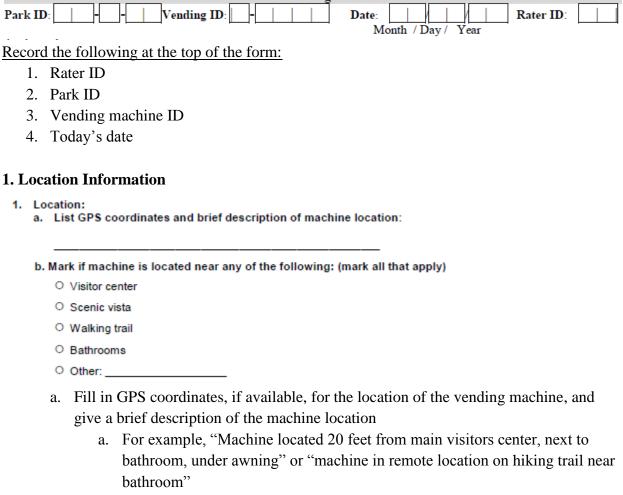## NPS Vending - Survey Protocol
Modified from NEMS-V/Delaware Munch Better/Nemours Healthy Vending Guide

These measures are designed to rate the nutrition available in vending machines that serve snacks or beverages. Restaurants, snack shops and stores should be captured by RESTAURANTS, SNACK SHOPS, and STORES tools respectively. Vending machines serving frozen foods (e.g. ice cream or microwave meals) are excluded.

In these protocol instructions, each section of the survey is shown, followed by instructions for completing that section.

FOOD VENDING MACHINES

Park ID: ☐☐-☐☐-☐☐ Vending ID: ☐-☐☐☐ Date: ☐☐/☐☐/☐☐ Month / Day / Year Rater ID: ☐☐

Record the following at the top of the form:
1. Rater ID
2. Park ID
3. Vending machine ID
4. Today's date

1. Location Information

1. Location:
    a. List GPS coordinates and brief description of machine location:

    _____

   b. Mark if machine is located near any of the following: (mark all that apply)
      ○ Visitor center
      ○ Scenic vista
      ○ Walking trail
      ○ Bathrooms
      ○ Other: _____

   a. Fill in GPS coordinates, if available, for the location of the vending machine, and give a brief description of the machine location
      a. For example, "Machine located 20 feet from main visitors center, next to bathroom, under awning" or "machine in remote location on hiking trail near bathroom"
   b. Mark if the machine is located near a visitor center, at a defined scenic vista (e.g. marked with signs by the park as a scenic overlook), along a walking trail, or near bathrooms (near defined as <100 feet or 1/3 football field). If other, please describe.

2. Is this machine operational? ○ yes ○ no

3. Clustering:

    a. Is this machine next to another FOOD vending machine? ○ yes ○ no

    b. Is this machine next to another BEVERAGE vending machine? ○ yes ○ no

2. Please indicate whether the machine is working (operational) at the time of the survey

3. Please indicate whether this machine is in a cluster of other vending machines (i.e. beverage machine next to a food machine, or beverage machine next to another beverage machines)

4. Does machine feature any of the following? (mark all that apply)

    a. Credit card reader ○ yes ○ no

    b. Robotic arm ○ yes ○ no

    c. Refrigeration ○ yes ○ no

4. Please indicate whether the machine features a credit card reader, a robotic arm that delivers the items from the shelf to the dispenser, or refrigeration

Media and Marketing	Select One	Comments
5. Does food vending machine have signs or other displays that promote general <u>healthy</u> food and/or drink choices?	○ yes ○ no	_____
6. Does the vending machine have signs or displays that promote <u>unhealthy</u> food or drink choices?	○ yes ○ no	_____
7. Are specific healthy items in the food vending machine identified using signs or displays (e.g. icons)?	○ yes ○ no	_____

5. Indicate whether the vending machine has signs or displays (e.g. screens) that encourage **<u>healthy</u>** food or drink choices. Fill in comments about what is displayed or phrases used.

    ○ Signage may relate to nutritional value/type of food

        ▪ Example: "Try a low-fat option like dried fruit"

        ▪ Example: "Eat healthy: Try our whole grain granola bars"

6. Do signs or displays encourage **<u>unhealthy</u>** food or drink choices?

    ○ It can be related to nutritional value/type of food (promoting sweets or chips)

        ○ Example: "Try our candy bars: Perfect for your sweet tooth"

        ○ Example: Posters featuring pictures of high-fat foods

        ○ Example: <u>Logos</u> or pictures of sugar drinks or sugar drink companies (i.e. Coca-Cola, Pepsi-co)

7. Are healthy items identified on the machine (either by the item or the button)?

    ○ Example: heart healthy items marked with a heart

    ○ Example: light or low-calorie items identified as such

8. What unhealthy option(s) is depicted on the exterior of the machine?
(mark all that apply)

○ Regular (non-baked) chips ○ Non-diet soda ○ Fruit-flavored drink (not 100% juice)

○ Energy drink ○ Flavored milk ○ Non-diet sports drink ○ Dairy dessert (ice cream)

○ Grain dessert (cookies) ○ Other:_____ ○ None of these

9. What healthy option(s) is depicted on the exterior of the machine?
(mark all that apply)

○ Baked chips ○ Water ○ Diet soda ○ 100% fruit juice

○ Skim/1% fat unflavored milk ○ Low calorie sports drink ○ Fruits

○ Vegetables ○ Other:_____ ○ None of these

8. What **unhealthy** options are depicted on the exterior of the machine (e.g. pictures of potato chips, candy bars, or sugar drinks)? Select all choices that apply.

Definitions:
-Regular chips: non-baked chips
-Non-diet soda: regular, sugar-sweetened soda
-Flavored milk: milk flavored with chocolate, vanilla, strawberry or other sugars
-Sports drink: thirst-quenching, sugar-sweetened beverages such as powerade
-Energy drink: caffeinated, sugar-sweetened drinks such as Monster
-Dairy dessert: creamy, dairy desserts such as ice creams
-Grain desserts: flour or grain-based dessert like cookies or cakes

o If not clear about whether an item counts as unhealthy, please refer to nutritional guidelines in Appendix A&B below.

9. What **healthy** options are depicted on the exterior of the machine (e.g. pictures of fruit, vegetables, water or 100% fruit juice)? Select all choices that apply.

Definitions:
-Low-fat unflavored milk: Skim or 1% cow/soy milk not flavored with sugar
-Low-calorie sports drink: thirst-quenching drinks (e.g. powerade), <10cals/8oz

10. Please indicate the total slot space dedicated to each of the following items:
(See nutrition criteria reference)

	GREEN (GO) Items	YELLOW (SLOW) Items	RED (WHOA) Items	Other/ Non-nutritive	Empty	Total
# slots in Food Machine	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐

10. Use the chart in Appendix A to determine whether an option is considered Green (healthy), Yellow (healthy in limited quantities) or Red (eat only occasionally). Count the number of slots filled by items that are classified as Green, Yellow or Red. Items that cannot be classified or are non-nutritive (e.g. chewing gum) should be quantified in the Other/Non-nutritive category. Empty slots should be counted and listed in the Empty category. List total number of slots in machine (should equal sum of other columns)

National Parks Nutrition Survey FOOD Vending Machine 11. Please indicate the total "healthy" slot space dedicated to each of the following items:	# Slots for Option	Price per Item	N/A
a. Fruits/Vegetables	☐☐	$☐.☐☐	○
b. Dried fruits	☐☐	$☐.☐☐	○
c. Trail mix (without chocolate)	☐☐	$☐.☐☐	○
d. Seeds (i.e. sunflower)	☐☐	$☐.☐☐	○
e. Jerky	☐☐	$☐.☐☐	○
f. Low-fat cookies (i.e. animal crackers)	☐☐	$☐.☐☐	○
g. 100-calorie snack packs	☐☐	$☐.☐☐	○
h. Other: _____	☐☐	$☐.☐☐	○
Total number "healthy" slots (add # of slots from a to h)	☐☐	$☐.☐☐	○

11. Count the number of slots filled with particular healthy items, and list the price (per item). If an item is not present, check the box for N/A.

Definitions:
-Fruit: fresh or canned fruit such as bananas, apples or pears in own juice or water
-Vegetables: fresh vegetables such as baby carrots or celery sticks
-Dried fruit: no-sugar/toppings added, such as apricots, raisons or cranberries
-Trail mix: combination of nuts, dried fruits, yogurt chips, etc (must meet nutrition criteria in Appendix B)
-Seeds: sunflower seeds or other seeds with no sauce/flavor added (salted ok)
-Jerky: dried beef, pork or other meat jerky
-Low-fat cookies: must meet nutrition criteria in Appendix B
-Low-calorie snack packs: must meet nutrition criteria in Appendix B

*If unsure of whether a particular item counts as healthy or not, you can write down the name of the item and then check nutritional information when back at your desk

Record the number of slots occupied by healthy items (add # from a to h)

12. Are baked chips available?* ○ yes ○ no
   a. If yes, what is the size and price in comparison to regular chips?
     (circle if ounce or gram; round to nearest whole number; if > 1 size available, report the smallest sized item)

	Size	Price	
Baked Chips/Pretzels	☐☐oz/g	$☐.☐☐	○ N/A
Regular Chips	☐☐oz/g	$☐.☐☐	○ N/A

* If more than one size available, report on the smallest sized item.

13. Are granola/energy bars available?* ○ yes ○ no
   a. If yes, what is the size and price in comparison to candy bars?
     (circle if ounce or gram; round to nearest whole number; if > 1 size available, report the smallest sized item)

	Size	Price	
Granola/Energy Bar	☐☐oz/g	$☐.☐☐	○ N/A
Candy Bar	☐☐oz/g	$☐.☐☐	○ N/A

12 &13. Record package size (in ounces or grams) and price (per package) of baked chips, regular chips, granola/energy bars, and candy bars. Mark N/A if item is not available.

Definition: Energy bars include Clif, PowerBar, Luna, Kashi, etc.

Circle whether granola or energy bar rated

If more than one varieties of chips or bars are available, pick the least expensive item to rate. If more than one items are the same price, pick the item for which the first letter of the item's name is closest to A in the alphabet (e.g. if Fritos and Cheetos are the same price, you would pick Cheetos).

14. Is nutritional information posted on or near the vending machine for food items?
  ○ yes, for all items
  ○ yes, only healthy items
  ○ no

15. Please rate the price of healthy items in the vending machine to comparable regular items.
  ○ more ○ less
  ○ same ○ N/A

14. Indicate whether nutritional information is posted on or near the vending machine for all food items, only for healthy items, or no items (MUST include calories)

15. Identify if healthy snack options are more expensive, the same, or less than regular snack options.
- Based on the healthy options you identified in Question 11, are similar unhealthy items more expensive, the same, or less expensive?
- If there are no healthy items, mark NA.

APPENDIX A

SAMPLE VENDING MACHINE ITEMS CATEGORIZED BY GO, SLOW, WHOA

	GO Almost anytime	SLOW Sometimes	WHOA! Once-in-a-while
Snacks— Non-Refrigerated	▪ Popcorn (fat-free or low-fat) ▪ Whole grain cereal (hot or cold) with at least 5g fiber and no greater than 6g sugar per serving ▪ Whole grain cereal bar ▪ Whole grain crackers ▪ Rice cakes ▪ Soy crisps ▪ Fruit cup in fruit juice ▪ Jerky (low sodium)	▪ Whole grain cereals (hot or cold) with at least 3g fiber and no more than 6g sugar per serving ▪ Baked chips ▪ Animal crackers ▪ Graham crackers ▪ Pretzels ▪ Nuts and seeds (plain or with spices) ▪ Nuts (light sugar covering or honey-roasted) ▪ Peanut butter and crackers ▪ Ready-to-eat cereal (low fat, whole grain) ▪ 100 Calorie Snack Packs ▪ Fruit cup in light syrup ▪ Whole-grain, low-fat muffins ▪ Low-fat granola bar ▪ Whole-grain, low-fat fig bars ▪ Trail mix (plain) ▪ Dried fruit ▪ Jerky	▪ Candy ▪ Cookies, cakes, and pies ▪ Doughnuts ▪ Pastries ▪ Muffins ▪ Pop tarts ▪ Buttered popcorn ▪ Chips ▪ Snack mixes ▪ Cheese-flavored crackers ▪ Fruit cup in heavy syrup
Snacks— Refrigerated	▪ Fruits and vegetables without added fat, sugar or salt ▪ Fat-free or low-fat yogurt, plain ▪ Fat-free or low-fat cheese or cottage cheese ▪ Hard-boiled eggs	▪ Fruits or vegetables with added fat, sugar or salt ▪ Fat-free or low-fat flavored yogurt with no more than 30g of total sugar per 8 oz serving ▪ Low-fat or reduced fat pudding ▪ Reduced-fat cheese or cottage cheese	▪ Vegetables fried in oil ▪ Pudding ▪ Yogurt made from whole milk ▪ Frozen desserts
Beverages— Refrigerated	▪ Water without flavoring or additives ▪ Fat-free or 1% (low-fat) milk, plain	▪ Reduced-fat (2%) milk, plain ▪ Fat-free or 1% flavored milk with up to 150 calories per 8 oz serving ▪ 100% fruit juice ▪ 100% vegetable juice ▪ No- or low-calorie beverages with up to 10 calories per 8 oz serving ▪ Smoothies (made with low-fat yogurt or other low-fat dairy alternatives and/or fruit/juice)	▪ Reduced-fat (2%) milk, flavored ▪ Whole milk, plain ▪ Whole milk, flavored ▪ Regular soda ▪ Sweetened teas, lemonade, and fruit drinks with less than 100% fruit juice ▪ Sports drinks, energy drinks, etc. with more than 10 calories per 8 oz serving

APPENDIX B

Using the sample policies noted earlier in this guide, which are based on expert recommendations, we created a quick reference chart to make it easy to identify foods that meet those recommendations.

1. Find the number of calories on the product's Nutrition Facts label.
2. Find the same number of calories in the "Calories" column on the chart below.
3. Move across the row and compare the numbers in this row for each nutrient (total fat, saturated fat, trans fat, sugar, and sodium) with the numbers for those nutrients on the product's Nutrition Facts label.
4. If the number on the Nutrition Facts Label is the same as or less than the number on the chart, the food meets recommendations.

CHEAT SHEET FOR VENDING ITEMS

Calories	Total Fat (9 calories per gram)	Saturated Fat (9 calories per gram)	Trans Fat	Sugar (4 calories per gram)	Sodium
	Grams	Grams	Grams	Grams	Milligrams
75	≤3	≤1		≤2	
100*	≤4	≤1		≤9	
125	≤5	≤1		≤11	
150	≤6	≤2		≤13	
175	≤7	≤2	0 calories, ≤0.5 g	≤15	≤ 200 mg per portion as packaged
200	≤8	≤2		≤18	
225	≤9	≤3		≤ 20	
250	≤10	≤3		≤ 22	
275	≤11	≤3		≤ 24	
300	≤12	≤3		≤ 26	
Calculations	(Total calories x 0.35) ÷ 9 cal/g	(Total calories x 0.10) ÷ 9 cal/g	N/A	(Total calories x 0.35) ÷ 4 cal/g	N/A

*Highlighted row is used in the example below.

Example:

This product has 100 calories. Using the row for 100 calories in the chart above, compare the grams of fat, saturated fat, trans fat, sugar and sodium on this label with the numbers in the chart.

Does the nutrient meet recommendations?   ☑ Yes   ☒ No

- ☑ FAT – Product label says 1.5g, which is less than the 4g shown in the chart.
- ☑ SATURATED FAT – Product label says 0g, which is less than the 1g shown in the chart.
- ☑ TRANS FAT – Product label says 0g, which is less than the 0.5g shown in the chart.
- ☒ SUGAR – Product label says 12g, which is more than the 9g shown in the chart.
- ☑ SODIUM – Product label says 200mg, which is equal to the 200mg shown in the chart.

Does the overall product meet recommendations? No.
Why? Because the product contained too much of one of the nutrients (sugar).
If the product contained only 9 grams of sugar, the same as shown in the chart, would the product then meet recommendations? Yes, because all five nutrients would be within the recommended ranges.

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BEVERAGE VENDING MACHINES

National Parks Nutrition Environment Survey BEVERAGE Vending Machine			
Park ID: ☐☐-☐-☐	Vending ID: ☐-☐☐☐☐	Date: ☐☐/☐☐/☐☐ Month / Day / Year	Rater ID: ☐☐

Record the following at the top of the form:
1. Rater ID
2. Park ID
3. Vending machine ID
4. Today's date

Questions 1-9: Please see food vending protocol above (pages 1-3)

Question 10:

	# Slots/buttons	Size	Price	
a. Water (plain)	☐☐	☐☐oz	$☐.☐☐	○ sold out
b. Artificially sweetened water drink (<10 cals/8 oz)	☐☐	☐☐oz	$☐.☐☐	○ sold out
c. 100% fruit juice	☐☐	☐☐oz	$☐.☐☐	○ sold out
d. Fruit-flavored drink (not 100% juice)	☐☐	☐☐oz	$☐.☐☐	○ sold out
e. Diet soda	☐☐	☐☐oz	$☐.☐☐	○ sold out
f. Non-diet soda	☐☐	☐☐oz	$☐.☐☐	○ sold out
g. Diet sports drink	☐☐	☐☐oz	$☐.☐☐	○ sold out
h. Sports drink	☐☐	☐☐oz	$☐.☐☐	○ sold out
i. Diet energy drink	☐☐	☐☐oz	$☐.☐☐	○ sold out
j. Non-diet energy drink	☐☐	☐☐oz	$☐.☐☐	○ sold out
k. Diet tea drink	☐☐	☐☐oz	$☐.☐☐	○ sold out
l. Non-diet tea drink	☐☐	☐☐oz	$☐.☐☐	○ sold out
m. Flavored milk	☐☐	☐☐oz	$☐.☐☐	○ sold out
n. Skim/1% fat unflavored cow's milk	☐☐	☐☐oz	$☐.☐☐	○ sold out
o. Other	☐☐	☐☐oz	$☐.☐☐	○ sold out
Total number of slots (add # of slots from a to o)	☐☐			

10. Count the number of slots, the bottle/can size, and the price for each of the items listed.
    - If more than one size of any item exists, always pick the smallest size. If more than one variety of any item exists (e.g. Diet Coke & Diet Pepsi), pick the item with the lowest price. If more than one variety has the same price, then pick the item for which the first letter of the name comes closest to A in the alphabet (e.g. if Coke and Pepsi are the same price, choose Coke)
    - If there is none of a particular item, mark N/A

-*Definitions*:
-Water: plain drinking water (may be carbonated or still, may not have flavor)
-Artificially sweetened water drink: flavored water sweetened artificially with <10 cals/8 ounces (e.g. Propel)
-100% fruit juice: may not have less than 100% juice
-Juice-flavored drink: fruit or juice flavored drink with less than 100% juice (e.g. fruit punch, cranberry juice)
-Diet soda: soda sweetened with artificial sweeteners (not with sugar)
-Non-diet soda: regular, sugar-sweetened soda
-Diet sports drink: thirst-quenching, artificially-sweetened beverages such as G2 Gatorade
-Sports drink: thirst-quenching, sugar-sweetened beverages such as powerade
-Diet energy drink: caffeinated, artificially-sweetened drinks such as Diet Rockstar
-Energy drink: caffeinated, sugar-sweetened drinks such as Monster
-Non-diet tea drink: drink make primarily with tea sweetened with sugar (e.g. Snapple)
-Diet tea drink: drink made primarily with tea sweetened artificially (e.g. Diet Sobe)
-Skim/1% unflavored cow's milk: unflavored skim or 1% milk

11. Is nutrition information posted on or near the vending machines for beverage items?

○ yes, for all items
○ yes, only healthy items
○ no

12. Indicate whether nutritional information is posted on or near the vending machine for beverage items (MUST include calories)