Food Service Guidelines in Food Pantries: Implementation and Evaluation Additional Guidance for SPAN, HOP, and REACH

Purpose

This document provides additional guidance for DNPAO's SPAN, HOP, and REACH recipients implementing and evaluating Food Service Guidelines (FSG) nutrition standards in food pantry environments. DNPAO recipients prioritize different community settings as key institutions for the FSG nutrition strategy, and for many, this includes food pantries. This document describes and operationalizes FSG standards for food pantries as a specific setting and provides resources for recipients for implementation and evaluation. Using this document will help recipients and relevant partners enable food pantries to improve the quality and healthfulness of foods they provide.

Food pantries can be a key intervention point for improving health in the United States since they fill a vital role in distributing food to food insecure Americans as a supplement to governmental assistance programs. Chronic illnesses including obesity are closely linked to poor nutrition which is more common among low-income and food insecure Americans. In addition, stressors of food insecurity can lead to reduced ability to self-manage chronic disease. Therefore, it is critical to increase the number of healthy options available at food pantries. There is evidence that nutrition standards can improve food offerings and lead to improved diet quality and therefore food pantries are promising settings for improving nutrition and food security among at-risk Americans. This document draws upon this research to provide guidance for implementing and evaluating nutrition standards in food pantries to help address the need for healthier options in this setting.

Note that this document is primarily intended for working with food pantries rather than food banks. Food banks are food distribution hubs that distribute large scale food donations to food pantries, where they are distributed to clients for consumption. While much of the information in this guide will still be useful to those working directly with food banks, it is suggested that you consult other resources for such work. For example, an extensive online course, "Developing A Food Bank Nutrition Policy: A Guide to Procure Healthful Foods" is available at https://learn.canvas.net/courses/426. You can also contact Feeding America (https://www.feedingamerica.org/) to gain further assistance.

What this Document Contains

As stated in the respective implementation guide and performance measure profile for this nutrition strategy, DNPAO defines FSG based on those that align with the Food Service Guidelines for Federal Facilities. Food pantries were identified as one setting where adaptation of FSGs may be needed because Food Service Guidelines for Federal Facilities standards do not easily align with the types of foods provided in food pantries or the way in which these foods are provided. Fortunately, several evidence-based systems, known as food ranking systems (FRS), have already been developed to categorize the foods that are obtained and distributed by food pantries according to their healthfulness. These FRS can be used as the basis for improving nutrition in food pantries through FSG. This document briefly summarizes strategies DNPAO recipients can apply to improve nutrition in diverse food pantries using these existing

food ranking systems. This resource provides additional guidance to recipients on four components: 1) selecting a food ranking system for food pantries, 2) implementing FRS in food pantries 3) reporting implementation for intermediate performance measures, and 4) evaluating long-term outcomes for food pantries (if selected).

Because food pantries vary widely in their capacity in terms of staff, resources, and infrastructure, they also vary widely in their ability to implement FRS. This document lists multiple FRS strategies and flexible evaluation procedures to fit local pantry capacity for implementation.

I. Selecting A Food Ranking System to Use in Food Pantries

In general, food service guidelines (FSG) serve to translate the Dietary Guidelines for Americans (DGA) into specific actionable recommendations for various settings where foods are sold or served. Several different food ranking systems (FRS) have been developed to translate DGA recommendations into specific actions for food pantries to identify and promote healthy foods. Each FRS has advantages and disadvantages. Food pantries, and recipients that support them, should consider these when deciding which FRS to use. It is also critical that recipients seek to provide flexible options based on the capacity of individual pantries.

Existing Food Ranking Systems

Many systems exist to classify foods according to their nutritional content, but these systems differ in the criteria used to determine healthiness, the number of categories deemed appropriate to measure food's healthiness, and the nutritional cut-points for those categories. Although this poses a challenge, particularly for those who would seek a unified food ranking system, this also presents an opportunity for recipients and the food pantry partners they are working with.

Each food pantry is unique in terms of food acquisition sources, budget, clientele, physical setting, food distribution methods, and other factors. It is useful to have several food ranking systems for pantries to choose from that provide nutritional criteria for ranking foods' healthiness and aligns with their capacity and available resources. Each of the following systems described in this document (see Table 1 below) is evidence-based, but their differences allow pantries to be flexible by choosing whichever best fits their needs (for more on these systems see *Developing Guidelines for Nutritious Choices at Food Pantries*). While other systems do exist and can be used, the following FRS have the most evidence and documentation supporting them as well as resources available to facilitate implementation. A new FRS to succeed Foods to Encourage is also currently under development through Robert Wood Johnson Foundation's Healthy Eating Research Program and should be available in early 2020.

Table 1
Summary of Existing Food Ranking Systems Recommended Based on Current Evidence and Resources Available to Support Implementation

Food Ranking System	Choose Healthy Options Program (CHOP)	Supporting Wellness at Pantries (SWAP)	Foods to Encourage (F2E)
Summary of Criteria and System	Points are assigned to foods based on their daily percentage of healthy (e.g., calcium, vitamin A) and unhealthy (e.g., sugar) nutrients to make a "CHOP score". Foods with like dietary functions (e.g., dairy products) are then ranked relative to each other using CHOP score.	Foods are assigned to one of three health categories according to their levels of each of the following nutrients: saturated fat, sugar, and sodium. The criteria for each of these nutrients varies depending on food group (e.g., dairy products, vegetables). Foods are ranked relative to other foods in their food group.	Foods in certain food groups (e.g., vegetables) are eligible to be considered as "Foods to Encourage" or "F2E" (i.e., healthy foods), whereas others (e.g., desserts) are not. In order for a food in an approved group to be F2E, it must meet further nutritional standards.
Food Healthfulness Ranking Categories	CHOP 1 (choose frequently, green) CHOP 2 (choose occasionally, yellow) CHOP 3 (choose sparingly, red)	 Green (choose often) Yellow (choose sometimes) Red (choose rarely) 	Foods to Encourage (F2E) Not F2E
Capacity Needed for Implementation	High	Medium	Low
Amount of Support Resources Available Online	High	High	Medium
Strengths	Comprehensive- accounts for levels of both healthy and unhealthy nutrients; Enables comparisons for nutrient-rich to calorie-rich foods	Intuitive "stoplight" system streamlines distribution (ideal in choice pantries); Includes guidance for all food groups without requiring many nutrient inputs	Most straightforward system; Requires low investment for implementation; Accounts for both healthy and unhealthy nutrients
Weaknesses	CHOP score calculation requires many nutrient inputs (even ones no longer on nutrition labels), which requires high investment from pantry personnel and IT systems. Foods fortified with vitamins and minerals may be classified as green even when they are high in added sugar, refined grains, or other unhealthy components.	Only accounts for unhealthy nutrients, rather than healthy nutrients (e.g., may consider nut butters to be unhealthy, despite richness of nutrients)	Only includes four F2E food groups, no guidance for other groups; Binary categories limits representation for variance in healthiness of foods

II. Implementing FSG in Food Pantries

Best Practices for Implementation

Based on existing research, the following are general components of best practice strategies for FRS implementation at food pantries:

- Address nutrition standards both for getting food from food banks/purchasing food (acquisition) and how food at pantries is categorized, selected, and consumed (distribution)
- Ensure implementation is efficient and practical to address pantries' limited resources and staff
- Incorporate prevailing strategies of behavioral design in FRS implementation to encourage client selection of healthier foods and maximize the impact of FRS

Basic Steps for Implementation

Recipients, food pantry management, personnel, and other relevant partners can collaborate to use the following basic steps to implement their FRS of choice in their pantry:

- Planning for performance measure reporting: For performance reporting, DNPAO recipients will need to present written agreements or policies acknowledging that the recipient is working with each pantry.
 - a. After an FRS is selected and an implementation plan is developed, it may be a good time to draft such agreements so they can include the standards and implementation agreed upon.
 - b. It may also be a good time to discuss how an audit can be conducted to validate implementation.
- 2. **Acquisition** (foods that are received from food banks, donations, and other free sources):
 - a. Assess the percentage of foods received that fall into each FRS health category. Request/order food from food banks, donors, and other sources that falls into healthier FRS categories (e.g., requesting more fresh fruits, vegetables, and lean proteins) to increase the percentages of foods that fall into healthier FRS categories.
 - b. Encourage donors to donate types of foods that fall within healthier FRS categories.
- 3. **Purchasing**: When purchasing foods, pantries have more freedom to directly prioritize foods in healthier FRS categories.
 - Assess percentage of purchased foods that fall into each FRS category and adjust purchasing to increase percentages of foods that fall into healthier FRS categories.
- 4. **Sort foods by food group**: All approved FRSs require foods to first be sorted by group before being sorted according to health quality. This ensures that rankings for food's health are relative to similar foods that fulfill similar roles in diet patterns and nutrition.

- a. Sort current inventory according to food groups as described in the FRS. For instance, panties using F2E as their FRS should sort foods into F2E's 13 main food groups (i.e., Cereal, dairy, fruits, etc.).
- Recommendations for this step include training sessions with personnel, clear signage displaying procedure and criteria for grouping, and dedicated software (e.g., Excel spreadsheet) for tracking inventory by sorted group.

5. Organize foods by FRS category:

- a. Within food groups (i.e., after sorting by food group), sort current inventory according to healthiness of foods using the criteria described in the FRS.
- b. Scanning technology can make classification of foods by FRS much simpler. For example, some supplying food banks use scanning technology to automatically classify foods into FRS categories. This information can be communicated directly from food bank to food pantry.
- c. For instance, pantries using F2E as their FRS should sort cereals as either F2E or not F2E based on their whole grain, fiber, sodium, sugar, and fat content (and sort the other food groups following their F2E criteria also).
- d. Like step 3, recommendations for this step include training sessions with personnel, clear signage displaying procedure and criteria for grouping, and dedicated software (e.g., Excel spreadsheet) for tracking inventory by sorted group.
- 6. **Behavioral design**: Behavioral design refers to strategies that encourage clients to select foods that fall into healthier FRS categories more often and those that fall into less healthy categories less often. Best practices begin with clear, concise labeling of foods according to their health ranking.
 - a. Ranking categories are usually associated with color cues (e.g., for SWAP, foods labelled in green indicate clients should choose them often, foods labelled in yellow indicate clients should choose them sometimes, and foods labelled in red indicate clients should choose them rarely).
 - b. For pantries that pre-box or pre-bag food for clients, there should be clear protocols for the percentages of foods in each category to include in the boxes/bags, and such protocols should prioritize healthier foods as much as possible.
 - c. Protocols should be clearly listed and trained for personnel. For choice pantries, foods in the same categories should also be shelved together.
 - d. Foods in healthier ranking categories should be shelved in convenient locations (e.g., at the front of the pantry, at eye-level, or at a level where they are easy to access), whereas foods in less healthy categories should be shelved in locations that are less convenient to access.
 - e. Shelving and displays of healthier foods should be more visually appealing and should be more clearly promoted than less healthy foods. All pantries should also distribute and display promotional materials encouraging clients to choose foods that are labeled as healthier and, where possible, provide materials or trainings to help clients more easily incorporate healthier category foods into their diet (e.g., providing recipes or demonstrations for cooking with vegetables).

f. More information on behavioral design strategies is also available at:
https://hungerandhealth.feedingamerica.org/explore-our-work/nutrition-education-initiatives/strategies/nudges/

Resources to Assist in Implementation of Each FRS

Each of the systems summarized above have a wealth of associated resources, including implementation guides and toolkits. While comprehensive implementation guidelines for each FRS are not included in this document, the following resources detail how to implement the specific FRS:

- CHOP: https://mazon.org/assets/Uploads/HOHM-CHOPGuide.pdf
- **SWAP**: https://indd.adobe.com/view/0be29257-c5f3-441e-b144-828b7ff00cf9
- F2E: http://hungerandhealth.feedingamerica.org/wp-content/uploads/legacy/mp/files/tool_and_resources/files/f2e-background-detail.v1.pdf

III. Reporting Implementation for Intermediate Performance Measures

All DNPAO recipients are required to report on intermediate performance measures that assess the establishment of FSG in various settings. Recipients implementing FSG in food pantries will need to provide data on how many food pantries have implemented one of the food ranking systems above. In addition, recipients need to estimate how many people are potentially impacted or reached by the implementation of the food ranking systems in the food pantries that have adopted them. These data should be added to the total counts for the following intermediate performance measures:

- 1. Number of community sites (e.g., food pantries) with implemented food service guidelines (e.g., FRS).
- 2. Number of venues* with implemented food service guidelines for each community site.
- 3. Number of people potentially impacted by implemented food service guidelines (e.g., FRS) in each community site (e.g., food pantry)

*The intermediate performance measure for the number of venues may not be relevant for food pantries and should not be included in the total count or should be reported as zero for this measure.

Evidence of FRS Implementation at each Pantry

In order to report the number of pantries implementing FRS, recipients will need to gather and present the following evidence of FRS implementation in food pantries:

- 1. The written agreement between recipient and the food pantry indicating which FRS they selected and plan to implement (or have implemented).
- 2. A written audit of each food pantry, demonstrating the extent to which the pantry is complying with the specific FRS standards agreed upon in the written agreement.
 - An existing audit tool available is the Healthy Food Pantry Assessment Toolkit, which assesses the availability of a variety of healthy food categories and behavioral design practices. The toolkit also includes a variety of additional

- supporting resources. https://snaped.fns.usda.gov/library/materials/healthy-food-pantry-assessment-toolkit
- The table below (Table 2) provides an example of an audit tool to assess implementation at multiple levels of pantry processes (i.e., acquisition and distribution) using several methods.

Table 2
Example Checklist for Food Pantry Food Ranking System (FRS) Implementation

Criteria	Activity	Status
		1 (Not implemented) 2 (Working towards implementation)
		3 (Fully implemented)
Acquisition-	Pantries request foods from food banks (and other free	
Food Requested	sources, like donations) based on FRS categories,	
	prioritizing foods in healthier categories	
	Acceptable Evidence of Implementation:	
	Policy/protocol prioritize requesting healthier foods	
	Determine count and percentage of requests for foods in various FRS categories (Only possible for	
	pantries that keep electronic or paper records from	
	pantry's existing systems of food requests to food	
	bank or requests for donations)	
Acquisition-	Count and Percentage of food items actually acquired	
Food Actually	(from food bank or donations) in each FRS category	
Acquired	 Analysis of electronic or paper records from pantry's 	
	existing systems for food shipments from food banks	
	(for pre-implementation, this will require post-hoc	
	sorting of foods into FRS categories)"Snapshot" of items received from food banks-	
	pantry personnel or recipient visits pantry and sorts	
	foods from food banks currently at pantry into FRS	
	categories, counts them, and calculates percentages	
Purchasing	Pantries purchase foods based on FRS categories,	
Strategies	prioritizing foods in healthier categories	
	Acceptable Options for Evidence of Implementation:	
	Policy/protocol prioritize purchasing healthier foods	
Purchasing	Count and Percentage of food items purchased in each	
Outcomes	FRS category (e.g., 20% of purchased foods at Pantry A	
	are CHOP 1, choose frequently)	
	Acceptable Evidence of Implementation:	
	Analysis of electronic or paper purchasing records	
	from pantry's existing systems (for pre-	
	implementation, this will require post-hoc sorting of	
	foods into FRS categories)	
	"Snapshot" of purchased items– pantry personnel or recipient visits pantry and sorts purchased foods currently	
	at pantry into FRS categories, counts them, and	
	calculates percentages	
Sort foods by food	Personnel sort foods into food groups as defined by the	
group	pantry's FRS	
	Acceptable Options for Evidence of Implementation:	
	List of food groups used for sorting	
	Protocols for personnel to follow for sorting	
	Photographs (taken by evaluator) of foods sorted, or	
	being sorted, by food groups	

		9
	Reports from personnel of regular sorting by food groups	
Organize foods by	Within food groups, personnel organize foods into	
FRS category	categories based on their nutrition content as defined by	
	their FRS Acceptable Options for Evidence of Implementation:	
	Visual, printed displays of nutrition cut-points and	
	other guidance for personnel to organize foods into	
	FRS categories (e.g., hand-outs, posters, signs, etc.)	
	Protocols for organizing	
	Photographs of foods organized by FRS categories	
	Reports from personnel of regular sorting by FRS	
	categories	
Distribution/	Pantries distribute foods based on FRS categories,	
Behavioral Design	prioritizing foods in healthier categories for promotion	
	Acceptable Options for Evidence of Implementation (via	
	observation, photos, or reports from personnel):	
	Foods labelled according to FRS categories	
	 Foods shelved/boxed according to FRS categories 	
	Foods promoted to clients or boxed according to	
	FRS categories (e.g., fruits and vegetables	
	promoted)	
	Count and Percentage of food items displayed in each	
	FRS category	
	CHOICE PANTRIES: Analysis of electronic or paper	
	records from pantry's existing systems for all food	
	items (i.e., purchased, from banks, donated, or	
	otherwise) displayed (i.e., stocked on shelves and	
	available to clients) to determine count and	
	percentage of foods in different FRS categories	
	CHOICE PANTRIES: "Snapshot" of items diaplayed/evailable in pantry, pantry paragraph or	
	displayed/available in pantry– pantry personnel or recipient visits pantry and counts total foods	
	displayed, foods displayed in each FRS category,	
	and calculates percentages	
	BOX PANTRIES: Calculate percentages of FRS	
	category foods per box/basket or, if each box is	
	different, track counts for each box, calculate	
	average percentage per box/bag. Can be measured	
	by pantry personnel count or via photograph for later	
	count and calculation	
Total	0-5= Pantry has generally NOT implemented FRS	/15 (max)
Implementation	5-10 = Pantry is working towards implementing FRS	
Score*	10-15= Pantry has largely implemented FRS	
*Note that the impler	mentation score is intended to guide efforts to improve implem	entation and is not a

*Note that the implementation score is intended to guide efforts to improve implementation and is not a required component of the performance measure

Estimating Number of People Impacted by FRS Implementation at Food Pantries

Many pantries require a form of documentation to receive services, and therefore may have accurate counts of the number of people who come into the pantry to receive food. Recipients can assess how many people are receiving services at a given pantry using one the following methods. Because pantries will differ in their capacity to accurately gather information about number of clients, these methods are presented in order of accuracy, which *means the generally more accurate methods are listed first*. Recipients can use whichever method is feasible.

- Pantry uses an electronic system to track the number of clients who receive foods and are able to count clients per day, week, month, and year. This information should include, as often as possible, data on how many people are being fed using food received from the pantry (e.g., one client is shopping for themselves and their family of 5 total people).
- 2. Pantry uses a written system to track the number of clients who receive foods and are able to count clients per day, week, month, and year. This information should include, as often as possible, data on how many people are being fed using food received from the pantry (e.g., one client is shopping for themselves and their family of 5 total people).
- 3. Pantry personnel can count number of clients who receive food every day for a week in preparation for evaluation and, wherever possible, ask about how many people the client plans to feed with the food received.
- 4. Recipient can audit pantry by counting the number of clients who receive food on a given day as a snapshot measurement.
- 5. Recipient can receive an estimate from pantry manager or other pantry personnel of total people served by the pantry per day, week, month, or year, whichever they believe is most accurate.

IV. Evaluating Impact of FSG Implementation in Pantries (Long-Term Outcome Evaluation)

Ultimately, the goal of implementing FRSs in food pantries is to improve the health of those who use the pantries as a key source of food. While intermediate performance measures address implementation (i.e., healthy foods are more available or offered after implementation), long-term impact should address the effectiveness of implementation (i.e., healthier foods are purchased or sold). Below are the DNPAO long-term outcome evaluation questions related to this strategy by award program.

SPAN

To what extent have efforts to implement food service guidelines in selected worksites or community settings led to increased purchasing of healthier foods?

HOP & REACH

To what extent have efforts to establish healthy nutrition standards in key institutions led to increased purchasing of healthier foods among priority populations?

Because foods are *given* to pantry clients rather than *sold*, recipients evaluating this strategy should adapt the evaluation question and corresponding indicators to appropriately address this

setting. In other words, it is important to determine whether the implementation of FSG in pantries achieves its goal of increasing the amount of healthy foods pantry clients receive.

The long-term outcome evaluation question for implementing FSG in food pantries may be adapted to be:

To what extent have efforts to implement food service guidelines in selected community settings (e.g., food pantries) led to users receiving healthier foods?

To measure this outcome, recipients will need to assess the healthfulness of foods clients received before and after implementation. In addition, they could also assess the availability of healthy foods in the pantry before and after implementation, since this directly affects foods received.

The table below (Table 3) describes ways to measures the impact of FSG implementation in food pantries, including multiple methods for gathering data for each example indicator. It is important to note that data for these measures should be collected both before and after implementation. It is also worth noting that to use all these indicators in every pantry is not feasible.

Table 3
Example Indicators for Long-term Outcome Evaluation for FRS Implementation in Food Pantries

Instructions:				
Record these measures before and after implementation of FRS, then compare data				
Example Indicators	Collection Methods			
Count and Percentage of food items received (by clients) in each FRS category	 CHOICE PANTRIES: Use pantry's existing inventory tracking systems (electronic or paper) to track foods present before opening pantry and at close of pantry to determine what foods were received/consumed; calculate percentages of foods from each FRS category CHOICE PANTRIES: If no existing inventory tracking system, pantry personnel or recipient tracks inventory before opening and after close to determine what foods were received/consumed; calculate percentages of foods from each FRS category CHOICE PANTRIES: If low capacity, pantry personnel can photograph clients' baskets or carts full of selected foods at check-out/exit. A sample of photos would provide a quick way to later analyze percentages of FRS categories for foods received. BOX PANTRIES: Calculate percentages of FRS category foods per box/basket or, if each box is different, track counts for each box; calculate average percentage per box/bag. Can be measured by pantry personnel count or via photograph for later count and calculation. 			
Count and Percentage of food items received (by pantry) in each FRS category	 If it is not possible to assess the foods acquired by clients, the foods acquired by the pantry can also be assessed. For example, proportion of healthier foods (according to FRS categories) purchased by the pantry or ordered from the food bank can be compared before and after implementation. 			
Client satisfaction and perceptions of health for foods available and received/consumed (Supplemental indicator to address client satisfaction)	 For pantries with high capacity, pantry personnel or recipients ask client to complete a very short survey (less than 30 seconds) using a 1-10 rating as they leave the pantry. The survey will include the following items: How satisfied are you with the food that was available at this pantry today? How healthy was the food that was available at this pantry today? How satisfied were you with the food you received at this pantry last time you came? How healthy was the food you received at this pantry last time you came? The survey may be administered to clients verbally (although responses can be recorded electronically or on paper), on paper, or electronically by either pantry personnel or recipients 			

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