

# A Baseline for Change: What We Know About the Foods Eaten from US Worksites, Cafeterias, and Vending Machines

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# The Worksite Food Environment

- Approximately 150 million working adults in the US
- Half of employees report food or beverage vending machines at work
- One third of employees report cafeteria or snack bar at work
- Three fourths report a break room with refrigerator and microwave
- Only 20% of employees agree that their “employer provides opportunities to eat a healthy diet”

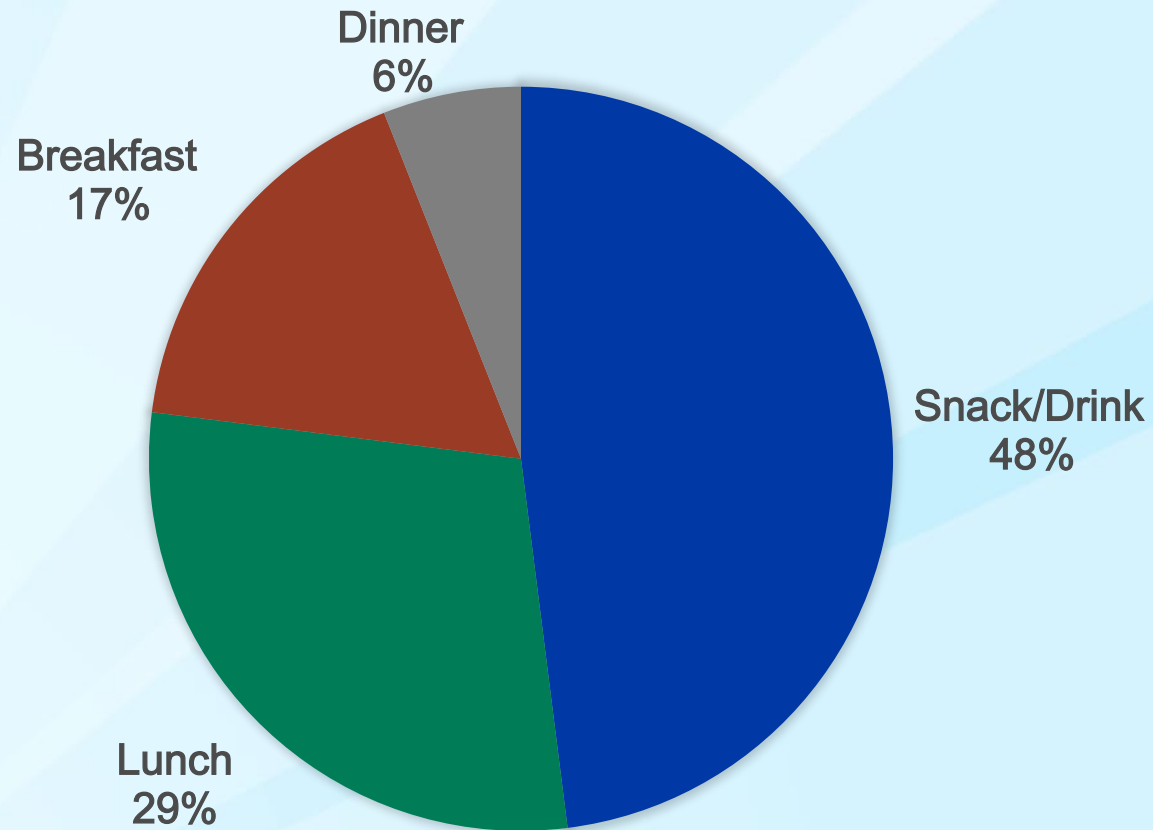


Source: Onufrak et al. Worksite Food and Physical Activity Environments and Wellness Supports Reported by Employed Adults in the United States, 2013. Am J Health Promot. 2018 Jan;32(1):96-105.

## **Foods Obtained at Work**

- **During a typical week, nearly a quarter (23.4%) of working adults obtain foods at work**
  - Includes vending, cafeterias, free foods from meetings and social events
  - 17% obtained free foods
  - 9% purchased food
- **Among consumers, work foods average 1,292 kcal per person per week**
  - Nearly 70% of calories consumed are from free foods

# Meal Occasion for Work Food Acquisitions



Source: Onufrak et al. Foods and Beverages Obtained at Worksites in the United States. J Acad Nutr Diet. 2019 Jan 16.

# Most Frequently Obtained Foods from Work

**These ten food categories account for 44% of work items**

Rank	Number of Times Obtained
1	Coffee (849 times)
2	Reg. Soft Drinks (511 times)
3	Sandwiches (317 times)
4	TapWater (274 times)
5	Tea(258 times)
6	Diet Soft Drinks (258 times)
7	Cookies/Brownies(150 times)
8	Lettuce Salad (143 times)
9	FrenchFries (120 times)
10	Potato Chips(118 times)

# Leading Food Sources of Calories Obtained from Work

**These ten food categories account for 52% of work calories**

Rank	Per Capita Calories Among Work Food Consumers
1	Pizza (146 kcal)
2	Sandwiches (137 kcal)
3	Reg. Soft Drinks (99 kcal)
4	Cookies/Brownies (49 kcal)
5	Burgers (48 kcal)
6	Egg/BreakfastSandwiches (43kcal)
7	Doughnuts/Pastries (40 kcal)
8	Burritos/Tacos(38 kcal)
9	Chicken (37 kcal)
10	Potato Chips(34kcal)

## Diet Quality of Foods From Work

HEI2010* Component	Worksite Foods Score
Total Fruit	1.8 out of 5
Whole Fruit	2.5 out of 5
Total Vegetables	3.5 out of 5
Greens and Beans	3.4 out of 5
Whole Grains	2.6 out of 10
Dairy	5.2 out of 10
Total Protein Foods	5 out of 5
Seafood and Plant Proteins	2.4 out of 5
Fatty Acids	7.7 out of 10
Refined Grains	3.2 out of 10
Empty Calories	7.4 out of 20
Sodium	3.5 out of 10
<b>Total HEI 2010 Score</b>	<b>48.2 out of 100</b>

\*HEI 2010 = 2010 Healthy Eating Index

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# Foods from Cafeterias (NHANES 2005 to 2014)



- **Prevalence**
  - 3% of US adults consumed foods from a non-school cafeteria on a given day
  - Average 706 calories from cafeterias/day/consumer
- **Perceptions of Workplace Cafeteria Healthfulness**
  - 77% of adults with cafeteria at work report “some” or “many” healthy options are available

# Most Frequently Obtained Foods from Cafeterias

**These ten food categories account for 40% of cafeteria foods**

Rank	Number of Times Obtained
1	Raw Vegetables (283 times)
2	Soft Drinks (282 times)
3	White bread/rolls (171 times)
4	Grain mixtures (155 times)
5	Salad dressings (117 times)
6	Raw tomatoes (114 times)
7	Tomato sauces (106 times)
8	Chicken (106 times)
9	Cooked vegetables(105 times)
10	Fruits (96 times)



# Leading Food Sources of Calories from Cafeterias

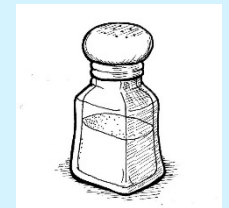
**These ten food categories account for 46% of cafeteria calories**

Rank	Per Capita Calories Among Work Food Consumers
1	Grain mixtures* (89 kcal)
2	Soft Drinks (45 kcal)
3	White bread/rolls (43 kcal)
4	Chicken (37 kcal)
5	Salad dressings (24 kcal)
6	Egg dishes(21 kcal)
7	Sausage/deli meats (17 kcal)
8	French fries (16kcal)
9	Cooked cereal/rice (15 kcal)
10	Fish (13kcal)

\*Grain mixtures includes pizza, pasta dishes, rice dishes, sushi dishes, and Mexican dishes

# Diet Quality of Foods From Cafeterias

HEI2010* Component	Worksite Foods Score
Total Fruit	2.4 out of 5
Whole Fruit	3.2 out of 5
Total Vegetables	5 out of 5
Greens and Beans	5 out of 5
Whole Grains	2.1 out of 10
Dairy	5.5 out of 10
Total Protein Foods	5 out of 5
Seafood and Plant Proteins	5 out of 5
Fatty Acids	5.5 out of 10
Refined Grains	6.3 out of 10
Empty Calories	13.4 out of 20
Sodium	0 out of 10
<b>Total HEI 2010 Score</b>	<b>58.3 out of 100</b>



\*HEI 2010 = 2010 Healthy Eating Index

# Foods from Vending Machines

## (NHANES 2005 to 2014)



- **Prevalence**
  - 4% of US adults consumed foods from a vending machine on a given day
  - Average 264 calories from vending/day/consumer
- **Perceptions of Workplace Vending Machines**
  - 65% of adults with vending machines at work report “few” or “no” healthy options\*\*

### Sources:

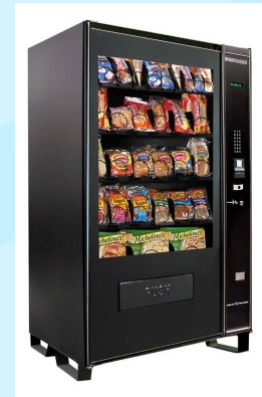
Onufrak et al. Foods Consumed by US Adults From Cafeterias and Vending Machines: NHANES 2005 to 2014. Am J Health Promot. 2019

Onufrak et al. Worksite Food and Physical Activity Environments and Wellness Supports Reported by Employed Adults in the United States, 2013. Am J Health Promot. 2018 Jan;32(1):96-105.

# Most Frequently Obtained Foods from Vending Machines

**These ten food categories account for 84% of vending foods**

Rank	Number of Times Obtained
1	Soft drinks (728 times)
2	Bottled Water (119 times)
3	Salty grain snacks (106 times)
4	Candies (98 times)
5	Potato Chips (76 times)
6	Cookies (54 times)
7	Crackers (48 times)
8	Coffee (45 times)
9	White bread/rolls (37 times)
10	Danishes/Pastries (22 times)



# Leading Food Sources of Calories from Vending Machines

**These ten food categories account for 89% of vending calories**

Rank	Per Capita Calories Among Work Food Consumers
1	Soft drinks (108 kcal)
2	Candies (26 kcal)
3	Salty grain snacks (24 kcal)
4	White bread/rolls (14 kcal)
5	Cookies (14 kcal)
6	Potato Chips(14 kcal)
7	Crackers (10 kcal)
8	Grain mixture* (10kcal)
9	Cakes (9 kcal)
10	Danishes/Pastries (7kcal)



\*Grain mixtures includes pizza, pasta dishes, rice dishes, sushi dishes, and Mexican dishes

Source: Onufrak et al. Foods Consumed by US Adults From Cafeterias and Vending Machines: NHANES 2005 to 2014. Am J Health Promot. 2019



# Diet Quality of Foods From Vending Machines

HEI2010* Component	Worksite Foods Score
Total Fruit	0.7 out of 5
Whole Fruit	0.3 out of 5
Total Vegetables	0.9 out of 5
Greens and Beans	0.04 out of 5
Whole Grains	1.9 out of 10
Dairy	1.7 out of 10
Total Protein Foods	2.0 out of 5
Seafood and Plant Proteins	4.0 out of 5
Fatty Acids	6.5 out of 10
Refined Grains	8.7 out of 10
Empty Calories	0 out of 20
Sodium	10 out of 10
<b>Total HEI 2010 Score</b>	<b>36.7 out of 100</b>

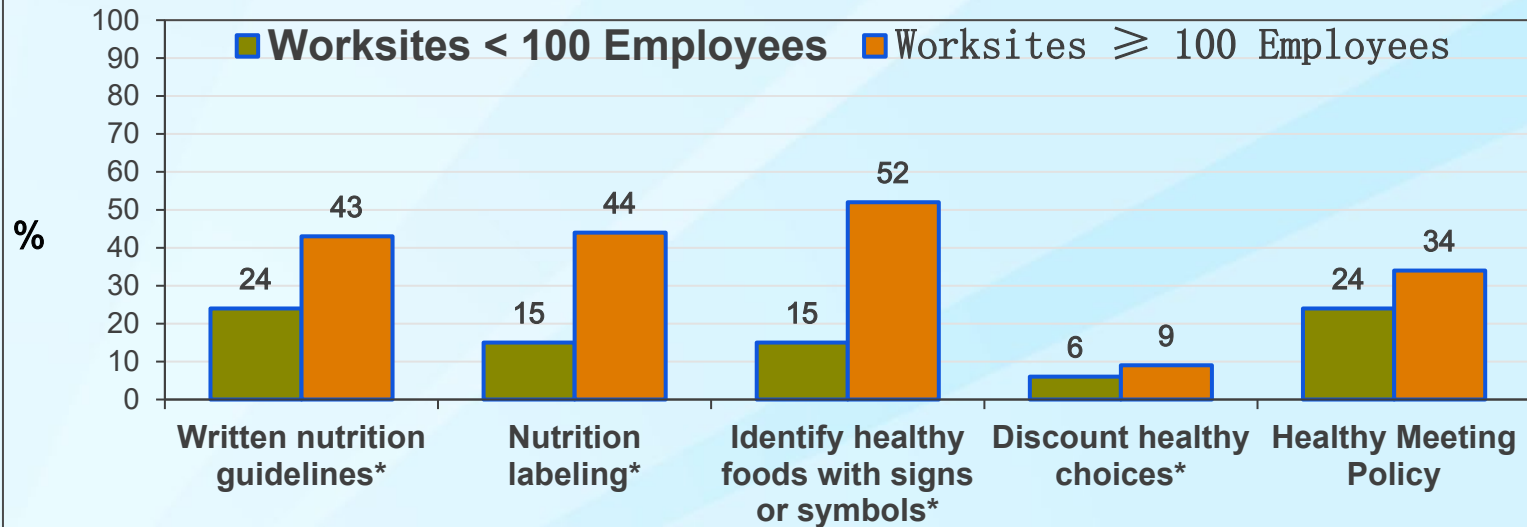
\*HEI 2010 = 2010 Healthy Eating Index

Source: Onufrak et al. Foods Consumed by US Adults From Cafeterias and Vending Machines: NHANES 2005 to 2014. Am J Health Promot. 2019

# Environmental Supports for Healthy Eating Among US Employers



Prevalence of Policy and Environmental Supports for Healthy Eating Among Worksite Wellness Programs\*



\* Among worksites that offer food

## Conclusions

- Many working adults have access to cafeterias, snack bars, or vending machines at work
- Around a quarter get food from during the week; most of the calories they get are free
- Diet quality of cafeteria foods is ok but high in sodium and low in whole grains
- Diet quality of vending foods is low
- Few employers have written nutrition standards for work foods or other environmental supports for healthy eating

## **Future Research and Gaps**

- **Effectiveness of FSG policies on changing dietary behaviors**
- **Best practices for measurement and evaluation using sales and procurement data**
  
- **Emergence of micromarkets**
- **FSG in unique settings such as corrections facilities, food pantries, senior centers, faith-based organizations**
- **How do FSG policies affect the food supply chain?**



Questions?

**For more information please contact Centers for Disease Control and Prevention**

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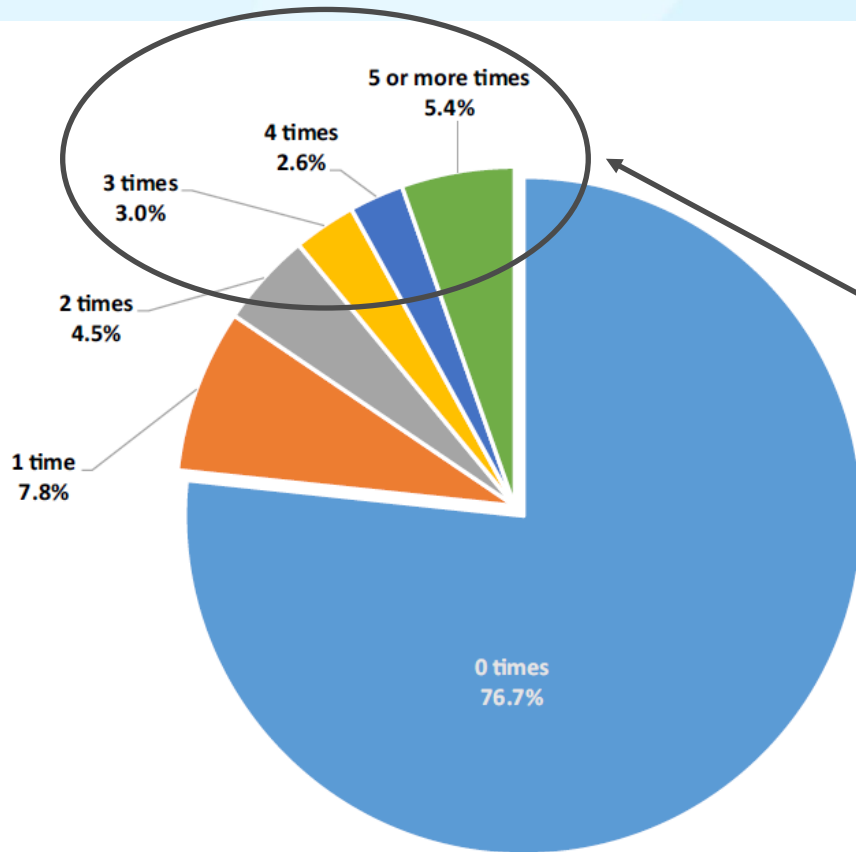
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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# Frequency Obtaining Work Foods



11% of working adults obtained food 3 or more times during the week

**Figure.** Number of free food or beverage acquisitions or purchases from work reported among working adults (n=5,222) during the 7-day study period. FoodAPS study, 2012-2013.