



**Improving the Nutrition Environment
Through Changing Concession Stand Options:
Eight Steps to Making Healthy Improvements**

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INTRODUCTION

Obesity is quickly becoming our nation's leading public health concern. In fact, the majority of US adults, and a growing number of children are overweight^(1, 2). Over two thirds (68%) of adults were either overweight or obese in 2009⁽¹⁾. In 2009, approximately 1 out of every 3 children was either overweight or obese.⁽²⁾ To slow the rise in obesity among children, many schools have undertaken efforts to improve school lunches and eliminate vending. However, concession stands have not been included in changes at most schools. On one hand, schools are encouraging children to be involved in athletics, but often these child athletes and their families, rely on mostly unhealthy concession stand options.

This how-to-guide looks to help youth concession stands provide healthier choices. Much of the information presented to you came about from a project with the Muscatine High School in Muscatine, Iowa. Working together, a research team from the University of Iowa and the Muskie Boosters' Club were able to offer a greater variety of food options at their concession stands including some items with less saturated fat, less sugar and more vitamins. Without the customers even noticing, they also removed the incredibly unhealthy trans fats from their popular nachos.

In addition, we have also worked with six other high schools across Iowa: Perry High School, Ottumwa High School, Lone Tree Schools, Tripoli Schools, Van Buren Schools, and Sioux City East High School. These schools made successful changes in their concession stand menus and provided research findings that we can share with you.

Finally, we have heard from other communities like Northeast Iowa School's Food and Fitness Youth Program, Healthy Henry County Communities and Mt. Pleasant Music Boosters, and Georgia Recreation and Parks Association and have included useful information we learned from their experiences.

1. National Center for Health Statistics. Health, United States, 2012: With Special Feature on Emergency Care. Hyattsville, MD. 2013

2. Ogden, C. L., Carroll, M. D., Kit, B.K., & Flegal, K. M. (2012). Prevalence of obesity and trends in body mass index among U.S. children and adolescents, 1999-2010. *Journal of the American Medical Association*, 307(5), 483-490.



COMMUNITY INVOLVEMENT

Community involvement is critical in making changes at the concession stand. You need group buy-in, strong leadership, input from youth and parents, and an eye towards the health and monetary goals.

GROUP BUY IN

Your group has to want to make these changes. Members need to be convinced these are worthwhile for them and their organization. As much as possible, everyone should have an opportunity to be a part of the decision making process and choosing what changes to make. In Muscatine, the Muskie Boosters developed a committee to make these changes. They asked parents and students about items that interested them and for their opinion on current concession stand foods.

In NE Iowa, the students proposed changes to their Booster and Music clubs by presenting information and the need for healthy options.

STRONG LEADERSHIP

Strong leaders are crucial to getting changes made and championing the cause. Someone needs to take responsibility for talking with all parties involved and negotiating solutions and compromises as needed. Ultimately, selecting a good leader(s) will ensure the

changes are made. It is also important that the group's top leadership is enthusiastic, supportive and involved as they are the ones ultimately empowered to make crucial decisions. Someone with passion for the cause, organizational skills and people skills is ideal.

STUDENT AND PARENT INPUT

Input from students and parents can help guide advertising, product choice and pricing. Several of our schools in our research study used surveys for either students and parents or both. Muscatine also did taste testing of their new popcorn and cheese and met with the student council to help with advertising. In NE Iowa, it was students who led the move to make changes. Involve your students. Students can be a great source of assistance. In Lone Tree, the junior class made decisions on healthy changes and manned the concession stand. In addition to surveying parents, the Georgia

Recreation and Park Association (GRPA) group asked concession stand site managers their thoughts regarding making changes.

IMPORTANCE OF PROFITS

A big issue for your group may be your bottom line. You will need to decide how important this is and how to maintain your current profits. The importance of profits was different for each of the groups in this guide. The fear is that people will not buy healthier options and food may be wasted. Muscatine was able to show they could make changes and maintain their profits. The NE Iowa schools kept prices low for testing. However, they received positive feedback from the community. They also felt that an increase in price would not impact future sales as the community's desire to have health options was important. Find out what healthy options are desired in your community and how much people are willing to pay for them. Also see the Cost/Profit Margin section on page 14 for ideas on overcoming this obstacle.

1

MAKING THE FIRST STEP:

Figuring out what your goals are



Questions to ask yourself

Why are you thinking about making changes to your concession stand offerings? _____

Are you concerned about the health and wellness of your youth and community? _____

Have you had pressure from others to make healthy changes? _____

Does everyone in your concession stand/booster group feel that healthy changes are necessary and desirable? _____

The first and foremost thing you should do is define your goals. What is your purpose for making changes? If it gets difficult down the road, referring back to your goals can remind you why it's important to make healthy changes.

Define your goals

By getting information from your community and determining their opinions, you will be able to determine what goals you have for changing concession stand food and what changes you want to make.

For example, one of our high schools received feedback from their school board that they needed to make more healthy changes in what foods they were offering to their students. In addition to changes in what was offered in the school cafeteria, the school decided to be consistent in emphasizing healthy choices by adding to their concession stand menu.

The Mount Pleasant Music Booster Club realized that at times, food at the concession stand was the only meal option for the youth. They decided to add more healthy fare such as bagels and yogurt parfaits. They received praise from their community for offering healthy meal options rather than just snack foods.

As mentioned on the page before, group buy-in is very important. Thinking about your goals can help sway more reluctant group members.

2

MAKING THE SECOND STEP:

Deciding what changes you would like to make

Questions to ask yourself and your community

What types of changes would you like to make? _____

Are you going to make any changes to existing products? _____

Are you going to add or discontinue any products? _____

What do you like to purchase at the concession stand? _____

What do kids like to purchase? _____

Are there existing items that you can improve on? _____

The second thing you should do is decide what changes to make. Do you want to add new healthier items or do you want to modify the items you have?

Deciding on changes

By getting information from your community and determining their opinions, you will be able to determine what changes you want to make.

For example, the Muskie Boosters added healthier options to those sold at the concession stands and modified some of the current options to make them healthier. You might also decide to stop selling certain products.

All of the concession stands from our studies chose to continue to offer some of the standard less healthy foods at the concession stand. This likely decreased the purchase of the healthier items but also was an easier transition for volunteers, customers and the booster club.

Some of the Iowa schools and the GRPA group also added healthier options to what was already offered (see Appendix page 33 for a list of recommended foods from GRPA). Each of Iowa schools decided on different choices but overall added fruit, vegetables, and dairy. GRPA added fresh fruit and attempted to increase sales of bottled water through advertising. East High School in Sioux City at first offered Powerade and Powerade Zero; they then decided to offer only Powerade Zero since that sold better than the full calorie version. All groups had the goal to maintain their profits.

EXAMPLES OF FOOD CHANGES

Purchasing healthy products proved to be challenging, but possible. This guide will provide helpful strategies for acquiring and storing the products used in Iowa and Georgia.



Carrots

Prior to our intervention, carrots were not offered at the Muscatine High School concession stand. After contacting local vendors and grocery stores, they learned that purchasing two pound bags of baby carrots would be most economical. The two-pound bags could be portioned into servings using plastic trays already in use for nachos and pretzels. To assure consistent serving sizes another option is to put carrots into small sandwich bags ahead of time or find a good deal on small pre-packaged carrots. They found the pre-packaged carrots economical when they purchased a large volume for a tasting event, but not for day-to-day events. Baby carrots keep well in the fridge for several weeks.

Challenges and Solutions

Carrots require refrigeration to prevent spoilage. Although the cost of purchasing a refrigerator can be

a barrier, refrigeration also helped to preserve other perishable food items such as hotdogs, chicken, ranch dressing, pickles, string cheese, and fruit. Maintenance of the refrigerator power supply was another challenge for Muscatine. In Muscatine, the refrigerator was accidentally unplugged and the food spoiled. They attached an inexpensive lockable grate to the refrigerator's power outlet to make sure that it did not happen again. (See #4 under general challenges page 25)



Fruit

The Muskie Boosters added whole apples the menu (bananas were already available but during morning events only). At first, they sought pre-packages apple slices from local distributors, vendors and grocery stores. Inquiries revealed that sliced, prepackaged apples were available through Hy-Vee® grocery, but at a significant cost. Whole apples purchased at the local grocery store could be sold profitably for only 75 cents each. Like carrots, spoilage was a barrier to adding fresh fruits to the existing menu (See #4 under general challenges page 25). The refrigerator helped to reduce product loss due to spoilage. Nonetheless, a small amount of fruit was lost to spoilage. With attention to product demand, present stock, and product purchase dates, loss can be avoided or reduced.

To add variety, attract customers and reduce cost, different types of apples could be rotated in accordance with grocery store pricing and seasonality. Try obtaining fresh, local apples from growers. We made low-fat ranch dressing available to pair with carrots.

Challenges and Solutions

Whole apples were not a strong seller for the Muskie Boosters, but they did sell more at all-day events. Muscatine did not have volunteers to cut fruit so whole fruit was a reasonable alternative. However, some Iowa schools and Georgia had success with pre-cut fruit which they prepared and packaged themselves. In Georgia, customers seemed to prefer cut up fruit even if it cost more. Both Georgia and NE Iowa found that cutting and packaging fruits such as orange slices and “snack pack” of fruits increased sales. They were able to charge more for the cut up fruit (\$1 for apple slices compared to 50 cents for a whole apple).

One challenge with cutting up fruit in advance is that produce, especially apples can brown. One suggestion to prevent this problem is to dip apple slices into clear diet soda. There is also a product called FruitFresh®, which is a powder that can be mixed with water and then produce can be dipped into that mixture.

The one concession operator in Georgia cut the fruit the same day he sold it. He did not make more than he thought he could sell and when he ran out that was it. He did not use apples or bananas that

brown. Rather he used cantaloupe, honeydew and pineapple then put fruit in a plastic cup with a lid and the “Smart Choices” sticker.



Nacho cheese

Initially, the Muscatine concession stand used a cheese sauce that was high in trans fat. When used to prepare nachos, Gehl's® nacho cheese contributed 2.5 grams of trans fat and 9 grams of total fat to each serving. By replacing the original cheese with a trans fat-free alternative, they eliminated trans fat and reduced the total fat by 3 grams per serving. Though the new cheese had no trans fats and less fat overall, it contained a slightly higher saturated fat content (Gehl's® = 2 g saturated fat and the new cheese = 2.5g). They felt this was a reasonable trade off for removing trans fats which are the unhealthiest. We did find a few cheeses with slightly lower saturated fat but they were not as easily accessible to the Boosters. The new cheese also had fewer calories (80 vs. 110 per serving). See the chart on page 34 for totals including the nacho chips.

Success! Eliminated 2.5 grams of trans fat and 3 grams of total fats without anyone noticing!

Challenges and solutions

Once the cheese substitution was made, customers did not detect any difference in the product. However,

obtaining an alternative cheese proved challenging. Distributor-related barriers (see general food-related challenges page 11). We found that distributors did not have direct access to nutritional facts for certain products. However, with help from their distributor, and a little internet research, they were able to retrieve the nutrition facts from the manufacturers of several cheeses carried by various distributors. It turned out that the easiest place to get a cheese without trans fat in the amount they needed was Sam's Club® or another warehouse store.

Equipment

Because the original cheese used a unique warmer, new warmers were needed to accommodate the new cheese. Although Muscatine was able to obtain new cheese warmers at a moderate cost, crock pots could be used as low-cost alternatives. Many cheeses come in #10 cans so a warmer for #10 may provide more flexibility to change cheese brands. Sometimes the microwave was useful to warm the cheese faster and then put it back in the warmer to keep warm during peak demand. However, to microwave the cheese it needs to be transferred from the metal can to a microwave-safe container.

“It was nice that we were able to make some changes on things that we were already providing, but finding ways to make it healthier for [the customers].”

- Muskie Booster



Popcorn oil

Replacing the oil used to make popcorn was one of the most successful changes that resulted from the intervention in Muscatine. Prior to our intervention, the concession stand used coconut oil bars to prepare popcorn. In addition to being high in saturated and total fat, the coconut oil bars contained several grams of trans fat per serving. We soon learned that canola oil could be used as an alternative to the coconut oil bars. This reduced the saturated fat and eliminated trans fat. The two oils are equivalent in calories. One coconut oil bar is equivalent to ½ cup of canola oil. In Muscatine, there were some who thought the popcorn tasted better using 2/3 cup of canola oil however this will increase the calories. (See report on page 32)

Success! Eliminated 2.7 grams trans fats and over 17 grams saturated fats without patrons noticing!

Challenges and solutions

Although the new oil went undetected among consumers, concession workers were initially resistant to the change. One concern was that the new oil required careful measurement. Therefore, we provided workers

with a brief training, written instructions, and several durable measuring cups. With these simple changes, workers soon adopted use of the new oil for all batches of popcorn. If your group really wants coconut oil try switching from bars to liquid oil. The liquid often does not have trans fats but will still be high in saturated fats.



Chicken sandwiches

Like most, the Muscatine concession stand offered hotdogs that contained high amounts of saturated fat, total fat, and calories. As one of the concession stand's most popular items, hotdogs could not be removed from the menu. However, a chicken sandwich could be offered as a healthier alternative. Compared to a hotdog, a chicken sandwich contained 80 fewer calories, 7 fewer grams of saturated fat, and 23.6 fewer grams of total fat. The chicken sandwiches sold very well when available. Muscatine used a large piece of chicken (5-6 oz). Using a smaller portion would decrease the calories and perhaps the cost.

Challenges and Solutions

Preparing the chicken proved to be a challenge. Because hotdogs were prepared using a rolling warmer, a small, electric indoor grill (George Forman type) had to be purchased to grill the chicken. In Muscatine, the indoor grill once triggered the fire alarm. When the grill was cleaned regularly, the alarm did not

go off. This was not a problem in Tripoli. We recommend discussing with your administrators and maintenance personnel ahead of time and do a test-run.

As a result, Muscatine cooked the chicken outdoors using a large gas grill. This method required planning and preparation to both thaw and prepare the chicken prior to indoor athletic events. Then the cooked chicken was kept warm in the same warmer we used for pizza. For outdoor events, the chicken could be grilled along with the pork sandwiches using the same large gas grill already available. For groups who do not already have a grill, an electric grill can be used and are available at a moderate cost (~\$145.00). These indoors grills are limited in the number of chickens that can be cooked at once (two or three).

Pre-cooked frozen chicken patties is an option that East High School in Sioux City used with success.



Granola Bars, Trail Mix and Small Hard Pretzels

These were not great sellers for the Muskie Boosters. They were more popular at all day events such as swim meets. However, they have long shelf lives and are easy to have on hand for customers who are interested. They removed small pretzels from the menu as they already had soft pretzels which were selling well. They substituted

the original low fat Quaker® oats chewy bars with Nature Valley® granola bars. The latter come two-to-a package and the Boosters felt they might seem like a better deal. Priced identical to the candy bars, granola bars did not sell well. It is unknown whether they might have done better if they had been cheaper than the candy bars. Trail mix is more costly and harder to sell at a low price. They replaced a straight nut mix with trail mix but, did not see a huge boost in sales.



String Cheese

String cheese can be bought from Sam's Club® or distributors in bulk or from local grocery stores or stores such as Walmart® in smaller quantities. It also keeps well in the fridge. The biggest challenge for the boosters was reminding people it was there as it was in the fridge and not on display. We suggest having one cheese stick out as a display item to remind patrons. String cheese comes in a variety of brands and prices, some of which taste better than others.

Conducting a taste test can help your group select the best product for you. Some groups in NE Iowa also sold string cheese, pairing it with a sandwich and fruit as a meal deal.

To keep your concession stand in accordance to USDA guideline, reduced-fat string cheese might be the best option. Check the labels as some string cheese, like mozzarella may already be low in fat.



Warm, Soft Pretzels

These are great sellers. You can buy the kind packaged without salt on the pretzels, then spray lightly with water so salt will stick. This way the Boosters were able to sell pretzels without salt to the large number of customers who preferred that. Equipment was a challenge (see page 12). We chose to change to a smaller pretzel as it was more profitable and contained fewer calories. People were fine with that and we sold them at the same price.



Pickles

Muscatine and Lone Tree added large pickles that were wrapped in wax paper sheets. This required no preparation and was popular with the students. However, these are not a good option if your group is concerned about salt intake.



Pork Sandwiches

Muskie Boosters traditionally offered a lean 5 oz pork loin grilled sandwich during football games only. Because of the lean cut it is nutritionally comparable to the chicken. This was originally offered only during football but was expanded to boy's basketball. The chicken and pork were cooked on the same grill. The pork loin was tenderized twice for them by the Hy-Vee® where they purchased them. These continued to sell well.

Items other groups have tried:

- Bottled water
- Turkey sandwiches
- Vacuum-sealed salads
- Blueberry yogurt parfaits
- Raisins/dried fruits
- 100% fruit slushies
- Breadsticks with low fat cheese
- Loaded baked potato
- Low calorie water flavoring packets
- Chocolate milk
- Low calorie sports drinks
- Baked chips
- Ground turkey instead of ground beef

Other suggestions that have not been tried by these groups:

- Veggie pizza
- Low fat hot dogs/turkey dogs
- Chicken sausages

3

THE THIRD STEP: Purchasing decisions

Questions to ask when making purchasing decisions

Where are you going to get your supplies? _____

Where can you get the best price? What are the costs of food/beverage you are thinking about selling? _____

Who are your buying partners? (e.g., lunch program or school cafeteria, local grocery store) _____

Research – what equipment do you need? _____

Some of the changes you might want to make may be simple such as adding a low calorie sports drink to your menu.

Other changes may require more equipment such as pretzel warmers or a small refrigerator to keep your perishables cool.

CHALLENGES ON GETTING YOUR SUPPLIES

1. Lack of information on healthy products

In our projects, some vendors did not have the nutrition facts for their products, while others only provided nutritional information to existing customers. Finding nutrition facts for some products required contacting the manufacturer by phone or email.

2. Special order for healthier products

Some healthier products are considered special orders by manufacturers and require additional fees, longer delivery time and or minimum order sizes.

3. Minimum orders

Some vendors have minimum order requirements that exceeded the needs of a high school concession stand. To avoid this problem orders could be added to those of local vendors who made larger orders. Several local grocery stores, as well as the local high school, were instrumental in obtaining products from distributors with minimum order requirements. One product, Kar's® Nuts Yogurt Apple Nut-Mix, was not available from a distributor and had to be purchased directly

from the manufacturer. However the minimum was 10 cases. Although they were not able to meet the minimum purchase requirement, the manufacturer agreed to ship a lesser amount of the product if Boosters covered the cost of shipping. This proved to be an economical means of procuring the product without having to meet the minimum order requirement.

SOLUTIONS FOR GETTING YOUR SUPPLIES

- a) Use the web to search for nutritional information
- b) Combine your order with school food service or other groups
- c) Buy through local grocery stores
- d) Talk with distributors/manufacturers as sometimes they will adjust requirements particularly if you pay shipping.
- e) Wholesale clubs (ex. Sam's Club®, Costco®) – Muscatine and some sites in Georgia bought items from them.

WHAT EQUIPMENT DO WE NEED?

Depending on what changes you would like to make, you may need to find additional equipment. These are examples of the equipment that boosters decided to invest in for their concession stand.



Pretzel warmers

Pretzel warmers are handy but expensive. Pretzel warmers are not absolutely necessary to serve soft-pretzels; some groups heat them up as needed in a microwave, an oven, a slow cooker or other warmer. The benefits of pretzel warmers are that they can be used to display the pretzels to the customers and they can keep multiple pretzels warm at once. Some of the more expensive humidified ones are warm enough to actually heat the pretzels from frozen while some of the less expensive non-humidified ones are only good to keep them warm once heated up. Make sure you know what you are getting.

The cost paid by the Boosters in 2009 was \$499 for the non-humidified variety that was only good for keeping things warm (not a great value) and \$983 for the humidified heated display case that could warm frozen pretzels. However, pretzel warming display cases range in cost from \$500.00-3,000.00.



Cheese warmers

Depending on how you currently warm your nacho cheese, changing to a healthier cheese may require getting new cheese warmers. The healthier brands identified by the Muscatine group came in standard #10 cans. This cheese can either be poured from the can into a slow cooker (lowest cost option to heat) or into a cheese warmer with a steel bowl insert. Alternatively, there are cheese-warmers designed to heat the cheese right in the #10 can. These warmers are convenient because no pouring is required and you can leave any remainder in the can and into the fridge for later use. Of note, warmers take a while to heat the cheese so sometimes, if the Muskie Boosters ran out during a game, they had to microwave the cheese and then pour it back in the can.

The cost of the new cheese warmer in 2009 was \$231.21. This was the type that heats the cheese in the can. The additional stainless steel insert bowl is only needed if you want to pour the cheese out of the can. They purchased a three quart size bowl for \$32.13 from Jarco® Industries. Low cost crock-pots range from \$19 - \$80.

Refrigerators or freezers

Some items may require cooling and freezing such as fruits, vegetables, chicken and leftover nacho cheese. Capitalizing on existing refrigerator capacity in the concession stand (such as that used to keep soda cold) or at the school may help.

Smaller fridges which take up less space and are more affordable may be enough for your needs. In 2013, you can buy a 10 cu. ft. fridge for \$399. East High School Athletic Department bought a 5 cu. ft. chest freezer for \$187 in 2012.



Space and electrical outlets

Finding space and electrical outlets for new equipment was challenging amidst an already crowded concession stand. Connecting new appliances to electrical outlets can also pose a challenge. Some appliances require significant amp output and can overload the circuits and result in a blown or tripped fuse. In Muscatine, the microwave had to be the only appliance plugged into its outlet to avoid tripping the breaker. Another appliance whose electrical outlet required special consideration was the refrigerator. To prevent it from being accidentally unplugged, use a lockable wire-mesh outlet cover.



Solutions to equipment issues:

- a) Consider lower cost alternatives to fancy equipment
 - For example, slow cookers (crock pots) instead of official cheese warmers sold by the concession equipment companies.
- b) Plan ahead to think about space and electrical outlet issues
- c) Grants or seed money to cover up-front costs or equipment donations
 - A left over dorm fridge may be wasting space in someone's garage.
 - The Muskie Boosters received money from the Wellmark Foundation.
 - For foundations in Iowa, try this link <http://www.iowacouncilof-foundations.org/directory.htm>
 - Other possible sources include: Action for Healthy Kids, Coordinated School Health Program (CSHP), Coordinated Approach to Child Health (CATCH), and the USDA Eat Smart Program.
- d) Choose food items that do not require new equipment

4

THE FOURTH STEP: Making sure you make a profit

How are you going to set your prices?

How much will it cost you to make the product (include in extra costs like trays, container, forks, condiments, cooking oil etc)? _____

How much money are you hoping to make on each one sold (profit margin)? _____

What is the market value (what people are willing to pay)? How are other concession stands setting their prices?

How much do you think people are willing to pay? _____

Can you make enough money on each one item to be happy? (Market value – cost = profit margin) _____

You must find a balance between what people are willing to pay for an item (market value) and what you can purchase it for in order to make a reasonable profit. This can be challenging for some items which are more costly. For example, the Muscatine group wanted to sell pre-cut packaged apple slices but found the price too high and did not think people would buy them at the price needed to make a profit. What people are willing to pay however may depend on the product.

IDEAS TO HELP YOU DECIDE

Survey questions about pricing.

Some of our study groups conducted a survey before making any changes to their concession stand menus. The groups in Muscatine and NE Iowa added questions about pricing to their pre-intervention survey to get an idea about what people might be willing to pay.

Trial and error

During the trial in Muscatine and Lone Tree, some price and product adjustments were made. Muscatine initially offered larger soft pretzels but discovered that people were not eating the entire thing. They were able to switch to smaller pretzels and charge the same amount without hurting sales (saving money and increasing profit). If possible, buy a small amount of the new item at first and try it.

NE Iowa schools kept prices of the healthy options low in order to “test the market” to see if people would even be interested in these new items. While their initial profits were minimal they found a great response to the healthier options. They felt that increase in price would not impact sales as the desire for healthy options was greater.

Wholesale outlets (e.g. Sam’s Club®, Costco®)

Wholesale outlets are a good place to get pre-packaged, single size serving items in bulk at lower prices.

Do it yourself (i.e. cut up your own fruit)

In NE Iowa, Tripoli, and Georgia, they got around the high cost of pre-prepared fruit by cutting it up themselves and packaging it. If you have time and enough volunteers this may be an option. In some Iowa schools the students did it.

In Muscatine they bought large packages of baby carrots and served them on nachos trays instead of purchasing more costly individual packages.

Standardize serving sizes

Standardizing serving sizes will help maintain consistent profit on an item. For example, when dispensing baby carrots from a two pound bag, either provide a model for volunteers to look at while dispensing or pre-package carrots in snack bag before a game.

Type of event and time of day
Muskie Boosters noted that certain products sold better at certain types of events and times of day. All day events such as track meets and swim meets were good for meal-type items (chicken sandwiches), fruit, carrots, and string cheese. Athletes who were there all day wanted healthy items rather than junk food. At morning events they sold more breakfast items (bagels, bananas).

Pair items together as a meal or snack deal

Examples:

- 1) An apple and string cheese
- 2) a chicken sandwich, apple and a drink.

Some items do not sell well enough to justify cost of purchasing the items.

Some items may not be feasible to sell if you don’t have a reliable distributor. See Muscatine prepackaged sliced apples example on page 7.

5

THE FIFTH STEP: Making decisions

Step 5

How are you going to decide what changes to make? _____

How can you test your ideas on a target group? _____

In our research projects in Muscatine and across Iowa, we surveyed students about their opinion on the current concession stand food and potential item that the boosters were considering adding or changing. The survey also asked questions about what students were willing to pay for certain items. Please see appendix page 31 for example surveys.

Taste-testing at events such as pep-rallies are a great way to try out new products on customers. Have them rate the food and suggest a price to sell it for.

6

THE SIXTH STEP: Keeping track of sales figures

Step 6

How are you going to track your sales? _____

There are multiple reasons why it's a good idea to keep track of your sales. First it is a method to make sure you have good inventory of items. Another reason is that you will know how successful your changes were if you keep track of basic sales, costs and profit data. You can keep track of your sales and inventory to try out some items before you buy large quantities.

Options

1. Use inventories to track game to game (see examples below). This gives you the most data and help you adjust mid-season but is more work.
2. Do a pre-season and a post-season inventory, keep all your receipts (make sure to look at them right away and write on them what things are if it isn't clear) and if possible write down when you throw food out or give it away.
 - a. Pre-inventory plus purchases (from receipts) – post-inventory and food thrown out = amount sold.
3. Use an electronic cash register, computer/smart phone application, or written log book to have volunteers log when they sell something.

Example Inventory Information Sheet

Game Date:

Product	Pre-game	Post-game inventory	Items "lost or discarded" inventory	Comments
EXAMPLE	Counted pre-game or post-game and any new purchases		For perishables, it is important to know how much was thrown away so you can estimate how much you need next week	
A				
B				
C				
D				
E				
F				

Game Date:

Product	Pre-game	Post-game inventory	Items "lost or discarded" inventory	Comments
A				
B				
C				
D				
E				
F				

7

THE SEVENTH STEP: GET THE WORD OUT!

Step 7

How are you going to advertise and market your new menu? (How are people going to know that there are new items?) _____

Ideas for advertising at the actual concession stand (i.e. new signs, displays, food out where they can see and smell it) _____

Ideas for advertising away from the concession stand (i.e. in the paper, newsletters, etc.) _____

Advertising was crucial to promoting the new products. A variety of different strategies were used by the three groups. Some strategies had little cost. Taking advantage of local resources helped keep costs down.

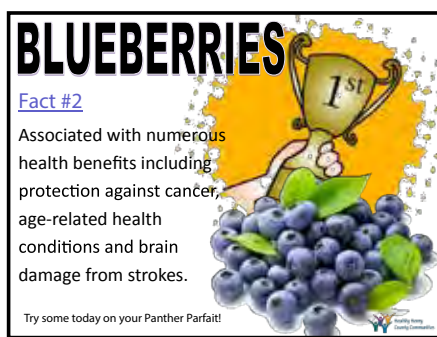
The groups developed posters, displayed the new foods at the concession stand, and the booster club in Muscatine was able to get some local press. Another option is to make your product look and sound catchy. The Mt. Pleasant Music Boosters packaged their snack packs cleverly by taking a bag, a clothes pin and two different healthy snacks and made up a catchy name “duet snack pack” to fit with the show choir theme. Some groups chose to identify the new items as healthy while others like Muscatine did not focus on health but rather on variety or taste (“Great Taste: More Choices”)

Posters

Creating simple posters to display around the concession stand was an inexpensive way to promote healthy products. Posters worked best when placed where patrons could see them when deciding on what to order. Created in Microsoft® Publisher and printed in color, smaller posters were laminated for a low cost and used repeatedly throughout the season. The posters could then be displayed throughout the school, stadium, and around the concession stand. In Muscatine, professional, more permanent outdoor menu signs for the football stadium were created with the help of a graphic designer and the local sign maker. This was a

more costly, one time outlay of funds. The Georgia group made signs templates available electronically to individual parks who wanted to use them (see Appendix-for examples). Electronic versions of the Muscatine and Georgia signs are available by request and may be altered.

The Mount Pleasant boosters put up signs on the health benefits of blueberries in the high school halls and bathrooms. Then at the concession stands, they had blueberry yogurt parfaits as a menu choice.



Advertisements in local media

(a) Local interest stories

If you can interest the local paper in writing a story about the changes or mention the changes in a story about local sports, this is a no cost way to get advertising. Georgia sent out a press release and Muscatine talked with the local sports writer.

(b) Strategic advertising

Muscatine chose to place ads in the school's seasonal sports brochure and the once per season high school sports insert in the local paper to maximize advertising dollars.



Product endorsement from school athletes

In Muscatine, one Booster was a former football coach. He enabled them to access the starting football players during their team photo-shoot. With the assistance of a photographer from the local newspaper, they were able to get several photographs of the athletes with their new products for no cost. In addition, these photos were used in an article about the concession stand changes in the local paper. With the consent of the athletes and their parents, these photos were later used to create several posters that were placed throughout the stadium. The only cost was color copying and lamination.

Word of mouth and seeing others eat the items

Concession stand customers also helped to increase awareness of new products just by being seen consuming these items at events. Occasionally, we noticed customers waiting in line changed their orders to include a new item after seeing another individual with the product. For example, pickles began increasing in popularity with students at football games.

Food displays

We are visual eaters. Attractive displays of food items at the concession stand helped to increase awareness of new products. The pretzel warmers (which also displayed the pretzels) were placed where customers could see them. Display racks which held granola bars etc, and laminated pictures of the foods also helped to inform customers of the new products. Whole fruit can be put out for view in a nice basket or bowl. Some stands in Georgia put whole fruit in hanging baskets. Items hidden in the refrigerator, such as cheese sticks, will either need pictures or an item place out in view (that will not be able to be sold).



Healthy foods logo

The Georgia Park and Rec group used their “Smart Choices” logo on fruit cups, signs and other advertisements. Another suggestion is to use these stickers as something that can be given away to students when they buy a new item. If students wear the stickers it is free advertising. You could also put your logo on other wearable giveaways such as arm bands, hats, or T-shirts. Again this would encourage people to eat the healthy items to get the giveaways and serve as advertising. The logo doesn’t have to be about health.

Letter to parents

The Georgia group sent letters to parents about the new options.

Posting on websites

Articles for parent, student or community newsletters

Announcement over the louder speaker at games

Muscatine wrote small blurbs for the announcers to read during the game.

Put advertisement on aprons for volunteers or site staff to wear

Have free “samples” of healthy options or giveaways

The menu board has a purple header with the word "MUSKIES" in a stylized, arched font. Below the header is the slogan "Great Taste. More Choices." in white text. The main body of the board is white and features a list of food items under the heading "NEW CHOICES". The items are arranged in two columns, with small images of each item. At the bottom of the board, there are three larger images of a burger, baby carrots, and a pretzel.

MUSKIES
Great Taste. More Choices.

NEW CHOICES

- Fresh apples
- Baby carrots with ranch
- Warm pretzels
- Dill pickles
- Trail mix
- Grilled chicken sandwiches
- Granola bars
- String cheese
- Apple juice

8

THE LAST STEP:

Were you successful!

SUCCESS

Step 8

How do you know if you are successful? _____

First define success

Do you want to increase your profits while increasing healthy choices?

Do you want to maintain your profit margins while increasing healthy choices?

Do you want happier parents or happier children?

There are several ways to figure out if you are successful in your venture.

First you can look at your sales data to see if you maintained profits while selling more healthy items (see step 5). Muscatine kept careful records and has data to show that profits were still made even with the new menu. See report on page 28.

Second, you can survey students and parents on their satisfaction with the current menu and new items. You can also ask questions to see if the students bought the new items and if they would buy them again. Please see appendix page 31 for example surveys.

Third, you can informally seek opinions of the changes. An informal poll can give you insight as to whether you were successful or not. Beware though that one person's opinion may not reflect the majority. Make sure you ask different people from different circumstances such as a parent of an athlete, students who go to athletic events but do not participate, and teachers.

One booster member believed their changes were successful when she received feedback from a parent thanking her for providing more healthy choices for an all-day event where the concession stand was providing the primary meals of the day.

COMMON CHALLENGES AND SOLUTIONS TO OVERCOME THEM

Challenge 1

People want to eat junk food at sporting events and expect junk food to be sold at the concession stand.

Solutions

a) Beliefs may change over time

These are ongoing challenges for which we do not propose to have the answer except that attitudes may change over time as people get used to new changes. We did see that some hometown spectators and some visitors from other towns were excited to have some healthier choices. The students in NE Iowa sold out of their new cut up fruit items multiple times.

b) Passionate advocates

Passionate volunteers can help convince others to give new products a try.

c) Careful wording - "More choices"

The Muscatine group chose to focus their advertising on the fact that now there were new options to try and not as much on the fact that these new options were "healthier". They used the slogan "Great Taste: More Choices". This was endorsed by the students as a better advertising tactic.

Georgia Parks and Recreation chose the slogan "Smart Choices: Part of the Game" to focus more on fruits and water helping sports performance. While in NE Iowa the schools advised "Try it...they like it!" We suggest asking your students.

d) Continue to offer some of the standard foods

All of our groups chose to continue to offer some of the standard less healthy foods at the concession stand. This likely decreased the purchase of the healthier items but, was an easier transition for volunteers, customers and the Booster Club. Pricing the healthier items lower than the other items may make them more attractive. Anecdotally, one park and recreation stand in Kentucky, got rid of everything but the healthier options and people bought them because there were no other choices.

e) Make the traditional concession food a little healthier

Making the popcorn and nachos a bit healthier went unnoticed by patrons in Muscatine.

"You don't have to change the behavior – the behavior gets to maintain itself. I eat popcorn at ball games. They don't even have to know that it's a healthier option."

– A Muskie Booster

Challenge 2

"Change will be too hard"

For example in Muscatine, there was skepticism about changing from convenient coconut oil sticks to liquid canola oil as it would be "too messy". However with good measuring cups and signs, volunteers adjusted without a lot of problems.

Solutions

a) Education

Make sure volunteers, leadership and everyone involved is updated on the changes and the reasons behind the changes.

b) Lots of signs

Clear instruction for volunteers in the form of signs is helpful.

c) Champion volunteers

Find enthusiastic volunteers to remind others of the changes and remind volunteers and patrons why these are good.

d) Strong leadership

Support from key leaders such as the Boosters Club's Presidents is crucial.

e) Flexibility

If one change is not working, be open to changing the plan.

For example, cooking chicken inside just did not work for the group in Muscatine so they started cooking it outside on a grill before the game.

f) Time

People need time to get used to changes. Do not give up too soon.

g) Make it easy

Consider trying the easiest changes first, for example, selling granola bars.

Only make a few changes at a time.

Replace your poorest selling items with something healthier.

Some of the changes were more challenging than others, like using an indoor grill for chicken sandwiches or purchasing a heating unit for the pretzels.

“Some of the changes were easy like offering big dill pickles and bags of carrots or changing from sticks of coconut oil to a liquid oil with much less saturated fat. Concession stand organizers have to look at their priorities and make the changes that will work for their community.”

– Muskie Booster

Challenge 3

With Booster clubs, board members rotate and change on a regular basis. Some boards might have a passion to keep the healthier options going while others might not work at it as much.

Solutions

a. Training the next champion

Find enthusiastic board members to champion the health efforts. The next champion board member will need resources to remind others why these are good and how these changes will not negatively effect profits. These resources can be survey data, sales data, national

data on obesity, etc.

b. Have your data ready

Another good reason to survey students and patrons is to have good data on the satisfaction with healthy items or on opinions on what items patrons are likely to buy.

Another piece of data you should have available for the next leaders on the board is the sales data. You need to be able to show that your healthy changes have not hurt profits. It's hard to dispute the numbers if your healthy changes are already a success and people are buying the products.

c. Write it down

It is recommended that you write down what you changes you made and why.

It's good to keep a history of what you have accomplished so others can look back upon your work.

Challenge 4

Spoilage

Some products can be challenging because they have limited shelf lives and may require refrigeration.

In Muscatine, some of the reasons for spoilage were

- too much of a certain fruit was purchased
- fruits were moved and forgotten
- existing products were not rotated with newly purchased fruits (or one could say “existing stock was not sold before newer fruit”).

Solutions

a) Keep track of sales so you know how much to buy at a time (See tracking sales on page 15)

Using an inventory sheet can help give an indication to whether you are buying too much at one time. Don't forget to mark down when product spoils or is given away.

b) Keep track of stock and product purchase dates.

Writing down dates of when items were purchased can help make sure that the ones bought first will be used first. Items can be grouped and stored by purchased or use by dates.

c) Get perishable foods from a local source so they are fresh (e.g. grocery store or farmers market)

Local sources have the freshest products compared to many food distributors. In addition, some farmers may be willing to sell you the products at a lower cost or may help you decide when the products are the freshest. Advertising that they are local products may also give a sales boost.

d) A good fridge – plug locked into the wall (See section 4. Carrots above)

To keep perishables fresh, you may need to buy a small refrigerator or borrow existing refrigerator space at the school.

e) Offer overripe fruit at a discounted price

Overripe fruit may move more quickly if you lower the price.

REPORTS: SUMMARIES OF CONCESSION PROJECTS



Improving the Nutrition Environment at Rural School Sporting Events:

Successful Changes Made at One High School

Obesity is quickly becoming our nation's leading public health concern. In fact, the majority of US adults, and a growing number of children are overweight. According to the Centers for Disease Control and Prevention, at least 17.1 percent of American children aged 12 to 19 years were overweightⁱ, and 66 percent of adults were either overweight or obese in 2004ⁱⁱ.

To slow the rise in obesity among children, many schools have undertaken efforts to improve school lunches and eliminate vending. However, concession stands have not been included in changes at most schools. Accordingly, a team of researchers from the University of Iowa Prevention Research Center and the Muskie Boosters collaborated on a project to explore the feasibility of selling more nutritious foods at the Muscatine High School Concession Stands. The goals of the project were to add healthier options to those sold at the concession stands and to modify some of the current options to make them healthier. First, a committee of Muskie Boosters members and Dr. Laroche's research team worked together to research available options, and then the Muskie Boosters decided upon a preliminary list of possible items. Next, Boosters and researchers surveyed parents and students about which items they might be interested in and their opinion on current concession stand foods. Using this information and considering issues such as pricing, availability and equipment, they added and modified items (see Table 1). The Boosters also developed an advertising campaign using signs, local media, announcements over the PA system and advertisements in their sports brochure.

To evaluate the changes, the research team did follow up surveys of parents and students, collected sales data using receipts and counts of inventory before and after games, and reviewed Muskie Boosters income and expense data for the intervention period and 2 years before.

Original menu	Items added
Super nachos	Apples
Hot dogs	Chicken sandwich
Candy	Carrots w/ low fat dip
Pizza	Warm pretzels
Water	Apple juice
Gatorade	Trail mix
Soda	Granola bars
Bagels	Pickles
Donuts	String cheese
Bananas	
Items changed	
Original item	Modified item
Nachos made w/ high transfat cheese	Nachos made w/ transfat-free cheese
Popcorn w/ coconut oil	Popcorn w/ canola oil
Pork sandwiches (football only)	Pork sandwiches (also available Friday nights in winter)

Table 1

Results show that parents' and students' satisfaction improved (table 2), and many students would buy the items again (figure 1). Concession stand profits remained strong (figure 2). New items remained a small, but significant percentage of sales overall and with the addition of the healthier popcorn made up 19.8% of sales (table 3). Notably, nachos, which comprised a significant portion of sales (18.6%), were lower in fat and calories, and pork sandwiches were offered more frequently as a result of the intervention. The next page contains a summary of barriers and solutions to adopting menu changes.



Photo by Beth Van Zandt, Muscatine Journal

Members of the Muskie Boosters Steering Committee pictured with Dr. Helena Laroche (bottom right)



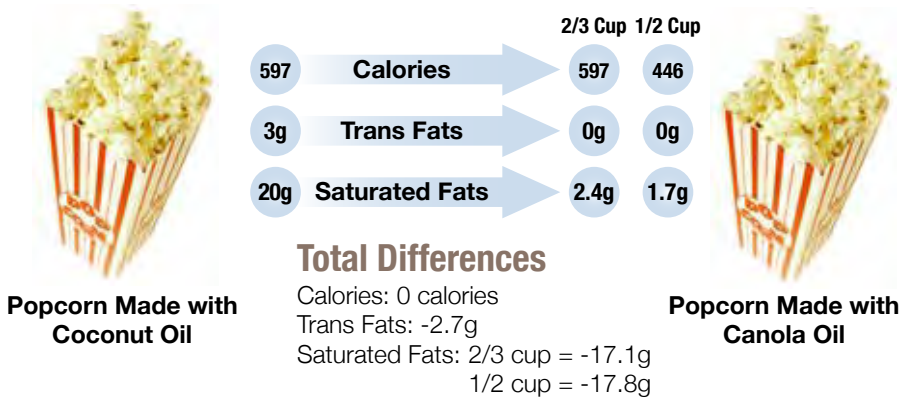
The Muskie Boosters mission is to raise funds and enhance the activities and sporting organizations for students at Muscatine High School. They support over 40 student organizations and provide funds for many special school projects. They are run by a board of around 30 couples and have a large membership who volunteer time, money or both. One of their primary revenue sources is concessions sold at most high school sporting events, accounting for roughly half of their income.

Popcorn

What changed: coconut oil bars used to make original popcorn replaced with canola oil. We used 2/3 cup but may use 1/2 cup of oil per batch. (Volunteers thought that 2/3 might have tasted better)

Barriers: resistance to use of new oil by volunteer staff, liquid oil requires measurement

Solutions: staff provided training, written instructions posted, measuring cups purchased

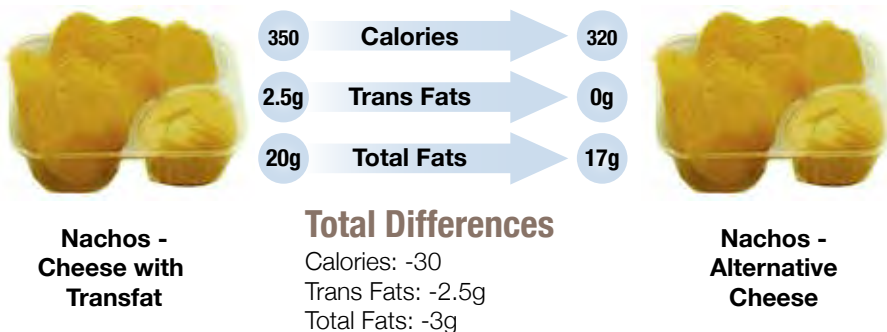


Nacho cheese

What changed: original cheese sauce replaced with transfat-free cheese sauce

Barriers: replacement cheese required new warmer

Solution: new cheese warmers purchased, low-cost crock pots also work to warm cheese

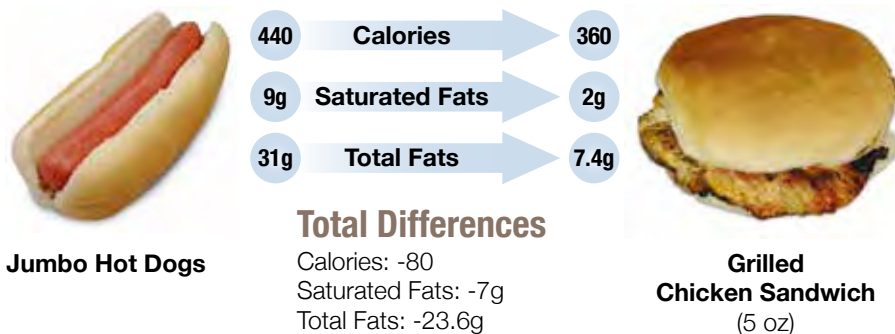


Jumbo hot dog/chicken sandwich

What changed: chicken sandwich added to the menu as a low-fat alternative to hotdog

Barriers: preparation more difficult than hot dogs, smoke alarm set off by inside grill

Solutions: chicken cooked at the beginning and kept warm, small grill purchased for indoors (placement away from smoke detector), chicken cooked mainly outdoors



Students: Willingness to Try New Products Again

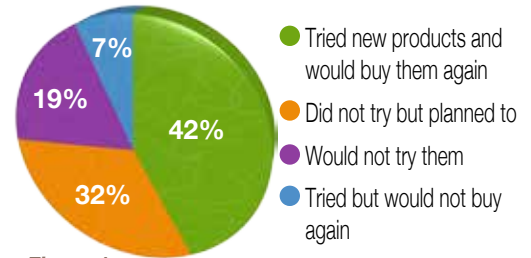


Figure 1

Profit Data (Fall to Spring - Academic Year)

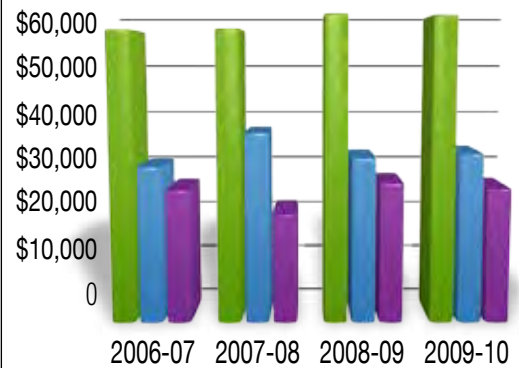


Figure 2

Students	Parents
Improved variety	Improved variety
Improved satisfaction w/ healthy items	Improved satisfaction w/ healthy items
	Improved overall satisfaction

Table 2

Percentage of New Items Sold	
New items only	11.0%
New items plus popcorn	19.8%
New items plus popcorn and pork sandwich	25.8%
Nachos	18.6%

Table 3

For more information contact Helena Laroche: helena-laroche@uiowa.edu or (319) 338-0581 ext 7700.

i The Centers for Disease Control and Prevention (2006). QuickStats: Prevalence of Overweight* Among Persons Aged 2--19 Years, by Sex --- National Health and Nutrition Examination Survey (NHANES), United States, 1999--2000 Through 2003--2004. Morbidity and Mortality Weekly Report Retrieved July 23, 2010, from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5545a5.htm>

ii The Centers for Disease Control and Prevention (2009). Prevalence of Overweight and Obesity Among Adults: United States, 2003-2004. NCHS Health E-Stat Retrieved June 23, 2010, from http://www.cdc.gov/nchs/data/hestat/overweight/overweight_adult_03.htm

This project was funded in part by a grant from the Wellmark Foundation®

NORTHEAST IOWA



Food & Fitness INITIATIVE

W.K. Kellogg Foundation Food & Community Partner

NE Iowa FFI YOUTH Create School Concession Changes

Students at four NE Iowa schools proposed changes in their concession stands to Booster & Music Clubs. Central of Elkader, Starmont, Cresco and Decorah have reported the following results from the efforts of the students. Profits were minimal with great response to healthy options from the customer. "Try it... they like it!" is the advice of these schools.

Cresco

More fruits, vegetables and dairy products are offered as healthy options at the Cresco concession stands. FFI youth presented information and the need for healthy options to their Booster Club. Gradually more items are being added.

Central of Elkader

FFI youth introduced a turkey sandwich at a cost of \$1.50 with support of their Booster Club. Students and staff made and wrapped sandwiches with break even profits. Ingredients were purchased at the local grocery store and the demand for more has also allowed them to increase their price and increase profits.

Decorah

A healthy meal option is offered at the Decorah concession stand thanks to the FFI Youth and staff. The meal deal includes a turkey sandwich, cheese stick, apple or raisins and carrot sticks for \$3.00. Proceeds benefit Boosters.

Starmont

Vacuum-sealed salads, turkey sandwiches and fruit cups are now offered as concessions at Starmont High School. Youth and staff with to package options. Salads are offered as vegetable or grilled chicken with prices from \$1.50 to \$3.00. Turkey sandwiches sell for \$1.50 and fruit cups are priced at \$1.00.



Our Vision:

Northeast Iowa is a unique place where all residents and guest experience, celebrate and promote locally grown food with abundant opportunity for physical activity and play EVERY DAY. Healthier people make stronger families and vibrant communities.

Contact:

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Food & Fitness Youth Engagement Coordinator

Heather Pecinovsky

Food & Fitness AmeriCorp Youth Liason

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Cresco, IA 52136

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Smart Choices

Smart Choices is a social marketing campaign designed to accompany the Georgia Recreation and Park Association's (GRPA) "Healthy Food and Beverage Sales at Concession Stands and in Vending Machines in Local Park and Recreation Settings" resolution that was passed in 2006. While the resolution encouraged all GRPA sites to provide healthy concession and vending options, six self-selected sites adopted the Smart Choices campaign try to increase sales of two healthy choices available in the concession stands: fruit and water. This campaign includes customizable promotion pieces, including a press release, parent letter urging them to choose healthy foods at concession stands, letter for concession stand operators asking them to offer healthy food alternatives, and point-of-purchase signs. All materials were developed after formative research with parents, GRPA staff, and concession stand operators. This research revealed that parents and children preferred messages about improving athletic performance over those about the items' "health." Therefore, the Smart Choices campaign used "play your best game" as the tagline. The implementation and impact of the campaign was studied during a fall season at the six self-selected sites.



The social marketing campaign resulted in increased sales of fruit and water at some sites, but others struggled to sell their healthy items. The sites that had the best sales had common traits, including a strong commitment to and enthusiasm for the project, creative ways to market healthy choices (e.g., pre-cut fruit), and strategies for increasing traffic to the concession stand (e.g., using directional signs throughout the site). Parent surveys that accompanied the campaign revealed that very few respondents consider the health of their selections when making concession stand purchases. The taste and cost of the items were consistently rated higher than health.

When respondents' knowledge of healthy and unhealthy foods were assessed, those parents who had a better understanding of unhealthy foods were more likely to purchase water than those parents with a lower score on this scale. Unfortunately, there seemed to be a misconception about the health of sports drinks among the respondents. In fact, 69% of parents indicated that they thought sports drinks were very healthy or healthy. Parents may be under the impression that these drinks are healthy because they are marketed as being able to enhance athletic performance and necessary to replenish electrolytes. However, sports drinks are not necessary for casual athletes. Parents need to understand that these drinks are sugar-sweetened beverages, like sodas, that contribute to obesity and overweight. Parents who indicated an awareness of the Smart Choices campaign were significantly more likely to have purchased fruit than those who did not know about the project.

Resources/Appendix

- I. USDA – Healthier School Challenge Nutrition Guideline Information Page 32
- II. Georgia Action for Healthy Kids
 “Vending Machine and Concession Stand Choices” Page 33
- III. Guide to Healthy Products Sources (Vendors) for specific products
 and their nutritional information Page 34
- IV. Other Resources
 - A. Sample of surveys used by the Muskie Boosters Page 39
 - B. Sample of survey used by Georgia Rec and Parks Page 45
 - C. Sample of inventory tracking sheet used by the Muskie Boosters Muskie Boosters Page 42
 - D. Sample of advertising
 - 1. Muscatine Boosters Page 47
 - 2. Georgia Recreation and Parks Page 49

Want more ideas?

This is a link of a PowerPoint presentation by Lyle McCoon Jr. of the Nicholasville/Jessamin County Parks and Rec. They removed most unhealthy options from their concession stands. www.fitky.org/ViewDocument.aspx?id=113

Visit <http://healthymeals.nal.usda.gov/hsmrs/HUSSC/calculator.html> to see if your product meets the Team Nutrition guidelines or use the table below

**Rounding guidelines: To express nutrient values to the nearest 1 g increment, f or amounts falling exactly half way between two*

Percent of calories from total fat	Must be at or below 35% of calories per serving	<ol style="list-style-type: none"> 1. Take the total grams of fat per serving, multiply by 9 2. Divide this number by the total calories per serving 3. Convert to a percentage by multiplying the result of step 2 by 100. Round to the largest whole number
Percent of calories from saturated fat	Must be below 10% of total calories	<ol style="list-style-type: none"> 1. Take the total grams of saturated fat per serving, multiply by 9 2. Divide this number by the total calories per serving 3. Convert to a percentage by multiplying the result of step 2 by 100. Round to the largest whole number
Trans fat	Must be less than .5 g per serving	<ol style="list-style-type: none"> 1. The amount of trans fat per serving will be listed on the nutrition facts label
Percent of sugar by weight	Must be at or below 35% by weight	<ol style="list-style-type: none"> 1. Take the total grams of sugar in one serving from the nutrition facts label 2. Divide this number by the weight of one serving in grams from the nutrition facts label (If serving size is not given in grams, take the total weight in grams on the front of the package and divide by the number of servings on the nutrition label). 3. Convert to a percentage by multiplying the result of step 2 by 100. Round to the largest whole number. Round to the largest whole number
Sodium	<p>For a non-entrée or side dish: must at or below 480 mg per serving</p> <p><i>Note: foods with less than 200 mg of sodium per serving are considered the healthiest options.</i></p> <p>For main dishes or entrees: must be at or below 480 mg</p> <p><i>Note: foods with less than 480 mg of sodium per serving are considered the healthiest option</i></p>	

whole numbers or higher (e.g., 2.5 to 2.99 g), round up (e.g., 3 g). For amounts less than half way between two whole numbers (e.g., 2.01 g to 2.49 g), round down (e.g., 2 g).

Vending Machine & Concession Stand Choices

Park and Recreation agencies, parents, and other organizations that are in charge of stocking vending machines and/or operating concession stands should include *at least some healthy food choices* in their offerings. The table below provides a list of foods that should be offered in limited quantities and those that should be emphasized (Best and Acceptable):

VENDING MACHINE CHOICES			CONCESSION STAND CHOICES			BEVERAGE CHOICES		
BEST	ACCEPTABLE	LIMITED	BEST	ACCEPTABLE	LIMITED	BEST	ACCEPTABLE	LIMITED
Animal crackers, graham crackers, whole grain crackers	Granola bars, whole-grain fruit bars	Cookies (including low fat)		Granola bars, whole-grain fruit bars	Candy bars	Milk, any flavor-preferably non-fat or low fat (1%); size: 8 oz.	Milk, 2%, whole size: 8 oz.	
		Candy, candy bars, chocolate bars, toaster pastries, marshmallow/cereal treats	Low-fat or fat-free mayonnaise, mustard, lettuce and tomato for sandwich toppings		Mayonnaise, cheese sauce, chili cheese sauce	Juice- fruit and vegetable that contain 100% juice; size: 6 oz.	Juice- fruit or or vegetable that contains at least 50% juice size: 6 oz.	
Pretzels	Baked chips, corn nuts, rice cakes, cereal/nut mix	Regular chips, cheese-flavored crackers, cracker sandwiches	Turkey and veggie burgers, turkey sandwiches	Reduced-fat hot dogs	Hot dogs, hamburgers	Water, pure	Flavored or vitamin-enhanced fitness water, sparkling water	
Nuts and seeds-plain or with spices	Nuts with light sugar covering; honey roasted	Candy-or-yogurt-coated nuts	Vegetables and low fat dip	Soft pretzels, baked chips	Chips, French Fries	Water, pure	Low-calorie, diet sodas, low-calorie iced tea, low-calorie coffee	Regular soft drinks, sports drinks, sweetened tea; size: 12 oz.
Trail mix (plain)	Popcorn/nut mix	Trail mix with chocolate, yogurt, or candy	Fresh, dried, or canned fruit		Sugary candy			
Fresh vegetables and fruit, single-serve canned fruit, dried fruit	Fruit leathers	Candy-or-sugar-coated dried fruit	Vegetable topping pizza	Cheese pizza	Pepperoni pizza			
Fat-free popcorn	Light popcorn	Buttered popcorn	Yogurt, preferably non-fat, low-fat or light	Sugar-free gelatin, fat-free pudding, fruit based popsicles	Ice cream			
Beef jerky 95% fat free		Sausage, pork rinds						

**Special note about portion sizes: Always offer the smallest portion size of all of the above listed foods. Limit the availability of large grab bags of chips and extra large candy bars. The same applies for beverages. Offer 8 ounce milk cartons, 6 ounce juice boxes, and 12 oz cans of diet soda. **

Adapted from Georgia Action for Healthy Kids, www.actionforhealthykids.org

Nacho Cheese Sauce

What we used	Bakers and Chefs™ Nacho Cheese Sauce
Manufacturer	Bakers and Chefs™
Contact information	Available at Sam's Club®: http://www3.samsclub.com/clublocator/ Enter your location information to locate a store near you
Serving size	1/4 cup
Calories	80
Fat	6g
Saturated fat	2.5g
Trans fat	0g
Comments	Other trans fat-free cheeses are available.
Equipment needed	#10 can cheese warmer or a large (≥3-quart) Crockpot with ladle
What we used	Topping Server Supreme with Ladle (nacho cheese warmer), Item Code: 86500
Cost	\$231.21
Manufacturer	Server Products
Contact information	http://www.concessionstands.com/s.nl/sc.2/.f?search=cheese+warmer In addition Sam's® or Costco® sometimes sell these.
Low-cost alternatives	3-quart Crockpot
Cost	\$19-\$80

Canola Oil

What we used	Pop-All Canola Popping Oil
Manufacturer	Pop-All
Contact information	Available from Farner-Bocken®. Visit http://mrc.farner-bocken.com/fbpublic/contact_us.html to locate a local distributor, or call customer service at 1-800-644-6323
Serving size	1 tbsp
Calories	120
Fat	14g
Saturated fat	1.0g
Trans fat	0g
Comments	Other brands of canola oil are available with similar nutrition facts. This particular popping oil includes flavoring to supposedly make it taste like coconut oil so it may taste different than just plain canola oil from in the store. Other "popping oils" may also have flavoring. Any canola oil should work. It is just a taste preference. Check labels as some popping oil is soybean oil, not canola.

Soft Pretzels

What we used	SuperPretzel® Soft Pretzels
Manufacturer	J&J Snack Foods Corp®
Contact information	Available at Wal-Mart® or visit http://www.superpretzel.com/softpretzels.html and enter your zip code to find a vendor near you
Serving size	1 pretzel
Calories	160
Fat	1.0g
Saturated fat	0g
Trans fat	0g
Sodium	130mg without salt, 920mg with salt
Comments	Other brands of pretzels are available with similar nutrition facts. To ensure that sodium content remains low, select unsalted varieties or those with salt on the side. Customers may then select to have light salt or no salt. About ½ of our customers requested their pretzels without salt.
Equipment needed	Pretzel warmer, microwave, roaster, or toaster oven *Note: the pretzel warmer can be both heated and humidified, or heated only. The heated only model is sufficient to keep pretzels warm, but requires use of a microwave, roaster, or toaster oven to initially heat pretzels to temp.
What we used	Heated Display Case, model No. 16PD-A; Humidified Heated Display Case, model No. HFD-1-P
Cost	Heated Display Case: \$499.41 (2009) Humidified Heated Display Case: \$983.00 (2009)
Manufacturer	Star Manufacturing®
Contact information	Available from Reinhart Food Service. Visit http://www.rfsdelivers.com/Locations/tabid/56/Default.aspx to find a local distributor
Low-cost alternatives	Microwave and heated display case, roaster or other warmer

Pork Sandwich

What we used	Raw pork loin and a hamburger style bun
Manufacturer	Hy-Vee® Grocery
Contact information	Your local grocery stores
Serving size	6 oz. of pork and 1 bun
Calories	280 for the sandwich
Fat	10.5g
Saturated fat	4.0g
Trans fat	0g
Sodium	520mg
Cholesterol	60mg
Carbohydrates	21g (<1g of fiber, 3g of sugar)
Protein	25g
Cost	Heated display case: ≥\$500.00, Microwave: ≥\$40.00

Apple Juice

What we used	Tropicana® Apple Juice
Manufacturer	Tropicana®
Contact information	http://cr.tropicana.com/user/tropusen.cfm?link=locator&date=20100803 Enter your location information to find a vendor near you
Serving size	10 oz
Calories	138
Carbohydrates	36g
Sugar	31g
Vitamin C	100% DV
Comments	Other brands of apple juice are available with similar nutrition facts. However, small size packages are recommend as apple juice is high in sugar.

Trail/Nut Mix

What we used	Kar's® Yogurt Apple Nut Trail Mix
Manufacturer	Kar's® Nuts
Contact information	Call customer service department at 800-527-6887 for information on how to order and pricing
Serving Size	1.5oz
Calories	220
Saturated Fat	3.5g
Trans Fat	0g
Sugar	7g
Comments	Finding a single-serving trail/nut mix with acceptable nutrition content was exceptionally challenging. However, other varieties may be available. You can use the nutrition content guide (Appendix B) to find a healthy trail/nut mix.

Granola Bars

What we used	Nature Valley® Granola Bars
Manufacturer	General Mills®
Contact information	Available at your local grocery store, or visit http://naturevalley.alice.com/?utm_source=naturevalley&utm_medium=referral&utm_campaign=channel_gmi for ordering and pricing information
Serving size	2 bars (42g)
Calories	180
Fat	6g
Saturated fat	0.5g
Carbohydrate	29g
Dietary Fiber	2g
Sugar	11g
Comments	Other varieties may be available. You can use the nutrition content guide (Appendix B) to find a healthy granola bar. Also, if you obtain the product from a local grocery store, you may be able to receive a discount for purchasing in bulk. Some Quaker® low fat granola bars also meet the criteria (They are smaller in size).

Pickles

What we used	Mt. Olive® Kosher Dill Pickles
Manufacturer	Mt. Olive® Pickle Company, Inc.
Contact information	http://www.mtolivepickles.com/locator/ Enter your information location to find a vendor near you
Serving size	1 oz (28g)
Calories	5
Fat	0g
Carbohydrate	1g
Sodium	260 mg
Comments	Many brands of pickles have similar nutrition information and could be used as an alternative. We sold the large size pickles.

String Cheese

What we used	Fastco® String Cheese	Frigo® String Cheese
Manufacturer	Fareway Stores Inc.	Suputo Cheese USA, Inc.
Contact information	http://www.fareway.com/ Click on the Store Locator link to find a store near you	Available at Sam's Club: visit to locate a store near you; http://www3.samsclub.com/clublocator/ Also available at Wal-Mart: visit http://www.walmart.com/# and click on the store locator to find a store near you
Serving size	1 piece (28g)	1 piece (28g)
Calories	80	80
Fat	5g	6g
Saturated fat	3g	3.5g
Protein	7g	6g
Comments	Many brands of string cheese have similar nutrition information and could be used as an alternative	

Frozen Fruit Slush

What we used	Cool Tropics Rips 100% Juice Slush®
Manufacturer	Cool Tropics®
Contact information	http://www.cool-tropics.com/products/products_rips.htm . Available at Kohls Wholesale Food Distributer http://www.kohlswholesale.com
Serving size	4 oz
Calories	110
Fat	0g
Carbohydrate	28g
Sugar	19g
Cost	\$31.14 per case of 60, 4 oz pouches
Comments	This product is shelf stable for 1 year. However, you will need freezer space to freeze individual packages.

Low-fat Cheesy Breadsticks

What we used	6" Whole Grain Reduced Fat Mozzarella Bosco® Stick
Manufacturer	Bosco® Pizza Company
Contact information	Available at food distributors or Kohls Wholesale. http://www.kohlswholesale.com
Serving size	1 breadstick (60g)
Calories	140
Fat	3.5g
Saturated fat	1.5g
Trans fat	0g
Carbohydrates	17g
Cost	\$62.46 for a case of 144
Comments	These Bosco® sticks were served with a 2 oz side of Marinara Sauce which adds calories and sodium.

Pre-cooked Chicken Filet

What we used	Daily Chef Mesquite Grilled Chicken Filet with Rib Meat
Manufacturer	Daily Chef brand at Sam's Club®
Contact information	Sam's Club, http://www.samsclub.com
Serving Size	3 oz (84 gm)
Calories	110
Fat	2.5 g
Saturated fat	0.5 g
Trans fat	0
Sodium	390 mg
Carbohydrate	17 g
Protein	20 g
Cost	\$10.68 for 45 oz (15 servings)
Comments	This chicken filet is manufactured by Walmart and is a private label. However, precooked chicken filets would be easy to find in grocery stores or similar discount stores.

Pre-Survey Muskie Booster Club Concessions Survey

We want to know what you think! The Muskie Booster Club is considering adding some new food items to the Muscatine High School concession stands. We would like your ideas as to which items to offer. Items previously sold will still be available.

1. Thinking about your most recent experience with the concessions stands at Muscatine High School during sports events, please indicate your overall level of satisfaction with food and drinks offered.

Very unsatisfied	Unsatisfied	Neither satisfied nor unsatisfied	Satisfied	Very satisfied	Not applicable
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2. The variety of current items at the concession stand is...

Poor	Fair	Good	Very Good	Excellent	Not applicable
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3. The taste of current items at the concession stand is...

Poor	Fair	Good	Very Good	Excellent	Not applicable
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4. Which of the following, if any, sports activities at Muscatine High School do you attend?
Please check all that apply.

Basketball Football Track Volleyball Cross Country Swimming Wrestling None of the above

5. Listed below are new items we are considering for the concession stand. Please circle how likely you would be to BUY the following items at the concession stand on a scale of 1 through 5, where 1 = not at all likely to buy and 5 = very likely to buy.

	Not at all likely to buy	Not likely to buy	May or may not buy	Likely to buy	Very likely to buy
Almonds	1	2	3	4	5
Bagels	1	2	3	4	5
String cheese	1	2	3	4	5
Fruit juice	1	2	3	4	5
Frozen yogurt in a cup	1	2	3	4	5
Granola bars	1	2	3	4	5
Grilled chicken sandwich	1	2	3	4	5
Iced tea	1	2	3	4	5
Milk	1	2	3	4	5
Peanuts in the shell	1	2	3	4	5
Salsa for nachos	1	2	3	4	5
Sliced apples in a bag	1	2	3	4	5
Baby carrots in a bag	1	2	3	4	5
Sun Chips	1	2	3	4	5
Trail mix	1	2	3	4	5
Warm soft pretzels	1	2	3	4	5
Yogurt	1	2	3	4	5

6. Of the food items listed above, please list the top three items you would most likely buy at the high school concession stand.

- a. _____ Most likely to buy
- b. _____ Second most likely to buy
- c. _____ Third most likely to buy

7. Please list any other food suggestions you may have:

8. What, if anything, would you like to see added or changed from the current items offered at concession stands at Muscatine High School?

9. How important is it to you that Muscatine High School offer healthy/nutritious food and drink choices during sports events?

Very unimportant	Unimportant	Neither important nor unimportant	Important	Very important
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10. How satisfied are you with the healthiness/nutritional value of the food and drink choices currently available during sports events at the Muscatine High School?

Very unsatisfied	Unsatisfied	Neither satisfied nor unsatisfied	Satisfied	Very satisfied	Not applicable
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11. The variety of healthy items currently offered at the concession stand is?

Poor	Fair	Good	Very Good	Excellent	Not applicable
------	------	------	-----------	-----------	----------------

12. How often, if at all, do you buy items from the concession stand at Muscatine High School during sports events?
Please circle one answer.

Never	Seldom	Sometimes	Frequently	Always
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13. Please share your thoughts on the following prices for specific items by checking the appropriate box.
Check one box for each item.

Item	Price	Less than I would expect to pay	About the same as I would expect to pay	More than I would expect to pay
Almonds	\$1.50	*	*	*
Bagels	\$1.00	*	*	*
String cheese	\$0.50	*	*	*
Frozen yogurt in a cup	\$1.50	*	*	*
Granola bars	\$0.75	*	*	*
Grilled chicken sandwich	\$3.00	*	*	*
Sliced apples in a bag	\$2.00	*	*	*
Baby carrots in a bag	\$0.50	*	*	*
Sun Chips	\$0.75	*	*	*
Trail mix	\$1.50	*	*	*
Warm soft pretzels	\$1.50	*	*	*
Yogurt	\$1.00	*	*	*

14. Please place a check in front of the answers that best describe you.

Male

Female

Thank you for taking the time to complete our survey!

Muskie Booster Club Concessions Survey

We want to know what you think! The Muskie Booster Club added some new food items to the Muscatine High School concession stands. We would like your thoughts on the changes.

1. Thinking about your most recent experience with the concession stands at Muscatine High School during sports events, please indicate your overall level of satisfaction with food and drinks offered.

Very unsatisfied	Unsatisfied	Neither satisfied nor unsatisfied	Satisfied	Very satisfied	Not applicable
------------------	-------------	-----------------------------------	-----------	----------------	----------------

2. The variety of current items at the concession stand is...

Poor	Fair	Good	Very Good	Excellent	Not applicable
------	------	------	-----------	-----------	----------------

3. The taste of current items at the concession stand is...

Poor	Fair	Good	Very Good	Excellent	Not applicable
------	------	------	-----------	-----------	----------------

4. How important is it to you that Muscatine High School offer healthy/nutritious food and drink choices during sports events?

Very unimportant	Unimportant	Neither important nor unimportant	Important	Very important
------------------	-------------	-----------------------------------	-----------	----------------

5. How satisfied are you with the healthiness/nutritional value of the food and drink choices currently available during sports events at Muscatine High School?

Very unsatisfied	Unsatisfied	Neither satisfied nor unsatisfied	Satisfied	Very satisfied	Not applicable
------------------	-------------	-----------------------------------	-----------	----------------	----------------

6. The variety of healthy items currently offered at the concession stand is...

Poor	Fair	Good	Very Good	Excellent	Not applicable
------	------	------	-----------	-----------	----------------

7. How often, if at all, do you buy items from the concession stand at Muscatine High School during sports events?
Please circle one answer.

Never	Seldom	Sometimes	Frequently	Always
-------	--------	-----------	------------	--------

8. Which of the following, if any, sports activities at Muscatine High School do you attend?
Please check all that apply.

Basketball Football Track Volleyball Cross Country Swimming Wrestling None of the above

9. Listed below are the items currently offered at the concession stand. Please circle how often you bought the following items at the concession stand.

	Never	Once	Twice	Three times	Four or more times
Apples	0	1	2	3	4+
Apple Juice	0	1	2	3	4+
Baby Carrots	0	1	2	3	4+
Candy	0	1	2	3	4+
Gatorade	0	1	2	3	4+
Granola bars	0	1	2	3	4+
Grilled chicken sandwich	0	1	2	3	4+
Hot dogs	0	1	2	3	4+
Nachos	0	1	2	3	4+
Pickles	0	1	2	3	4+
Popcorn	0	1	2	3	4+
Pork Sandwich	0	1	2	3	4+
Soda	0	1	2	3	4+
Soft pretzels	0	1	2	3	4+
String Cheese	0	1	2	3	4+
Trail mix	0	1	2	3	4+
Water	0	1	2	3	4+

10. What food or drink items would you like to see added or changed from the current items offered at concession stands at Muscatine High School?

11. Please share your thoughts on the following prices for specific items by checking the appropriate box.
Check one box for each item

Item	Price	Less than I would expect to pay	About the same as I would expect to pay	More than I would like to pay
Apples	\$0.75	*	*	*
Pickles	\$1.00	*	*	*
String cheese	\$0.50	*	*	*
Warm soft pretzels – no cheese	\$1.00	*	*	*
Granola bars	\$1.00	*	*	*
Grilled chicken sandwich	\$3.00	*	*	*
Trail mix	\$1.00	*	*	*
Baby carrots with ranch dressing	\$1.25	*	*	*
Apple Juice	\$1.00	*	*	*

12. What are your thoughts about the new items we offer as listed above?

- I did not try any of them and do not plan to try them
- I did not try any of them but plan to try them in the future
- I tried them but would not buy them again
- I tried them and would buy them again

13. Please place a check in front of the answers that best describe you.

- Male Female
- Freshman Sophomore Junior Senior

14. Did you complete a survey about the concession stand last fall

- Yes No

15. Have recent money worries (due to problems in the economy) led you to buy less food or choose less expensive items at the concession stand instead of what you would normally buy

- Yes No

Thank you for taking the time to complete our survey!

Local Park Assessment for Smart Choices Campaign (From GRPA project)

The questions below will help you understand your park and recreation sites' strengths and needs regarding healthy eating.

1. Is the local park and recreation site aware of the 2006 GRPA Resolution on Healthy Food and Beverage Sales at Concession Stands and in Vending Machines?

2. Which sports are played at the site and which sport seasons are they played in?

3. Does the sites have concession stands? If so, how many?

4. Does the park and recreation site offer healthy items at the concession stands? If so, what? Use the standards chart to identify. What is offered at the concession stand?

5. Who is in charge of choosing and purchasing items to be sold at concession stands?

6. When are these decisions made and when are the items purchased? (i.e., before season, each week, etc)

7. Do park and recreation sites have signs to promote healthier foods and beverages?

Inventory Information Sheet

Game Date:

Product	Pre-game Inventory	Post-game Inventory	Items "lost or discarded"	Comments
A				
B				
C				
D				
E				
F				

Game Date:

Product	Pre-game Inventory	Post-game Inventory	Items "lost or discarded"	Comments
A				
B				
C				
D				
E				
F				

MUSKIES



Great Taste. More Choices.



NEW CHOICES

- Fresh apples
- Baby carrots with ranch
- Warm pretzels
- Dill pickles
- Trail mix
- Grilled chicken sandwiches
- Granola bars
- String cheese
- Apple juice





Like food?

Then you'll love our new concession items!

Check it out






We have added

- Apples
- Baby carrots w/ranch dressing
- Grilled chicken sandwiches
- Warm pretzels
- Dill pickles
- Trail mix
- Granola bars
- Apple juice
- Snack pretzels




MUSKIES



Muskie
Journal

Did you know?

We now offer
Trail mix, granola bars and snack pretzels



TRY ONE TODAY

Try a delicious spin on an old favorite

Eat your pretzel with mustard!



This *new* item is even better with mustard! Try one today.

SMART



CHOICES

Part of the Game!

INSERT
SITE
LOGO

INSERT SITE NAME HERE

Parks and Recreation
encourages you to make the
SMART CHOICE!

INSERT
SITE
LOGO

SMART CHOICES:
PART OF THE GAME.



Buy water, a **SMART CHOICE**,
and play your **BEST GAME!**

INSERT SITE NAME HERE

encourages you to make the SMART CHOICE!



**Buy fruit, a SMART CHOICE,
and play your BEST GAME!**

INSERT SITE
LOGO HERE

INSERT SITE NAME HERE

encourages you to make the
SMART CHOICE!



**Buy water, a SMART CHOICE,
and play your BEST GAME!**

How to Make Healthy Improvements to Your Concessions Stand:

The Eight Steps at a Glance

Step 1: What are you making changes?

Step 2: What types of changes would you like to make?

Step 3: Where are you going to get your supplies and equipment?

Step 4: How are you going to set your prices?

Step 5: How are you going to decide what changes to make?

Step 6: How are you going to track your sales?

Step 7: How are you going to advertise and market?

Step 8: How do you know if you are successful?



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