



## **Improving the Nutrition Environment through Changing Concession Stand Options:**

*A how-to-guide based on lessons  
learned in Muscatine High School in  
Iowa, four Northeast Iowa schools,  
and Georgia Parks and Recreation*



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## Introduction

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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.<sup>1</sup> According to the Centers for Disease Control and Prevention, at least 17.1 percent of American children aged 12 to 19 years were overweight and 66 percent of adults were either overweight or obese in 2004.<sup>2</sup>

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.

The next two pages contain a short report of a program at Muscatine High School. Working together, a research team from the University of Iowa and the Muskie Boosters' Club were able to offer healthier food options at their concession stands. This report will give you a good summary of this program.

Additionally, we have heard from other communities like Northeast Iowa School's Food and Fitness Youth Program and Georgia Recreation and Parks Association and have included useful information we learned from their experiences. On the third page of this introduction is a short summary from NE Iowa and the fourth page includes one from Georgia.

This guide was developed from lessons learned from three community projects that successfully made these changes; Muscatine High School (Muskie Boosters), the Food and Fitness Youth from NE Iowa schools, and Georgia Recreation and Parks Association (GRPA).

1. 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>

2. 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](http://www.cdc.gov/nchs/data/hestat/overweight/overweight_adult_03.htm)





# 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 overweight<sup>i</sup>, and 66 percent of adults were either overweight or obese in 2004<sup>ii</sup>.

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)



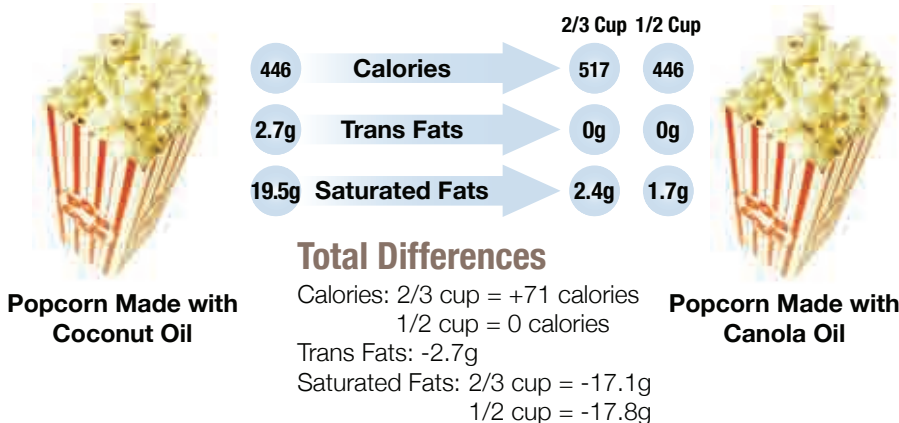
The Muskie Boosters mission is to raise funds and enhance the activities and sporting organizations for students at Muscatine High School. They support over 40 student organizations and provide funds for many special school projects. They are run by a board of around 30 couples and have a large membership 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

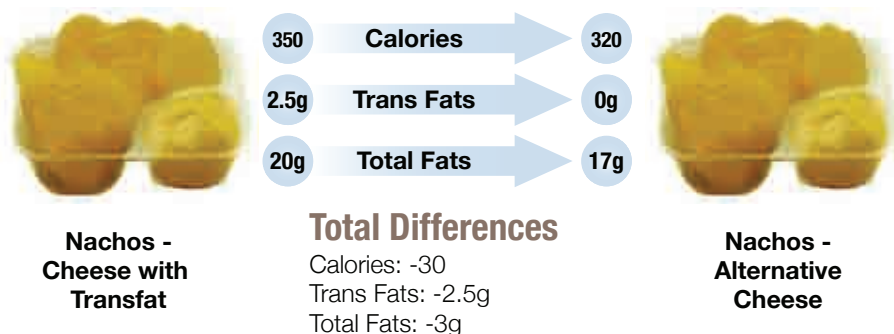


## Nacho cheese

**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

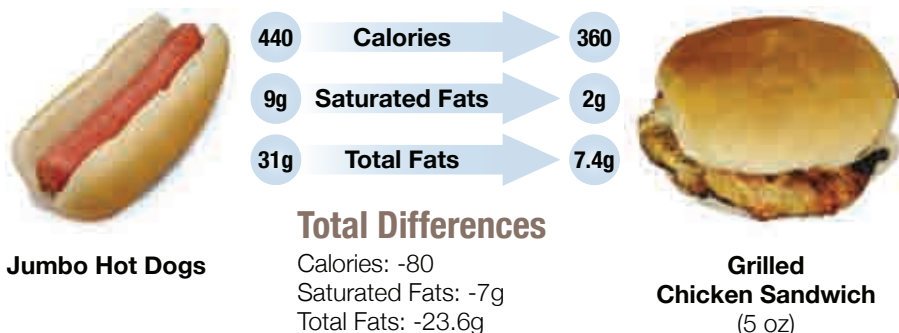


## Jumbo hot dog/chicken sandwich

**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

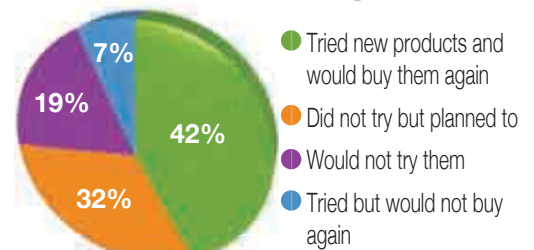


Figure 1

## Profit Data (Fall to Spring - Academic Year)

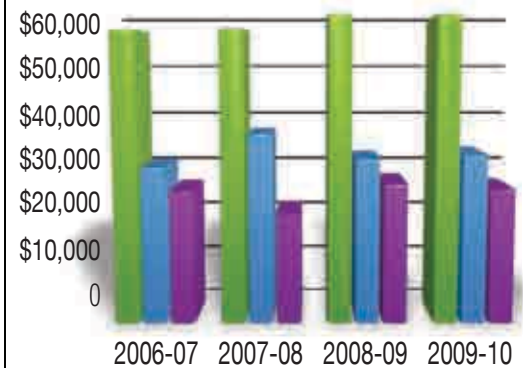


Figure 2

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

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[helena-laroche@uiowa.edu](mailto: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](http://www.cdc.gov/nchs/data/hestat/overweight/overweight_adult_03.htm)

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# 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.

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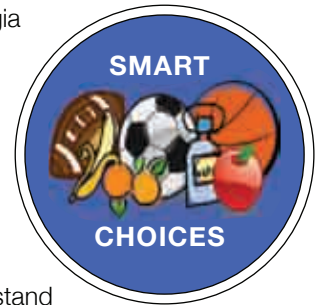
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## Smart Choices

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*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.



## Community Involvement

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### **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.

### **Group interest in change for health reasons**

It helps if the group wants to make changes for health reasons.

### **Student and parent input**

Input from students and parents can help guide advertising, product choice and pricing. All three groups 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. In addition to surveying parents, the 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 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 16 for ideas on overcoming this obstacle.



## Define Goals

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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, the goals of the Muskie Boosters were to add healthier options to those sold at the concession stands and to modify some of the current options to make them healthier.

All three 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 also was an easier transition for volunteers, customers and the booster club.

The goals for the NE Iowa schools and the GRPA group were also to add healthier options to what was already offered (see Appendix page 24 for a list of recommended foods from GRPA). Each of the four NE 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. All three groups had the goal to maintain their profits.

## Resources

### Food

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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.

#### 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 chart in introduction– page 3)

#### 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.

##### Success!

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

#### 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, we 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). We 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 4 for totals including the nacho chips.

"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]." a Muskies Booster

#### 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 13)

Many distributors required minimum purchases that greatly exceeded our needs. Additionally, we found that distributors did not have direct access to nutritional facts for certain products. However, with help from our distributor, and a little internet research, we 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 we 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 we were able to obtain new cheese warmers at a moderate cost, we learned that crock pots could be used as low-cost alternatives. Many cheeses come in #10 cans so a warmer for #10 cans like we purchased 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.

**Success!**

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

**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 significant 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. We soon learned that chicken grilled indoors has the potential to trigger the fire alarm. We believe this was triggered by the steam during cleaning and that during regular cooking this might not set off the alarm. However volunteers were understandably hesitant to try again. We recommend discussing with your administrators and maintenance people ahead of time and do a test-run.

As a result, we 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 may also be an option but that was not tested.

## Carrots

We made low-fat ranch dressing available to pair with carrots.

Prior to our intervention, carrots were not offered at the Muscatine High School concession stand. After contacting local vendors and grocery stores, we 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. We found the pre-packaged carrots economical when we purchased a large volume for a tasting event, but not for day-to-day events.



## 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. After the refrigerator was accidentally unplugged for an extended period of time, the concession manager had to discard perishable items. To prevent future food loss, we attached a lockable grate to the refrigerator's power outlet for a cost of just a few dollars. To prevent waste, other groups should consider this proactive measure to secure the refrigerator's power supply. Baby carrots keep well in the fridge for several weeks. (See #4 under general challenges page 13)

## Fruit

The Muskie Boosters added whole apples the menu (bananas were already available but during morning events only). At first, we sought pre-packages apple slices from local distributors, vendors and grocery stores. Our inquiries revealed that sliced, prepackaged apples were available through the local Subway® or 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 16). 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 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.





## 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, NE Iowa 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.

## 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



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.

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 Muskie Boosters was reminding people it was there as it was in the fridge and not on display. 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.

## **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 we were able to sell pretzels without salt to customers who preferred that, which was a large number of them. Equipment was a challenge (see page 21). 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**

We added large pickles that we wrapped in wax paper sheets. This required no preparation. 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 us by the Hy-Vee® where we purchased them. These continued to sell well.

## ***Items other groups have tried:***

### **Bottled water**

GRPA goal was to also increase purchases of bottled water as there is a strong link between high-sugar drinks, like soda, juice and some sport-drinks, and childhood obesity.

### **Turkey sandwiches**

### **Vacuum-sealed salads**

### **Raisins/dried fruits**

## ***Other suggestions that have not been tried by these groups:***

### **Veggie pizza**

### **Low fat hot dogs/turkey dogs**

### **Chicken sausages**

### **Yogurt**

## ***General food-related challenges and solutions***

### **Challenges**

#### **Lack of information on healthy products**

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.



Always check the web as the nutritional information for many products is available online from the manufacturer.

#### **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.

#### **Minimum orders**

Some vendors had minimum order requirements that exceeded the needs of a high school concession stand. To avoid this problem, we learned that our 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. Through contact with Kar's® Nuts, we learned that in order to obtain the desired trail-mix, the Muskie Boosters needed to order at least 10 cases. Although we were not able to meet the minimum purchase requirement, the manufacturer agreed to ship a lesser amount of the product if we 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**

- 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.

### **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:

- 1) Too much of a certain fruit was purchased
- 2) Fruits were moved and forgotten
- 3) 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 16)
- b) Keep track of stock and product purchase dates
- c) Get perishable foods from a local source so they are fresh (e.g. grocery store or farmers market)
- d) A good fridge – plug locked into the wall (See section 4. Carrots above)
- e) Offer overripe fruit at a discounted price



## Food safety

While your group may already be aware of some food safety guidelines, you may want to update them on any information for new food items. For example, grilled chicken may carry salmonella and needs to be heated to an internal temperature of 165° F.

## Solutions

- a) Check with you local health department for guidelines or go to [www.fsis.usda.gov](http://www.fsis.usda.gov).
- b) Purchase and use food thermometers.
- c) Clean surfaces and wash hands after handling uncooked meat.
- d) Wear gloves, use tongs or use tissue when touching ready-to-eat foods like carrots, fruit, and soft pretzels.

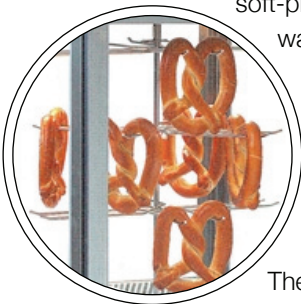
## Equipment

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Meeting equipment needs for the new products was one of the more costly challenges during the project.

### 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, 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 crock pot (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. The previous brand of cheese used in Muscatine (Gehl's®) was sold in large plastic pouches and used a specialized cheese-warmer and dispenser that only held that brand of cheese. 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. We purchased a three quart size bowl for \$32.13 from Jarco® Industries. Low cost crock-pots range from \$19 - \$80.

## **Refrigerators**

Some items may require refrigeration such as fruits, vegetables, chicken and leftover trans fat-free 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. The Muskie Boosters bought a Kenmore® 9.5 cu.ft. fridge for \$340 in 2009.

## **Space and electrical outlets**

Finding space and electrical outlets for new equipment was also 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 one case 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

- a) Consider lower cost alternatives to fancy equipment
  - For example, 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.iowacounciloffoundations.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

## Cost/Profit Margins

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You must find a balance between what people are willing to pay for an item 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.

### Survey questions about pricing

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, some price and product adjustments were made. They 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.

### **Some items do not sell well enough to justify cost**

Some items may not be feasible such as the pre-cut and packaged apple slice in Muscatine. Explore potential alternative such as whole fruit.

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

In NE Iowa 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 NE Iowa 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).

## Advertising

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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.

### Posters

Creating simple posters to display around the concession stand was an inexpensive way to promote healthy products and one of the most helpful ways to advertise, especially when these posters were 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.

### 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 us to access the starting football players during their team photo-shoot. With the assistance of a photographer from the local newspaper, we were able to get several photographs of the athletes with our 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 our 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**

Attractive displays of food items at the concession stand also 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.

## **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.



## **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**

## Overall Challenges and Solutions

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### Challenge 1

**People want to eat junk food at sporting events and expect junk food to be sold at the concession stand. Some boosters were also concerned that we might be forcing healthy items on people who did not want them.**

### Solutions

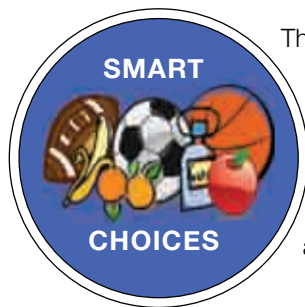
#### a) Beliefs may change over time

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 option were "healthier". They used the slogan "Great Taste: More Choices". This was endorsed by the students as a better advertising tact. 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 three 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. Anecdotaly, one parks 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

### **The idea that changes will be too hard.**

For example in Muscatine, there was skepticism about changing from convenient coconut oil stick 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 enthusiastically 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 trying to use an indoor grill for chicken sandwiches for winter season sports 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

## Resources/Appendix

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I. USDA – Healthier School Challenge Nutrition Guideline Information .....	Page 23
II. Georgia Action for Healthy Kids “Vending Machine and Concession Stand Choices” .....	Page 24
III. Guide to Healthy Products Sources (Vendors) for specific products and their nutritional information .....	Page 25
IV. Other Resources	
A. Sample of surveys used by the Muskie Boosters .....	Page 30
B. Sample of survey used by Georgia Rec and Parks .....	Page 37
C. Sample of inventory tracking sheet used by the Muskie Boosters Muskie Boosters ...	Page 38
D. Sample of advertising	
1. Muscatine Boosters .....	Page 39
2. Georgia Recreation and Parks .....	Page 43

### ***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](http://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, for amounts falling exactly half way between two*

<b>Percent of calories from total fat</b>	Must be at or below 35% of calories per serving	<ol style="list-style-type: none"> <li>1. Take the total grams of fat per serving, multiply by 9</li> <li>2. Divide this number by the total calories per serving</li> <li>3. Convert to a percentage by multiplying the result of step 2 by 100. Round to the largest whole number</li> </ol>
<b>Percent of calories from saturated fat</b>	Must be below 10% of total calories	<ol style="list-style-type: none"> <li>1. Take the total grams of saturated fat per serving, multiply by 9</li> <li>2. Divide this number by the total calories per serving</li> <li>3. Convert to a percentage by multiplying the result of step 2 by 100. Round to the largest whole number</li> </ol>
<b>Trans fat</b>	Must be less than .5 g per serving	<ol style="list-style-type: none"> <li>1. The amount of trans fat per serving will be listed on the nutrition facts label</li> </ol>
<b>Percent of sugar by weight</b>	Must be at or below 35% by weight	<ol style="list-style-type: none"> <li>1. Take the total grams of sugar in one serving from the nutrition facts label</li> <li>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).</li> <li>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</li> </ol>
<b>Sodium</b>	<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](http://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®: <a href="http://www3.samsclub.com/clublocator/">http://www3.samsclub.com/clublocator/</a> 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; Stainless Steel Insert Bowl, 133 oz., Item Code: 2194
Cost	\$231.21
Manufacturer	Server Products
Contact information	<a href="http://www.concessionstands.com/s.nl/sc.2/.f?search=cheese+warmer">http://www.concessionstands.com/s.nl/sc.2/.f?search=cheese+warmer</a> 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 <a href="http://mrc.farner-bocken.com/fbpublic/contact_us.html">http://mrc.farner-bocken.com/fbpublic/contact_us.html</a> 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 <a href="http://www.superpretzel.com/softpretzels.html">http://www.superpretzel.com/softpretzels.html</a> 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 Humidified Heated Display Case: \$983.00
Manufacturer	Star Manufacturing®
Contact information	Available from Reinhart Food Service. Visit <a href="http://www.rfsdelivers.com/Locations/tabid/56/Default.aspx">http://www.rfsdelivers.com/Locations/tabid/56/Default.aspx</a> to find a local distributor
Low-cost alternatives	Microwave and heated display case, roaster or other warmer

## Pork Sandwich

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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

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What we used	Tropicana® Apple Juice
Manufacturer	Tropicana®
Contact information	<a href="http://cr.tropicana.com/user/tropusen.cfm?link=locator&amp;date=20100803">http://cr.tropicana.com/user/tropusen.cfm?link=locator&amp;date=20100803</a> 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

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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	210
Saturated Fat	4g
Trans Fat	0g
Sugar	15g
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

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What we used	Nature Valley® Granola Bars
Manufacturer	General Mills®
Contact information	Available at your local grocery store, or visit <a href="http://naturevalley.alice.com/?utm_source=naturevalley&amp;utm_medium=referral&amp;utm_campaign=channel_gmi">http://naturevalley.alice.com/?utm_source=naturevalley&amp;utm_medium=referral&amp;utm_campaign=channel_gmi</a> 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	<a href="http://www.mtolivepickles.com/locator/">http://www.mtolivepickles.com/locator/</a> 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	<a href="http://www.fareway.com/">http://www.fareway.com/</a> Click on the Store Locator link to find a store near you	Available at Sam's Club: visit to locate a store near you; <a href="http://www3.samsclub.com/clublocator/">http://www3.samsclub.com/clublocator/</a> Also available at Wal-Mart: visit <a href="http://www.walmart.com/#">http://www.walmart.com/#</a> 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	

## Pre-Survey Muskie Booster Club Concessions Survey

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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
------	------	------	-----------	-----------	----------------

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:

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

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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
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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

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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
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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
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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 sports activities at Muscatine High School do you attend?  
Select 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)

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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?

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

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

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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?

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

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

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

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## Inventory Information Sheet

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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				



**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



**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.**

SGRPA Advertisements  
Smart Choices Logo



Part of the Game!

<b>INSERT SITE LOGO</b>	<b>INSERT SITE NAME HERE</b> Parks and Recreation encourages you to make the <b>SMART CHOICE!</b>	<b>INSERT SITE LOGO</b>
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SMART CHOICES:  
PART OF THE GAME.



**SMART  
CHOICES**

**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!**



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Blue Shield Association

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