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Assessment of the Presence, Content, and Gaps in Municipal Food Service Guidelines: An Analysis of Policies in the 20 Most Populous U.S. Cities, 2017–2023

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Abstract

Purpose: Local food service guidelines (FSG) policies can affect the foods sold or served to support local businesses and human health. This study identified FSG policies enacted between 2017 and 2023 and used an FSG Classification Tool to quantify alignment of policy attributes.

Design: Quantitative content analysis.

Setting: Local jurisdictions.

Sample: Twenty most populous U.S. cities in 2022.

Measures: Frequency of FSG policies and percent alignment to coding tool.

Analysis: Using municipal legal code databases and city clerk websites, enacted FSG policies were identified. Content analysis determined policy attributes across 3 FSG domains: (1) nutrition standards; (2) behavioral design; (3) facility efficiency; and the construct of implementation supports.

Results: From 2017 to 2023, 7 policies across 6 cities met inclusion criteria. Alignment to the tool ranged from 6% to 71%, with 2 policies scoring higher than 51%. Nutrition domain scores ranged from 0% to 100%, with 3 policies scoring >70%. Behavioral design and facility efficiency

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Author Contributions

Reena Oza-Frank, Diane M. Harris, Heidi M. Blanck, and Amy Lowry Warnock contributed to the concept and design of the study. Reena Oza-Frank and Caitlin McCarthy conducted the policy searches. Reena Oza-Frank and Amy Lowry Warnock analyzed the data and drafted the primary manuscript. All authors contributed to data interpretation, reviewed and helped revise the manuscript for appropriate content, and approved the final manuscript for submission.

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.

Consent to Participate

There are no human participants involved in this research and informed consent is not required.

Declaration of conflicting interests

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domain attributes were less frequent. All policies included at least 1 implementation supports provision, with scores ranging from 14% to 61%.

Conclusion: From 2017 to 2023, 7 FSG policies were enacted by 6 of the 20 most populous cities in the U.S. These policies can serve as models for other jurisdictions. To maximize impact, FSG policies can include additional FSG standards to improve food environments.

Keywords

nutrition; nutrition policy; health policy; food service guidelines; sustainability

Purpose

Unhealthy eating patterns and sedentary lifestyles have been identified as important drivers of increases in the prevalence of obesity[1] and the increasing rates of diet-related chronic disease among Americans.[2–5] Combining individual interventions with population and policy approaches[1,6] could amplify public and individual-level benefits.

One way to help create healthier food environment is by using food or nutrition standards, such as those defined in the Food Service Guidelines for Federal Facilities (FSG).[7] FSG are applicable to foods and beverages sold or offered through cafeterias, micro-markets, and vending machines in settings such as worksites, trade schools and universities, public agency or government buildings, and local park and recreation centers. The FSG is a model set of guidelines that can be used or adapted in many settings and with 4 primary goals to: (1) increase the availability of healthier food and beverage options such as improving access to fruits, vegetables, whole grain products, and reducing amounts of added sugars (aligned with the Dietary Guidelines for Americans[8]); (2) promote healthier options through behavioral design strategies such as pricing, placement, and promotion; (3) adhere to food safety protocols that minimize foodborne illness; and (4) foster use of food service practices that promote facility efficiency and support the local food system including farmers and producers. Thus, FSG can provide community worksites and anchor institutions with a comprehensive set of nutrition standards to improve availability of healthier food in public settings through public procurement mechanisms and food service offerings.

Since the release of the initial federal FSG standards in 2011, there has been a noted increase in the use of FSG as a strategy to improve food environments at state[9–12] and local[13–17] levels. At the local level, city councils, composed of elected officials, are the primary governmental entity responsible for promulgating legislation (e.g., ordinance, code, etc.).[18] Research shows that FSG policies are more prevalent in larger municipalities,[19] increasing the opportunity to have far reaching public health impact among municipal residents.[20]

In a previous FSG municipal-level policy study, authors examined attributes of local-level FSG policies enacted through 2016.[17] Authors identified 6 FSG policies adopted in 5 cities: New York City, NY, Philadelphia, PA, Austin, TX, San Francisco, CA (2 policies), and Seattle, WA. The present study expands on that research, by identifying, describing, and quantifying local FSG policies adopted 2017–2023, and assessing the presence, content, and gaps of FSG policies. Policy attributes across 3 FSG domains were analyzed: (1)

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nutrition standards; (2) behavioral design; and (3) facility efficiency; as well as the construct of *implementation supports* included in policy language. Tracking uptake of FSG policies can help researchers better understand the evolution of policy attributes, and the potential population impact over time.

Methods

Design

In the present study, authors identified and analyzed local-level FSG policies enacted between January 1, 2017, and December 23, 2023, in the 20 most populous U.S. cities, based on 2022 population data available at the time of our analysis.[21] The term "policies" was defined to include local ordinances, codes, executive orders (EO), and administrative policies from local agencies. Each of these policy types have been previously defined.[17] All cities except Oklahoma City, OK were consistent with the cities included in the prior study of local FSG policies (the previous study included El Paso, TX).[17]

We used one primary legal database, Municode, as well as individual city clerk website searches to identify local policies that met our study inclusion criteria. Eleven of the 20 cities use Municode for codification. Municode does not allow for Boolean key word searches, thus key words/phrases were developed for identifying potential FSG policies within this source (Table S1). Because policies of interest are not explicitly labeled as FSG, search strings were intentionally broad to ensure all FSG policies were identified. Nine cities do not use Municode for codification but provide codes on their official city clerk websites; these websites were individually searched with the same terms as used in Municode. EOs are not codified and typically not included in Municode or city clerk websites, thus we conducted additional online searches of all 20 cities to capture any executive orders or related policy documents on other official city websites (using the same search terms). CityHealth[22] which assesses America's 40 largest cities on policies, including healthy food purchasing policies, was used as a secondary data source for all cities to ensure inclusion of state FSG policies that met our inclusion criteria but were not identified by the primary sources.

Sample

The lead (R.O.F.) and second (C.M.) authors applied the FSG key words/phrases to the primary and secondary databases and made final determinations on inclusion or exclusion of policies in consultation with co-authors when discrepancies arose (A.L.W., D.M.H.). To meet inclusion criteria, all FSG policies had to specify the development of, or refer to, nutrition standards/guidelines that apply to foods and beverages served, sold, or procured for adult populations in government-owned or -controlled facilities and programs, including where conferences and on- or off-site events are held.[9,17] Policies that included a task force or other government committee to make recommendations on applying FSG standards for government-run programs[9] were also eligible for inclusion. Policies were excluded if they primarily focused on select vulnerable groups for which a nutrition standard may already be set—such as school lunches or child feeding, i.e., persons aged 18 or younger, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).[9] Policies

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focusing on meals served to medically vulnerable populations were also excluded, such as those in nursing homes, in-patient hospitals, or rehabilitation centers; these populations' nutritional needs differ from those of the general population, and applying FSG standards may not be medically appropriate.[9] Also excluded from the study sample were Council-adopted resolutions; meeting minutes; and food service RFP's and vendor contracts as these do not necessarily translate into sustainable shifts in the availability of healthy foods and beverages via a legislative act.

Measures and Analysis

Once we identified all FSG policies meeting inclusion criteria, we began content analysis and coding. Two trained coders with public health law (A.L.W.) and nutrition (R.O.F and A.L.W.) expertise analyzed the full text of each policy to assess the presence or absence of key attributes using a previously developed FSG Policy Classification Tool (herein referred to as the FSG Tool). Details of how this tool was developed and updated have been previously published,[9,12,17] including how the updated tool differs from the previous local FSG surveillance study.[9] Briefly, the tool was modified to (1) award minimum credit to any policy that includes language encouraging or requiring adherence to DGA nutrient requirements, even if failing to name standards used in food service venues; and (2) separate facility efficiency and environmental sustainability policy attributes into a standalone domain score called "Facility Efficiency".[9]

Independently, the coders reviewed and classified FSG policies using a present ("1") and absent ("0") schema, consistent with policy coding best practices.[23] Policies were coded according to the FSG Tool's food setting type categories: (1) vending machines on government-owned or -leased property ("vending machines"); (2) meals on government-owned or -leased property ("meals"); (3) food or beverages made available at government events or meetings ("events or meetings"); (4) food service guideline task force ("task force"); or (5) all food procurement ("food procurement"). FSG policies affecting foods and beverages in multiple setting categories (e.g., vending machines, cafeterias, meetings) were combined to create one score (described in more detail below).

Two coders (R.O.F. and A.L.W.) independently coded each FSG policy (overall n = 3 discrepancies; overall Cohen's kappa = 0.98); if policy interpretation was not clear, legal experts were consulted. Content analysis determined policy attributes across 3 FSG domains: (1) nutrition standards; (2) behavioral design; (3) facility efficiency; as well as the construct of implementation supports. Additionally, policy characteristics related to these FSG domains/construct—but not defined as FSG standards and thus not included in the FSG Tool— were recorded separately as "innovations" (defined as standards beyond what is included in current FSG standards).

Individual components of each domain within the FSG Tool have previously been published.[9] Within each domain, the number of codes present (noted as "1") were added to create the numerator and divided by the total number possible in each domain in the FSG Tool.[9] For example, if a policy included language consistent with only 1 variable in the nutrition domain of the "meals" food service setting category, the numerator would be 1 and the denominator would be the total number of nutrition variables, or 11 in this example. The

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policy would be awarded a score of 9% (1/11) in the nutrition domain. If policies affected foods and beverages across multiple setting categories, then a combined score was created. For example, if a policy covered “vending machines” and “meals,” then the denominator for the nutrition domain would be 8 (food vending) plus 7 (beverage vending) plus 11 (meals), or 26 (8 + 7+11) and if the policy met criteria for 12 variables, then the score would be 46% (12/26). Finally, the FSG Tool domain scores for each FSG policy allowed us to calculate an overall *FSG Comprehensive Score* (average of the 4 domain scores). This *FSG Comprehensive Score* represents an adopted FSG policy’s overall strength and quality as it relates to potential public health impact for the specific intervention.

Results

Our search of primary and secondary data sources identified 1934 (839 + 1095) policies with 7 policies meeting inclusion criteria (Figure 1). Exclusions primarily resulted from a policy’s focus on (1) food safety, handling, permitting, and licensing of food vendors; (2) zoning codes for food establishments; and (3) food served or sold to youth in school or childcare.

From 2017 to 2023, 6 cities adopted new FSG policies that met study inclusion criteria, 1) New York City, NY, 2) Chicago, IL, 3) Philadelphia, PA, 4) San Antonio, TX, 5) Columbus, OH, and 6) Denver, CO. Any policies adopted prior to 2017 were not included in the 2017–2023 time period. These cities enacted FSG policies that affected the nutritional quality of foods and beverages procured, sold, or served in various community settings, including government worksites (n = 3) and food retail venues (n = 3). One city adopted a policy that established a Food Equity Task Force to create a local food system that ensures access to healthy and affordable food using the Good Food Purchasing Program,[24] which uses FSG as the gold standard. The most common policy vehicle was the EO (n = 3), followed by city code (n = 2); city ordinance (n = 1); and Administrative Directive (n = 1). The *FSG Comprehensive Scores* for these policies ranged from 6% to 71%, with 2 policies scoring higher than 51% (Table 1). Table 1 presents the 7 enacted FSG policies and describes their policy attributes and percent alignment across the 3 FSG domains: (1) nutrition standards; (2) behavioral design; (3) facility efficiency; and the construct of implementation supports.

Nutrition Domain

Nutrition scores ranged from 0% to 100%, with 3 policies scoring >70% (Table 1). Specifically, NYC EO 8 (100%), Denver EO 70 (100%), and San Antonio AD 11.1 (73%) had the highest nutrition domain scores. Two of the policies require following nutrition guidelines related to the “food and beverage vending” and/or “meals” food setting types (NYC EO 8, San Antonio); one policy requires following nutrition guidelines related to “food and beverage vending” (Denver). Three policies (Table 2)—NYC Local Law No. 075, Philadelphia, and Columbus—require limiting the selection of beverages listed as part of children’s meals in food service establishments (not limited to restaurants or fast food settings and thus applicable to government facilities). One policy, Chicago, requires establishing a task force to address food equity by establishing a new coordinating body

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for implementing and monitoring the progress of the Good Food Purchasing Program.[24] Additionally, 3 policies did not reference existing nutrition standards or guidelines (Table 2).

Behavioral Design Domain

Five polices had a behavioral design score of 0%, whereas 2 policies—NYC EO 08 and Denver—had scores >60%. The behavioral design strategies included across the 2 policies were: consistency in requiring vending items to include FDA food labels and pricing (NYC EO 08 only), promotion, and placement of healthier items.

Facility Efficiency Domain

Five policies had a facility efficiency score of 0%, and the other 2 policies scored >60%. Both of these policies referenced the Good Food Purchasing Program,[24] which includes local sourcing requirements. In addition to local sourcing such as that included by the Chicago task force policy, NYC EO 08 also recommended that vending machines use energy conservation methods and all food packaging to be recyclable, compostable, or reusable.

Implementation Supports Domain

Implementation supports scores ranged from 14% to 50% (Table 1). Table 3 shows that adopted FSG policies included 5 of the 6 implementation supports, with the most common naming a government body to oversee implementation (n = 7); the named entity was the city or mayor's office or the department or commissioner of health. Two policies address compliance check requirements, but in different ways: annual submission of the inventory list of all foods stocked in machines (NYC EO 8) or compliance within 3 months after effective date (Philadelphia). One policy, San Antonio, requires training and/or educating staff and/or vendors. Two policies—NYC EO 8 and San Antonio—require a regular review of nutrition standards every 3 years. All 3 policies include a "food and beverage vending" requirement that ≥50% of total offerings meet nutrition standards. No policy required authorization of funding to support FSG implementation.

Innovations

Table 4 summarizes innovations (standards beyond those included in current FSG standards) in implementation supports and nutrition that are related to the key FSG domains but not defined as FSG standards and thus are not included in the FSG Tool. Two innovative implementation supports require city government staff to (1) sign an acknowledgement that they received the Administrative Directive (San Antonio) and (2) solicit and incorporate client feedback on meals and snacks (NYC EO 8). Both of these sites also included a variety of nutrition innovations.

Discussion

This study provides an update of municipal-level FSG policies adopted in the 20 most populous U.S. cities while also quantifying FSG policy attributes. An additional 7 FSG policies were adopted between 2017 and 2023 across 6 cities, 4 of them new since the previous study.[17] Overall nutrition domain and implementation support construct attributes were included more frequently than behavioral design or facility efficiency domain

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attributes, suggesting there may be common policy attributes to facilitate policy adoption, while other attributes may be more challenging for adoption.

In the previous study, 3 of the policies required healthier offerings in vending machines, 2 set standards for healthy food procurement (food and beverages purchased, prepared, or served by city agencies), and 1 was for an FSG task force.[17] Additionally, 5 of 6 policies in the prior study met a majority of FSG attributes in the classification tool (51% or greater), whereas in the current study, only 2 of 7 policies met a majority. This decrease in the number of policies meeting a majority of criteria is partially explained by 3 policies having identical intent and associated language for limiting selection of beverages as part of children's meals in food service establishments. Although these policies did not score well across any of the domains, and thus cannot be considered comprehensive, the policies—which attempt to decrease children's consumption of sugar-sweetened beverages, the primary source of added sugar in children's diets,[25] and a contributor to increased prevalence of obesity[26]—are far reaching in applying to all food service establishments, including government buildings and restaurant settings. The extensive, population-level reach of these 3 policies is not captured in the FSG Tool.

Two cities, NYC and Philadelphia, enacted multiple FSG policies in the current (2017–2023) and previous (through 2016) surveillance periods. As of 2023, Philadelphia adopted 2 FSG policies, and NYC adopted 3. The Philadelphia FSG policy (EO 4–14 adopted in 2014 and updated in 2022[27]) affects the nutritional quality of an estimated 20 million meals served each year, while the NYC policy EO 8 affects[28] all city agencies that purchase, prepare, and serve or sell meals and snacks. The NYC policy language stipulates that the standards be routinely reviewed to ensure alignment to current nutrition science in the updated DGA (2020–2025). And both FSG policies identify the Public Health Department (PHD) as a source of ongoing technical assistance. The PHD also provides online training modules tailored to meet the needs of city food procurement staff, food service managers, and those who develop menus and serve food. Such policy implementation supports—and regular assessments of the nutrition standards, as included in the FSG tool—may contribute to better implementation outcomes and eventual public health impact. Another factor that may support the acceptability of healthier offerings in certain city buildings is acknowledgement and availability of cultural food offerings. "*City departments should be open to participant's feedback on the food that is served and provide opportunities for choice and cultural and religious food preferences*.".[27]

It may take an extended time for a jurisdiction not only to adopt a policy, but also to ensure implementation and sustainability of the policy; yet these steps are essential to ensure the policy is fulfilling its intended goals.[29,30] Although this study did not verify an adopted policy's implementation, implementation supports aimed at facilitating adoption were assessed in the FSG Tool. Five of the 6 policies in the previous study scored 51% or higher in this category, compared with only 1 of the 7 policies in the current study. Despite this, every policy in the current study cited a government body to oversee implementation. Only 1 policy, San Antonio, requires training and/or education for staff and/or vendors. Although no policies included city or local funding for implementation supports (e.g., training, enforcement), it is notable that San Antonio was a previous recipient of funds from

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CDC's Division of Nutrition, Physical Activity, and Obesity (DNPAO), which included FSG implementation as a supported strategy.[31]

Our search identified policies related to facility efficiency, though the policies were excluded because they did not include nutrition standards and thus did not meet inclusion criteria. Facility efficiency and food safety standards may be included in separate, non-FSG-related policies[7,17] and it was outside the scope of this FSG-focused study to apply search terms to systematically identify all such policies.

There are some limitations to this study. This analysis was limited to enacted local ordinances, EOs, and administrative policies in the 20 most populous cities in the U.S. Oklahoma City was not included in the previous study as it was not one of the 20 largest cities. Instead, the previous study included El Paso, TX. Municode searches revealed no new policies for El Paso, nor did a search of the El Paso city clerk website (as a verification step). This finding supports consistency in monitoring FSG policies over time. Although FSG policies may fall under other policy types, and municipalities' policy types may differ, the policy types included are those most commonly codified by a city. Although we (1) used one municipal legal code database, and (2) searched all 20 city clerk websites and secondary sources, some existing FSG policies may have been missed due to source variability in archiving city codes—including current vs historic codes—and due to variability in how cities document their city codes. Additionally, county and/or state governments may apply FSG policies to local jurisdictions, yet we did not search for or identify those policies because this study's focus was city-level policy adoption. Finally, the FSG tool represents standards within domains that may not include every element needed to determine a policy's comprehensiveness.

Despite these possible limitations, this analysis of local FSG policies extends previous work examining local and state FSG policies.[9,12,17] Using the previous studies' FSG tool and methods strengthens the methodology for coding/policy interpretation across multiple coders and maximizes consistent FSG policy monitoring over time. Additionally, this study captured innovations to highlight areas in which policies may not have been formally coded or credited for certain FSG-related policy attributes.

Conclusion

Large cities are continuing to enact FSG policies. However, some policies address FSG components more effectively than others. Additional cities can consider adding more FSG components to policies to more comprehensively align with FSG. Such policies are a population-level strategy to improve food environments and help address diet related health conditions for more Americans. Future studies might explore why some cities have adopted FSG policies while others have not, and what shared characteristics (such as socioeconomic, demographic etc.) distinguish adopters from non-adopters among these largest cities. Other future studies might assess the impact of the FSG policy's implementation on individual and/or population health outcomes.

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Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Data Availability Statement

Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

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So What?

What is Already Known on this Topic?

- Local FSG policies can improve the nutrition quality of meals and beverages prepared, served, and sold to persons in those communities. Through 2016, 6 FSG policies were adopted by 5 large U.S. cities.

What Does this Article Add?

- This study provides an update on municipal-level FSG policies adopted by the 20 most populous U.S. cities. From 2017–2023, 7 new FSG policies were enacted by local decision makers across 6 U.S. cities. Study authors assessed percent alignment across 3 FSG domains: (1) nutrition standards; (2) behavioral design; (3) facility efficiency; as well as the construct of implementation supports.

What are the Implications for Health Promotion Practice or Research?

- Additional cities can consider adopting FSG policies to increase the availability of healthier food and beverage options in their communities.

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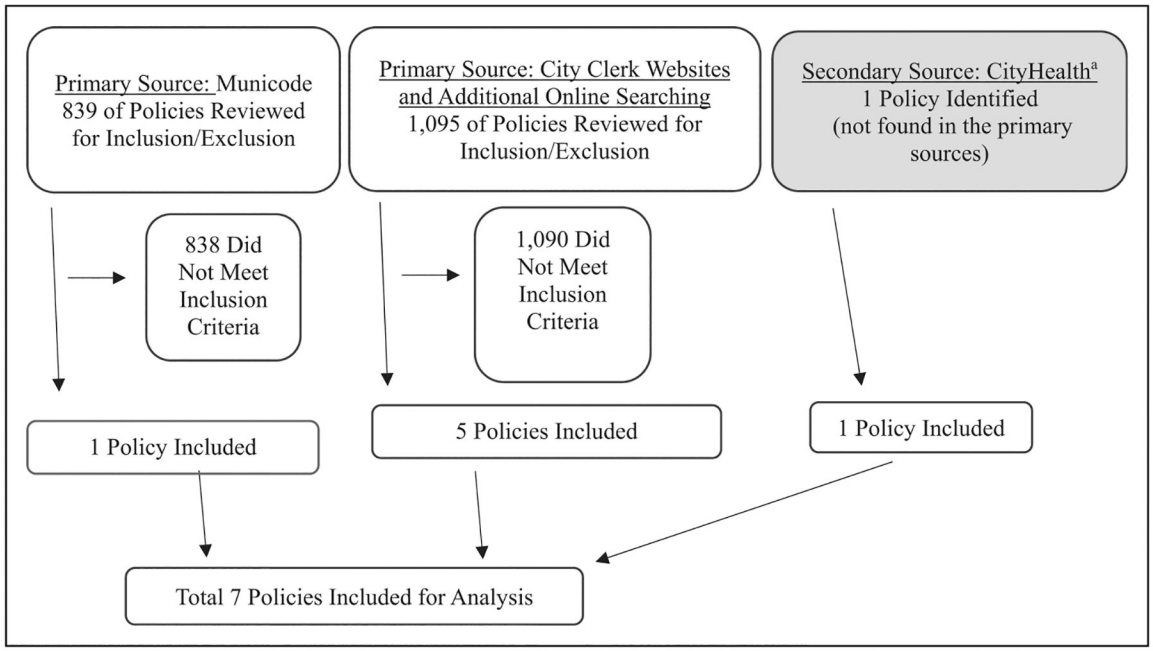


Figure 1.

Flow diagram for food service guidelines (FSG) policy identification and inclusion [a]https://www.cityhealth.org/our-policy-package/healthy-food-purchasing/.

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Table 1.

Adopted Food Service Guidelines (FSG) in Local Policies and Percent Alignment to FSG Classification Tool Domains, 2017–2023

City, state (year)[a]	Policy citation	Policy type	Setting	Food type	Nutrition score, %	Behavioral design score, %	Facility efficiency score, %	Implementation supports score, %	Comprehensive (overall) FSG score, %[c]
New York city, NY (2019)	Local law no. 075	City code	Food service retail venues	Meals	9%	0%	0%	17%	6%
New York city, NY (2022)	Executive order no. 8[b]	Executive order	Government worksites	Food and beverage vending; meals; procurement	100%	67%	67%	50%	71%
Chicago, IL (2022)	Executive order no. 2022-1	Executive order	Task force (office of the mayor)	--	0%	0%	100%	14%	29%
Philadelphia, PA (2019)	Bill no. 190505	Ordinance	Food service retail venues	Meals	9%	0%	0%	33%	11%
San Antonio, TX (2019)	AD 11.1	Administrative Directive	Government worksites	Food and beverage vending; meals; procurement	73%	0%	0%	61%	34%
Columbus, OH (2020)	717.01	City code	Food service retail venues	Meals	9%	0%	0%	17%	6%
Denver, CO (2018)	Executive order no. 70	Executive order	Government worksites	Food and beverage vending	100%	75%	0%	33%	52%

[a]Cities are in order of population size according to "Annual Estimates of the Resident Population for Incorporated Places of 50 000 or More, Ranked by July 1, 2023 Population: April 1, 2020 to July 1, 2023." https://www.census.gov/data/tables/time-series/demo/popest/2020s-total-cities-and-towns.html

[b]Executive Order (EO) 122 of 2008 established the NYC Food Standards; EO 122 was repealed and replaced by EO 8 of 2022which recommitted New York City to the Food Standards as well as to a Good Food Purchasing framework.

[c]Comprehensive (Overall) FSG Score is the average of the 4 domain scores.

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Table 2.

Nutrition Standards Referenced in Adopted Local Food Service Guidelines (FSG) Policies, 2017–2023

City, state (year)[a]	Policy citation	Policy Description	Nutrition standards referenced in policy
New York city, NY (2019)	Local law no. 075	Limiting selection of beverages listed as part of children's meals in food service establishments.	None listed
New York city, NY (2022)	Executive order no. 8[b]	New York city commitment to procuring, preparing, and serving healthy and nutritious food, and promoting transparency relating to such vital services within Mayoral agencies.	2022 NYC food standards (Good food purchasing program, USDA Dietary guidelines for Americans)
Chicago, IL (2022)	Executive order no. 2022-1	The establishment of a food equity Council, coordinated by the office of the mayor, to create an equitable local food system to ensure access to healthy and affordable food.	Good food purchasing program
Philadelphia, PA (2019)	Bill no. 190505	Limiting selection of beverages listed as part of children's meals in food service establishments.	None listed
San Antonio, TX (2019)	AD 11.1	Nutrition guidelines for food/beverages, catered meals, and snacks purchased with city funds.	Food service guidelines for city of San Antonio facilities, food service guidelines for federal facilities, Dietary guidelines for Americans
Columbus, OH (2020)	717.01	Limiting selection of beverages listed as part of children's meals in food service establishments.	None listed
Denver, CO (2018)	Executive order no. 70	Establishes the policy of the city and county of Denver for controlling and providing healthier food and beverage options to city employees in city vending machines.	General service Administration's "health and sustainability guidelines for federal Concessions and vending Operations" (an earlier version of food service guidelines for federal facilities), the USDA "A Guide to Smart snacks in school", and the Colorado department of public health and Environment's "Colorado healthy hospital Compact."

[a]Cities are in order of population size according to "Annual Estimates of the Resident Population for Incorporated Places of 50 000 or More, Ranked by July 1, 2023 Population: April 1, 2020 to July 1, 2023." https://www.census.gov/data/tables/time-series/demo/popest/2020s-total-cities-and-towns.html

[b]Executive Order (EO) 122 of 2008 established the NYC Food Standards; EO 122 was repealed and replaced by EO 8 of 2022 which recommitted New York City to the Food Standards as well as to a Good Food Purchasing framework.

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Table 3.

Policy Implementation Supports Included in Adopted Local Food Service Guidelines (FSG) Policies, 2017–2023

Implementation supports	Number of FSG policies (N = 7)
Names an agency that shall supervise the implementation of the policy	Chicago Denver NYC local law 75 NYC executive order 8 Philadelphia San Antonio Columbus
Addresses compliance check requirements in the policy	NYC executive order 8 Philadelphia
Specifies that training and/or education will be provided to staff and/or vendors to ensure implementation success	San Antonio
Requires that a review of nutrition standards or guidelines occurs on a regular interval to reflect updates in nutritional science	NYC executive order 8 San Antonio
Requires a percentage of total food and/or beverage offerings that must meet referenced nutrition standards	Denver NYC executive order 8 San Antonio
Stipulates dedicated funding to help with implementation, training, enforcement, or similar activities	None

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Table 4.

Innovations[a] in Implementation Supports and Nutrition Included in Adopted Local Food Service Guidelines (FSG) Policies, 2017–2023

City, state (year)[b]	Policy citation	Setting	Food type	FSG tool domain	Innovation
New York city, NY (2022)	Executive order no. 8[c]	Government worksites	Food and beverage vending	Nutrition	Inclusion of standards for hot beverage machines; require processed meat not be sold by 2025. Recommend that snacks do not contain artificial favors or colors, or low- or no-calorie sweeteners.
			Meals	Nutrition	Require no deep frying. Require all new or renovated kitchens be built without deep fryers.
				Implementation supports	Require that sites solicit client feedback annually regarding meals and snacks and consider results as part of their menu planning process. Sites must solicit client feedback regarding cultural preferences, taste and food quality.
San Antonio, TX (2019)	AD 11.1	Government worksites	Meals	Nutrition	Vegetarian or vegan options must be offered. No fried foods.
				Implementation supports	Requires city employees to sign an acknowledgement of the receipt of the administrative Directive.

[a]Innovations are related to the 4 key FSG domains —(1) nutrition standards referenced; (2) behavioral design strategies and selection of healthier choices, (3) supports for FSG implementation; and (4) facility efficiency practices that encourage environmentally responsible practices—but are not defined as FSG standards and thus not included in the FSG coding tool.

[b]Cities are in order of population size according to "Annual Estimates of the Resident Population for Incorporated Places of 50 000 or More, Ranked by July 1, 2023 Population: April 1, 2020 to July 1, 2023." https://www.census.gov/data/tables/time-series/demo/popest/2020s-total-cities-and-towns.html

[c]Executive Order (EO) 122 of 2008 established the NYC Food Standards; EO 122 was repealed and replaced by EO 8 of 2022 which recommitted New York City to the Food Standards as well as to a Good Food Purchasing framework.