



**Understanding the Food
Service Guidelines Policy
Landscape:**

*A Tool for Prioritizing Healthy
Food Access in Worksites and
Communities*

HERO Webinar

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Amy Lowry Warnock, MPA
Diane Harris, PhD MPH CHES

Today's Discussion

I. Background:

- Worksites and chronic disease prevention
- Why food service guidelines

II. Study:

- “Advancing Healthy Food Service in the United States: State Food Service Guidelines Policy Adoption and Implementation Supports, 2015-2019”

III. CDC's FSG Policy Journey:

- Lessons Learned



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

POLL QUESTIONS 1 AND 2

1. Our leaders understand that offering healthy foods is critical to employee wellness, productivity, and controlling healthcare costs.
 - a. Strongly agree
 - b. Agree
 - c. Not sure
 - d. Disagree
 - e. Strongly disagree

2. Who provides food service in your organization:
 - a. We contract with a food service management company (Aramark, Sodexo, etc.) or vending provider
 - b. We operate our own food service
 - c. Other, e.g. a mix of contracted and self-op



Vision:

A nation where everyone can easily access nutritious food, lead active lives, and live free of diet- and inactivity-related disease.

Mission:

Lead efforts to support healthy eating and active living for all people by advancing public health strategies.

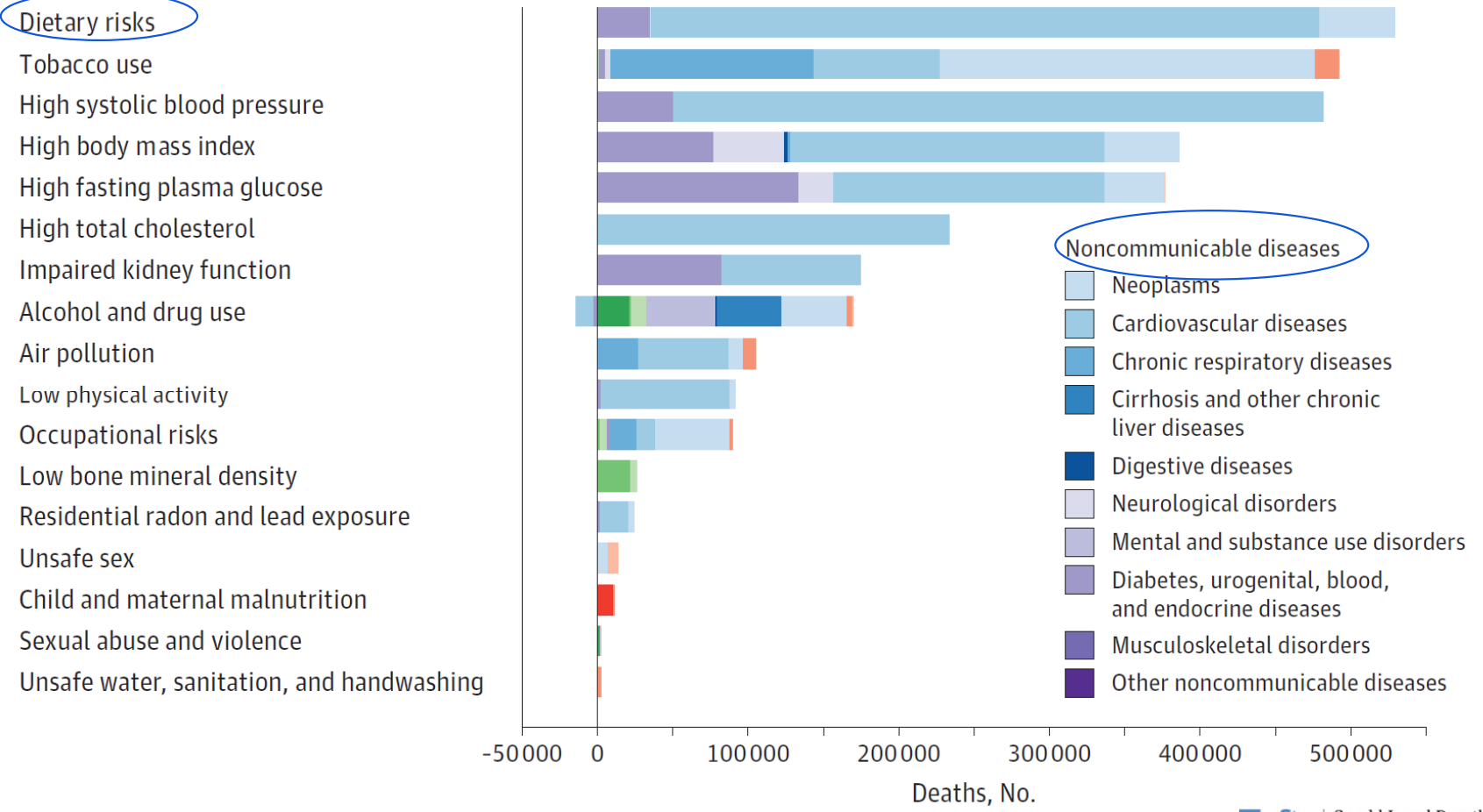
DNPAO: WHAT WE STRIVE FOR EVERY DAY

Risk Factors - Major Cause of Poor Health

Risk factors

Dietary risks

US Burden of Disease Collaborators, JAMA 2018

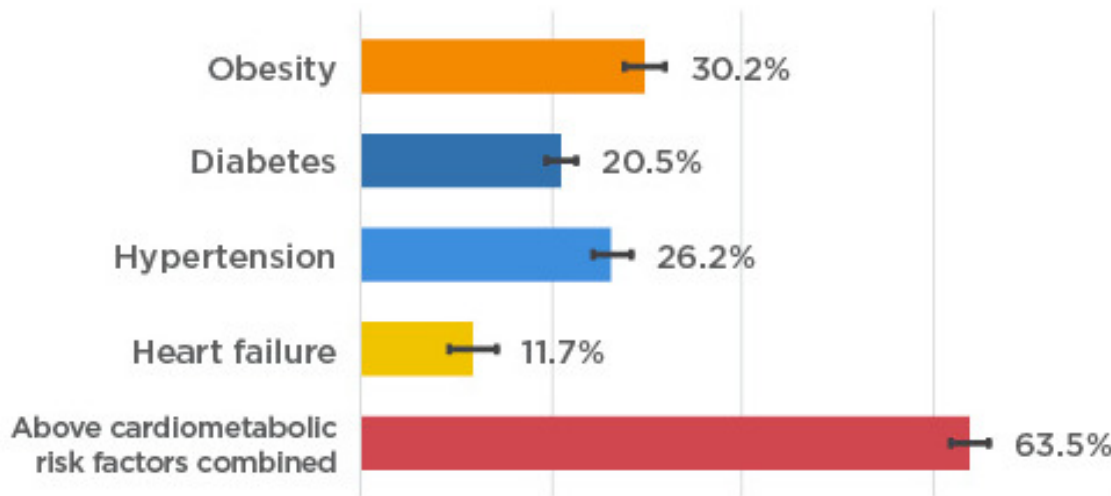


Noncommunicable diseases

Excess COVID-19 Hospitalizations from Diet-Related Diseases

Considered jointly, **63.5%** (UI, 61.6–65.4) or 575 419 (UI, 559 072–593 412) of COVID-19 hospitalizations were attributable to these diet-related diseases.

U.S. COVID-19 hospitalizations estimated to be due to cardiometabolic risk factors



Nearly 600,000 excess COVID-19 hospitalizations in 2020

Black bars indicate uncertainty intervals. Values do not sum due to proportional risks.

O'Hearn, M., Liu, J., Cudhea, F., Micha, R., & Mozaffarian, D. (2021). COVID-19 hospitalizations attributable to cardiometabolic conditions in the U.S.: A comparative risk assessment analysis. *JAMA*.

Healthy Eating Can Promote Health and Reduce Risk of Chronic Disease

Birth Through 23 Months

- Lower risk of overweight and obesity
- Lower risk of type 1 diabetes
- Adequate iron status and lower risk of iron deficiency
- Lower risk of peanut allergy
- Lower risk of asthma

Children and Adolescents

- Lower adiposity
- Lower total and low-density lipoprotein (LDL) cholesterol

Women Who Are Pregnant or Lactating

- Favorable cognitive development in the child
- Favorable folate status in women during pregnancy and lactation

Adults, Including Older Adults

- Lower risk of all-cause mortality
- Lower risk of cardiovascular disease and mortality
- Lower total and LDL cholesterol
- Lower blood pressure
- Lower risk of obesity
- Lower body mass index, waist circumference, and body fat
- Lower risk of type 2 diabetes
- Lower risk of cancers of the breast, colon, and rectum
- Favorable bone health, including lower risk of hip fracture



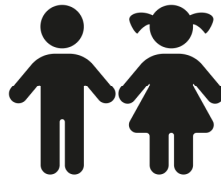
DGA -- FSG

How to operationalize for community settings to support population health



Our Vision: Optimal Nutrition Across the Lifespan

DNPAO works at multiple levels to establish healthier food environments for all to improve nutrition security



**Maternal
Nutrition**

**Early Child
Nutrition**

Early Care and Education

Food Service Guidelines

Breastfeeding

Farm to Education

**Fruit and Vegetable
Programs**

Family Healthy Weight Programs

Health Equity

Many Americans eat at work, but these foods and beverages do not always align with dietary guidance

1/3 of Americans have cafeterias and **1/2** have vending machines at work.

~7 million adults eat food/drinks from a cafeteria daily.

~9 million eat food/drinks from a vending machine daily.

❖ **Nearly 50%** of calories consumed from vending machines comes from added sugars.

Onufrak SJ, 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. 32(1):96

Onufrak SJ, et al. Foods Consumed by US Adults From Cafeterias and Vending Machines: NHANES 2005 to 2014. Am J Health Promot. 2019. 33(5):666-674.



Food and Nutrition

- Prepared Foods
- Packaged Snacks
- Beverages

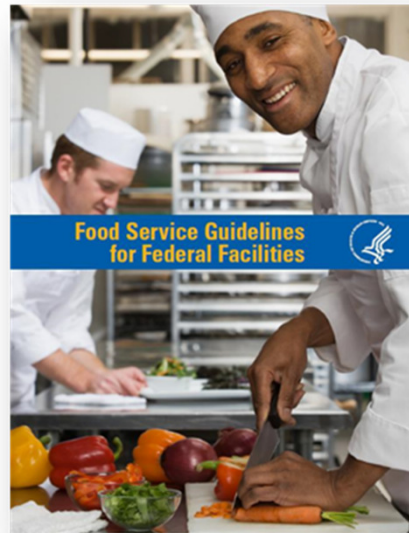


Facility Efficiency, Environmental Support, and Community Development Standards

- Purchasing
- Food Service Management and Consumer Engagement
- Waste Diversion

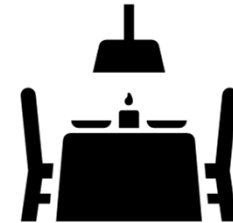
FSG for Federal Facilities Standards

Standard and Innovative



Food Safety

- Best practices beyond FDA Food Code



Behavioral Design

- Placement and Layout
- Product Innovations and Defaults
- Pricing and Promotion;
- Tableware
- Information
- Organizational policy

Food Service Guidelines Can Improve Health Outcomes and Generate Cost Savings for Employers

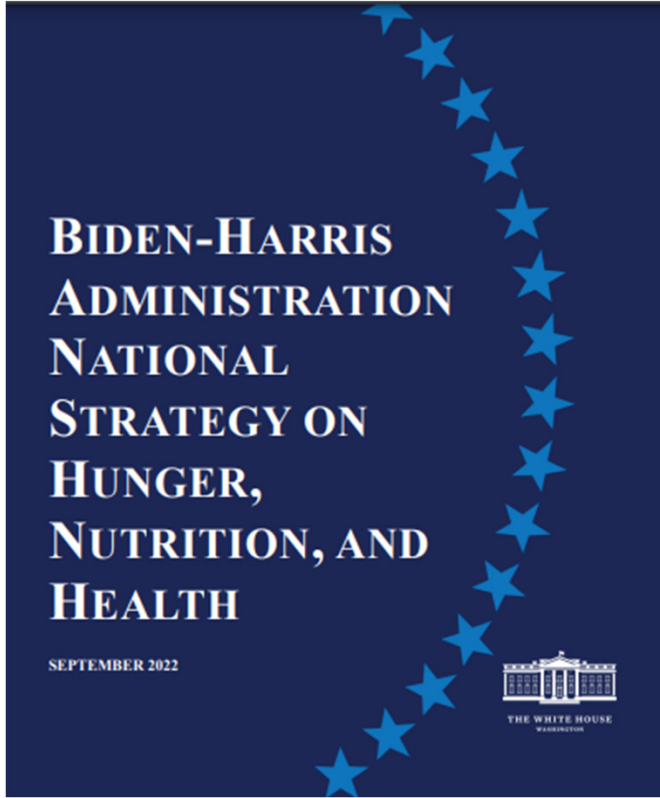
- Microsimulation modeling estimated changes in incidence of cardiometabolic disease, related mortality, and cost effectiveness of implementing FSG in populations of **US government and private company** employees
- Based on changes in intake of 6 dietary targets, study shows lifetime reductions of:
 - Heart attacks (107/M)
 - Strokes (30/M)
 - Diabetes (134/M)
 - Ischemic heart disease deaths (156/M)
 - Stroke deaths (8/M)
- **Cost savings overall in discounted healthcare costs (\$539 Million lifetime)**

Abrahams-Gessel S, et al. Implementing federal food service guidelines in federal and private worksite cafeterias in the United States leads to improved health outcomes and is cost saving. J Public Health Policy. 2022 Jun;43(2):266-280

Pillar 3: Empower Consumers to Make and Have Access to Healthier Choices

Expand access to healthier environments in federal facilities.

- Implementing and updating the Federal Food Service Guidelines in federal facilities will promote fruits, vegetables, whole grains, low-fat dairy, and low sodium options; increase the availability of healthy beverage choices as well as plant-based options; and encourage healthy choices through behavioral design. Millions of federal employees and other people who access government facilities—from National Parks to VA hospitals—will benefit. (p 23)



**BIDEN-HARRIS
ADMINISTRATION
NATIONAL
STRATEGY ON
HUNGER,
NUTRITION, AND
HEALTH**

SEPTEMBER 2022

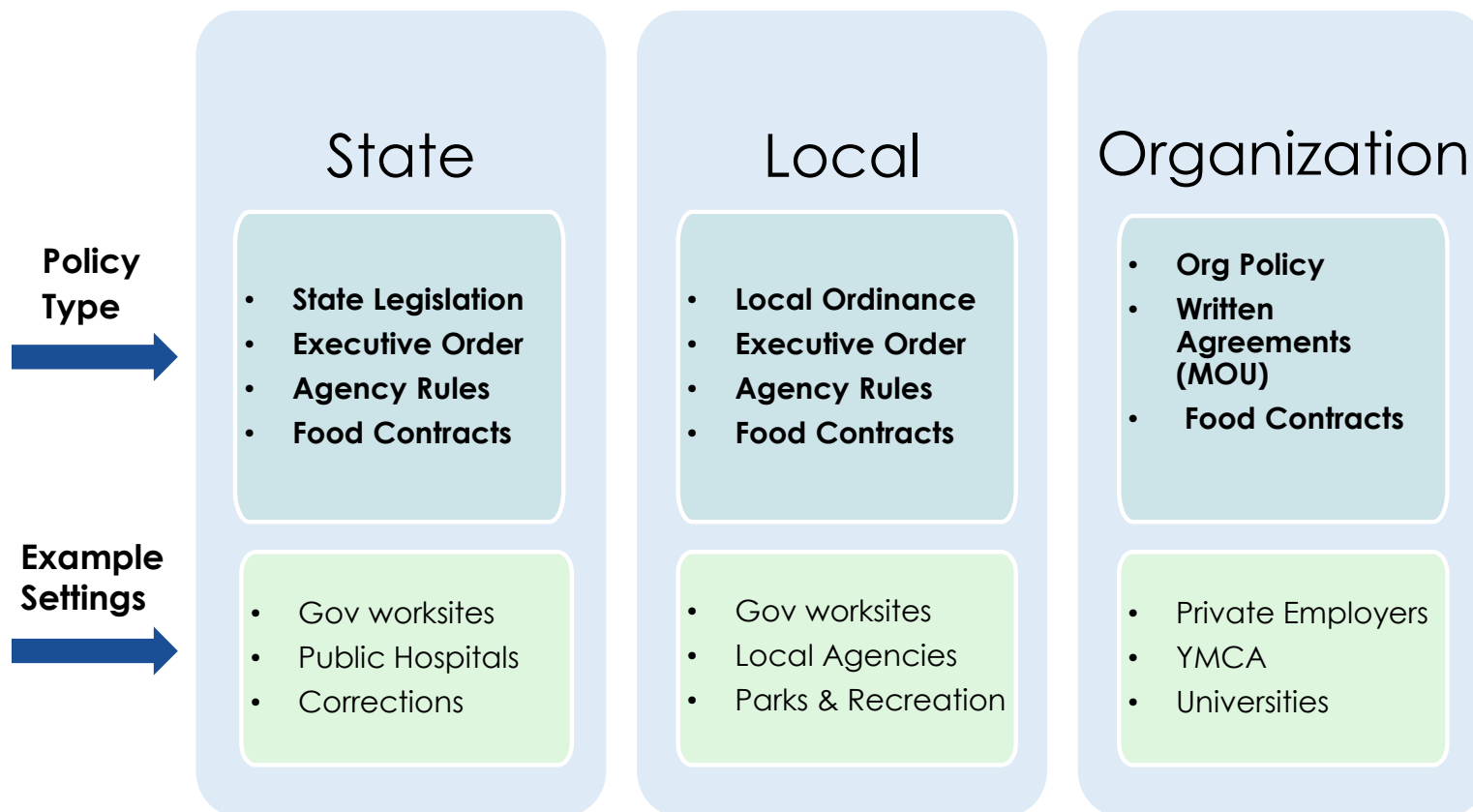


#WHConfHungerHealth

POLL QUESTION 3


3. How familiar do you think those responsible for your food service (or organizations you work with) are with food service guidelines policies?
 - a. Very familiar
 - b. Somewhat familiar
 - c. Not sure
 - d. Not at all familiar with FSG

FSG POLICY TYPES



Quantitative Research

Advancing Healthy Food Service in the United States: State Food Service Guidelines Policy Adoption and Implementation Supports, 2015-2019

Amy Lowry-Warnock, MPA ¹, Nicole Strombom, MPH, JD², Kristy Mugavero, RN, MPH¹, Diane Harris, PhD MPH¹, Heidi M. Blanck, PhD^{1,3}, and Stephen Onufrak, PhD¹

Purpose Food service guidelines (FSG) policies can impact the nutritional quality of millions of meals sold or served to government employees, citizens in public places, or institutionalized persons. This study examines state FSG policies adopted January 1, 2015 to April 1, 2019, and uses a FSG Classification Tool (FSG Tool) to quantify alignment with nutrition recommendations for public health impact.

Design Quantitative Content Analysis

Setting State Government Worksites and Facilities

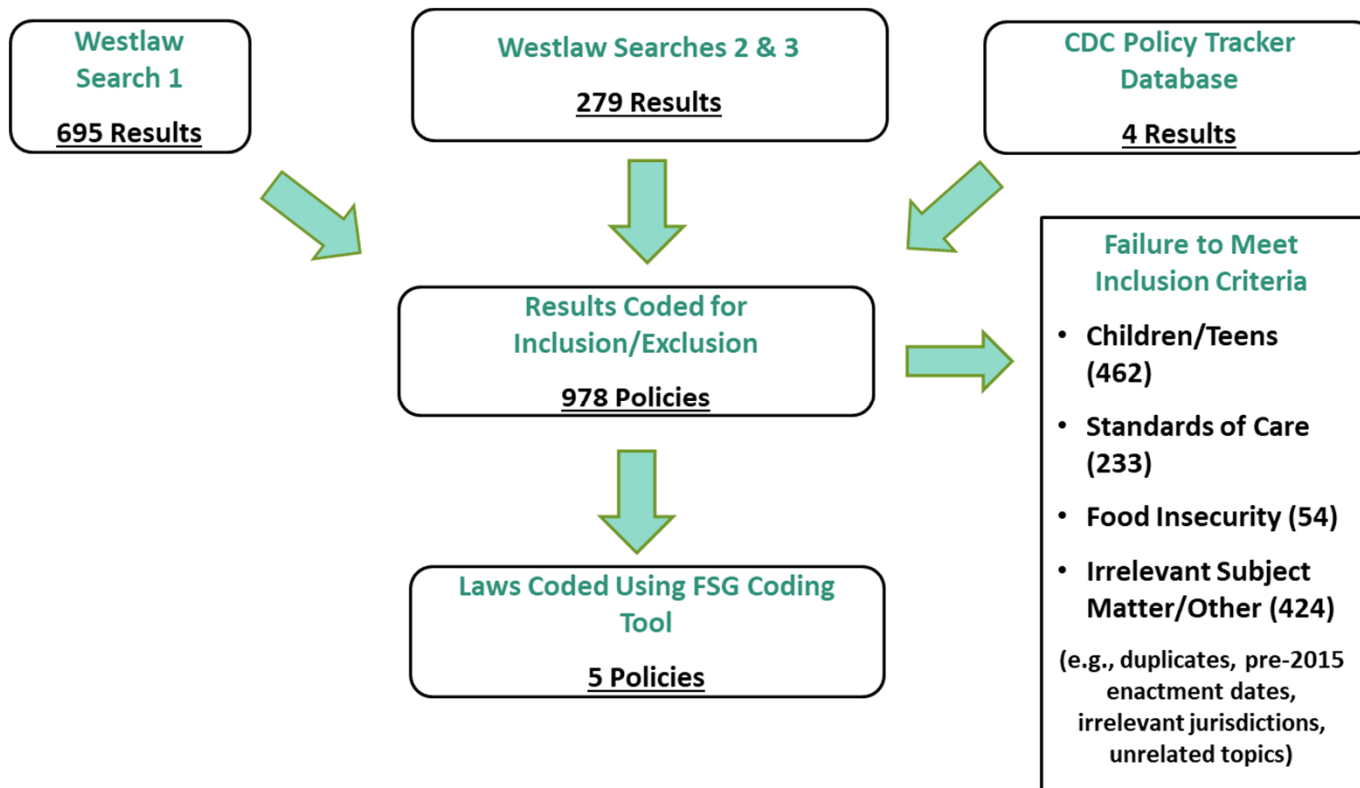
**PUBLISHED
2022**

**AMERICAN
JOURNAL OF
HEALTH
PROMOTION**

FOOD SERVICE GUIDELINES POLICY SURVEILLANCE

- **State FSG Policy Surveillance Overview:**
 - 5-year cycle, All 50 States & D.C.
 - Only enacted policies, including executive orders
 - Commercial databases of state legislation:
 - Lexis Nexis
 - Westlaw
 - Bloomberg Law
- **Partners (CDC/HDSP, American Heart Association, Public Health Law Center)**

STATE FSG POLICY SURVEILLANCE



To be included in the study, the policy had to meet inclusion criteria:

- Specify the development or reference nutritional guidelines that apply to foods and beverages served and/or sold to adult populations
- OR
- Specify the development of task forces or other committees to develop FSG for government facilities
- AND
- Be enacted between January 1, 2015 and April 1, 2019

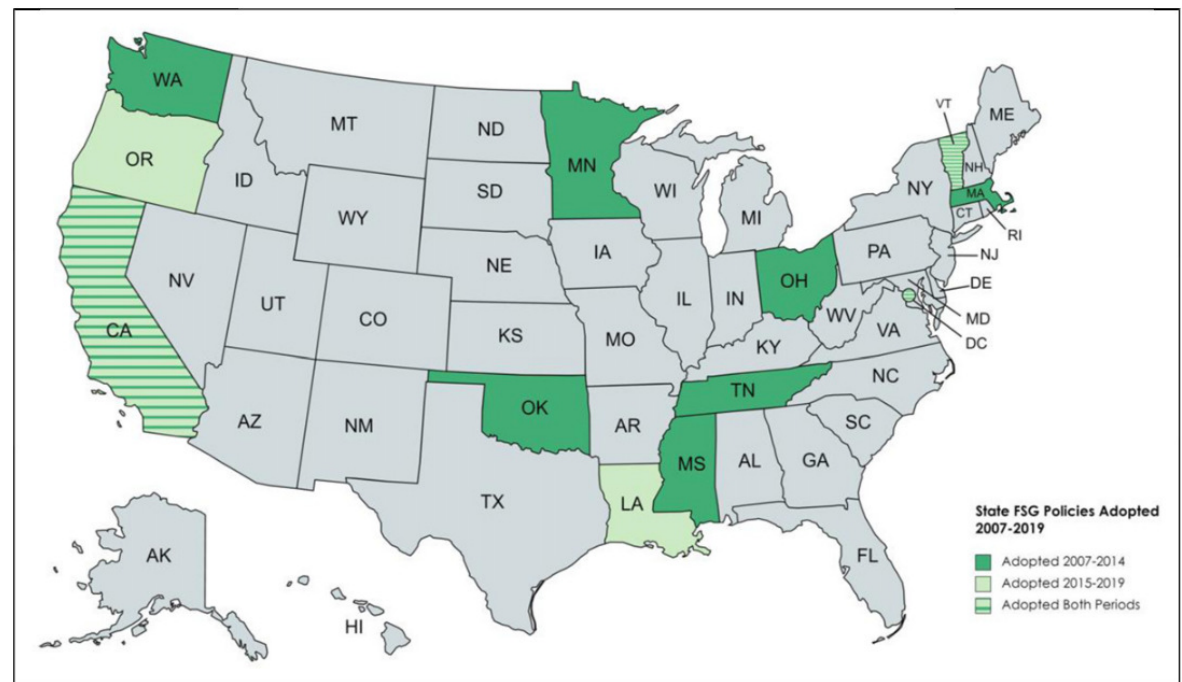
FSG POLICY CLASSIFICATION CODING TOOL

Four coding tool modules used to capture important policy attributes (% score assigned)

1. **Nutrition** (standards correspond with FSG for Federal Facilities)
2. **Behavioral Supports** (labeling, pricing, promotion, etc.)
3. **Implementation Supports** (training, compliance, responsible parties)
4. **Facility Efficiency** (locally sourced, organic, plant-based, etc.)

STATE POLICY SURVEILLANCE STUDY FINDINGS

Since 2007, there have been a total of 20 FSG policies enacted by 11 states and D.C.



Lowry-Warnock A, et al. *Advancing Healthy Food Service in the United States: State Food Service Guidelines Policy Adoption and Implementation Supports, 2015-2019*. *American Journal of Health Promotion*. 2022;0(0).

STATE FSG POLICY SURVEILLANCE (2015-2019)

Policy Citation	State	Setting	Food Venue Type	Nutrition Standards Referenced in Policy
Admin. Code § 1241	CA	State Corrections	Meals (served)	Dietary Guidelines for Americans 2015-2019 and 2008 CA Food Guide
Reg. Text 463393 (NS)	LA	State Government Worksites	Vending	HHS/GSA Health & Sustainability Guidelines, AHA, or NANA Vending Standards
Code § 10-302.02	DC	Parks and Recreation	Vending	Federal High School Competitive Food Standards
Admin. Code 585-015-0020	OR	State Government Worksites	All Foods	Food Service Guidelines for Federal Facilities [†]
Stat. T. 29 § 160c	VT	State Government Worksites	All Foods*	HHS/GSA Health & Sustainability Guidelines, AHA, or NANA Vending Standards

HIGH LEVEL FINDINGS:

- 5 State FSG Policies (VT, OR, CA, LA, D.C.)
- Government worksites and buildings; parks & rec centers; state run prison
- 4 align with DGA , 3 named Federal FSG

Equity & Local Ag Support:

- 2 out of 5 require local sourcing
- 1 financially incentivized hiring veterans, legally blind, or other persons with a disability

FSG POLICY IMPLEMENTATION

- Each law was scored on six elements of implementation support
- FSG Tool's six implementation support elements:
 1. **naming of a government body to oversee implementation**
 2. **authorization of compliance checks**
 3. **requirement to conduct employee or vendor food standards training**
 4. **requirement to review nutrition standards post-implementation**
 5. **requirement to ensure that a specific percentage of foods or beverages meet the nutrition standard**
 6. **authorization of funding to support policy implementation**

IMPLEMENTATION SUPPORTS

Setting	State	Foods Impacted	Implementation Strategy Referenced	Implementation Score
Locally-Run Prisons	CA	Meals	named implementation lead	17%
State Government Worksites	LA	Vending	named an implementation lead	17%
Parks & Recreation	DC	Vending and Concessions	named an implementation lead; 100% of foods to meet nutrition standards	33%
State Government Worksites	OR	All Foods (vending machines, cafeterias, snack bars)	named an implementation lead; compliance checks	33%
State Government Worksites	VT	All Foods	named an implementation lead; compliance checks; post-implementation nutrition standard review; 100% of foods to meet nutrition standards	67%

POLL QUESTION 4

4. Food service quality (healthy choices) are metrics we monitor in our organizational scorecard?
 - a. Strongly agree
 - b. Agree
 - c. Not sure
 - d. Disagree
 - e. Strongly disagree

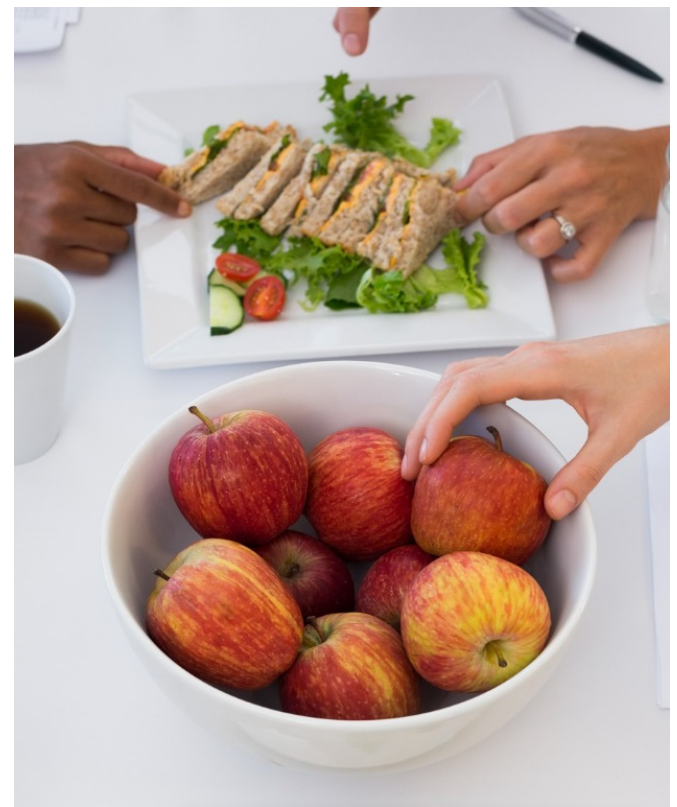
CDC's FSG Policy Journey: Adoption to Implementation



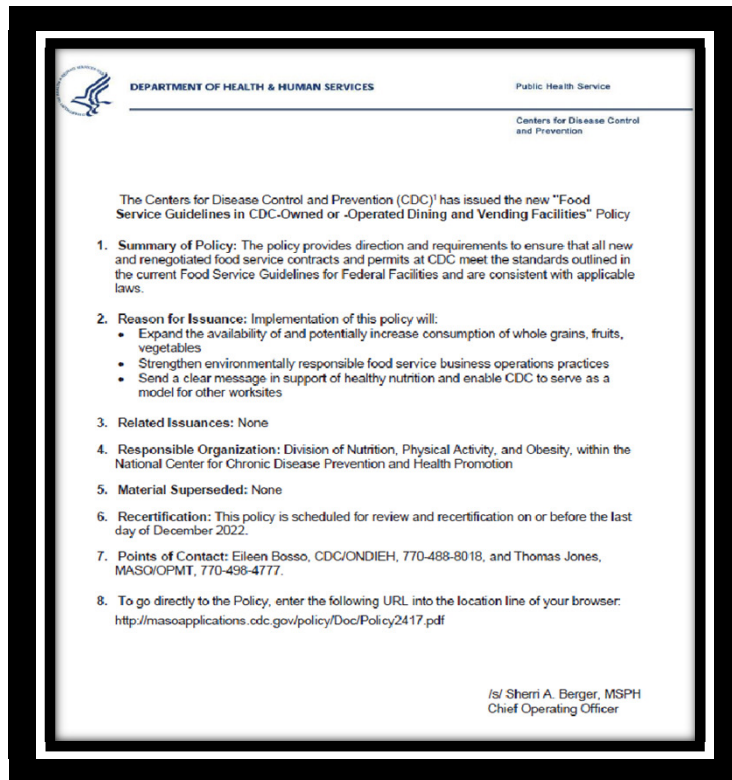
VISION

A federal workforce that harnesses its combined food service and food procurement power to:

1. Ensure employees & visitors have access to healthier foods and beverages
2. Promote a resilient regional food system with new procurement opportunities for small, local, and minority-owned farmers/producers
3. Increase food-sector job opportunities for historically underemployed groups (e.g., veterans, individuals with disabilities, women etc.)
4. Prevent unnecessary food waste and loss
5. Promote environmentally-friendly and sustainable practices



CDC FSG POLICY



First-ever CDC FSG policy was adopted by the policy board and signed by CDC's Chief Operating Officer in January 2018 (updated 2023)

FSG in all:

- Procurement Request Packages
- Request for Funding Proposals (RFPs)
- Food service contracts and permits -- new or renegotiated

Venues:

- CDC-owned or-leased buildings in the U.S
- Vending and dining facilities (cafes, grills, snack shops, cafeterias)

[Food Service Guidelines in CDC-Owned or -Operated Dining and Vending Facilities \(cdc.gov\)](https://www.cdc.gov)

CDC FSG POLICY - IMPLEMENTATION LESSONS LEARNED

WHAT WORKED:

- Building excitement among employees and agency leadership/champions
 - ***Worked closely with workplace wellness***
 - Promotional flyers
 - Employee surveys on desired products and what wasn't working
 - Agency-wide article on healthier vending offerings

- Meaningful and sustained collaboration with blind vendors
 - Proof of concept/business case made
 - 100% healthy machine sold out
 - Pilot had 1 old machine and expanded to 2 new machines purchased by BEP



CDC FSG POLICY - IMPLEMENTATION LESSONS LEARNED



CHALLENGES:

- Initial placement of healthier vending machines and equipment breakdown
- Vendors lack nutritional knowledge of healthier items and prep
- Lack of adherence by onsite staff and managers in cafeterias
- Vendor food distributor lists impacted sourcing of:
 - Healthier products
 - Organic products
 - Locally sourced products
- Mechanism for monitoring and compliance
- Reduced in-person presence due to COVID-19 impaired momentum

GETTING STARTED: CDC RESOURCES



Food Service Guidelines Implementation Toolkit | Nutrition | CDC

Building Blocks of Food Service Guidelines



[Put Food Service Guidelines into Organizational Policies and Food Vendor Contracts | Nutrition | CDC](#)

Food Service Guidelines Policy Framework

CDC's Food Service Guidelines (FSG) Policy Wheel defines seven core elements of a comprehensive FSG policy. The term "FSG policy" can include a variety of formal written agreements that seek to prioritize good nutrition and health within any food service operation.

Click on any plus sign below to see sample language for vendor contracts, purchasing agreements, or organizational policies. The sample language is for illustrative purposes only and is just one example of what a strong FSG policy may include.



See
Sample
Language



[Nutrition](#)

[Behavioral
Design](#)

[Facility
Efficiency](#)

[Food Safety](#)

Nutrition

The nutrition standards the vendor is expected to meet should be clearly stated in the food service guidelines policy or written agreement. Standards should be based on the most current nutrition science and operationalized for use in a food service environment. This allows a vendor to properly plan, purchase, and prepare healthier menu offerings in a timely and cost-effective manner.

Sample language that incorporates nutrition standards for food service guidelines is below but does not include all of the standards in the [Food Service Guidelines for Federal Facilities](#) [PDF-3.34MB]. See [Table 1](#) and [Table 3](#) for the full list of standards for prepared foods and beverages, respectively.

Prepared Foods: Sample Language



Packaged Snacks: Sample Language



Beverages: Sample Language



[Return to FSG Policy Framework](#)



**FOOD SERVICE GUIDELINES
IN ACTION:**

Lutheran Medical Center
Wheat Ridge, Colorado



**FOOD SERVICE GUIDELINES
IN ACTION:**

Denver Health
Denver, Colorado



**THE HEALTHY
HOSPITAL COMPACT:**

Bringing Nutritious Food
to Colorado Hospitals

Examples of Successful Programs:
Food Service Guidelines | Nutrition | CDC







Short videos describing effective food service guidelines policies and how to put them into practice in your worksite or community.

1. [Food Service Guidelines Overview](#)
 2. [Developing Food Service Guidelines Policy](#)
 3. [Types of Food Service Guidelines Policies and Partners](#)
 4. [Food Service Guidelines Policy Standards \(Part 1\)](#)
 5. [Food Service Guidelines Policy Standards \(Part 2\)](#)
-

Cultural Food Preferences in Food Service | Nutrition | CDC

How Do I Communicate with Vendors about Adding Culturally Preferred Foods to Menus?

If your food vendor is not bound by contract to add culturally diverse foods, you can ask them if it would be feasible to do so. Any changes would need to be within the scope of their contract and budget, without incurring additional cost. Consider asking the food vendor questions around the following themes:

- Willingness to offering culturally preferred foods.
- Cost-effectiveness of sourcing ingredients.
- Ability to offer culturally preferred foods that also meet nutrition standards in the [Dietary Guidelines for Americans](#) [PDF-30.9MB   Guideline 2.
- Whether specialized kitchen equipment might be needed.
- Knowledge and experience cooking diverse cuisines.
- Types of foods and cuisines in which vendors would make a profit.
- How often to introduce new or seasonal recipes to the menu rotation.
- Willingness to offer specific dishes tied to religious observances.
- Promotion of new menu items.



DISCUSSION QUESTIONS



- What are some barriers to improving nutritional quality and cultural diversity of foods and beverages at your organization?
- Do you have any success stories to share?

THANK YOU

For more information, contact: dmharris@cdc.gov and awarnock@cdc.gov



Centers for Disease Control and Prevention

National Center for Chronic Disease Prevention and Health Promotion

Division of Nutrition, Physical Activity, and Obesity (DNPAO)

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.



Links for HERO Webinar: Understanding the Food Service Guidelines Policy Landscape: A Tool for Prioritizing Healthy Food Access in Worksites and Communities

Slide 16: AJHP Article: Advancing Healthy Food Service in the United States: State Food Service Guidelines Policy Adoption and Implementation Supports, 2015-2019

- <https://journals.sagepub.com/doi/full/10.1177/08901171221123311>

Slide 28: CDC MASO Policy

- <https://www.cdc.gov/other/pdf/FSG-Policy-CDC-20230725.pdf>

Slide 31: CDC Food Service Guidelines Implementation Toolkit

- <https://www.cdc.gov/nutrition/food-service-guidelines/implementation-toolkit.html>

Slide 32: Put Food Service Guidelines into Organizational Policies and Food Vendor Contracts

- <https://www.cdc.gov/nutrition/food-service-guidelines/strategize-and-act/policies-and-contracts.html#:~:text=Put%20Food%20Service%20Guidelines%20into%20Organizational%20Policies%20and,Vendor%20Reporting%20...%208%20Roles%20%26%20Responsibilities%20>

Slide 33: CDC FSG in Action Video Series

- Food Service Guidelines in Action Video: Denver Health
https://youtu.be/oUglXQ_jQD0?si=EecJXckireea5PGJ
- Food Service Guidelines in Action Video: Lutheran Medical Center
https://youtu.be/_ZEagyCh1bU?si=m9haZsfh8e5iJAb8

Slide 34: CDC Series of FSG Micro-Learning Modules

- Food Service Guidelines Overview: <https://www.youtube.com/watch?v=aJrQxHqiVP4>
- Developing Food Service Guidelines Policy: <https://www.youtube.com/watch?v=wVJkz5fLGlw>
- Types of Food Service Guidelines Policies and Partners:
<https://www.youtube.com/watch?v=dohxqP1Lu-4>
- Food Service Guidelines Policy Standards (Parts 1 and 2):
<https://www.youtube.com/watch?v=lceW5mbrpaU>
<https://www.youtube.com/watch?v=9qRXeWb3BKk>

Slide 35: CDC Cultural Food Preferences in Food Service

- <https://www.cdc.gov/nutrition/food-service-guidelines/strategize-and-act/cultural-food-preferences.html>