is in significant need of upgrading and has not operated for 10 years, but that has some working equipment and a functional building shell. Splitting cost burden between the park and a potential operator by a bid process may be a case-by-case decision.

Sample Startup Costs for Reopening a Concession Stand			
FOR PARK SYSTEM		FOR OPERATOR	
Kitchen Outfitting (i.e. refrigerators, microwave ovens, cash registers)	\$75,000	Kitchen Outfitting (i.e. pots, pans, tools, utensils)	\$4,000
Dining Area (i.e. outdoor seating, take-out/order counter, lighting fixtures)	\$5,000	Small Wares (i.e. menus, table accessories)	\$1,500
Installation (i.e. general contracting, flooring)	\$3,000	Installation (i.e. signage, labor)	\$8,000
Office (i.e. P.O.S.)	\$10,000	Office (i.e. computer, copy/fax machine, credit card system)	\$5,400
Soft Costs (i.e. security system)	\$6,000	Soft Costs (i.e. rent, marketing, licensing, inventory, book keeping)	\$24,500
Subtotal Costs	\$99,000	Subtotal Costs	\$43,400
10% Contingency (of total cost)	\$9,900	10% Contingency (of total cost)	\$4,340
Total	\$119,900	Total	\$64,240

Revenue Expectations

Anticipating revenue is a challenge in any business, and healthy concessions are no exception. Where prior operational data is available, such information should be used as a starting point for expectations. In many instances, however, stands may not have been operated before, or the product mix will be vastly different as the model shifts to healthier offerings and prior operation figures may be less relevant.

Below are some guiding principles for generating revenue expectations:

1. Demand is a percentage of the total estimated number of visitors for major events (e.g., sports, practices, camps, pool) and for traffic passing through.
2. Average check per customer is the average amount of money each customer will pay when purchasing food from the concession stand.
3. Revenue is based on demand and the average expected check per customer.

In the case of Hunting Park, the project was seeking to learn if the concession stand, in addition to serving park-goers, could also serve as a breakfast or coffee stop for commuters cutting through the park on their way to work. Here is an example of how they projected anticipated revenue. In 2011, the traffic count for Hunting Park Avenue, which runs through the park, was 1,180 cars for a three hour period between 6 a.m. and 9 a.m. The concession stand is located in a key location with ample parking in front, making it an ideal location for motorists to turn off and support the concession stand with very little inconvenience. The project team spoke with local coffee and breakfast take-out chains to determine the average amount of money a customer spends in the morning on typical breakfast items. Assuming the average check is \$3, the team calculated anticipated sales to be \$106,200 per year based on a three hour window ($\$3 \times 118$ customers per day $\times 6$ days a week $\times 50$ weeks a year).



IMPLEMENTATION AND MARKETING

Careful implementation of a healthy food service program or policy is vital to success and ultimate sustainability. Project implementation has several components ranging from how the new products actually get sourced, purchased and put on the shelf to how the new products are marketed and promoted to the current consumer base. A solid marketing strategy is needed to determine how to attract and retain customers. The following section highlights strategies and best practices for building consumer demand for healthy concessions and vending using the 4Ps (Product, Pricing, Promotion, Placement) marketing model, a common set of tools used to increase demand.^{xii} The table below highlights suggested vending and concessions strategies using the 4Ps model.

PRODUCT

Choosing Healthy Products for Vending and Concessions

The goal of most initiatives is to ensure that the healthiest options are available for purchase and consumption, and the decision to make the healthy choice is easy and appealing. Choosing the appropriate nutrition standards for your program may differ depending on the venue (e.g., school, workplace, hospital) and may vary for concession operations that typically offer full-service menus versus vending machines that tend to provide more snacks and beverages. At minimum, standards should be based on most recent Dietary Guidelines for Americans.

The Four Ps of Marketing for Concessions and Vending

PRODUCT

- Product mix
- Quality and variety
- Nutrition composition
- Packaging (*e.g., package design/color, illustrations, targeting specific groups, menu labeling, portion size, calorie labeling*)

PRICING

- Differential prices
- Specials
- Subsidies

PROMOTION

- Item and shelf tagging
- Sampling events

PLACEMENT

- Location
- General layout
- Quantity of facings (*number of spaces allocated for each product*)
- Eye level (*children's, women's and men's*)

In order to choose products that meet set nutritional criteria for your program, it is important to understand how to read a Nutrition Facts label. This label tells you the serving size, along with amount of key nutrients including total fat, saturated fat, cholesterol, sodium and fiber per serving. The label can then be compared with your target nutrition criteria to see if the product fits within the program. Not all commercially sized products contain nutrition labels, but the supplier should have this information available if you request it.

Compare Nutrition Facts with Nutrition Criteria: Which label fits the program?

Examine the two labels below and determine which product meets the nutrition criteria.

Nutrition Facts	
Serving Size 1 oz (28g)	
Servings Per Container 1	
Amount Per Serving	
Calories 151	Calories from Fat 86
% Daily Value*	
Total Fat 10g	15%
Saturated Fat 3g	15%
Cholesterol 00g	0%
Sodium 168mg	7%
Total Carbohydrate 15mg	5%
Dietary Fiber 1g	5%
Sugars 0g	
Protein 2g	
Vitamin A 0%	Vitamin C 15%
Calcium 1%	Iron 3%

Regular Potato Chips

Nutrition Facts	
Serving Size 1 oz (28g)	
Servings Per Container 1	
Amount Per Serving	
Calories 110	Calories from Fat 15
% Daily Value*	
Total Fat 1.5g	2%
Saturated Fat 3g	0%
Cholesterol 00g	0%
Sodium 150mg	6%
Total Carbohydrate 23mg	8%
Dietary Fiber 2g	6%
Sugars 2g	
Protein 2g	
Vitamin A 0%	Vitamin C 2%
Calcium 3%	Iron 2%

Baked Potato Chips

NUTRITION CRITERIA	REGULAR POTATO CHIPS	BAKED POTATO CHIPS
CALORIES: 250 OR LESS FOR TOTAL PACKAGE OR SINGLE SERVING	✓	✓
SATURATED FAT: LESS THAN 3 GRAMS PER SERVING		✓
TOTAL FAT: LESS THAN 7 GRAMS PER SERVING		✓
SODIUM: LESS THAN 230MG PER SERVING	✓	✓



IMPLEMENTATION CONSIDERATIONS

Who is responsible for making changes?

What staff time is needed?

How much will it cost?

Are there equipment needs?

Are there signage needs?

How will you build consumer demand and drive purchasing of healthier food and beverage items?



In 2010, Nemours Health and Prevention Services worked along with The Delaware State Parks to redesign their concession stands and vending machines to categorize food as either “Go”, “Slow” or “Whoa”. Their model takes into account that all foods can be a part of an overall healthy diet, in moderation.

“Go” foods are healthiest options for the amount of calories they contain. Eat these foods most often, almost anytime.

“Slow” foods have added sugar or fat that makes them high in calories. They are sometimes foods that should be eaten, at most, several times a week.

“Whoa” foods are highest in sugar and fat and the least healthy. They are once in a while foods.

In addition to targeting new products that meet selected nutrition criteria, some programs seek to introduce healthy standards incrementally and consider the benefits of keeping some familiar, top-selling items. Altering portion size is another way to keep some less healthy products in the mix without encouraging overconsumption. For example, most vending companies can supply single-serving bags of chips instead of the larger bags, or a concession stand operator can decrease the cup size of a large soda from 20 ounces to 16 ounces. Often these changes can be made without altering the price point, benefiting both the concessionaire from a profit perspective and the consumer from a health perspective.

Sample Vending Machine Items *(adapted from Nemours)^{xiv}*

SNACKS			BEVERAGES		
GO	SLOW	WHOA	GO	SLOW	WHOA
Popcorn (fat-free or low-fat)	Baked potato chips	Regular chips	Plain water	Fat-free or 1% flavored milk	2% milk, flavored or unflavored
100% whole grain crackers or pretzels	Fresh or dehydrated fruit with added salt, sugar or fat	Imitation fruit snacks and gummies	Seltzer	100% fruit juice	Whole milk, flavored or unflavored
Unsalted nuts or seeds	Whole grain crackers or pretzels		Unflavored fat-free or 1% milk	Diet beverages that are artificially sweetened	Sweetened teas
Trail mix or fruit/nut bars with no added sugar	Salted nuts		Unsweetened tea or coffee		Soda
					Energy drinks

Product Calculators

Several online tools exist to assist in calculating if selected products meet set nutritional criteria.

- HealthierUS School Challenge (HUSC) Competitive Foods Calculator is a tool that was developed to help determine if foods sold meet HUSC standards <http://healthymeals.nal.usda.gov/hsmrs/HUSC/calculator.html>
- Alliance for a Healthier Generation's Healthy Schools Program Product Calculator allows you to determine if a product meets Alliance guidelines, although it does not work with beverages https://schools.healthiergeneration.org/resources_tools/school_meals/product_calculator/

- Nutrition Environment Measurement Survey—Vending (NEMS-V) Healthy Choices Calculator rates food and beverages on a traffic light system based on NEMS-V rating scores <http://www.nems-v.com/NEMS-VHealthyChoicesCalc.html>
- Iowa Department of Education Nutrition Calculator is used to determine if a food product meets the Healthy Kids Act Nutritional Content Standards for a la carte, vending and regulated fundraising items sold to students during the school day http://educateiowa.gov/index.php?option=com_content&view=article&id=1740

Healthy Versus Stealthy: Undercover Ways to Improve Menu Nutrition Profiles

Community Profile: Princeton Recreation Department

Subtle changes to existing concession menus can decrease calories and improve nutrition quality while maintaining appeal, affordability and profitability. In the summer of 2012, the Princeton Recreation Department opened a newly renovated and designed pool complex, including a newly designed concession stand that serves pool patrons and day campers. As part of their mission to promote health in the community, the leadership decided to test various ways to make the food served in their community healthier.

Key Steps to Implement:

1. **Planning:** The project team, which included a registered dietitian, met with the concessionaire and reviewed the previous year's sales and menus. This discussion was important to understand the key drivers of profits and sales, as well as the concessionaire's capacity to implement changes (e.g., Do they have ovens to bake chicken tenders or only fryers?).
2. **Menu Review:** The project team then conducted a nutrition analysis of the previous year's menu and developed recommendations for changes.
3. **Finalize Changes:** The project team then engaged in a collaborative discussion to review recommendations and identify the most feasible and realistic changes. Negotiations with vendors or operators may require a multi-faceted approach where new items are phased in, old items are phased out and existing products are re-portioned.



Simple product modifications from the previous season's menu included changes in portion size, changes in product type/ingredients and the addition of new, healthy options. Examples of healthier items added to the menu included salmon and turkey burgers, additional types of fresh salads, paninis and wraps, fruit and fruit salad, yogurt, frozen fruit bars and 100% juice.

The concessionaire collected sales data between 5/28/12 and 9/9/12, which was then analyzed by The Food Trust. Looking at top 15 selling items and the product modifications of those products alone, the concession stand sold 1,192,264 fewer calories than it would have without those modifications. In addition, changes to portion size of fountain sodas included switching a large soda from 20 ounces to 16 ounces and a small from 16 ounces to 12 ounces. This change in portion size resulted in 141,820 fewer calories sold based on change in cup size alone.

Menu Modifications	
CURRENT MENU	SUGGESTED MODIFICATIONS
Hamburger 6 oz serving size Made from 80/20 (meat/fat) ground beef White bun	Hamburger 4 oz serving size Made from 90/10 ground beef* Whole wheat bun
Cheeseburger Same as above with 2 slices whole-fat cheese	Cheeseburger Same as above with 1 slice of low-fat cheese
Tuna Salad Sandwich Tuna salad with whole-fat mayonnaise White bun	Tuna Salad Sandwich Tuna salad with low-fat mayonnaise Whole wheat bread
Mozzarella Sticks 6 pieces per order	Mozzarella Sticks 5 pieces per order
Chocolate Milk Whole-fat milk	Chocolate Milk 1% or skim milk
Fountain Soda Small 16 oz	Fountain Soda Small 12 oz
	New Items! Turkey Burgers Salmon Burgers Edamame
	<i>*This will also reduce shrinking during cooking.</i>

Princeton Recreation Department Modified Pool Concession Menu

menu		
R&K'S POOLSIDE GRILL		
WHOLE WHEAT BREAD IS THE DEFAULT ON SANDWICHES		
SALADS, WRAPS & THINGS		
Garden Salad	\$2.75	
lettuce, tomato, cucumber and onion		
Spring Mix Salad	\$4.00	
lettuce, feta, cranberries and walnuts		
Caprese Salad	\$4.00	
mozzarella, tomato, basil and balsamic		
Buffalo Chicken Salad	\$4.25	
chicken, lettuce, feta and tomato		
Chef Salad	\$4.95	
lettuce, tomato, cucumber, meat and cheese		
Tuna Salad	\$4.25	
tuna, lettuce, tomato and onion		
Spinach Salad new	\$3.75	
spinach, bacon and red onion		
Grilled Chicken Breast Wrap	\$3.75	
with lettuce and tomato		
Garden-Style Veggie Burger	\$3.75	
with lettuce and tomato		
Hummus & Roasted Veggie Wrap	\$3.75	
Tuna Melt	\$4.25	
GRILL ITEMS		
Beef Burger	\$3.25	
Cheese Burger	\$3.50	
California Burger with lettuce, tomato and onion	\$3.75	
California Cheese Burger	\$4.00	
Grilled Chicken Sandwich	\$3.75	
Steak Sandwich	\$3.50	
Steak Sandwich with cheese	\$3.75	
BLT	\$3.50	
Buffalo Chicken Wings	\$3.75	
Chicken Nuggets (8)	\$3.75	
Chicken Nuggets (4) with fries	\$4.25	
Hot Dog (all beef)	\$2.50	
Hot Dog with sauerkraut or cheese	\$2.75	
Pulled Pork Sandwich	\$3.75	
Quesadilla	\$3.25	
Chicken Quesadilla	\$3.75	
Grilled Cheese Sandwich	\$2.50	
Whole Pizza Plain (12")	\$7.00	
Whole Pepperoni Pizza (12")	\$7.50	
COLD SANDWICHES wheat bread or wrap		
Peanut Butter & Jelly	\$2.50	
Tuna Salad with lettuce and tomato	\$3.75	
Chicken Salad with lettuce and tomato	\$3.75	
Turkey Breast with lettuce and tomato	\$3.75	
Turkey Club with lettuce and tomato	\$4.25	
PANINI comes with a bag of plain chips		
Mediterranean Grilled Chicken	\$5.25	
with spinach, roasted red peppers and balsamic		
Grilled Chicken with Bacon	\$5.25	
with mozzarella and balsamic		
Turkey Breast	\$5.25	
with mozzarella, bacon, roasted red peppers and balsamic		
Roasted Vegetables	\$5.25	
with mozzarella and balsamic		
SIDES		
Fresh Fruit	\$1.00	
Fresh Fruit Salad new	\$3.00	
Yogurt & Fruit Parfait new	\$3.75	
Nachos with cheese	\$2.75	
French Fries	\$2.50	
Sweet Potato Fries	\$3.00	
Cheese Fries	\$3.00	
Disco Fries (gravy & cheese)	\$3.50	
Onion Rings	\$3.00	
Mozzarella Sticks	\$3.50	
Edamame	\$3.00	
DRINKS & SNACKS		
Milk (regular or chocolate)	\$2.00	
Gatorade / Green Tea / Iced Tea	\$2.00	
Bottled Water (23.7oz)	\$1.50	
Capri Sun / Canned Soda	\$1.00	
Fountain Soda / Lemonade (12oz or 16oz)	\$1.25/\$1.75	
Chips / Candy / Snacks	\$1.00	
Ice Cream Novelties (various)	\$1.50-\$3.50	
Hand-Dipped Ice Cream (small or large)	\$2.00/\$3.50	
Funnel Cake (8")	\$3.00	
Churros	\$1.00	
Jumbo Pretzel (cinnamon sugar, salt or plain)	\$2.00	
VEGETARIAN OPTIONS		
ALL MILK IS LOW-FAT		
SMALLER PORTION SIZE		

PRICING

Making healthier items more affordable than the less healthy items is a complementary approach to improving healthy product availability and helps ensure uptake in purchasing and consumption of newly introduced products. The goal of this adjustment is to create a profit or, at minimum, a cost-neutral effect. Several studies show that pricing interventions can positively affect dietary choices.^{xv} In Minnesota, two community-based intervention studies used price reductions to promote the increased purchase of targeted foods. The first study examined lower prices and point-of-purchase promotion on sales of lower-fat vending machine snacks in 12 work sites and 12 secondary schools. Price reductions of 10%, 25% and 50% on lower-fat snacks resulted in an increase in sales of 9%, 39% and 93%, respectively, compared with usual price conditions. The second study examined the impact of a 50% price reduction on fresh fruit and baby carrots in two secondary school cafeterias. Compared with usual price conditions, price reductions resulted in a four-fold increase in fresh fruit sales and a two-fold increase in baby carrot sales.^{xvi}

Key Steps to Implement:

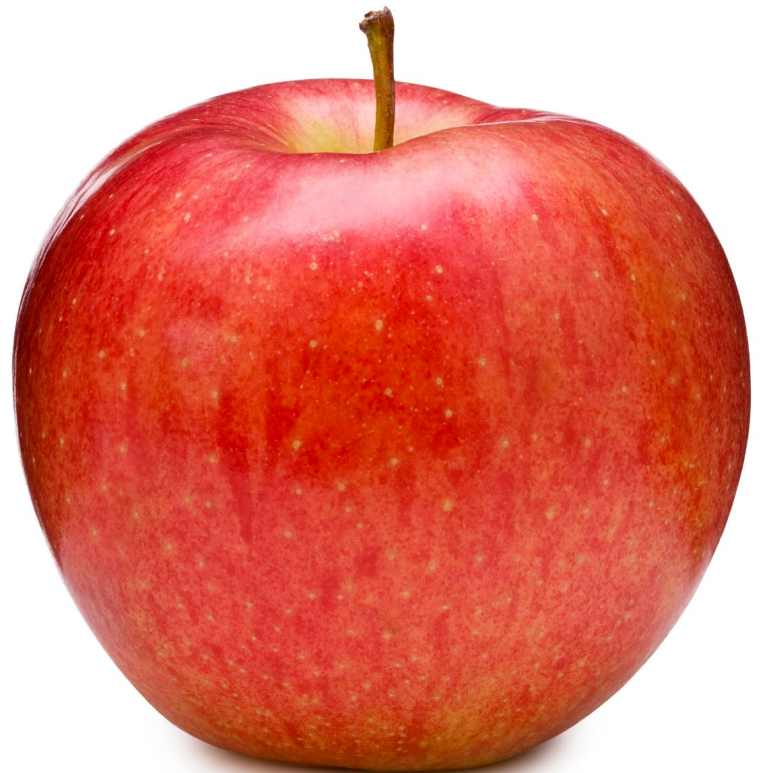
1. **Determine who has control** or is the key stakeholder in this strategy to include them in the discussion. It will likely vary depending on location and type of initiative. Governmental food service operations may not have control over vendor prices of food in the way that private entities do.
2. **Review previous sales** to determine top-selling items to identify possible products to target.
3. **Calculate sample price projections** to set the right price and make a profit, and insure that all stakeholders' interests are addressed.

As part of the North Carolina Red Apple Project, hospitals in North Carolina also used progressive pricing strategies to decrease the price of healthy food while increasing the price of less healthy options. In this case, hospital administrators committed to subsidize any loss in revenue due to changes; however, the revenue was actually \$70,000 above the expected budget in the first year.



TIP: IT IS IMPORTANT TO LET CUSTOMERS KNOW WHAT KIND OF FOOD IS BEING SOLD, BUT BE CAREFUL NOT TO OVERUSE SIGNAGE. TOO MUCH SIGNAGE CAN OVERWHELM CUSTOMERS.

PICK A FEW OF YOUR SPECIALTIES TO HIGHLIGHT AND THEN CREATE A CLEAR MENU THAT INCLUDES OFFERINGS AND PRICES.



PROMOTION

Promoting nutritious and healthful food items is necessary for increasing consumption of foods that customers might not typically eat. Attractive packaging and signage may encourage customers to try specific healthier items such as fruit salad, and menu labeling that indicate number of calories or health claims such as “low fat” are clear examples of healthy promotions. Healthy vendors can take a cue from other promotional strategies (e.g., taste testing, flyers about new items) that can serve to orient individuals to new products and improve acceptance.

Promotional Ideas

Temporary Price Reductions

- Offer a discount on newly introduced items to incentivize people to try them
- Buy 1, get 1 free (great for healthy products, particularly perishables such as fresh fruit)

Taste Tests

- Give samples to customers to try before buying the food, especially during peak hours
- For new vending products, hold a special event
- Hand out menus to advertise new products and encourage customers to try new things
- Sample a few products you are thinking about selling and ask customers to vote on their favorite

Signage

- Put up an A-frame sign for advertising
- Install banners
- Use menu labeling and shelf tagging systems to educate customers about healthy choices



PLACEMENT

In order to influence customers to purchase healthy items, place them in front of the customers as frequently as possible where they are most likely to be seen. It helps to position healthier options in plain view and place less healthy options in less visible areas. Placing items at eye level may help increase sales, so it is important to consider if your target audience is a child or adult.

Community Profile: Philadelphia, PA

In 2011, the Philadelphia Department of Public Health partnered with the Procurement Department, the Mayor's Office of Sustainability and the city's vending partners to implement healthy beverage and snack vending standards. As part of their vending standards, they required that healthier options comprise 65% of total offerings and be placed in locations of highest selling potential. In order to help aid vendors in stocking machines, they created planograms—a visual diagram of how the machine should look. Below is a diagram for a vending machine in City Hall.



Example Snack Vending Planogram from the City of Philadelphia

Real Deal Baked Veggie Chips 1.5 oz		Pirates Booty Popcorn 1 oz		Pop Corners Kettle Corn 1.1 oz		Herr's Original Popcorn 1 oz		Special K Cracker Chips 1 oz	
Snyder's Old Tyme Pretzels 1.58 oz		Snyder's Honey Mustard Nibblers 1.5 oz		Snyder's Nibblers 1.5 oz		Pepperidge Farm Baked Crisps 1 oz		Herr's Baked Chips 1 oz	
Austin Zoo Animal Crackers		100 Calorie Chips Ahoy		Welch's Fruit Snacks 2.25 oz		Keystone Party Mix 1 oz		Sun Chips Harvest Cheddar 1 oz	
Mr. Nature Trail Mix Unsalted		Mr. Nature Unsalted Energy Mix		Dried Mango Fruit		Kars Cashews 1 oz	Planters Salted Peanuts 1 oz	Oat and Honey Granola Bar	Kellogg's Nutri-grain Strawberry
Snickers	M&M's Peanut	Twix	Reeses Peanut Butter Cup	Kind Bar	Kashi Fruit Bar	Kellogg's Special K Strawberry	Fiber One Bar	Fig Newtons	Snackwell's Vanilla
Tastycake		Cheetos		Fritos		Doritos Nacho		Lays Potato Chips	
Lifesaver Mints		Doublemint		Winterfresh		Extra Spearmint		Extra Winterfresh	

HEALTHIER VENDING MACHINES

Philadelphia is phasing in changes to encourage healthier selections at 225 vending machines in municipal buildings, recreation centers and elsewhere. It is also making them more energy-efficient.

VENDING MACHINE WRAP:

ANY ADVERTISING ON THE MACHINE SHOULD FEATURE WATER OR 100% JUICE.

PRODUCT MIX: AT LEAST 65% OF BEVERAGES MUST BE "HEALTHY" (WATER, 100% FRUIT JUICE, NON-SUGAR-SWEETENED SODAS, TEAS AND FRUIT DRINKS).

PLACEMENT: HEALTHY ITEMS MUST BE PLACED IN HIGHEST-SELLING POSITIONS, USUALLY CLOSEST TO EYE LEVEL.

SIZE: SUGAR-SWEETENED DRINKS SHOULD BE LIMITED TO 12 OZ WITH A PREFERENCE FOR SODA IN 7.5 OZ SIZES.

PRICE: WATER SHOULD BE CHEAPER THAN REGULAR SODA (\$1.50 WATER WORKS OUT TO 7.5¢ AN OUNCE VS. 8.3¢ AN OUNCE FOR A CAN OF SODA).

CALORIES LABEL: TOTAL CALORIES FOR EACH ITEM MUST BE PROMINENTLY LISTED ON THE FRONT OF THE MACHINE.

Implementation: Policies

Policy can play an essential role in instituting any widespread community initiative. In the case of healthy concessions it serves as an efficient way for public and private sector entities to positively impact the food environment of the people they serve while also working to address issues like obesity, diabetes and heart disease.

Some examples of policy options to improve the overall food environment include:

- Vending policies that require a certain percentage of options to meet specified nutrition criteria
- A jurisdiction-wide procurement policy requiring food purchased by government agencies meet certain criteria (e.g. nutrition criteria, sustainability criteria or preference for local foods)
- Healthy concessions guidelines that include set percentage of healthier options
- A hospital policy to increase access to healthy beverages sold on property
- Guidelines to provide healthy options and portions in worksite cafeterias
- Access to free drinking water.



TOGETHER, POLICIES CAN DOVETAIL WITH FEDERAL AND PRIVATE POLICIES TO CREATE **SYSTEMATIC ENVIRONMENTAL CHANGE** THAT CAN IMPROVE HEALTHY FOOD CHOICES.

Google

As an incentive to keep employees happy at work, Google offers free, high-quality meals. Some offices have also planted help-yourself vegetable gardens. Each campus has several themed cafés in addition to vending machines and snack bars. While there is an emphasis on local, sustainable ingredients, the program has led to weight gain among the employees. In response to this, Google staff nutritionists have tested a variety of strategies to make sure that healthier choices are available and that employees choose them. The team does this by making sure that healthier options are available at all times during the day. In the cafeteria, the healthiest products are placed at eye level and prepared foods are color coded with traffic light signage: green (eat anytime), yellow (once in a while) or red (not often). They also introduced smaller plates in the cafeteria and desserts are kept to a two bite size. Both soda and water are available in the refrigerators, but water is placed at eye level and soda is at the bottom. Since making this change, water consumption has increased by 47% while soda decreased by 7%. Google employs a team devoted to monitoring and creating programs that foster employee wellness.



CASE STUDY

The table below includes questions for consideration to ensure an effective policy is crafted, accepted and implemented. Generally speaking, the role of the public health practitioner is to advise, share evidence, educate on implications of the proposed policy and then promote it once it is established.

Developing Policy: Questions to Consider

Should the policy be mandatory or optional?	Mandatory policies tend to have broader population impact but may not always be feasible. Optional or voluntary guidelines are often a good starting point.
What approval is required to implement a new policy?	Must have a clear understanding of the approval process and its requirements. <i>For example, which offices need to be involved to sign-off on a city-wide procurement policy?</i> <i>Are there current vending/procurement contracts in place that will need to be amended to reflect the policy change?</i>
What will be the reach of the policy?	- Determine who the policy will affect. <i>For example, one school concession stand vs. vending in the entire district; vending in city-owned buildings vs. vending in state-owned buildings.</i> - Determine how those affected by the policy will be educated about the new changes. <i>For example, will taste tests be conducted with newly introduced snacks in the vending machine? Will a promotional campaign highlighting the new nutrition information tagging system be implemented in the company cafeteria?</i>
Who will implement and monitor the policy?	Identify who will be responsible for program oversight and compliance. <i>The department or individual may be different than those crafting the policy. For example, the mayor's office may be instrumental in writing and enacting the policy, but the implementation and compliance will be conducted by health department staff.</i>
What is the policy timeline?	- Build in adequate time to implement the policy correctly. - Consider language that allows for a pilot or trial period of implementation before full adoption. <i>For example you may want phase in the targeted percentage of healthier items to get customers accustomed to the changes.</i>
Which nutrition standards will be featured within the policy?	- Consider using widespread, accepted nutrition standards. - Determine if the priority of the policy is to limit unhealthy foods, increase access to healthy foods or both. - Tailor the nutrition standards outlined in the policy to reflect the needs of the community and the targeted location. <i>For example, fresh food nutrition standards may not apply to vending machine policies in city-owned buildings, but they may apply to cafeterias operated on city property.</i> - Identify if vendors (or vendor contracts) must be modified to accommodate the policy.
How will the policy be communicated to consumers?	Consider how the new policy and product changes will be advertised to consumers. <i>For example, you may want to build in a marketing plan to build consumer demand for new products being offered. This plan could include strategies such as taste test or coupons.</i>

Supportive Strategies

Healthy food services is just one strategy that is part of a broader approach to creating healthy food environments. Organizations across the country are finding innovative ways to provide healthier food options for their employees, customers and the public, and they are often combining multiple strategies to achieve this goal. This section includes a few examples of companies and groups that have employed creative efforts to combine strategies such as community gardens and concessions to improve the food environment.

In Pittsburgh, Pennsylvania, the Phipps Conservatory and Botanical Gardens has created a café featuring environmentally friendly food, serve ware and cleaning practices. When in season, produce is sourced from the organic edible garden located on the conservatory grounds. The garden, which opened in spring 2011, serves as both an educational experience for visitors and a wholesome, cost-effective option for their foodservice operation.

Another example is Target Corporation, located in Brooklyn Park, Minnesota, which hosts two garden plots which include a wide variety of local and exotic fruits and vegetables. The gardens provide fresh produce to the 7,000 Target employees who enjoy breakfast and lunch on campus. The garden is fertilized with composted coffee grinds and food scraps from the cafeteria. Target also offers a Community Supported Agriculture (CSA) program to staff members looking to increase their fruit and vegetable consumption at home. Armed with recipes from the cafeteria's executive chef, employees can also take home fresh produce provided through a local farmer thanks to this popular program.

COMMUNITY GARDEN

When thinking about a garden component to a healthy vending, concessions or cafeteria program, make sure to research local food safety or health department regulations for serving produce grown in a community garden. These guidelines and regulations will also likely differ for public and private institutions.



Evaluating Healthy Food Services

Evaluation of healthy concessions projects and policies is a critical component in understanding the success or lack thereof, and the progress made toward the initial goal. Evaluation can occur at several levels. These include:

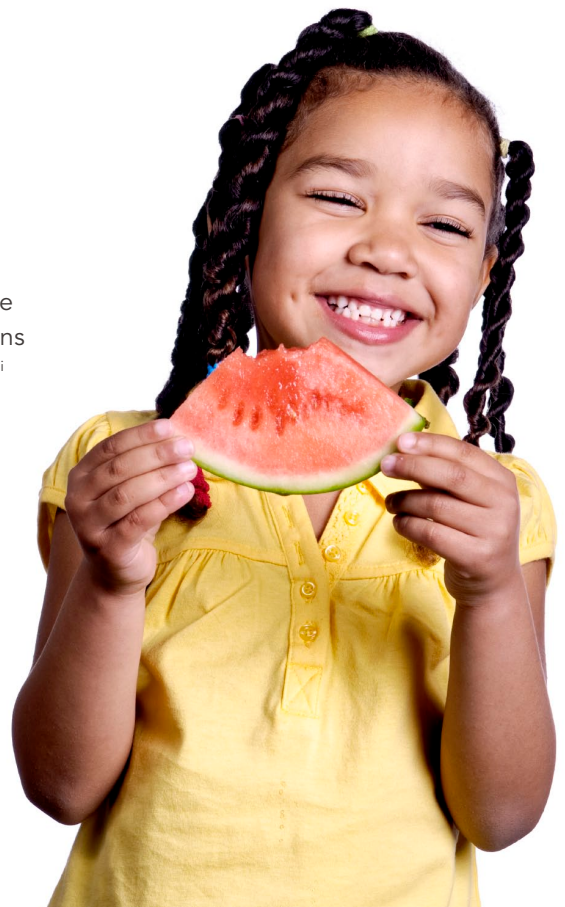
1. Examining the process undertaken and documenting lessons learned about the strengths and weaknesses regarding the feasibility of an approach
2. Understanding the short-term impacts, for example, shifts in purchasing patterns and profitability and
3. Understanding longer-term impacts, such as obesity reduction.

Documenting the Process

Process evaluation is an ongoing process that documents how well the intervention was implemented and identifies ways to improve the program. Monitoring the process helps to identify what is working (or not) in real time and allows an opportunity to course correct, if needed. Typically this part of the evaluation determines:

- To what extent were the program activities and goals accomplished?
Did the healthy cafeteria program provide the products specified to meet set nutritional criteria?
- To what extent was the program implemented?
Were the vending machines correctly stocked with items meeting nutritional criteria on an ongoing basis?
- To what extent was the target audience reached?
Did children at the pool buy targeted items from the concession stand?
- To what extent were resources used effectively?
Did the marketing campaign work in driving demand towards desired products?
- To what extent were the data collection methods effective?
Were you able to obtain the correct sales data from the vending company?

Several concessions and vending projects across the country, such as the Munch Healthier at Delaware State Parks have published their evaluations which may give ideas as to how to set up an initial process evaluation.^{xvii}



Measuring Impacts

Since there is an emerging interest in healthy vending and concessions, there is a growing need to document promising practices to determine the impacts of altering the food environment to include healthier options. When creating an evaluation plan, think about possible outcomes to measure. Possible outcomes for healthy concession stand, vending and cafeteria projects may include calories sold/vended, profits, changes in health of participants or changes in cost of total food budget. In order to measure these outcomes, access to data is needed to evaluate the effects. Some potential data sources needed include current and past sales data from vendors or Point of Sale (POS) systems, nutritional data from nutrition facts labels or nutrition analysis software, customer counts from traffic or people counters and customer satisfaction from consumer surveys.

Sales data is often critical to showing that creating healthy concessions will not lose money. Often this is a major fear of stakeholders before entering into a project. While it is important to evaluate each project, several projects across the country have shown that they do not lose money by introducing healthy options; in fact, profits are often increased. Tracking sales over time will give a sense of how the project is working, since it may take a few months for customers to get used to the new food and beverage offerings. It is not uncommon to see sales initially drop and then rebound within three months when customers get used to the new offerings.



SALES DATA IS OFTEN
CRITICAL TO SHOWING
THAT HEALTHY
CONCESSIONS WILL
NOT LOSE MONEY.

Rochester Honkers Baseball Team – Olmstead County, Minnesota

In 2011, the Rochester Honkers Baseball team teamed up with Olmsted County Public Health Services in Minnesota to launch the mascot-endorsed Slider's Healthy Choice Menu. After reviewing the menu to identify healthier alternatives, the project team evaluated costs and set prices of healthy items so that they were equal to or cheaper than less healthy items. They also developed a brand around the team mascot "Slider" and created promotional signage to highlight healthier items. The new menu provided concessions stands with healthier alternatives such as low-fat granola bars, baked chips and pretzels, fresh cut fruit and 100% fruit juice. Survey results with customers showed that nearly half (47%) tried one of the newly introduced items, and almost all (80%) noticed the new healthy menu options.



CASE STUDY

Resident surveys and traffic counters (devices that count the number of pedestrians or cars passing by) can also yield important data about customer demand. Many park systems are already using traffic counters to track use of parks. These metrics, along with data about frequent major events (such as sports practices or games), support demand assessments for business planning purposes. Local franchise operators, for example, have communicated expectations for a 1% customer purchase rate from car traffic counters. In the study of Philadelphia's Hunting Park, it was found that approximately 6,700 cars enter the park each day. The concession stand is also located adjacent to a busy thoroughfare that runs through the center of the park, making the traffic information even more relevant.

Garbology is another emerging technique for understanding food items currently consumed at a particular location and can help plan for and evaluate changes to a concessions program. In simple terms, garbology is the scientific study of trash and the way it reflects the lifestyles of a group of people. This approach catalogues specific categories of items consumed at different venues versus what is reported in customer surveys. For example, in a survey to gather information as part of the planning process for the concession stand, 3% of Hunting Park park-goers reported consuming alcohol in the park while garbology data found 43% of all the trash was alcohol-related.



Process for Garbology Evaluation

STEPS FOR COMPLETION

Open trash bag over tarp (using scissors if necessary).

Use rake to spread garbage out over tarp.

Remove unnecessary garbage items (items irrelevant to project, i.e. non-food trash).

Begin to move remaining (relevant) garbage into groups (i.e. beverages, snacks/packaged food, hot/prepared foods).

Once items are grouped, record the item, brand name (if applicable) and quantity. Judgments may need to be inferred from location and season (i.e. popsicle-like sticks are most likely from chicken-on-the-stick sales).

Take photographs as needed.

Take image of trash for qualitative review to record counts, findings.

SUPPLIES NEEDED

1. Large tarps (on which trash can be spread)
2. Work gloves, preferably puncture-proof
3. Grabbers (to pick up trash)
4. Scissors
5. Sturdy metal rake
6. Camera
7. Item record spreadsheet

Conclusion

Creating healthier food environments through healthy concessions is quickly becoming a national trend. According to industry reports, healthful vending was listed as one of the top seven new food trends, and companies geared toward providing these services are marketing their services to schools, workplaces and other venues in the community.^{xviii} Workplaces across the country are also looking to cut healthcare costs by creating healthy food environments that will promote the health of their employees. As this field continues to grow, documenting and sharing lessons about each program will help the field understand the most promising strategies for improving the overall food environment.



Appendix: Sample Policies

EXAMPLE	REACH	SCOPE	NUTRITION CRITERIA	MARKETING STANDARDS
NYC Agency Food Standards	Mandatory Comprehensive Nutrition Standards	Food sold in vending machines on city or government property	<i>Require snacks meet the following criteria per package:</i> • Calories: no more than 200 calories • Total fat: no more than 7g (nuts, seeds, nut butters and cheese are exempt) • Saturated fat: no more than 2g (nuts, seeds, nut butters and cheese are exempt) • Trans fat: 0g trans fat • Sodium: no more than 200mg • Sugar: no more than 10g (nuts, seeds, nut butters and cheese are exempt, Yogurt: no more than 30g sugar per 8 oz) • Fiber: contain at least 2g of fiber, if product is grain/potato-based (e.g. granola bars, crackers, pretzels, cookies, chips)	• Require calorie information is posted for each food item, as packaged • For programs serving children 18 and under: products cannot contain artificial flavors, artificial colors, artificial sweeteners or other non-nutritive sweeteners • Recommend limit grain/potato-based snacks to no more than 50% of machine
Philadelphia Department of Public Health	Mandatory Comprehensive Nutrition Standards	Food sold in snack vending machines in city buildings	<i>Required Criteria: At least 65% of snack machine must be healthy snacks defined as vended food items that meet all of the following nutrition standards:</i> • Have less than or equal to 250 calories per single serving package and/or per total package • Have less than or equal to 3g of saturated fat per serving • Have less than or equal to 7g of total fat per serving, excluding nuts and seeds • Have less than or equal to 230mg of sodium per serving. High Fiber: At least one item in the machine must be high fiber—defined as at least 5g/serving of fiber. High-fiber items must also meet the above required criteria. <i>Recommended Criteria: It is strongly recommended that as many vended food items as possible comply with the following recommended criteria:</i> • Have 0g of trans fat. • Have no more than 18g of sugar per serving, excluding fresh fruits and vegetables, dried fruits and vegetables and packaged fruit packed in its own juice or water. • At least five items in the machine contain 10%–19% of Daily Value for Vitamin A, C, E, Calcium or Iron.	• Total calorie content per item should be placed on or adjacent to the selection buttons or adjacent to the price of items. • Items with high fiber or a good source of vitamins or minerals must be labeled as such. • Items that meet healthy snack criteria must be placed in a position with highest selling potential. • Only healthy snacks can be advertised on the machine. • Price of healthy snacks must not exceed the price of other options. • When possible and economically feasible, items should be organic, local or documented sustainably grown.
Delaware Healthy Eating Initiative	Mandatory Comprehensive Nutrition Standards	Food sold at concessions in state parks	<i>“Go” foods meet these nutrition standards:</i> • No more than 35% of calories from total fat (not including nuts or seeds) • No more than 10% of calories from saturated fat • Zero trans fat (≤ 0.5g per serving) • No more than 35% of calories from total sugars (except yogurt with no more than 30g of total sugar per 8 oz portion as packaged) • At least 3g of dietary fiber per serving in grain products	• Aim to make 60%–100% of offerings “Go” foods, 30% or less “Slow” foods, and 10% or less “Whoa” foods • Food and beverages that meet nutritional standards must be sold at price equivalent to or lower than similar items that do not meet standards

Continued on next page.

EXAMPLE	REACH	SCOPE	NUTRITION CRITERIA	MARKETING STANDARDS
Delaware Healthy Eating Initiative (cont.)			• No more than 200mg of sodium per package • No more than 200 calories per portion as packaged	• Food and beverage that meet standards are placed at eye level • Visible prompts to promote healthier options
Massachusetts State Agency Food Standards	Mandatory Comprehensive Nutrition Standards	Food purchased for meals served all state agencies	• All products purchased contain 0g of trans fats. • All individual items have ≤ 480mg sodium per serving, unless otherwise indicated. • No purchase of food products prepared by deep frying. • Beverages: ≤ 25 calories (kcal) per 8 oz for beverages other than 100% juice or milk. • Canned fruits: fruit canned in its own juice. • Dairy: 1% or non-fat milk only and ≤ 100 calories per 8 oz; low fat or non-fat yogurt only. • Bread, pasta and other grains: contain ≤ 215mg sodium per serving. • Cereal: contain ≤ 215mg sodium per serving. • Canned vegetables: contain ≤ 290mg sodium per serving and have no salt added. • Canned and frozen tuna, salmon and other seafood: contain ≤ 290mg sodium per serving or have no salt added. • Canned meat: contain ≤ 480mg sodium per serving.	• Healthy options such as fresh fruit, leafy greens salad and/or vegetable slices are available. • Water is available at all times.
Healthy NC Hospitals – Red Apple Hospital Project	Voluntary Comprehensive Nutrition Standards	Food served in all hospitals in North Carolina	Main dish • Calories: less than 500 • Max 35% calories from total fat • Max 10% calories from saturated fat • Trans fat: 0g • Sodium: less than 600mg Side item • Calories: less than 225 • Max 10% from saturated fat • Trans fat: 0g • Sodium: less than 360mg Snacks, desserts and quick breads • Calories: less than 200 • Max 35% calories from total fat* • Max 10% calories from saturated fat • Trans fat: 0g • Sodium: less than 360mg • Max 35% total sugars by weight (EXCEPT for yogurt with 30g or less of total sugars per 8 oz portion as packaged) <i>*100% nuts or seeds are EXEMPT from the fat criteria</i>	• Promote healthy items with pricing incentives. • Use marketing techniques, including nutrition labeling, to educate and encourage healthy items. • Implement education campaign to promote healthy foods to staff and visitors.
Santa Clara County (California) Nutrition Standards	Mandatory Comprehensive Nutrition Standards	Food and beverages offered, served and purchased at county facilities or by county departments	For Cafeterias and cafes: Beverages: At least 50% of the beverage options must be made up of one or more of the following: • Water, including carbonated • Non-sweetened tea or coffee • Plain (no added flavor or sugar) non-fat or 1% low fat dairy milk • Plant-derived milk (e.g. soy, rice, almond) with 130 or less calories per 8 oz serving • Low-calorie beverages that do not exceed 40 calories per 8 oz serving.	• Healthier beverages should be placed prominently and be as easy to see as the operator's other most popular beverages.

Glossary

Concessions: Places where patrons can purchase snacks or food at a theater, museum, stadium, park or hospital.

Differential Prices: A term used when prices are adjusted to help influence purchasing behavior.

Facings: A term used in marketing or merchandising to show amount of shelf space dedicated to a given product. A box of cereal on a shelf would be one facing, two of the exact same kind sitting side by side would equal two facings.

Place: A term used in marketing to describe the physical placement of where and how a product is displayed.

Point of Sale System: The electronic system used to record and monitor sales.

Price: A term used in marketing that reflects the amount a customer pays for the product.

Procurement: A policy officially adopted often by a state or local government (or a state or local government agency) requiring that the food it purchases, provides or makes available contains key nutrients at levels that do not exceed standards established by public health authorities.

Product: A term used in marketing to describe a tangible good.

Promotion: A term used in marketing to represent all of the methods of communication that a marketer may use to provide information to different parties about the product.

Request for Proposals: A solicitation made, often through a bidding process, by an agency interested in procurement of a service or product.

Shelf Tagging: Signage that goes on the edge of a shelf that promotes or gives information about a product that it is near.

Soft Costs: A cost that is not considered a direct cost.

Vending: A machine where items such as snacks and beverages can be purchased.

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