Food Service Management Company Insights and Opportunities to Improve Nutrition in the Food Supply

There is widespread recognition that most Americans are consuming too much sodium and added sugar and that both can lead to significant negative health outcomes. Thus, ASTHO sought to better understand efforts around improving the nutritional quality of foods offered and served by food service management companies (FSMCs) to support state health agencies and partners with implementing healthy food service guidelines.¹

To date, much of the focus around nutrition improvements has been in the school setting, driven by federal updates to school meal and snack standards. Yet FSMCs serve millions of meals each day across multiple institutions and sectors, from entertainment venues to hospitals. Through the Advancing Sodium and Added Sugar through Partnerships Project, ASTHO explored how FSMCs’ efforts improved the nutritional quality of foods and beverages in a broader range of institutions and other venues.

This issue brief highlights findings, insights, and learnings from FSMCs. ASTHO interviewed several companies and organizations that shared information, projects, lessons learned, challenges, and opportunities around improving the healthfulness of foods and beverages offered by FSMCs. This issue brief also underscores the importance of partnering and collaborating with state public health agencies to strengthen the nutritional quality of foods served across food service sectors.

Public Health Recommendations around Reducing Sodium and Added Sugar

The most recent United States Department of Agriculture (USDA) and HHS Dietary Guidelines for Americans 2015-2020 (DGA) recommends limiting both sodium and added sugar as part of a healthy eating pattern.

Most Americans are consuming an average of 3,400 mg of sodium per day, significantly more than the recommended daily maximum of 2,300 mg. Excess sodium can lead to high blood pressure, which contributes to increased risk for heart disease. The American Heart Association (AHA) notes that high blood pressure is the leading risk factor of women’s deaths in the United States and the second leading risk factor for death in men. Additionally, one-third of American adults currently have high blood

¹ CDC notes that healthy "food service guidelines are used to create a food environment in which healthier choices are more available for consumers. These guidelines are used to increase the availability of healthier food and beverages, and to display them more prominently, so that healthier options are more accessible. Food service guidelines should be a part of a comprehensive strategy to promote health and wellness in the workplace."

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pressure and ninety percent of American adults are expected to develop high blood pressure over their lifetimes.\textsuperscript{1} CDC lists breads and rolls, cold cuts and cured meats, and pizza as some of the top contributors of sodium in the United States.\textsuperscript{2}

Added sugars—or sugar added to foods when they are processed or prepared—can lead to excess calorie intake with little to no nutritional benefit. As the DGAs underscore, consumption of added sugars can make it difficult for individuals to meet their nutrient needs while staying within calorie limits.\textsuperscript{3} Excess calories can cause can cause a person to be overweight or obese and impact heart health negatively. About one-third of U.S. adults and nearly one-fifth of children ages 2-19 are obese. Yet Americans consume roughly 23 teaspoons of added sugar every day.\textsuperscript{4,5}

AHA recommends that women consume no more than 6 teaspoons and men no more than 9 teaspoons of added sugars per day. AHA also notes that the primary sources of added sugar in American’s diets include soft drinks, sugars, candy, cakes, cookies, pies and fruit drinks, dairy desserts and milk products, and other grains like cinnamon toast and honey-nut waffles.\textsuperscript{6} The Center for Science in the Public Interest’s added sugar infographic underscores the overconsumption of added sugars in American’s diets and related health consequences.

As noted, many leading public health organizations and government agencies, including WHO, AHA, the National Academy of Medicine, and USDA/HHS have issued recommendations to limit both sodium and added sugar intake. Other efforts, like those from HHS in coordination with the U.S. General Services Administration (GSA), have used these recommendations to develop nutrition guidelines for all food service concession operations and vending machines managed by HHS and GSA.

These GSA/HHS Health and Sustainability Guidelines for Federal Concessions and Vending Operations, which is based on the DGA and assists contractors in increasing healthy food and beverage choices available for purchase in federal venues, include both standard criteria and above standard recommendations for sodium and added sugars. For example, the standard criteria states that food items contain $\leq 480$ mg sodium as served while all meals must contain $\leq 900$ mg sodium. With regards to added sugars, the guidelines recommend limiting calories from sugars to $\leq 35$ percent of total weight (excluding fruits or vegetables without added caloric sweeteners). The guidelines also outline specifics for added sugar and sodium in particular foods. For example, with added sugar, standard criteria states that at least 50 percent of breakfast cereals contain less than 10g total sugars per serving. Only yogurt with no added caloric sweeteners or yogurts labeled as reduced or less sugar according to FDA labeling standards should be made available.
With sodium, all vegetable offerings should contain ≤230 mg sodium in order to meet standard criteria.

With these guidelines, along with a growing demand for healthier foods, many companies have made significant efforts to reduce sodium and added sugar. These changes are widespread and span not only FSMCs but also some of the world’s largest food manufacturers like Nestle and Mars. Both companies announced in early 2016 that they support FDA’s work to establish and implement voluntary sodium reduction targets for the food industry at-large. The companies are also working to reduce sodium across the board, to ensure foods can fit into a dietary pattern with no more than 2,000 mg of sodium per day, a target that follows WHO recommendations and is 300 mg less than DGA’s recommendation.

A Focus on FSMCs

The sheer size and scope of FSMCs make them a central player in improving the food supply across the country. Some of the largest FSMCs—Sodexo, Compass, and Aramark, for example—serve millions of customers across thousands of sites every day. These companies operate kitchens, prepare food, and implement nutrition guidelines in a multitude of sites. From sporting and entertainment sites to schools and hospitals, government agencies, and prisons, these companies play a pivotal role in what Americans consume on a daily basis.7

Figure 1. As an example of how local public health can engage the food industry, this diagram shows the Spokane Regional Health District’s (SRHD) relationships with industry representatives as part of their Sodium Reduction in Communities Program (SRCP). The SRCP partner is the organization implementing the sodium reduction initiative.
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In 2015, ASTHO embarked on a project to better understand efforts around improving the nutritional quality of foods offered and served by FSMCs. ASTHO conducted one-on-one interviews and face-to-face meetings with a subset of national and regional FSMCs. In addition, ASTHO interviewed public health organizations partnering with FSMCs as well as an academic institution making significant nutrition improvements to the food it serves across campus. ASTHO asked about nutrition standards guiding different sectors, challenges surrounding reducing sodium and added sugar, partnerships with states, public health agencies and others that help advance the healthfulness of foods served, as well as ways companies have overcome hurdles. The information was collected and interviews conducted from fall 2015 through spring 2016. Those interviewed included lead dietitians, culinary experts, procurement specialists, and general health and wellness staff. Recognizing that there are several FSMCs ASTHO did not interview or collect information about, this issue brief reflects findings from only the subset of companies and public health partners ASTHO connected with during this time. In addition, interviews focused on the work that FSMCs are involved in outside the school setting, in sectors such as hospitals, sports venues, entertainment parks, prisons, and other institutions served by FSMCs. The information below represents ideas and insights collected from ASTHO’s interviews and meetings, as well as publicly available information.

FSMCs and Nutrition: Key Findings

FSMCs take a variety of approaches to improve the nutritional quality of foods offered in a broad range of settings and institutions. The key findings that follow are broken into sections where companies tend to focus their efforts: 1) approach to health and nutrition; 2) procuring healthy foods; 3) developing nutritious menus; and 4) satisfying the client and customers.

Approach to Health and Nutrition

Companies are keenly aware of the need to reduce sodium and added sugar in the food supply. To date, the companies interviewed have made great strides to reduce sodium in many types of dishes. Added sugars have been primarily addressed in the beverage space. Some of the changes to increase healthful offerings have been catalyzed by changes in the school setting. Stronger nutrition standards in that sector and reformulated products have helped drive change across the board. Now, most companies have nutrition criteria that are followed for at least a majority of foods offered.
Internal nutrition standards specific to a particular company, however, can be layered with additional and different standards depending on the specific contract, sector, state, and other factors. This patchwork of requirements can create challenges for developing and offering nutritious items that are acceptable across outlets.

While challenges with nutrition standards sometimes exist, companies tend to focus on the whole menu and promote fruits, vegetables, and whole grains. Driven largely by client and consumer demand, companies have noted that this “holistic” approach can help to naturally drive down added sugar and sodium and lead to a greater likelihood that company-specific nutrition criteria will be met. For some, this also includes an emphasis on cleaner labels and fewer ingredients and often ladders up to the company’s broader wellness strategy that can encompass programs like nutrition education, community engagement, sustainability, and events such as taste tastings and menu committees.

Focusing on the whole menu has also led to a number of partnerships with national public health organizations committed to nutrition improvements. For example, Sodexo partners with the Partnership for a Healthier America and has a goal of implementing a healthy hospital food initiative in 20 percent of accounts by 2018. Aramark has partnered with AHA and has a stated goal of achieving a 20 percent reduction in calories, saturated fat, and sodium, as well as a 20 percent increase in fruits, vegetables, and whole grains, by 2020. Compass and a number of other FSMCs have worked closely with the Culinary Institute of America on healthy recipes and menu development. In other cases, city-wide partnerships like the one between Selrico and San Antonio have driven nutrition improvements across a variety of settings.

Selrico is a comparatively small, family-owned FSMC operating in both San Antonio and Phoenix. The company provides food service operations to government organizations, institutional facilities, and commercial companies. San Antonio Metropolitan Health District received a sodium reduction grant from CDC as one of only seven cities to receive this type of grant. Because the city wanted to reduce sodium in meals served through government programs and other settings, they partnered with Selrico to address sodium levels in both pre-K and senior meal programs. The city worked with Selrico to meet desired goals; the health district conducts nutrient analysis and together they select menus to target for reduction. They give suggestions on changing menu items and using new foods and ingredients. This three-year project began in 2014.

ii In this document, client refers to the purchasing sector or institution while customer refers to an individual buying foods or beverages at a client site.
Although these goals are company-wide, clients and customers drive much of what is offered in specific locations. As many FSMC staff noted, the clients they serve have full autonomy to choose foods to offer and FSMCs must have customers on board and prepared to purchase healthier items in order for changes to be sustainable. To gain support for healthy changes, FSMCs are employing a number of strategies, including behavioral economics, subtly nudging customers to make healthier choices.

For example, Harvard Dining reduced the total number of cereal options (from 21 to 8), the majority of which contain less sugar. In addition, some companies have made water more readily available (compared to sugary drinks), have eliminated the use of trays, and are using smaller plates to help reduce overall consumption.

### Procuring Healthy Foods

FSMCs are purchasing tens of thousands of ingredients to develop their menu offerings. Because of this, the ingredients that go into foods influence the nutritional quality of meals. For example, lower sodium tomato products allow companies to create lower sodium lasagnas, pizzas, and pastas that include tomato sauce, tomato paste, or other tomato-based foods. Both the availability of a healthier ingredient, as well its price point, are key factors contributing to a meal’s overall nutritional quality.

Price is particularly important to FSMCs, especially when contracts may prohibit the client from raising prices to the customer. For this reason, FSMCs seek out healthier ingredients that are also competitively priced.

Challenges remain around procuring healthy items, in large part due to foods that are procured from what is often thousands of local manufacturers. Bread and dairy products, for example, are two food categories that tend to be purchased from a wide range of vendors. Multiple contracts and smaller orders from each one can create barriers to lowering sodium across an entire food or food group. But as more FSMCs demand healthier products, nutritious options become more widely available. In addition, some FSMCs are helping to write food specifications\(^\text{ii}\) that increase demand for and accessibility of healthier options. Lastly, stronger nutrition standards implemented in schools has helped spur product innovation and availability across sectors.

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\(^{ii}\) In this case, food specifications refer to the written description of a food or beverage, including the specific requirements a vendor must follow to meet contract requirements.
FSMC healthy food procurement recommendations to the public health community and other FSMCs:

- Engage food manufacturers and ingredient makers to spur innovation and availability of healthier products;
- Leverage knowledge of FSMCs in writing food specifications; and
- Utilize purchasing power to demand healthier foods at a lower price point.

In Wyoming, the impact of school nutrition standards is reaching other government agencies that participate in the USDA agriculture support program, including the department of corrections and other government and non-government organizations. In an effort to simplify operations, commercial canneries have started to manufacture all canned goods using the federal nutrition standards for sodium and added sugar required for schools. As a result, prisons across the state are serving lower-sodium canned meats and vegetables. Canned fruit is served with reduced sugar (e.g. in light syrup vs. heavy syrup).

Developing Nutritious Menus

Many FSMCs have announced sodium targets for specific foods and menu items, resulting in more offerings that are lower in sodium. However, some foods, like breads and pizza, are among the most difficult foods to achieve lower sodium targets while still maintaining quality and palatability. Technical and taste factors including shelf stability, price, flavor, and texture are all impacted by modifications to the sodium level. In foods like cold cut deli meats, sodium plays a food safety and preservation role and has been used as a deterrent to Listeria, a dangerous foodborne illness.8

Another effective strategy to reduce sodium and added sugar includes cooking from scratch. FSMCs have found that preparing foods on-site helps create more nutritious dishes, in large part because of the flexibility to add less salt and sugar and the ability to use lower or no-sodium or added sugar-based ingredients like herbs and spices. For example, tomato products and broths often get incorporated as one of many ingredients in a dish. By itself, these products may taste like they need more salt and sugar, but when combined with other ingredients, these additions aren’t always necessary. Cooking from scratch also helps reduce the number of ingredients overall, satisfying increased customer demand for cleaner labels. Additionally, training and hiring nutritionally-minded, knowledgeable chefs and food service leaders is key to offering healthier menu items.
As many companies noted, healthy menus can be developed on paper but only chefs can effectively implement them. To that end, chefs have found that consistent but gradual reduction of sodium over time has been more successful than quick, dramatic actions. Chefs have also noted that some regions of the country—particularly those with higher Asian food and pizza consumption rates—tend to have increased sodium intakes. Although sodium reduction can remain challenging in regions with traditionally saltier foods, lower sodium ingredients like “lite” soy sauce have helped lower total sodium content in recipes.

FSMC culinary recommendations to the public health community and other FSMCs:

- Continue to strive for sodium reduction goals, but achieve them gradually;
- Be cognizant of unintended consequences, like potential food safety issues when sodium is reduced in some foods or added chemicals in place of sugar;
- Promote cooking to reduce the number of ingredients while also focusing on healthier ones;
- Engage culinary schools to ensure the next generation of chefs is trained on how to cook tasty, nutritious foods; and
- Continue working with the Culinary Institute of America and other entities to help promote menu improvements and innovative recipes.

The Culinary Institute of America has been instrumental in leading product and menu innovation. Under their Healthy Menus Research and Development Collaborative, stakeholders from across the food industry come together to share insights and ideas on how to create and promote healthier foods. One such example is the successful mushroom-beef burger blend, which offers a lower fat and sodium burger while meeting consumer taste requirements. This burger was developed as a direct result of collaboration among FSMCs led by the institute.

Satisfying the Client and Customer

Perhaps as essential as internal corporate leadership is client willingness to try and subsequently purchase and promote healthier items. As FSMCs have noted, customers vote with their wallets. In order for healthier items to be offered, customers must purchase them. There is a continual dynamic between FSMCs that provide new and healthier products and clients that expect to offer tasty and appealing foods at an affordable price. Some FSMCs host taste tests and other creative activities to promote new, healthy foods. For example, CulinArt hosts roadshows (such as Beat the Sugar Blues) that allow the company to market new items. Other companies engage in behavioral economics to nudge consumers towards more nutritious foods. Compass arranges snacks and other impulse items in ways that encourage healthier choices.

Price drives much of what customers purchase, so the challenge remains to develop recipes and
items that are healthier and affordable. In short, companies want to do what they can to preserve the customer experience, ensuring wherever possible that individuals will be repeat purchasers.

FSMC client recommendations to the public health community and other FSMCs:

- Engage in nutrition education and healthy product promotion, an opportunity to showcase new foods that also taste great.
- Continue to promote gradual changes to popular items to help customers transition to healthier versions;
- Understand regional and client drivers like health, taste, or price that drive purchasing decisions;
- Employ behavioral economics to nudge customers towards more nutritious foods.

The Public Health Opportunity

The insights gleaned from interviewing FSMCs show that there are a number of opportunities for state public health agencies and others to work collaboratively with FASMCs to improve the nutritional quality of our food supply. Public health leaders throughout the country can help move the needle by maintaining strong connections and communication with FSMCs as they implement food service guidelines. Specifically, the public health community can:

- **Continue to advocate for policies that promote healthy eating**, such as the FDA added sugars component on a revised Nutrition Facts Panel, as well as FDA’s voluntary sodium recommendations;
- **Reach out to FSMC leadership** in specific regions and states and align nutrition efforts on a more regional level;
- **Leverage public health agency networks** to encourage collaboration across FSMCs in both government and non-government settings;
- **Share best practices, success stories, and case studies** to stress the business opportunity associated with improving nutrition;
- **Work with FSMCs to develop food specifications** that meet current nutrition goals; and
- **Leverage other existing bodies**, like food policy councils and food procurement work groups, to engage FSMCs in other local food and health-related activities.

There are many ways public health leaders can leverage and support enhancing the nutritional quality of foods offered by FSMCs and the food supply in general. The momentum to improve the nutritional quality of foods served is exciting. Continued input and collaboration among FSMCs and the public health community will continue to foster healthier options across the many settings FSMCs serve every day.
Resources to Support Reducing Sodium and Added Sugar among FSMCs

2015-2020 Dietary Guidelines for Americans (USDA/HHS)
This document represents the latest nutrition guidance for Americans, published by USDA and HHS every five years.

Confused about Salt? (Center for Science in the Public Interest)
This infographic helps address public confusion around sodium. It highlights the facts related to the health risks of excess sodium intake and underscores the science behind the need for sodium reduction.

Connecting Public Health and the Food Industry: Reducing Sodium through Public-Private Collaboration (National Network of Public Health Institutes)
This web forum focused on ways in which public health can partner with key sectors to inform decisions about foods produced, prepared, and served within the food system, including an example of how public health has worked with the food industry to increase demand and availability of lower sodium products and meals.

Healthy Hunger-Free Kids Act (USDA)
This website provides links to regulations, legislation, implementation, and corresponding communications materials.

Healthy Food Service Guidelines (CDC)
This website describes what healthy food service guidelines are, their importance, and highlights both additional resources and success stories.

Healthy, Hunger-Free Kids Act of 2010: The Role of State Health Agencies in Ensuring Access to Healthy Food (ASTHO)
This issue brief summarizes key components of the Healthy, Hunger-Free Kids Act. Each section emphasizes the important role of state health agencies as key partners in the implementation of various components.

Improving Healthy Food Offerings (ASTHO)
This website outlines and provides links to AストHO’s work on healthy food service guidelines, including state stories and examples, archived webinars, and additional resources.

Improving the Food Environment through Nutrition Standards: A Guide for Government Procurement (CDC)
This document provides practical guidance to states and localities for use when developing, adopting, implementing, and evaluating a food procurement policy.

Smart Food Choices: How to Implement Food Service Guidelines in Public Facilities (CDC)
This document includes guidelines to assist contractors in increasing healthy food and beverage choices in federal worksites. The
guidelines are designed to make healthier choices more available in cafeterias, concession stands, snack bars, and vending machines.

**Sodium and Salt (American Heart Association)**
This consumer-oriented website provides information about sodium and salt, including the science behind its connection to health and disease, as well as resources to track sodium intake, infographics, FAQs, information for kids, and more.

**Sodium Infographics (American Heart Association)**
This website links to several infographics that provide information about American’s consumption of sodium and associated health consequences of excess sodium intake.

**Sodium Reduction in Food Service: A Resource for Public Health Professionals Partnering with Food Service Providers (National Network of Public Health Institutes)**
This resource summarizes key strategies and approaches highlighted by consultants from the Culinary Institute of America during a web forum series on Connecting Public Health and Food Service Providers.

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