Making The Switch to Healthy Concession: A School Curriculum

Project Proposal

Masters Project

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Chapter 1: Project Proposal

Background

There is a growing obesity epidemic among both youth and adults in the United States. It is imperative that food sources, such as concession stands, address and alter items as needed to ensure that healthful foods are available as an alternative to the traditional snacks commonly seen at high school sporting events. By providing a healthy alternative, such as fresh fruit and lean protein, individuals may be more likely to choose these items over the high fat, sugar loaded confections at the concession stand.

Concession stands have been around for decades and have primarily served one type of food: junk food. It has never been commonplace to incorporate fresh fruit and vegetables and other healthier choices into the selection of concessions. Many school organizations look at one key aspect when it comes to the foods they select for sporting events and that is profit. If a product is not going to sell, it will not be an option. However, to combat the obesity epidemic at a localized level, schools and youth sports organizations must consider making a change in order to promote healthier lifestyles for their patrons and athletes.
I. Introduction

The childhood epidemic is continually rising. Current statistics indicate that 1 in 6 children (CDC, 2015) and more than one third of adults in the United States are obese (CDC, 2016). It is necessary to examine convenience foods available to youth and patrons at sporting events in order to determine whether these foods play a role in unhealthy lifestyle habits. These foods, which are calorie dense and high in sugar, are easily accessible in sports settings (Thomas, 2012).

More than 44 million youth participate in a sporting event (NCYS, 2008) and the relationship between sports attendance and dietary habits is vague (Thomas, 2012). For many, the foods served at sport concessions replace a meal rather than a simple snack. Research continues to grow when examining concession stand choices at youth sporting events; however, there is no current curriculum that illustrates implementation of a guideline for providing healthy options while simultaneously educating the general population about these choices.

II. Purpose of Project & Objectives

Purpose of Project

The purpose of this project is to design a curriculum that any school sporting event concession stand can utilize. This curriculum will provide insight into how food selections are determined among individuals and allow non-educators to implement a healthy alternative to common food selections. It is important to note that this curriculum will not replace existing concession choices; it is to provide alternative options for individuals to make the choices themselves.
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**Project Objectives**

1. Identify gaps in diet quality of youth and adult patrons and participants as well as provide alternative concession options at youth sporting events at any school.
2. Encourage behavior change within individuals that will result in healthier diet patterns for both the individual and their families.
3. Design a replicable curriculum for nutrition professionals and school Booster organizations who desire to create a larger community impact by establishing healthier options during sporting events.

**III. Definitions and Terms**

**Conceptual**

*High Energy Foods:* foods high in calories, typically high in sugar and fats; produces high energy when broken down by the digestive system.

*Low Energy Foods:* low calorie foods; foods are not high in fat and calories; typically foods such as fruits, vegetables and high water content foods.

*Diet Quality:* quality of food consumed by an individual.

*Poor Diet:* a diet that supplies an individual with more or fewer carbohydrates, fats, proteins, vitamins, minerals, and water that is necessary to maintain good health.

*Balanced Diet:* a diet that contains the proper proportions of carbohydrates, fats, proteins, vitamins, minerals, and water necessary to maintain good health.

*Traffic Light Labeling (TLL):* used by researchers to distinguish high-energy foods from low energy foods; red= no nutritional value, yellow= moderate to low nutritional value, green= low energy foods, a healthy choice.
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*Recreation and Sports Facilities (RFS):* a public facility in which individuals can exercise or participate in sports.

**III. Conceptual Framework**

**Maslow’s Hierarchy of Needs**

Individuals in any community have needs. Maslow’s Hierarchy of Needs demonstrates how to address these needs (Figure 1). This five level pyramid indicates what individual needs must be met before the next level can be achieved. The most basic needs, the physiological needs, are food, water, shelter, etc. These needs must be met for basic human survival (McLeod 2007).

![Figure 1.0 Maslow’s Hierarchy of Needs](image)

This model provides a better understanding of what motivates individual behaviors. All individuals are capable of moving higher in the pyramid but only when the basic need is met; individuals can also drop levels as different life events occur (i.e. divorce, job loss, family death) (McLeod 2007). McLeod states that “Maslow noted only one in a hundred people become fully
self-actualized because our society rewards motivation primarily based on esteem, love, and other social needs” (McLeod 2007).

Satter’s Hierarchy of Food Needs

The food portion of this level can be further broken down into another hierarchy of needs called the Satter’s Hierarchy of Food Needs (Figure 2). This pyramid is a six-tiered system and operates in a similar method to Maslow’s pyramid; the needs of the individuals in the first level must first be met before that individual can acknowledge the next level (Satter 2007).

![Figure 2.0 Satter’s Hierarchy of Food Needs](image)

Many individuals, particularly in low-income communities, find themselves in the Enough Food section of the pyramid. These individuals are food insecure and will typically select foods that have high energy density, as these foods are easily accessible and at low-costs (Satter 2007). Satter states that “the need to satisfy hunger promotes selecting food items previously experienced as being filling and sustaining- food items that are relatively high in energy density” (Satter 2007). The next level of the pyramid is the Acceptable Food level and “...may relate to nutritional quality as well as social norms about food selection and manner of
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food acquisition” (Satter 2007). As the pyramid continues, individuals who are satisfied at one level will continue upwards toward the Instrumental Food level. This level is closely related to Maslow’s Self-Actualization level in that a person will “...consider choosing food for instrumental reasons: to achieve a desired physical, cognitive, or spiritual outcome” (Satter 2007).

IV. Theoretical Framework

People choose high fat, calorie dense foods due to their convenience, affordability, availability, and ease of transport. According to Esptein, “when a behavior is consistently reinforced in the presence of a unique stimulus, that stimulus begins to influence the rate of the behavior” (Esptein 2007). Behavior theory could illuminate the food behavior patterns of patrons and youth at sporting events. Operant conditioning could provide a model to encourage healthy food selections by the use of positive reinforcement.

Behaviorism (Behavior Theory) falls under the psychology umbrella and studies stimulus-response relationships and their consequences (Spicer 2003). Consequences can be broken down into two types, reinforcement and punishment, and are responsible for the relationship between the behavior and the stimulus (Spicer 2003). Because all choice is universal, behaviorism suggests that the food choices act as a reinforcer. Under behaviorism, the understanding that “all behavior is learnt from the environment. We learn new behavior through classical or operant conditioning” (McLeod 2007).

By this, one can infer that individuals are able to learn new food behaviors that could replace established, unhealthy behaviors. As Esptein stated, “...if someone has equal access to two types of food in the home, and both are ready to eat and require the same behavioral cost to
prepare, then they are likely to choose the meal that they find most reinforcing” (Esptein 2007). For example, if an individual has a high-energy food, such as candy, and a low-energy food, such as fruits and vegetables, available in their home, they will be more likely to choose the food they believe to be the most reinforcing. If the individual has a past connotation that high-energy foods are reinforcing, there is a greater likelihood that they will choose the candy over the fruits and vegetables.

V. Literature Review

In the book, *The Food Revolution: How Your Diet Can Help Save Your Life and Our World*, author John Robbins discusses the American diet and what necessary changes can be made in order to improve eating habits across the country. Robbins stated:

“The conventional American diet is failing people. Full of processed and refined foods, sugar and unhealthy fats, it is not providing people with the experiences of their bodies that they want or need. It is, in fact, a tragedy” (Robbins, 2011).

Robbins also states, “the average North American consumes, per day, the rather staggering total of 53 teaspoons of sugar. This amounts to a five-pound bag of sugar every 10 days for each man, woman, and child” (Robbins, 2011). A visit to any sporting event concession venue will exhibit a colorful display of sugary drinks and snacks. These foods, not only available during school and sporting events, are always readily available to students in vending machines. Robbins also referred to these situations, stating that:

“Meanwhile, more than 5,000 schools in the United States today have contracts with fast-food companies and junk-food manufacturers
to provide food for their cafeterias and/or vending machines. Coca-Cola and other soft drink companies are giving millions of dollars to cash-strapped school districts in return for exclusive rights to sell their products in schools” (Robbins, 2011)

In schools across the country, Booster clubs and parent volunteers organize and operate the concession stands during sporting events (Laroche, 2014). The sales of the food during the games are typically the large money generator for Booster organizations so many clubs are resistant to the introduction of new foods or changes (Laroche, 2014). The food sold at these events typically consists of sugar-sweetened beverages and ready-to-eat snacks such as popcorn, pizza, hot dogs, candy, and chips. According to the National Hot Dog & Sausage Council, Americans spent more than $2.5 billion on hot dogs in 2015, and Americans will consume enough hot dogs at major league ballparks to stretch from Washington D.C to San Francisco (National Hot Dog & Sausage Council, 2015). The Council also states “supermarkets and school cafeterias, restaurants and concession stands hot dogs are served everywhere. While it is difficult to offer a single precise answer as to the number of hot dogs sold and consumed each year, one thing is for sure: the market is more than a foot long (National Hot Dog & Sausage Council, 2015). While the obvious approach to implementing a change in concession foods is to eliminate calorie-dense foods and replace them with healthier options, there would be backlash from patrons and a sharp decline in sales, a more feasible approach would be gradually introduction to healthier items (Laroche, 2014).

A recent study has utilized the use of traffic light labeling (TLL) as an indicator of healthful choices. TLL is the use of placing colored labels on foods that correspond with the
appropriate nutritional content. Foods that are high in calories, fat, and sugar and possess no nutritional value would possess a red indicator; yellow indicators designate foods that have little to moderate nutritional value; and green indicators correspond to foods that are low in calories and fat, representing a healthy choice (Olstad, 2015). According to this study, “TLL may be a more effective means of encouraging healthier selections compared to calorie labeling” (Olstad, 2015). This study hypothesized that “…if TLL could increase [the] purchase of healthy items, then managers might be more willing to improve RSF [recreation and sports facilities] food environments” (Olstad, 2015). Their findings indicated that individuals were accepting of the TLL and the labels “increased purchase of healthier [foods], and reduced purchase of unhealthy foods in a publicly funded RSF, with no loss of revenue” (Olstad, 2015).

As Leonard H. Epstein stated in another study, “food is a strong reinforcer and, in some contexts, may be a more powerful reinforcer than are drugs of abuse” (Epstein, 2007). When examining the dietary choices of individuals, their association of which food perceptions as a reward to good behavior or achievement is vital. Epstein also states, “strong reinforcers can motivate a lot of behavior, whereas weaker reinforcers do not support very much behavior” (Epstein, 2007). For example, if individuals believe that a certain food is a reward for a certain behavior, they are more likely to associate certain foods as a positive choice even if they are calorie dense foods.

Recently, a food revolution has occurred; more and more Americans are aware of the foods they are consuming, where these foods are coming from, and the nutritional value of their meals. In a recent study, “parents reported that youth commonly consume unhealthful snacks, such as candy or chips, in conjunction with sports” (Thomas, 2012). These snacks are high in fat
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and sugar and they are easy options for patrons and youth who are in a rush. However, there are those patrons, parents, and youth that are constantly aware of their food choices while they are attending these events (Sukalakamala, 2013). For this population, “there is a need to add and provide healthier food options to satisfy health conscious consumers” (Sukalakamala, 2013). The idea of having healthier concessions is “becoming more commonplace each year as Americans strive to be healthier…” (Geller, 2015) as a recreational park in Kansas recently discovered, reporting that the staff was “pleasantly surprised [with the transition in foods]” (Geller, 2015).

VI. Discussion

With the ever-growing obesity epidemic affecting more and more American adults and children each year, it is critical to find an approach to increase the consumption of healthful foods. Even with the growing number of studies examining concession stand choices at youth sporting events, there is still much to be discovered regarding its linkage to obesity, behavior, and the potential for change. For every individual, classifying foods as healthy or unhealthy presents a challenge. What may be healthy for one individual may not be for another (e.g. Gatorade). Studies like this are becoming a common topic as chronic disease and health risks are on the rise. By reducing the intake of the high fat foods, such as pizza and soda, individuals can begin to make the positive changes needed for quality health. With that being said, great progress has been made that could provide valuable insight into the modification of individual relationships toward food.
Chapter 2: Preliminary Steps and Program Plan

Preliminary Steps

I. Introduction and Preliminary Steps in Planning Educational Programs for Youth and Adult Learners

This curriculum will provide non-educators and volunteers with the resources and materials necessary to organize and facilitate healthier options for patrons and participants of youth sporting events. Implementation of this program will be in any youth sports setting where individuals gather and food is served. Athletic Boosters and other youth sport organizations may utilize this information and train/educate volunteers accordingly. The design of this curriculum is to work in partnership with existing concession programs and the information provided will not replace the advice of medical professionals.

This program does not have specific time constraints and is flexible, as the program requires. Food suggestions and visuals provided through this curriculum target any individual that partakes in youth athletic events. These individuals may range from little to no nutritional knowledge to seasoned experts. By examining the preliminary steps in the planning process, material will target the needs of families and individuals while making significant behavior changes in their daily lives.

II. The Interactive Planning Model

The target audience for this program will be any participant or patron of youth athletic events at high schools across the state. This program will follow the Interactive Planning Model (Caffarella & Daffron, 2013, p.29) and will target key nutritional and sustainability issues that participants face including: food selection, nutritional knowledge, selecting whole grains, switching to low-fat dairy, choosing lean meats, and incorporating more fruits and vegetables.
into their routine during athletic events. Participants will have access to nutrition information that is a supplemental guide for Traffic Light Labeling (TLL).

There are five areas of foundational knowledge that are particularly important when planning adult programs. These areas include technology, adult learning, cultural differences, relationship building, and power & interest (Caffarella & Daffron, 2013, p. 29). Elements of the Interactive Planning Model include the following as stated by Caffarella & Daffron (2013, p. 29):

- Discerning the context
- Building a solid base of support
- Conducting a needs assessment
- Sorting and prioritizing program ideas
- Developing program objectives and goals
- Designing instructional plans
- Devising transfer-of-learning plans
- Formulating evaluation plans
- Making recommendations and communicating results
- Selecting formats, schedules, and staff programs
- Preparing budgets and marketing plans
- Coordinating facilities and on-site events

Due to limited resources and financial restraints to the schools, the use of technology will not be necessary for this program. In many school cafeterias, technology items such as Smart Boards are not accessible and are not necessary for program implementation. Additionally, while cultural differences may not always be present during this program, it is vital that
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volunteers and non-educators be aware of this while providing information to patrons and youth.

This model provides all the necessary elements necessary to design a successful program; consideration of these elements is vital when designing, implementing, and evaluating the *Making The Switch to Healthier Concessions* program. Prior to program implementation, schools and athletic organizations should conduct a needs assessment and present the findings to their support system.

III. Foundational Knowledge and Discerning the Context

When planning any educational program, it is vital to collaborate rather than clash with planning methods of every organization involved. Each partner brings crucial tools to the discussion throughout the planning process. Establishment of a more cohesively organized program with the incorporation of the planning methods of various organizations. It is important to note that ownership of certain tasks is vital to program operation. If multiple planning procedures are implemented, representatives from the organizations must orchestrate the appropriate step in the planning process.

It is also important to be considerate of all ethnicities and cultural norms throughout the program planning process; this program is no exception. In order to achieve program success, it is important to examine the cultural needs within the county where program implementation will occur. Once identified, the volunteers and non-educators of the concession stands will be able to tailor programming and information to meet these needs effectively. If a cultural need is present, modification of the current lesson plans used in programming is permissible to encompass the traditions of the culture. The foods suggested in this curriculum may be taboo to certain cultures.
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and it is important to be aware of these barriers throughout the program planning process.

IV. Building a Base of Support

A partnership between the school’s Athletic Boosters and any volunteers will be vital to the success of this program. Other organizations, such as OSU Extension, could provide additional information. Any local health and wellness coalitions or advisory committee could also provide insight into program implementation. As discussed in Caffarella & Daffron (2013), Advisory Committees are a key element to the success of any program (p. 115). Within Extension, they are a vital tool to communicate with partners and community members. These committees are able to tackle crucial issues current and potential partnership programs may face.

V. Identifying and Prioritizing Ideas and Needs

In order to create the most beneficial education program, a needs assessment of the participants is crucial. The performance of a detailed needs assessment is strongly encouraged prior to any program planning. Information from this will determine what the program will encompass and why the program is necessary. An example of a County Needs Assessment is included in this curriculum (Figure 3.0). Feedback and input from advisory committees and health and wellness coalitions should be a considering factor when identifying needs. As stated in Caffarella & Daffron (2013), “an educational need is most often defined as a discrepancy or gap between what presently is and what should be” (p. 134). Demographic information from the county and the needs assessment of the county will provide insight into community needs and gaps.
Figure 3.0 County Needs Assessment

Making the Switch to Healthier Concessions County Needs Assessment Data

Name of County being served: _________

School Building that will be serving the above county: _______________________

School Entity that will conduct program: ______________________

Additional Organizations that will be involved: ________________________________

Demographic Characteristics of Target Audience in this County being served
   http://Quickfacts.census.gov

1. County Total Population:
   ______________________________________________________________

2. Percent of Persons under 18:
   ______________________________________________________________

3. Percent of Persons 65 years and over:
   ______________________________________________________________

4. Percent of Persons, Female:
   ______________________________________________________________

5. Race:
   a. Percent, White:
      ______________________________________________________________

   b. Any other race over 1%: _________

   c. Any other race over 1%: ______________________

   d. Subtract the Race percents listed above from 100, remainder is Other:
      ______________________________________________________________
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6. Ethnicity, Percent, Hispanic:

Socio-economic Profile

(Login or register) Run an Indicator Report for your County, Ohio, View Report

1. Poverty, County being served:

2. Poverty, State: _______________________________________________________________

3. Free & Reduced Lunch recipients, County: __________________________

4. Total Enrollment in Schools:

Related Health, Lifestyle, and Environmental Characteristics in County being served.
http://www.countyhealthrankings.org/

5. County Health Rankings:

6. Obesity, Adults:

7. Access to Recreational Facilities (rate of recreational facilitates/100,000 people):
   Change year to 2013

8. Limited Access to Healthy Foods:
   Change year to 2013

9. Fast Food Restaurants:
   Change year to 2013

10. Walkability Scores of Cities in County being served: www.walkscore.com OR
    Google “Your City” ____ (State) Walkability
Other Nutrition-Related Programs Serving Persons in the County being served:

How These Findings Applied To Your Plan of Work:

Cities/towns to be served:

Cities:
Towns:

Collaborators/Partner Agencies, who will receive program services:
VI. Developing Program Goals and Objectives

Collaborations between the athletic boosters, volunteers, and community organizations would not be successful without distinct goals and objectives in mind. Using a collaborative approach, the goals and objectives should be determined based upon the needs assessment of the program participants/population of the county (Caffarella & Daffron 2013, p. 122).

Below is the goals and objectives of the Making The Switch to Healthier Concessions program. This is a guide only and is customizable to meet the needs of each unique county or school organization. The goal of the program is to educate athletic event participants and patrons of XXXX County about the importance of choosing nutritious items as well as encouraging participants to make a healthy lifestyle change. The objectives of the program are both educational and operational in nature. The educational objectives will be the results of the program in terms of the information retained. The operational objectives will be those that the participants implement in their daily lives. The objectives are as follows:

1. To provide alternative choices for participants and patrons of sporting events where access to affordable and nutritious food is limited.
2. Empower families and athletes using education, support, and services to make healthier food choices and improve their lives.

These objectives provide a foundation from which organizations will utilize to design unique objectives and materials for their schools. All the objectives should be a common outcome for the organization and its partners. Using the provided curriculum, messages and food choices can be chosen and provide the program with structure. The visuals and messages provided in the curriculum encourage patrons to fill their nutritional gaps and needs in their daily
lives. As discussed in Caffarella & Daffron 2013, the term “gap” can present a negative connotation and therefore the term “needs” replaces this term (Caffarella & Daffron, 2013, p. 135). When evaluating the program, the examination the increase in healthy items and the decrease of unhealthy items may provide insight into program success.

**Program Plan**

The purpose of this program is to provide patrons and athletes of youth sporting events healthier options at the concession stands. Using a collaborative approach, the goals and objectives were determined based on the purpose of this program; as previously stated, additional goals and objectives should be determined at the discretion of the organization and the partners involved based on the needs assessment. This program aligns with multiple aspects of the Interactive Model of Program Planning (Caffarella & Daffron, 2013, p. 29). Without the strong support base as well as teamwork among the organization’s team, this program would not be successful.

While this program does follow the Interactive Model, which has no true beginning or end, this program is in a linear form. By conducting a needs assessment prior to any planning, organizations will be able to determine the areas of the county that demonstrate the greatest need for the program (i.e. limited access to healthy foods, number of fast food restaurants, etc.). Organizations may then choose to collaborate with other health-based organizations in order to design materials and provide input to food selections that will best meet the needs of the community. From there, all other aspects of the model will be determined.

This program will fill an educational need. An educational need is “…a discrepancy or gap between what presently is and what should be” (Caffarella & Daffron, 2013, p.134). By
informing patrons and athletes at youth sporting events about the health benefits to choosing more foods from MyPlate, organizations are creating healthy environments and healthier communities. Organizations are able to conduct a needs assessment to determine issues such as obesity rates, Supplemental Nutrition Assistance Program (SNAP) rates, poverty levels, and walkability scores. The aim of the *Making The Switch to Healthier Concessions* program is to educate participants at youth sporting events through visuals and messages about the importance of well-balanced nutrition.

**Budget**

The organization and any participating partners should determine items purchased for this program. This program will not cause financial strain on the organization; however, the organization should plan for the purchase of new items while limiting current “unhealthy” items in their concessions. For example, an organization could plan to reduce the amounts of sodas available and increase the amount of water available. Once the soda sold out, no additional soda will be available and therefore increasing the numbers of water sold. It also important to note that the purchase of additional nutritional messages not supplied in this curriculum will be the financial responsibility of the organization.

**Location**

This implementation of this program can occur at any location in which concessions are sold at youth sporting events. Organizations should work closely with Athletic Booster committees in order to secure space in which to display visuals. These visuals will be the most efficient if on display where all patrons and athletes are able to view them without obstruction. Smaller locations, such as concession trailers, may limit certain nutritional as well as unhealthy
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items in order to accommodate for space.

**Personnel**

Volunteers and employees of the organization will be the individuals who serve the food at concession stands. It is important to note that these individuals should in no way provide patrons and athletes with nutritional advice; they should refer the individual to their primary care physician. The volunteers and employees are key factors in ensuring the use of proper food safety measures and curriculum visuals are properly on display. It is the responsibility of the organization to ensure their employees and volunteers are trained and aware of proper food handling techniques. This curriculum does not provide food safety information.

**Timeline**

It is at the discretion of the organization to when and the duration of the program. This program can be implemented at any sporting event during any season; however, the longer the information and healthy options are available, the more likely the organization will see change in patrons and increases in healthy food selection. In order for the program to be the most effective, it is recommended that the materials and healthy food selections be incorporated into every athletic event at every location (i.e. main concessions, outdoor concessions).

**Conclusion**

Creation of this program is to provide organizations with new concession stand options and provide information to complement these new options. It is important to note that every organization is different and will need to select foods that fill different needs. This curriculum is to be a guide that any organization in any community can utilize. By collaborating with additional organizations, such as local Extension services, organizations will be able to have
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greater success with the program.
Chapter 3: Curriculum

Making The Switch to Healthy Concessions Curriculum
MyPlate

Topic: MyPlate
Title: Welcome to MyPlate
Objectives: Utilize MyPlate to make healthy concession choices.
Provide visual aid to demonstrate how different foods fit into healthy lifestyle.
Additional Resources: choosemyplate.gov, Dietary Guidelines for Americans 2015-2020

Materials Needed:
- Large MyPlate poster (Figure 6.0)
- Food models to demonstrate applicable examples from each food group
- What’s MyPlate All About? Visual (Figure 5.0)
- Traffic Light Labels
- Traffic Light Visual (Figure 4.0)

Examples of Food Items that could be sold:
- Fruits
- Vegetables
- Whole Wheat Buns/Bread for Sandwiches
- Low Fat Dairy
- Lean Protein
With the release of the new Dietary Guidelines in 2010, the USDA redesigned the old food pyramid guide and replaced it with the updated version we see today. This is a more realistic guide for Americans; this shows us what our plates should look like during meals.

By providing us with a visual, MyPlate (Figure 5.0) helps us choose healthier foods and demonstrates the importance of balance. This tool shows us not only what types of foods we should be eating, but also how much of each food group. There are five food groups shown here: fruits, vegetables, grains, protein, and dairy. Vegetables can include cucumbers, carrots, broccoli, asparagus, corn, potatoes, and many others. There are also several options for fruits such as apples, grapes, strawberries, watermelon, and oranges. Grains include a variety of foods such as cereals, oatmeal, bread, rice, pasta, and much more. Protein is found not only in animal sources, such as chicken and beef, but also includes eggs, nuts, seeds, peanut butter, and beans. Lastly, the dairy group includes milk, cheese, and yogurt.

When we look at MyPlate, you can see that half our plates should be fruits and vegetables, grains should be about a quarter, and proteins should be less than a quarter of the plate. Dairy is about one cup of milk or yogurt or one ounce of cheese.

One important item to note is water. While this does have a specific group on MyPlate, it is still an important component to a healthy diet. It is recommended that we get about eight 8 ounce glasses of water a day, which is about 4 bottles of water.

Each food group is key to proper health but remembering the serving size of each group is just as important. It is recommended that we have 2 cups of fruits a day and 2 ½ cups of vegetables.
When implementing this program in your organization, having a variety of foods from each food group is key. Try to keep foods as simple as possible; whole fruits such as apples, oranges, or bananas are a great way to have fruit available at all times. A whole piece of fruit would count as one serving of vegetables. Having pre-measured vegetables already packaged provides convenience to your patrons and increases the chances of purchase.

Please refer to the list of GREEN label foods that fit with MyPlate.

Examples of Foods for Each Category:

**Go**

**Vegetables:**
- Carrot, Celery, Cauliflower, Broccoli tray with hummus
- Celery with Peanut Butter
- Additional toppings for sandwiches or walking tacos such as diced tomatoes, onions, lettuce, and peppers.

**Fruits**
- Fruit Salad
- Whole fruits such as banana, apple, or oranges
- Fruit cups in 100% fruit juice such as pineapple, grapes, or mixed berries with low-fat fruit dip

**Dairy**
- Low-Fat vanilla yogurt for fruit dip
- 1% or Skim milk
- Use low-fat cheese and sour cream in combination dishes such as pizza or walking tacos
- Low-fat string cheese

**Protein**
- Switch to low-fat or lean hot dogs and burgers; consider turkey burgers or black bean patties!
- Grilled chicken sandwiches with lettuce, tomato, and onion
- Packets of mixed nuts
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- Incorporate black beans as addition to walking tacos
- Use hummus as a vegetable dip

Grains
- Using whole grain buns and chips
- Popcorn with little to no butter or salt
- Whole grain crackers

Also, try increasing amount of water while limiting amount of soda available!

Slow
- Corn tortilla chips
- 100% Fruit/Orange Juice
- Ice Cream
- 2% Milk
- Processed Cheese (slices, sauces, etc.)
- Refined Grains (White Bread, White Rice)
- 100% Fruit Juice
- Popcorn with salt and butter
- Processed deli Meats
- Hamburgers

Whoa
- Whole Milk
- Candy Bars
- Soda
- Sports Drinks
- Hot Dogs
- French Fries
- Potato Chips
- Cookies
- Pizza

Using color correct stickers, volunteers should place stickers on all food and beverage items based on the food example guide.

- Green stickers for Go foods
- Yellow stickers for Slow foods
- Red stickers for Whoa foods
Volunteers should direct any nutrition related questions to visuals; volunteers should never attempt to answer medical related questions and should recommend that patrons consult their physician.

Visuals should be placed where patrons have easy access or are in a clear location.

**Figure 4.0. Go, Slow, Whoa Food Descriptions**

**Whoa:** These foods are high in fat or sugar and provide us with little to no nutrition! Eat this sparingly!

**Slow:** These foods have some nutritional value but we still don’t want to eat too much of these foods!

**Go:** These foods are packed with vitamins, minerals, and fiber! We need to eat several servings of these foods each day! These are a great choice!
Figure 5.0. MyPlate Visual
Figure 6.0 MyPlate Poster
Appendix

Figure 1.0 Maslow’s Hierarchy of Needs

![Maslow's Hierarchy of Needs](image)

Figure 2.0 Satter’s Hierarchy of Food Needs

![Satter's Hierarchy of Food Needs](image)
Making The Switch to Healthier Concessions: A School Curriculum

Figure 3.0 County Needs Assessment

*Making the Switch to Healthier Concessions County Needs Assessment Data*

Name of County being served: 

School Building that will be serving the above county: 

School Entity that will conduct program: 

Additional Organizations that will be involved: 

Demographic Characteristics of Target Audience in this County being served

http://Quickfacts.census.gov

7. County Total Population:

8. Percent of Persons under 18:

9. Percent of Persons 65 years and over:

10. Percent of Persons, Female:

11. Race:
   e. Percent, White:
   f. Any other race over 1%: 
   g. Any other race over 1%: 
   h. Subtract the Race percents listed above from 100, remainder is Other:
12. Ethnicity, Percent, Hispanic: ________________________________________________

Socio-economic Profile


(Login or register) Run an Indicator Report for your County, Ohio, View Report

11. Poverty, County being served: ________________________________________________

12. Poverty, State: _____________________________________________________________

13. Free & Reduced Lunch recipients, County: _________________________________

14. Total Enrollment in Schools: ________________________________________________

Related Health, Lifestyle, and Environmental Characteristics in County being served.

http://www.countyhealthrankings.org/

15. County Health Rankings: ____________________________________________________ of _________

16. Obesity, Adults: ____________________________________________________________

17. Access to Recreational Facilities (rate of recreational facilitates/100,000 people): Change year to 2013

______________________________

18. Limited Access to Healthy Foods: Change year to 2013

______________________________

19. Fast Food Restaurants: Change year to 2013

______________________________

20. Walkability Scores of Cities in County being served: www.walkscore.com OR Google “Your City” ____ (State) Walkability
Other Nutrition-Related Programs Serving Persons in the County being served:

How These Findings Applied To Your Plan of Work:

Cities/towns to be served:

Cities:
Towns:

Collaborators/Partner Agencies, who will receive program services:
Figure 4.0. Go, Slow, Whoa Food Descriptions

**Whoa:** These foods are high in fat or sugar and provide us with little to no nutrition! Eat this sparingly!

**Slow:** These foods have some nutritional value but we still don’t want to eat too much of these foods!

**Go:** These foods are packed with vitamins, minerals, and fiber! We need to eat several servings of these foods each day! These are a great choice!
Figure 5.0. MyPlate Visual
Figure 6.0 MyPlate Poster
References


Making The Switch to Healthier Concessions: A School Curriculum


Making The Switch To Healthier Concessions

A New Approach to Selecting Healthier Foods at Sporting Events

Preliminary Steps & Program Plan

School Curriculum for Youth/Teen Sporting Events

2017

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Preliminary Steps

I. Introduction and Preliminary Steps in Planning Educational Programs for Youth and Adult Learners

This curriculum will provide non-educators and volunteers with the resources and material necessary to organize and facilitate healthier options for patrons and participants of youth sporting events. Any organization in a youth sports setting where individuals gather and food is served can utilize this program. Athletic Boosters and other youth sport organizations may utilize this information and train/educate volunteers accordingly. This curriculum is designed to work in partnership with existing concession programs and the information provided is not intended to replace the advice of medical professionals.

This program does not have specific time constraints and is designed to be flexible, as the program requires. Food suggestions and visuals provided through this curriculum target any individual that partakes in youth athletic events. These individuals may range from little to no nutritional knowledge to seasoned experts. By examining the preliminary steps in the planning process, lessons will be designed to target the needs of families and individuals while making significant behavior changes in their daily lives.

II. The Interactive Planning Model

The target audience for this program will be any participant or patron of youth athletic events at high schools across the state. This program will follow the Interactive Planning Model (Caffarella & Daffron, 2013, p.29) and will target key nutritional and sustainability issues that
participants face including: food selection, nutritional knowledge, selecting whole grains, switching to low-fat dairy, choosing lean meats, and incorporating more fruits and vegetables into their routine during athletic events. Participants will have access to nutrition information that will be guided by Traffic Light Labeling (TLL).

Five areas of foundational knowledge are particularly important when planning adult programs. These areas include technology, adult learning, cultural differences, relationship building, and power & interest (Caffarella & Daffron, 2013, p. 29). Elements of the Interactive Planning Model include the following as stated by Caffarella & Daffron (2013, p. 29):

- Discerning the context
- Building a solid base of support
- Conducting a needs assessment
- Sorting and prioritizing program ideas
- Developing program objectives and goals
- Designing instructional plans
- Devising transfer-of-learning plans
- Formulating evaluation plans
- Making recommendations and communicating results
- Selecting formats, schedules, and staff programs
- Preparing budgets and marketing plans
- Coordinating facilities and on-sit events

For this program, not all five foundational knowledge areas will be utilized. Due to
limited resources and financial restraints to the schools, the use of technology will not be utilized for this program. In many school cafeterias, technology items such as Smart Boards are not accessible and are not necessary for program implementation. Also, while cultural differences may not always be present during this program, it is vital that volunteers and non-educators be aware of this while providing information to patrons and youth.

This model provides all the necessary elements needed to design a successful program and will be used when designing, implementing, and evaluating the *Making The Switch to Healthier Concessions* program. Prior to program implementation, schools and athletic organizations should conduct a needs assessment and present the findings to their support system.

**III. Foundational Knowledge and Discerning the Context**

When planning any educational program, it is vital to collaborate rather than clash with planning methods of every organization involved. Each partner brings crucial tools to the discussion throughout the planning process. By incorporating the planning methods of various organizations, a more cohesive organized program can be established. It should also be noted that ownership of certain tasks is vital to program operation. If multiple planning procedures are implemented, representatives from the organizations must orchestrate the appropriate step in the planning process.

It is also important to be considerate of all ethnicities and cultural norms throughout the program planning process; this program is no exception. In order to achieve program success, it
is important to first examine the cultural needs within the county in which the program will be implemented. Once identified, the volunteers and non-educators of the concession stands will be able to tailor programming and information to better meet these needs. If a cultural need is found, the current lessons plans used in programming could be modified to encompass the traditions of the culture. The foods suggested in this curriculum may be taboo to certain cultures and it is important to be aware of these barriers throughout the program planning process.

IV. Building a Base of Support

A partnership between the school’s Athletic Boosters and any volunteers will be vital to the success of this program. Other organizations, such as OSU Extension, could be consulted to provide additional information. Any local health and wellness coalitions and advisory committees could also provide insight into program implementation. As discussed in Caffarella & Daffron (2013), Advisory Committees are a key element to the success of any program (p. 115). Within Extension, they are a vital tool to communicate with partners and community members. These committees are able to tackle crucial issues current and potential partnership programs may face.

V. Identifying and Prioritizing Ideas and Needs

In order to create the most beneficial education program, a needs assessment of the participants is crucial. Prior to any program planning, a detailed needs assessment should be conducted in order to determine what the program will encompass and why the program is needed. For this program, the county needs assessment will be utilized; a more detailed needs
assessment will be outlined in the program plan. An example of a County Needs Assessment can be seen below. Feedback and input from advisory committees and Health and Wellness Coalitions should also be considered when identifying needs. As stated in Caffarella & Daffron (2013), “an educational need is most often defined as a discrepancy or gap between what presently is and what should be” (p. 134). Demographic information from the county and the needs assessment of the county can be used to determine a needs and gaps within the community.

Making the Switch to Healthier Concessions County Needs Assessment Data

Name of County being served: ________________

School Building that will be serving the above county: ____________________________

School Entity that will conduct program: ________________

Additional Organizations that will be involved: ________________________________

Demographic Characteristics of Target Audience in this County being served

http://Quickfacts.census.gov

1. County Total Population: ________________________________

2. Percent of Persons under 18: ________________________________

3. Percent of Persons 65 years and over: ________________________________

4. Percent of Persons, Female: ________________________________
5. Race: ________________________________
   a. Percent, White: __________________________
   b. Any other race over 1%: __________
   c. Any other race over 1%: ________________
   d. Subtract the Race percents listed above from 100, remainder is Other: ______
      ________________________________________

6. Ethnicity, Percent Hispanic: ________________________________

Socio-economic Profile

(Login or register) Run an Indicator Report for your County, Ohio, View Report

1. Poverty, County being served: ________________________________

2. Poverty, State: ________________________________

3. Free & Reduced Lunch recipients, County: ________________

4. Total Enrollment in Schools: ________________________________

Related Health, Lifestyle, and Environmental Characteristics in County being served.
   http://www.countyhealthrankings.org/

5. County HealthRankings: ________________ of ________________

6. Obesity, Adults: ________________________________
7. Access to Recreational Facilities (rate of recreational facilitates/100,000 people):

Change year to 2013

8. Limited Access to Healthy Foods:

Change year to 2013

9. Fast Food Restaurants:

Change year to 2013

10. Walkability Scores of Cities in County being served:  
    Google “Your City” ___(State) Walkability

    Other Nutrition-Related Programs Serving Persons in the County being served:

    How These Findings Applied To Your Plan of Work:

Cites/towns to be served:
Cities:
VI. Developing Program Goals and Objectives

Collaborations between the athletic boosters, volunteers, and community organizations would not be successful without distinct goals and objectives in mind. Using a collaborative approach, the goals and objectives should be determined based upon the needs assessment of the program participants/population of the county (Caffarella & Daffron 2013, p. 122).

Below is the goals and objectives of the Making The Switch to Healthier Concessions program. This should be used as a guide only and be tailored to best meet the needs of each unique county. The goal of the program is to educate athletic event participants and patrons of XXXX County about the importance of choosing nutritious items as well as encouraging participants to make a healthy lifestyle change. The objectives of the program are both educational and operational in nature. The educational objectives will be the results of the program in terms of the information retained. The operational objectives will be those that the participants implement in their daily lives. The objectives are as follows:

1. To provide alternatives for participants and patrons of sporting events where access to affordable and nutritious food is limited.

2. Empower families and athletes using education, support, and services to make healthier food choices and improve their lives.

These objectives provide a foundation from which materials will be constructed. All the objectives should be a common outcome for the organization and its partners. Using the provided
curriculum, messages and food choices can be chosen and provide the program with structure. The visuals and messages provided in the curriculum encourage patrons to fill their nutritional gaps and needs in their daily lives. As discussed in Caffarella & Daffron 2013, the term “gap” can present a negative connotation and therefore the term “needs” should be used in its place (Caffarella & Daffron, 2013, p. 135). Increased sales in healthy items and decreased sales of unhealthy items may provide a benchmark to which the success of the program can be evaluated.

**Program Plan**

The purpose of this program is to provide patrons and athletes of youth sporting events healthier options at the concession stands. Using a collaborative approach, the goals and objectives were determined based on the purpose of this program; as previously stated, additional goals and objectives should be determined at the discretion of the organization and the partners involved based on the needs assessment. This program aligns with multiple aspects of the Interactive Model of Program Planning (Caffarella & Daffron, 2013, p. 29). Without the strong support base as well as teamwork among the organization’s team, this program would not successful.

While this program does follow the Interactive Model, which has no true beginning or end, this program was designed in a linear form. By conducting a needs assessment prior to any planning, organizations will be able to determine the areas of the county that demonstrate the greatest need for the program (i.e. limited access to healthy foods, number of fast food restaurants, etc.). Organizations may then choose to partner with other health-based
organizations in order to design materials and provide input to food selections that will best meet
the needs of the community. From there, all other aspects of the model will be determined.

This program is meant to fill an educational need. An educational need is defined as “…a
discrepancy or gap between what presently is and what should be” (Caffarella & Daffron, 2013,
p.134). By informing patrons and athletes at youth sporting events about the health benefits to
choosing more foods from MyPlate, organizations are creating healthy environments and
healthier communities. Organizations are able to then conduct a needs assessment to determine
issues such as obesity rates, Supplemental Nutrition Assistance Program (SNAP) rates, poverty
levels, and walkability scores. The aim of the Making The Switch to Healthier Concessions
program is to educate participants at youth sporting events through visuals and messages about
the importance of well-balanced nutrition.

Budget

The organization and any participating partners should determine items purchased for this
program. This program is not meant to cause financial strain on the organization; however, the
organization should plan for the purchase of new items while limiting current “unhealthy” items
in their concessions. For example, an organization could plan to reduce the amounts of sodas
available and increase the amount of water available. Once the soda is sold out, no more soda
will be restocked and therefore increasing the numbers of water sold. It should also be noted that
the purchase of additional nutritional messages not supplied in this curriculum will be the
financial responsibility of the organization.

Location
This program is designed to be implemented at any location in which concessions are being sold at youth sporting events. Organizations should work closely with Athletic Booster committees in order to secure space in which to display visuals. These visuals will be the most efficient if they are displayed were all patrons and athletes are able to view them without obstruction. Smaller locations, such as concession trailers, may limit certain nutritional as well as unhealthy items in order to accommodate for space.

**Personnel**

Volunteers and employees of the organization will be the individuals who serve the food at concession stands. It is important to note that these individuals should in no way provide patrons and athletes with nutritional advice; they should refer the individual to their primary care physician. The volunteers and employees are key factors in ensuring proper food safety measures are taken and curriculum visuals are displayed properly. It is the responsibility of the organization to ensure their employees and volunteers are trained and aware of proper food handling techniques. This curriculum does not provide food safety information.

**Timeline**

It is at the discretion of the organization to when and how long the program will be implemented. This program can be implemented at any sporting event during any season; however, the longer the information and healthy options are available, the more likely the organization will see change in patrons and increases in healthy food selection. In order for the program to be the most effective, it is recommended that the materials and healthy food
selections be incorporated into every athletic event at every location (i.e. main concessions, outdoor concessions).

**Conclusion**

This program is designed to provide organizations with new concession stand options and provide information to complement these new options. It is important to note that every organization is different and will need to select foods that fill different needs. This curriculum is meant to be a guide that can be used at any organization in any community. By partnering with additional organizations, such as local Extension services, organizations will be able to have greater success with the program.
Making The Switch to Healthy Concessions Curriculum
MyPlate

Topic: MyPlate

Title: Welcome to MyPlate

Objectives: Utilize MyPlate to make healthy concession choices.
Provide visual aid to demonstrate how different foods fit into healthy lifestyle.

Additional Resources: choosemyplate.gov, Dietary Guidelines for Americans 2015-2020

Materials Needed:
- Large MyPlate poster (Figure 6.0)
- Food models to demonstrate applicable examples from each food group
- What’s MyPlate All About? Visual (Figure 5.0)
- Traffic Light Labels
- Traffic Light Visual (Figure 4.0)

Examples of Food Items that could be sold:
- Fruits
- Vegetables
- Whole Wheat Buns/Bread for Sandwiches
- Low Fat Dairy
- Lean Protein

With the release of the new Dietary Guidelines in 2010, the USDA redesigned the old food pyramid guide and replaced it with the updated version we see today. This is a more realistic guide for Americans; this shows us what our plates should look like during meals.

By providing us with a visual, MyPlate (Figure 5.0) helps us choose healthier foods and demonstrates the importance of balance. This tool shows us not only what types of foods we
should be eating, but also how much of each food group. There are five food groups shown here: fruits, vegetables, grains, protein, and dairy. Vegetables can include cucumbers, carrots, broccoli, asparagus, corn, potatoes, and many others. There are also several options for fruits such as apples, grapes, strawberries, watermelon, and oranges. Grains include a variety of foods such as cereals, oatmeal, bread, rice, pasta, and much more. Protein is found not only in animal sources, such as chicken and beef, but also includes eggs, nuts, seeds, peanut butter, and beans. Lastly, the dairy group includes milk, cheese, and yogurt.

When we look at MyPlate, you can see that half our plates should be fruits and vegetables, grains should be about a quarter, and proteins should be less than a quarter of the plate. Dairy is about one cup of milk or yogurt or one ounce of cheese.

One important item to note is water. While this does have a specific group on MyPlate, it is still an important component to a healthy diet. It is recommended that we get about eight 8 ounce glasses of water a day, which is about 4 bottles of water.

Each food group is key to proper health but remembering the serving size of each group is just as important. The USDA recommends that we have 2 cups of fruits a day and 2 ½ cups of vegetables.

When implementing this program in your organization, having a variety of foods from each food group is key. Try to keep foods as simple as possible; whole fruits such as apples, oranges, or bananas are a great way to have fruit available at all times. A whole piece of fruit would count as one serving of vegetables. Having pre-measured vegetables already packaged provides convenience to your patrons and increases the chances of purchase.
Please refer to the list of GREEN label foods that fit with MyPlate.

Examples of Foods for Each Category:

**Go**

**Vegetables:**
- Carrot, Celery, Cauliflower, Broccoli tray with hummus
- Celery with Peanut Butter
- Additional toppings for sandwiches or walking tacos such as diced tomatoes, onions, lettuce, and peppers.

**Fruits**
- Fruit Salad
- Whole fruits such as banana, apple, or oranges
- Fruit cups in 100% fruit juice such as pineapple, grapes, or mixed berries with low-fat fruit dip

**Dairy**
- Low-Fat vanilla yogurt for fruit dip
- 1% or Skim milk
- Use low-fat cheese and sour cream in combination dishes such as pizza or walking tacos
- Low-fat string cheese

**Protein**
- Switch to low-fat or lean hot dogs and burgers; consider turkey burgers or black bean patties!
- Grilled chicken sandwiches with lettuce, tomato, and onion
- Packets of mixed nuts
- Incorporate black beans as addition to walking tacos
- Use hummus as a vegetable dip

**Grains**
- Using whole grain buns and chips
- Popcorn with little to no butter or salt
- Whole grain crackers

Also, try increasing amount of water while limiting amount of soda available!
**Slow**
- Corn tortilla chips
- 100% Fruit/Orange Juice
- Ice Cream
- 2% Milk
- Processed Cheese (slices, sauces, etc.)
- Refined Grains (White Bread, White Rice)
- 100% Fruit Juice
- Popcorn with salt and butter
- Processed deli Meats
- Hamburgers

**Whoa**
- Whole Milk
- Candy Bars
- Soda
- Sports Drinks
- Hot Dogs
- French Fries
- Potato Chips
- Cookies
- Pizza

Using color correct stickers, volunteers should place stickers on all food and beverage items based on the food example guide.
  - Green stickers for Go foods
  - Yellow stickers for Slow foods
  - Red stickers for Whoa foods

Volunteers should direct any nutrition related questions to visuals; **volunteers should never attempt to answer medical related questions and should recommend that patrons consult their physician.**

Visuals should be placed where patrons have easy access or are in a clear location.
**Whoa:** These foods are high in fat or sugar and provide us with little to no nutrition! Eat this sparingly!

**Slow:** These foods have some nutritional value but we still don’t want to eat too much of these foods!

**Go:** These foods are packed with vitamins, minerals, and fiber! We need to eat several servings of these foods each day! These are a great choice!
What’s MyPlate All About?

Fruits

Vegetables

Grains

Protein Foods

Dairy

ChooseMyPlate.gov

USDA United States Department of Agriculture Center for Nutrition Policy and Promotion