This guide was created to help sites that have vending machines improve the nutritional quality of the products they offer. The goal of vending machine changes is not to take away desirable snacks but to increase healthy offerings and increase the likelihood that participants will make a healthy choice.

**FCS EXTENSION STAFF AND SITE LEADER ROLES**

FCS Extension Staff can use this guide to help sites increase healthy offerings in their vending machines.

<table>
<thead>
<tr>
<th>Extension staff will:</th>
<th>Site representatives will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Assist with the vending machine assessment.</td>
<td>● Get site approval for the change.</td>
</tr>
<tr>
<td>● Survey class participants to determine what healthy options would be popular.</td>
<td>● Work with vending machine companies to adjust offerings.</td>
</tr>
<tr>
<td>● Promote healthy changes after they have been made.</td>
<td>● Promote healthy changes after they have been made.</td>
</tr>
<tr>
<td></td>
<td>● Support sustainability of healthy changes through follow up and policy implementation.</td>
</tr>
</tbody>
</table>

**STEPS TO GETTING STARTED**

**Step 1: Get Support**

*Support from the site:* Before you get started, get commitment for change from site leaders, organizational decision makers, employees and/or participants. Discussing vending machine options and surveying vending machine users can help you gain support and commitment (See the Vending Machine Survey at the end of this document for an example survey). This project will likely be more successful if it is coming from the ground up. For example, if a group of employees advocate for healthier vending options at a worksite, then it is more likely that a project will have support and be implemented.

*Support from vending companies:* You may also want to consider working with your site leader to get support from the vending machine company at the start of this project. Doing this early on may help you get an understanding of the changes that the company is willing and/or able to make. Many vending companies may be happy to help and even provide you with a list of healthy options they already offer.
Step 2: Assess Current Offerings

Once there is known support from the site for vending machine changes, UT Extension staff can work with the site representative to assess what the vending machine currently offers and what healthy changes they may want to make. Assessing the current options is an important step because it helps the site 1) identify where they are, 2) identify the changes they want to make, and 3) evaluate the intervention. You can use the Current Site Offerings Form in this document to do this. There are several options for assessing the number of healthy items currently offered at a location. Work with your site representative, vending machine company and other partners to determine the best option for your intervention.

**HOW TO USE THE CURRENT SITE OFFERINGS FORM**

1. Record all the snacks/beverage names and nutrition information on the Current Site Offerings Form.
2. See how many healthy options the vending machine already offers by using one of the methods below:
   - *Suggested Snack Nutrition Criteria:* Use the nutrition guidelines found on the Healthy Snacks Guidance Form to determine how many items are considered healthy options.
   - *PHA Healthier Food and Beverage Calculator:* Enter nutrition information from each item into the PHA Healthier Food and Beverage Calculator.
   - *Vending Machine Company List:* Ask the vending machine company if they have criteria or resources to designate healthy items and use their criteria or resources.
   - *General Healthy Products List (Simplest Option):* Use the Healthy Snacks Guidance Form to see how many items from the General Healthy Products List the vending machine currently offers.
3. On the Current Site Offerings Form, note Yes or No if the product meets the nutrition criteria used.

Step 3: Decide on Changes

Work with the site leader to review their current vending machine offerings and set a goal for healthy changes. For example, one goal is to fill 50 percent of the vending machine with healthy snacks or beverages; however, any changes to offer more healthy choices are considered a win! You may also consider phasing in the healthy changes over a set period of time. Once you have a goal in mind, you can start creating a list of healthy product possibilities.

There are a couple ways you and your site can develop a list of healthy product possibilities. Choose the option that works best for you and your partners.

1. *Use a list of healthy items provided by your vending machine company:* Some vending companies will already have a list of healthy options to choose from. This is a great starting point. If you have any concerns with items on their list you can check them using the PHA Healthier Food and Beverage Calculator or the Suggested Snack Nutrition Criteria (See Healthy Snack Guidance Form) provided in this guide.
2. *Use the general list of healthy products:* You can start with the list of generally healthy products on the Healthy Snacks Guidance Form. Select the product categories your site is interested in and present them to your vending machine company to see what they offer within those categories. Make sure that the products the vending company presents fit within the Suggested Snack Nutrition Criteria, the PHA Healthier Food and Beverage Calculator, or are approved as a healthy item by the vending machine company.

**MAKE VENDING CHANGES:**

Share the site’s goals and list of desired healthy products with the vending machine company. Keep in mind some vending machine companies may not be as open to changes as others. They may be concerned that the changes will impact sales.

Tip: If the vending company is concerned about healthy item sales, work with site participants and any other vending machine customers to identify what healthy options they prefer. You can use the Vending Machine Survey in this guide to distribute to participants so they can provide feedback. Use this information to work with the vending machine company to select snack items that participants would like to purchase.

**PROMOTE CHANGES AND ENCOURAGE HEALTHY CHOICES:**

Promoting the vending machine changes and the healthy options is an important step in the process. FCS Extension Staff can work with site leadership to promote vending changes by selecting one or more of the following options.
Product Placement

Prioritize placing the healthiest options at eye level and on the left side of the vending machine. Healthy snacks will be in the most viewable area, increasing the likelihood of purchase.

Pricing

Use competitive pricing for healthy options. You can do this by making sure that the healthy options are priced lower than unhealthy options or at least are not more expensive.

Promotion

- Offer samples of the new healthy snacks to participants.
- Promote healthy items by placing a star or other sticker next to the healthy items. You will need to make sure that if the item placement is moved, the star is moved as well.
- Implement signage on the side of the vending machine to display nutrition facts.
- Talk about changes to offer more healthy items in your Extension classes.
- Educators and site leaders should model healthy vending machine behaviors (selecting healthy choices).

Policy

To make changes more sustainable, work with your site to implement a healthy vending policy. Consider including the number of healthy options that must be present in the vending machine (See the Healthy Vending Policy Example).

For more information and guidance on making healthy vending options see the following resources:


City of Minneapolis Healthy Vending Toolkit: https://www2.minneapolismn.gov/media/content-assets/www2-documents/departments/wcmslp-096533.pdf


The authors would like to thank UT Extension agent Bianca Johnson and dietetic intern Madison Hooper for their review of this document.

This material was funded by USDA’s Supplemental Nutrition Assistance Program (SNAP) under an agreement with the State of Tennessee.

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.

UT Extension provides equal opportunities in programs and employment.
## Current Site Offerings Form

Use this form to record the nutrition information from each snack or beverage within the vending machine at your site.

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Food or Beverage (Circle One)</th>
<th>First Ingredient</th>
<th>Serving Size (oz OR g)</th>
<th>Servings per container</th>
<th>Calories Per serving</th>
<th>Total Fat (g) Per serving</th>
<th>Saturated Fat (g) Per Serving</th>
<th>Sodium (mg) Per Serving</th>
<th>Sugars (g) Per Serving</th>
<th>Meets Nutrition Criteria used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Soda</td>
<td>Food</td>
<td>Carbonated Water</td>
<td>1 bottle (20 oz.)</td>
<td>1</td>
<td>240</td>
<td>0</td>
<td>0</td>
<td>75</td>
<td>65</td>
<td>Y/N</td>
</tr>
<tr>
<td>Example: Popcorn</td>
<td>Food</td>
<td>Popcorn</td>
<td>1 package (23 g)</td>
<td>1</td>
<td>110</td>
<td>6</td>
<td>0.5</td>
<td>90</td>
<td>6</td>
<td>Y/N</td>
</tr>
</tbody>
</table>

This material was funded by USDA's Supplemental Nutrition Assistance Program (SNAP) under an agreement with the State of Tennessee.

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.

UT Extension provides equal opportunities in programs and employment.
Vending Machine Survey

1. How often do you use the vending machine at this site? (circle one)

- Often (weekly)
- Occasionally (once or twice per month)
- Rarely (a few times per year)
- Never

2. What items currently available in the vending machine do you typically purchase? Circle all that apply.

3. Which items would you purchase if they were in the vending machine? Circle all that apply.

4. How would you feel about healthier options being available in the vending machine? Circle one.

- I think this would be beneficial.
- I do not want healthier options in the vending machine.
- I do not use the vending machine.
- Other (please specify)

This material was funded by USDA’s Supplemental Nutrition Assistance Program (SNAP) under an agreement with the State of Tennessee.

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.

UT Extension provides equal opportunities in programs and employment.
Healthy Snacks Guidance

**Suggested Snack Nutrition Criteria**

- Per item as packaged
  - Does not contain trans fats
- Per one serving size:
  - No more than 200 calories
  - No more than 36 percent calories from fat
  - No more than 10 percent calories from saturated fat
  - No more than 35 percent calories from sugar
  - No more than 200 mg of sodium

**Exemptions/exceptions**

- Nuts and seeds are exempt from the fat restriction due to their high levels of healthy fats.
- Fruits and vegetables that have not been processed with added sweeteners or fats are exempt from the sugar restriction due to naturally occurring high levels of sugar.

**Beverages**

- Beverage changes should focus on filling slots with water, no-calorie beverages, unflavored 1 percent milk, 100 percent fruit juice with no added sweeteners, and beverages with no more than 60 calories per 12 ounces.

**Examples of snacks that often meet guidelines include:**

- Grains
  - Pretzels
  - Baked Chips or snacks
  - Some whole grain cereal snack mixes
  - Some whole grain granola/cereal/energy bars
  - Popcorn (fat-free or low-fat)
  - Tortilla chips
  - Rice cakes

- Fruits/Vegetables
  - Dried fruit
  - Raisins
  - Fruit cups in 100 percent juice

- Nuts/Seeds
  - Almonds
  - Pistachios
  - Peanuts
  - Sunflower seeds
  - Some trail mix

You can use the chart below to help you quickly determine if a snack fits the above nutrition guidelines.

1. Look at each snack’s nutrition label.
2. Find the appropriate calories per serving column in the table below and compare each nutrient in the corresponding row.
3. If the numbers on the nutrition label are within the calorie guidelines and meet the criteria for each nutrient than it meets the suggested snack nutrition criteria.

You may also refer to the calculations below to calculate each item manually.

<table>
<thead>
<tr>
<th>Calories per serving</th>
<th>Total Fat</th>
<th>Saturated Fat</th>
<th>Sugar</th>
<th>Sodium</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 calories/gram</td>
<td>9 calories/gram</td>
<td>4 calories/gram</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>3g or less</td>
<td>1g or less</td>
<td>2 g or less</td>
<td>200 mg or less</td>
</tr>
<tr>
<td>100</td>
<td>4g or less</td>
<td>1g or less</td>
<td>9 g or less</td>
<td>200 mg or less</td>
</tr>
<tr>
<td>125</td>
<td>5g or less</td>
<td>1g or less</td>
<td>11 g or less</td>
<td>200 mg or less</td>
</tr>
<tr>
<td>150</td>
<td>6g or less</td>
<td>2g or less</td>
<td>13 g or less</td>
<td>200 mg or less</td>
</tr>
<tr>
<td>175</td>
<td>7g or less</td>
<td>2g or less</td>
<td>15 g or less</td>
<td>200 mg or less</td>
</tr>
<tr>
<td>200</td>
<td>8g or less</td>
<td>2g or less</td>
<td>18 g or less</td>
<td>200 mg</td>
</tr>
</tbody>
</table>

Calculations:

- Total calories x 0.35 ÷ 9 cal/g
- Total calories x 0.10 ÷ 9 cal/g
- Total calories x 0.35 ÷ 4 cal/g

Nutrition criteria and healthy products/snack list adapted from: City of Minneapolis Healthy Vending Toolkit

https://www2.minneapolismn.gov/media/content-assets/www2-documents/departments/wcms1p-096533.pdf

AND the Nemours Health and Prevention Services Healthy Vending Guide:


This material was funded by USDA’s Supplemental Nutrition Assistance Program (SNAP) under an agreement with the State of Tennessee.

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.

UT Extension provides equal opportunities in programs and employment.
Healthy Vending Machine Policy Example:

Purpose: The Centers for Disease Control and Prevention suggests that a balanced diet or healthy eating plan are part of a healthy lifestyle. (CDC, 2016)

Therefore, (SITE NAME) is committed to providing a healthy food environment for staff and participants. The food environment at (SITE NAME) includes vending machines where snacks and beverages are sold.

The purpose of this policy is to outline vending machine guidelines for providing a healthier eating environment to encourage and support healthy food choices by staff and participants.

Effective (DATE): It is the policy of (SITE NAME) that the vending machine on site will serve:

<table>
<thead>
<tr>
<th>Editable Suggestions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____ percent of beverages will be sugar free</td>
</tr>
<tr>
<td>_____ percent of food items will be a healthy option as defined by the following criteria (Outline the criteria you used to select healthy options).</td>
</tr>
</tbody>
</table>

This policy will go into effect (DATE) and will be reviewed and revised (TIMEFRAME).

Signature

Title

Date

This material was funded by USDA’s Supplemental Nutrition Assistance Program (SNAP) under an agreement with the State of Tennessee.

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.

UT Extension provides equal opportunities in programs and employment.