

WHITE PAPER

School Nutrition Services

Best Practices + Recommendations



**Presented by Food Insight Group
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Executive Summary

School nutrition programs are often the largest purveyor of nutritious meals in a community. Many districts serve breakfast, lunch, afterschool snacks or supper meals, and summer meals. School nutrition programs offer affordable meals to students who can pay and free or reduced-price meals to students who qualify. These “reimbursable meal programs” receive federal funding in exchange for strict compliance with nutrition standards recently updated through the Healthy, Hunger-Free Kids Act of 2010. School nutrition directors are responsible for maintaining these complex programs on extremely tight budgets, and they often face additional pressure from community members who want specific changes, but who do not always understand the realities and constraints of school nutrition.

The full report aims to summarize the “best practices” and recommendations from school nutrition directors around the country who are recognized for running “model” programs. Not every practice or recommendation will be appropriate for every district. Factors like student participation rate¹, percentage of students who qualify for free or reduced-price lunch, level of community support, and availability of local farms qualified to sell into school nutrition programs can all affect what is possible.

¹ The “participation rate” refers to the average daily percentage of students who buy or receive a school meal

An overview of general best practices

Menu Concepts

- ✓ Seasonal, culturally appropriate recipes
- ✓ Mostly scratch/speed-scratch cooking
- ✓ At least 50% plant-based menus in response to the current climate crisis and public health needs
- ✓ Two delicious entrée options at breakfast and lunch (one plant-based, one with some animal products), plus a composed cold salad option daily
- ✓ Keep up with restaurant trends to attract and retain the student customer

Processing

- ✓ 80% raw, unprocessed ingredients purchased for recipe production

Fruits + Vegetables

- ✓ 70% fresh or frozen vegetables and fruits
- ✓ Participate in farm to school programs
- ✓ Design flexible menus to use what is ripest and freshest on any given day

Local + Organic

- ✓ Increase pressure on broadline and produce suppliers to source more local produce through careful bid language
- ✓ 40% of procured food items are local
- ✓ 65% of procured food items are from producers that use sustainable practices

Budget

- ✓ 90% of individual schools operate in the black on a monthly basis
- ✓ 50% of all proteins are plant-based; no more than 25% of proteins are animal muscle

A la carte

- ✓ No a la carte sales

Differentiating across k-12

- ✓ Grades k-5 serve lunch family style
- ✓ Breakfast in the classroom, grab-and-go-breakfast, and second chance breakfast as implemented across the district

Waste reduction

- ✓ Reusable plates, utensils, cups, bowls, etc.
- ✓ Suppliers are encouraged to ship items in packaging that is reusable/recyclable
- ✓ All recipes are weight based
- ✓ Composting happens in cafeteria and in the kitchen across all school sites

Marketing

- ✓ Designated marketing specialist on SNS staff payroll
- ✓ Communication with students, parents, non-nutrition staff, and the community is engaging, consistent, and pervasive

Staff + training

- ✓ Nutrition staff entry-level positions start at a living wage
- ✓ 75% of nutrition staff jobs are full time with benefits
- ✓ Childcare is provided to employees before and after work hours
- ✓ Professional development training is provided a minimum of three times per year
- ✓ Staff turnover stays at an average of 30% or lower over a three-year period
- ✓ At least 20% of staff have some kind of culinary education

Additional considerations

- ✓ Students must be involved in SNS programming
- ✓ SNS program café spaces include:
 - Clean air
 - Good light
 - Anything that will reduce noise (e.g., soft materials, acoustic tiles)
 - Creative seating (e.g., high-top tables, bench seating, coffee bar seating)

Community members and organizations seeking school nutrition program changes must work in partnership with school nutrition leadership toward a comprehensive vision for the district. The vision should articulate community goals within the context of nutrition program realities. Looking to districts around the country for recommendations and inspiration is an excellent place to begin seeing the possibilities for change, but it is critical to remember each district is unique and must develop place-specific solutions. Federal school nutrition programs serve an essential function in our communities, and building a culture of respect for these programs and the people who run them is an important first step toward realizing their full potential.

School Nutrition Services

Best Practices + Recommendations

This report was prepared by Food Insight Group (FIG) for the North Carolina Partnership for Child Nutrition (NCPCN). Recommendations are based on research and interviews with Boulder Valley School District Director of Food Services Chef Ann Cooper, Burlington School Food Project Food Service Director Doug Davis, former Berkeley Unified School District Director of Nutrition Services Marni Posey, Minneapolis Minnesota Director of Culinary & Wellness Services Bertrand Weber, former Oakland Unified School District Nutrition Services Director and current San Francisco Unified School District Nutrition Services Director Jennifer LeBarre, Gaston County NC Schools Director of School Nutrition Frank Fields, and Greenville South Carolina School District Director of Food and Nutrition Services Joe Urban. Additional information and insights were shared by email or in person by Greg Christian, founder of Beyond Green Partners, North Carolina Department of Instruction Child Nutrition Services staff, and others.

The report content reflects the collected wisdom of those who were interviewed, as well as the 20+ combined years of experience of the FIG team working in institutional food systems. The report is not meant to be a comprehensive guide to designing, implementing, and evaluating school nutrition programs; rather, this report provides insights into how school nutrition programs can be designed to better serve students, communities, and the planet within current federal, state, and local policies.

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Introduction

FIG and NCPCN are collaborating to identify best practices in model school nutrition programs across the United States, with long-term plans to test new models in North Carolina (NC) school districts.

The ultimate aim of this work is to increase school meal participation and improve outcomes for all students in North Carolina.

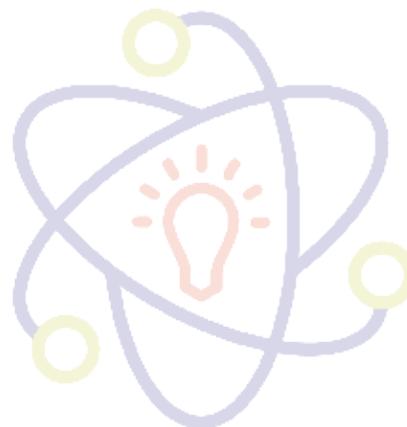
Federal and state guidelines determine many of the parameters for school nutrition programs, regardless of geography. Even so, developing a conscientious, sustainable school nutrition program will require systems and programs tailored to a particular school district's location, demographics, economics, and more. Schools embarking on a journey to provide students and community with excellent school nutrition programs must understand that what works in one location may or may not work in another. A sustainable model program will only be achieved when the culture and the people of a place are actively engaged in developing everything from menus to cafeteria lighting to school gardens.

For the purposes of this report, a “sustainable school food program” refers to a program that is economically viable and supports environmental and student health.

This report outlines recommendations for School Nutrition Services (SNS) programs, organized into three levels: “good,” “better,” and “best” practices from across the country. All recommendations are based on general best practices. A process that engages the school district, NCPCN, students, parents, staff, and suppliers will be vital to developing a pilot program that explores how a given district in NC might shift school nutrition practices in the future.

The goal of this report is to offer a menu of options that provide the background for an informed planning process for a pilot in any district in North Carolina.

This report is meant to be an overview of best practices throughout the nation; the report does not contain a review of current NC district practices. All recommendations in this report are meant to be encompassing in nature and do not reflect practices that may already be incorporated by a given district.



A brief list of important acronyms

ADM	Average Daily Membership
ASSP	After School Snack Program
FIG	Food Insight Group
FV	Fruits and vegetables
NCPCN	North Carolina Partnership for Child Nutrition
NSBP	National School Breakfast Program
NSLP	National School Lunch Program
SNS	School Nutrition Services
USDA	United States Department of Agriculture

LARGE NC PUBLIC SCHOOL DISTRICT NUTRITION SERVICES **SNAPSHOT** (SY2018-19)



183 SCHOOL
SITES



3 **CONTRACTS**
to cater external
organizations

PEOPLE

160,471 AVERAGE DAILY MEMBERSHIP (ADM)



10,421
TEACHERS

19,537
TOTAL STAFF
in WCPS



3,614,963
BREAKFASTS
SERVED

9,532,675
LUNCHES
SERVED



SCHOOL NUTRITION SERVICES



798 FILLED SNS
POSITIONS

174 COOKING
KITCHENS



6 DELIVERY
TRUCKS

19 ADDITIONAL
RECEIVING SITES
(Received from kitchens)



33%
**FREE & REDUCED-
PRICE MEALS**
(Students who qualify)

315,124
**CATERED
MEALS AND
SNACKS**



\$7,229,245 SUPPLEMENTAL SALES OF **A LA CARTE** ITEMS

Case Studies

FIG conducted interviews with school food services directors of nationally recognized school nutrition programs between Summer 2018 and Summer 2019. Interviewees included:

Joe Urban, Director of Food and Nutrition Services for Greenville County Schools in Greenville, SC

Jennifer LeBarre, Executive Director of Student Nutrition Services for San Francisco Unified School District in San Francisco, CA and formerly the Executive Director of Nutrition Services for Oakland Unified School District in Oakland, CA

Ann Cooper, Director of Food Services for Boulder Valley School District in Boulder, CO

Doug Davis, Director of Food Services for Burlington School District in Burlington, VT

Bertrand Weber, Director of Culinary & Wellness Services, Minneapolis Public Schools

Marni Posey, Director of Nutrition Services, Berkeley Unified School District (at the time of interview)

Frank Fields, Director of School Nutrition, Gaston County, NC (at the time of interview)

A program was identified as a “model school nutrition program” by FIG based on previously available case studies, recommendations from industry leaders, and snowball sampling of other nutrition directors who provided additional contact leads. A “model school nutrition program” in this report refers to a school nutrition program providing any of the following: exceptional quality food to students, food service in uniquely inviting environments, procurement practices that benefit local small and midsized farmers and producers, financially viable programs, high-quality jobs and professional development opportunities, multiple community benefits beyond the school building, considerations of climate and environment in menu planning and procurement, or high levels of student participation and engagement.

Interviews were conducted in person or by phone and usually lasted between 1 and 4 hours. Interviews focused on the history of a district’s school nutrition programs, district demographics, the components of the programs, operations,

budget, staffing, student engagement, menu development, procurement, infrastructure, district and other regional support, challenges and barriers to building and maintaining model programs, facilitators of model programs, and more. Interviews were followed by additional research into district policies and practices through publicly available data, and data shared directly with FIG by interview participants.

Some districts throughout the country are more comparable to NC districts than others when considering population size, demographics, and number and size of schools. None of these factors determined what districts had particular program components (e.g., a large or small district might have a very successful summer meals food truck), so for the purposes of this report, we do not differentiate best practices by school district attributes.

Those who participated in interviews consistently reported that their **primary goal** for their district is to **move away from heavily processed and packaged foods and toward foods that are fresh, minimally processed, and of high quality**. There was a common understanding that high-quality nutrition is foundational to the success of all students and an important way for schools to equitably provide opportunities for all students to succeed. There was little patience for federal, state, or local policies that hampered districts’ ability to achieve their goals, and a great deal of ingenuity in working within current systems to build thriving programs despite real or perceived barriers.

Perhaps most importantly, each of these districts has leadership that is clearly articulating a **vision** for the school nutrition programs, writing that vision down as a way to publicly hold themselves accountable, and then making one-, five-, ten-, and twenty-five-year plans in order to achieve that greater vision. Any district must be able to articulate their vision for a model program before moving toward change.

Results

What follows is a summary of all best practices highlighted in the case study interviews and informal interviews with industry experts conducted between Summer 2018 and Summer 2019. No direct quotes are attributed because interviews were conducted under the presumption that information would be shared in the aggregate, and individual school district practices would not be specifically identified. Best practice suggestions are presented under the following headings:

Program Design

Staff + Training

Additional Best Practices

Not all school districts are implementing all practices. Within each subsection are ideas that may or may not work for a particular district. Each section (Program Design, Staff + Training, Additional Best Practices) is followed by specific tips, general recommendations, and a summary of best practices by “good,” “better,” and “best.”

Program Design

Many model programs have shifted to view school nutrition programs as a restaurant business, with the additional layer of federal and state school nutrition program guidelines. These programs consider students their customers, mirror trends in the restaurant industry on school menus, and redesign café spaces to feel more like a food court or “fast casual” eating experience. Some districts are offering students more choice by allowing them to tailor their entrée. For example, with plain pasta, sandwich rolls, marinara sauce, and meatballs presented individually on the line, students can choose to make spaghetti & meatballs or a meatball sub sandwich.

The number of meal component offerings varies by district, with some opting for more choices to attract customers the way restaurants do. These programs tend to rely on a la carte sales to balance the budget because more offerings inevitably

result in more product wasted.

Other districts have opted to present two delicious offerings at each meal period (often one plant-based or plant-forward option and one option containing an animal protein). The thinking goes that students do not need endless choices, they simply need a few well executed, tasty choices each day. These districts are able to balance the budget without a la carte sales by streamlining production and truly understanding what needs to be produced each day without shortages or waste.

Menus determine equipment and infrastructure needs, as well as staff training needs. Many of the districts interviewed updated their menus in conjunction with kitchen upgrades and/or the building of a central kitchen². Central kitchens allow the bulk of recipe preparation and production to happen in one place with specialized equipment and skilled staff.

With any new menu item, most directors emphasize the importance of taste testing in schools before implementing. Students prefer to encounter new items in a format that does not appear to ‘cost’ them anything (such as a full lunch they do not like). There are no negatives to trying something in a small sample cup and providing feedback!

Menus should be culturally relevant for the student population. For example, programs serving First Nations students incorporate traditional recipes, schools in Central California will have many delicious Latin-influenced recipes, and a school serving a large population of South Asian descent should include South Asian dishes on the menu. This does not mean the menu should not stretch students’ palates and ask them to try a variety of foods from around the country and globe; however, it does mean that the school nutrition program needs to be in touch with the communities it serves. Some districts have asked school families to submit their own

² A central kitchen consolidates processing and cooking for school meals at one site, thereby increasing economies of scale and efficiencies. Prepared food (fresh, cooled, and/or frozen) is then transported to individual school kitchens for portioning, heating, and serving.

recipes to the SNS program for adaptation to SNS regulations and inclusion on the menu.

Processing

Move toward minimally processed³ ingredients. Remove all canned fruit from the menu. Remove all highly processed products from the menu. Use only whole-muscle chicken and other less processed proteins. Balance the menu with a mix of scratch-made⁴, speed scratch⁵, and prepared items to reduce the technical skills required and save staff time. Consider a central kitchen or hub-and-spoke kitchen model, where one or several kitchens have more equipment and staff to process raw product before distributing freshly processed products (e.g., washed, chopped, cooked local kale) to all district kitchens for finishing and service (e.g., reheat, add spices, and serve).

Fruits + vegetables

Increase fresh fruit and vegetable offerings. Make fruits and vegetables (FV) more appealing by eliminating plastic packaging. Place prepared salads or other colorful FV offerings in black bowls to increase attractiveness. Allow students to take as many servings of vegetables as they want for reimbursable meals. Implement salad bars if possible. Always have a variety of colors of fruits and vegetables on display to increase visual appeal of the lunch line. Design the menu with “fresh fruit” rather than naming the anticipated item in order to accommodate whatever is ripe and ready at the time of service. The same can be done with vegetables by writing “sautéed local greens” to accommodate spinach, kale, collards, or any other locally available greens.

Encourage garden-based curricula, cooking lessons, and other positive experiences with food production to improve students’ knowledge of, exposure to, and willingness to eat FV. Find other champions in the school district to lead the educational pieces that school nutrition staff may not have time or knowledge to conduct (e.g., advocate for a full-time school garden coordinator).

Local + organic

Increase procurement of high-quality local products when appropriate. Task the broadline and produce distributors with finding local products that are in season and price competitive. One director provided the cost-effective example of buying milk from a local, family-owned dairy to use in all recipes requiring milk rather than for students to drink, which would

be cost prohibitive. Another district faced pressure from the community to purchase more organic products. With only one organic supplier and high associated costs, the director found a creative solution – a produce supplier working with farmers transitioning to organic but not yet certified organic. They used organic growing practices and produced high-quality products, but the price was still low enough for the district to afford.

Budget

Running a school nutrition program like a business requires restaurant-style management, including monthly profit and loss statements for individual schools to keep track of what is and is not working financially in a way that allows for targeted and swift course correction.

When considering menu concepts that might be more expensive than some highly processed products (e.g., local grass-fed ground beef vs. frozen commercially available beef patties), menus should be balanced to accommodate these more expensive items. For example, more expensive fresh, local ground beef could be used in a chili recipe where half the required protein content comes from ground beef and half from beans, cutting in half the amount of ground beef needed. Or local ground beef could be used in recipes twice per month instead of weekly, adding two more plant-based meals with a much lower cost to balance the budget.

In general, scratch cooking results in a reduction in ingredient costs because unprocessed ingredients are less expensive than pre-formulated frozen entrees and products. The additional cost comes in the form of labor, and it is important to invest in proper infrastructure and equipment so that a thoughtful, mostly scratch menu can be executed by a well-trained, well-paid, streamlined staff team.

A la carte

A la carte sales refer to all foods sold by school nutrition

3 According to the USDA, minimal processing means that “the product was processed in a manner that does not fundamentally alter the product.” Examples include washed, chopped, and bagged greens or flash-frozen fruit.

4 Scratch cooking refers to the process of assembling raw or minimally processed ingredients into a finished dish.

5 Speed scratch cooking refers to the process of combining prepared foods with raw ingredients into a finished dish.

services that are not part of a reimbursable meal program (either breakfast, lunch, after school snack programs). Districts each have their own philosophy as to the role a la carte sales should play in the SNS program. Some directors feel that a la carte sales are critical for the financial stability of the program, while others view them as taking away from reimbursable meal participation and disallow competitive sales altogether. One district has brought a la carte sales entirely in house to maximize healthfulness of the offerings and profit for the SNS program. They prepare items like healthy popcorn and sell sparkling flavored water, all of which exceed federal Smart Snack nutrition guidelines⁶. Vending is only available in secondary schools, with restricted hours in middle schools and unrestricted hours in high schools. Preparation of these additional a la carte offerings may require staff time, equipment, and/or distribution to each school, and these associated costs may significantly reduce any profits gained. Depending on district infrastructure, eliminating competitive sales may prove to be the best practice for promoting student health and increasing school meal participation.

Districts that choose to allow food and beverage sales outside of reimbursable meals should carefully consider how to keep overhead and associated costs low. Snack bars have the potential to decrease participation in reimbursable meals, particularly if they sell low-quality yet appealing snacks and beverages like chips, cookies, and drinks that meet Smart Snack guidelines but may not promote health. A district could choose to implement strict nutritional standards on the items available for purchase (e.g., no sugar added, no artificial flavors or colors) and could limit operating hours to those outside of mealtimes (e.g., snack time, after school). Snack bars may contribute to inequities observed by students, as some families may be able to afford extra money for snack purchases that others may not. If snack bars are considered as an additional revenue source to support the SNS program, special considerations should be made to avoid potential negative consequences.

Differentiating across K-12

The focus for optimizing SNS program participation differs across elementary, middle, and high schools. In elementary schools, directors have found the timing of recess and lunch matter. When lunch occurs before recess, students may rush through the line or not get lunch at all in their excitement to get outside and play. When lunch occurs after recess, students come to the lunchroom tired, hungry, and more able to focus

on eating their food. Directors report higher participation, a calmer café environment, and reduced plate waste. Best practices for breakfast service in elementary school include “[breakfast in the classroom](#)” models.

In high schools, directors emphasize the importance of making the lunch experience feel more like what students would choose outside of school. While some directors specifically dislike the “food court” model, others believe the food court feel attracts students and increases participation. High-top tables where friends can gather, café-style seating around the edges of the lunchroom, phone charging stations, a variety of food choices, and fast service are all recommended. “[Breakfast after the bell](#),” “[grab-and-go-breakfast](#),” and other alternative breakfast models are also important at the high school level in order to increase participation and successfully fuel students to learn and perform at their best.

Many directors develop different menus for kindergarten through 8th grade and high schools. Some have suggested using linen napkins, reusable utensils and trays, and placing condiments like oil and vinegar on the tables in high schools, while others emphasize the importance of teaching communal eating behaviors by serving lunch “family style” at least once per month in elementary schools. The goal of each of these strategies is to make in-school eating experiences more closely resemble the “real world” mealtimes that may or may not be familiar to students. Enhancing the social and emotional benefits of school lunch is very important and can be approached in a variety of creative ways. Each district must determine how best to achieve these goals within the bounds of budget, staff time, and school policies.

Waste reduction

Reducing food and packaging waste as much as possible is a fundamental component of any model SNS program. Packaging waste can be reduced by purchasing raw ingredients in bulk and eliminating plastic packaging on the serving line (e.g., whole fruit wrapped in plastic, individually packaged servings of baby carrots). Studies consistently show that FV are more appealing when offered unwrapped. Instead of using foil and plastic wrap to cover hotel pans, kitchens

⁶ Smart Snack nutrition guidelines refers to federal regulations of snacks offered as part of the After School Snack Program; snacks must meet minimum requirements of whole grains, sugar and salt content, etc. For more information, visit <https://www.fns.usda.gov/tn/guide-smart-snacks-school>.

can use stainless-steel covers designed to fit hotel pans. Examples directors provided of ways they reduce food waste include incorporating unused ingredients into a soup made the following day, peeling and freezing overripe bananas for banana bread, and using unopened milk leftover from the breakfast program to make yogurt.

A less obvious form of waste reduction is converting all recipes to weight-based recipes. Weighing ingredients (e.g., “5 pounds of potatoes” rather than “1 quart of potatoes”) ensures greater accuracy in purchase, production, and service. If a kitchen aims to produce meals for 500 customers, weighted recipes accurately produce meals for 500 rather than 480 or 520. In a similar vein, districts could consider pre-ordering apps that allow students to order meals up to two weeks in advance, providing kitchens with more accurate data for procurement and production.

Composting is an intermediate step toward waste reduction. Using compostable utensils and trays and composting food waste may be an improvement over single-use plastics and sending food to landfills. However, reusable serving ware and finding ways to reduce food waste should be the ultimate goal. Some districts are not equipped with dishwashing equipment and cannot pay for the additional staff time required to handle reusables. Compostable goods have been more expensive than conventional plastic or Styrofoam, but prices are dropping, and there may be local funds or other grants to offset the costs.

Marketing

Marketing is a consistent challenge across SNS programs. Most lack funding for a communications or marketing staff person, and existing staff typically lack the time and/or skills to effectively market the program. Even when SNS programs make improvements asked for by their communities (e.g., increasing local procurement, improving cultural relevance of the menu, implementing composting programs), most do not communicate these changes effectively. The impact of poor marketing is significant. Improvements to school food service often require financial investment, and the hope is these costs are justified by increased student participation, which generates increased revenue for the SNS program. When the school community is not well informed of the improvements, their perception of the program does not change, and participation may remain stagnant.

Social media (e.g., Facebook, Instagram, Twitter) can be an effective tool for reaching the community with updates on

program improvements and current menu offerings. Some SNS programs work with the communication person or team at the district level, while others work with individual principals to communicate with families. One director has found success with having a beautifully designed calendar sent home to families at the beginning of each school year detailing the menu. In the café, they suggest colorful, easy to read signs and example plates of food so students are able to see what they can get on the line. Across all communication, emphasize students’ need for real, nutritious food in promoting health and learning. Partner with local chefs and restaurants for cross-promotion and recipe sharing.

Specific tips

- ✓ Develop a vision for the district’s School Nutrition Services that reflects the best practices outlined in this document.
- ✓ The vision may begin as an internal document but should quickly expand to include a working group of parents, students, non-nutrition staff, nutrition staff, and others who have a vested interest in the long-term success and sustainability of a model school nutrition program.
- ✓ Overall goal: develop a program vision that moves toward school breakfast and lunch as part of the regular school day for all students, regardless of demographics, just like math or science class. The ingredients and recipes must be both delicious and good for the planet, SNS jobs should be desirable and respected, and the SNS programs must become more integrated with the rest of the school district and community.

General recommendations

GOOD

Menu Concepts

- ✓ Seasonal recipes that reflect the community's cultural cuisines.
- ✓ 60% scratch/speed-scratch.
- ✓ 35% plant-based menus in response to the current climate crisis and public health needs.
- ✓ Two delicious entrée options at breakfast and lunch (one plant-based, one with some animal products).
- ✓ Keep up with restaurant trends to attract and retain the student customer.

Processing

- ✓ 60% raw, unprocessed ingredients purchased for recipe production.

Fruits + Vegetables

- ✓ 75% fresh or frozen vegetables and fruits.
- ✓ Participate in the NC Farm to School program and apply for the NC Farm to School Awards.
- ✓ Ensure a variety of bright, natural colors on the line each day.
- ✓ Design menus with "fresh fruit," "sautéed greens," and other all-encompassing terms so kitchens have the flexibility to use what is ripest and freshest on any given day.
- ✓ Support garden and cooking curricula across k-12 schools.

Local + Organic

- ✓ Increase pressure on broadline and produce suppliers to source more local produce through careful bid language.
- ✓ 25% of procured food items are local (defined as produced within North Carolina or 150 miles of school district).
- ✓ 40% of procured food items are from producers that use sustainable practices (as specified by the district in partnership with other local agencies).

Budget

- ✓ 65% of individual schools operate in the black on a monthly basis.
- ✓ 30% of all proteins are plant-based; no more than 40% of proteins are animal muscle.

A la carte

- ✓ Schools insisting on maintaining an a la carte program should (1) sell only the highest-quality snack items (e.g., house-made trail mix, yogurt parfaits, veggie snack packs with dip) and (2) consider developing a funding policy in partnership with the PTA, school administration, and other stakeholders to load free and reduced-price student accounts with a set amount of extra cash each semester to provide all students with a more equal opportunity to participate in the program.

Differentiating across k-12

- ✓ Breakfast in the classroom, grab-and-go breakfast, and second chance breakfast as implemented across the district.

Waste reduction

- ✓ Compostable plates, cups, utensils, etc.
- ✓ Suppliers are encouraged to ship items in packaging that is reusable/recyclable.
- ✓ All recipes are weight based.

Marketing

- ✓ Marketing is handled by an independent contractor and/or by the district's marketing specialist (not specific to SNS programs).
- ✓ Communication with students, parents, non-nutrition staff, and the community is engaging and consistent.

BETTER

ALL OF THE ABOVE, PLUS:

Menu Concepts

- ✓ Introducing students to new and interesting dishes from around the country and world.
- ✓ 70% scratch/speed-scratch.
- ✓ 40% plant-based menus in response to the current climate crisis and public health needs.

Processing

- ✓ 70% raw, unprocessed ingredients purchased for recipe production.

Fruits + Vegetables

- ✓ 80% fresh or frozen vegetables and fruits.

Local + Organic

- ✓ 30% procured food items are local (defined as produced within North Carolina or 150 miles of school district).
- ✓ 50% procured food items are from producers that use sustainable practices (as specified by the district in partnership with other local agencies).

Budget

- ✓ 75% of individual schools operate in the black on a monthly basis.
- ✓ 40% of all proteins are plant-based; no more than 40% of proteins are animal muscle.

Waste reduction

- ✓ Composting happens in cafeteria and in the kitchen across all school sites.

BEST

ALL OF THE ABOVE, PLUS:

Menu Concepts

- ✓ 85% scratch/speed-scratch.
- ✓ 50% plant-based menus in response to the current climate crisis and public health needs.

Processing

- ✓ 80% raw, unprocessed ingredients purchased for recipe production.

Fruits + Vegetables

- ✓ 90% fresh or frozen vegetables and fruits.

Local + Organic

- ✓ 40% of procured food items are local (defined as produced within North Carolina or 150 miles of school district).
- ✓ 65% of procured food items are from producers that use sustainable practices (as specified by the district in partnership with other local agencies).

Budget

- ✓ 90% of individual schools operate in the black on a monthly basis.
- ✓ 50% of all proteins are plant-based; no more than 25% of proteins are animal muscle.

A la carte

- ✓ No a la carte sales

More to consider

In addition to increasing reimbursable school meal program participation, revenue could be augmented by serving more **adult meals**.

Adults may purchase the same breakfast, lunch, and snacks offered to students for a slightly higher cost. These additional meals can provide added revenue for the SNS program. A district could consider establishing a fund that donors could pay into to support meals for teachers and staff as a way to thank them for their hard work and dedication. In addition, a district could consider offering teacher meals that go beyond the offerings for students. For a premium rate (e.g., \$5/ lunch instead of \$3.50/lunch), teachers could pre-order fresh sandwiches and salads for pick-up during planning or lunch periods. Teachers and other adults in the district are important food behavior role models for students, so a district should carefully consider how these separate and different meals would be viewed by students. An alternative is to offer teachers the option to purchase the same school meal but served on a bed of greens instead of with the grain required by USDA for students.

A Note: New menus often result in an initial decline in school meal participation, but this is typically followed by a rebound as student tastes and expectations adjust.

Staff + Training

Attracting and retaining skilled SNS staff can be one of the most important aspects of running a model program, and it can be one of the biggest challenges. Districts across the country face similar barriers, including competition with other food service companies and restaurants, and increasing pressure to pay a living wage. SNS programs may particularly struggle to compete for skilled culinary staff when the local unemployment rate is low.

Developing skilled staff

Most school nutrition programs do not start with a highly skilled labor force. Relatively inexpensive outside consultants and chef trainers are available to train school nutrition staff to handle scratch and speed scratch cooking, regardless of kitchen set up, previous staff knowledge, and school district budget. Federal and community grants are also available to support this kind of staff training.

Retaining skilled staff

Providing full benefits and competitive wages to employees is challenging, but it significantly helps retain skilled staff. Some districts have chosen to consolidate positions from two part-time positions into one full-time job in order to provide benefits. Other strategies for creating full-time positions and the revenue to support them include increasing the district-run catering operation, adding additional reimbursable meal programs (e.g., [At-Risk After School Meal Program](#)), or adding in-house food processing to accommodate more local, raw ingredients and scratch cooking (which requires more labor hours – funding is offset by the savings associated with raw vs. processed product). While some districts create full-time jobs by combining SNS and bus driver positions, this strategy may reduce job satisfaction and limit skill building and is not recommended as a best practice. At least one district has seen success with combined school nutrition and custodial staff positions.

Staff training and ongoing professional development opportunities strengthen SNS programs by supporting accurate and consistent menu execution, staff confidence, and job satisfaction. Training can be focused on basic culinary skills, refining the skills required for specific recipes that need improvement, general nutrition education, or other needs within the SNS program. Grant funding may be available to support staff training for districts.

SNS staff are often viewed as separate from other school staff, which reduces cohesion and understanding across the school community and can maintain the negative power dynamic that often exists. When non-SNS staff, like teachers and administrators, have the opportunity to get to know their SNS counterparts, they become better able to support and advocate for school nutrition program participation and improvements. Best practice include greater integration of school nutrition staff into the larger school staff team.

As schools return to more scratch cooking, the staff hierarchy must be adjusted to reflect more of the restaurant model of lead cook, prep cooks, and servers. Staff must feel like they are part of the decision-making process, from monthly school-level profit-and-loss reports, to menu setting, to professional development training. School nutrition at the federal level is structured to be a top-down program, but staff need to feel empowered in their positions in order to increase staff retention and job satisfaction.

As the average age of school nutrition staff increases, school nutrition programs need to seek out ways to attract and retain the next cohort. Best practices will have to include increased staff benefits like childcare, senior care, and more to provide jobs that accommodate younger staff over the course of their working lives.

Clear communication and a shared vision between the director and SNS staff support program success.

Staff size + labor hours

Staff size is dependent on individual kitchens, school demographics, menu, procurement process, non-nutrition staff participation in cafeteria service and monitoring, and more. Generally, staff time is not being used as efficiently as it could. Outside reviewers and/or internal administrators can observe kitchen efficiency and make recommendations related to labor hours and staff time.

Salaries and benefits are often tied to district policies and/or union regulations, and school nutrition programs have little recourse to adjust hourly wages or benefits. Labor is generally one third of the school nutrition budget, so it is worth the investment to understand, adjust, and streamline kitchen labor.

Staff working conditions

Increasing ventilation and natural lighting wherever possible and creating an inviting break room for staff can go a long

way toward improving the work environment. Especially as programs move toward more scratch cooking, consider multiple shifts for staff to optimize the use of space and create a less hectic work environment. For example, half the staff could work 6 AM to 2 PM, with the other half working 10 AM to 6 PM. The first shift serves breakfast, starts lunch prep, serves lunch, and cleans, and the second shift supports lunch prep, serves lunch, does breakfast and other recipe prep for the next day, and cleans.

Substitutes are another challenge for many districts. As much as possible, keep retired staff on the books for substitute positions, and keep some number of staff employees as full-time workers who serve as floaters and substitutes.

Specific tips

- ✓ Invest in a labor audit to understand how current staff time is being used and where efficiencies could be gained.
- ✓ Conduct staff surveys and interviews to understand current attitudes, behaviors, and aspirations regarding employment in SNS.
- ✓ Include staffing specifically in the vision developed for the district's SNS program.

General recommendations

GOOD

- ✓ Nutrition staff entry-level positions start at \$12.00/hour.
- ✓ 50% of nutrition staff jobs are full time with benefits.
- ✓ At least 65% of all SNS staff report liking or loving their job.
- ✓ Professional development training is provided a minimum of two times per year for a minimum of one day each time.
- ✓ At least 40% of SNS staff report feeling empowered to drive the SNS program forward.
- ✓ Staff turnover stays at an average of 40% or lower over a three-year period.
- ✓ At least 10% of staff have some kind of culinary education (e.g., Associates Degree, culinary academy training, etc.)

BETTER

(all of the above, plus):

- ✓ Nutrition staff entry-level positions start at a [living wage](#).
- ✓ At least 75% of all SNS staff report liking or loving their job.
- ✓ At least 50% of SNS staff report feeling empowered to drive the SNS program forward.
- ✓ At least 15% of staff have some kind of culinary education (e.g., Associates Degree, culinary academy training, etc.)

BEST

(all of the above, plus):

- ✓ Childcare is provided to employees before and after work hours to ensure younger staff can build a SNS career starting as young adults.
- ✓ Professional development training is provided a minimum of three times per year for a minimum of one day each time.
- ✓ At least 75% of SNS staff report feeling empowered to drive the SNS program forward.
- ✓ Staff turnover stays at an average of 30% or lower over a three-year period.
- ✓ At least 20% of staff have some kind of culinary education (e.g., Associates Degree, culinary academy training, etc.)

Additional Best Practices

Interviews covered a wide range of practices that supported sustainable, customer-focused, planet-conscious SNS programs. Additional best practices recommended by interview participants include:

- ✓ Leave a buying group if that buying group is not willing to make the same changes a particular district plans to make to achieve the articulated vision.
- ✓ Spend zero time worrying about challenges beyond the SNS program's control (e.g., student seat time for lunch, set by school administrators; federal nutrition guidelines). That does not mean SNS programs should not advocate for better policies, but on a day-to-day basis, SNS programs should find ways to serve great food to students regardless of current policy barriers.
- ✓ Most people involved in SNS programs, or lobbying to change SNS programs, may not know very much about what a holistic school nutrition program could actually look like. It is important to educate potential advocates on everything from good food purchasing agreements to dignified meal experiences, fostering a supported workforce, equitable meal programs, and beyond.
- ✓ Infrastructure will look different between schools and across districts. Key pieces of equipment (in addition to basics like sinks) are:
 - Combi-ovens
 - Tilt-skillets
 - Sharp knives, knife sharpeners, and cutting boards
 - Scales
- ✓ Students must be involved in SNS programming. This includes visioning, taste testing, student-led oversight groups for SNS programming, wellness policy participation, and more.
- ✓ SNS programs ultimately serve the student, and the student ultimately experiences the SNS program in the café space. New SNS program café spaces include:
 - Clean air
 - Good light
 - Anything that will reduce noise (e.g., soft materials, acoustic tiles)
 - Creative seating (e.g., high-top tables, bench seating, coffee bar seating)
 - Cleaning stations stocked daily, with students trained to clean café spaces themselves
 - Plants and other attractive decorations, including student-generated art
 - Charging stations for electronics
- ✓ Before implementing changes to an SNS program, develop a comprehensive plan for accurate and consistent data collection, management, and reporting. Establish baseline measures for participation across all meal programs, staff job satisfaction and retention, and more.

Conclusion

Community members and organizations seeking school nutrition program changes must work in partnership with school nutrition leadership toward a comprehensive vision for the district. The vision should articulate community goals within the context of nutrition program realities. Looking to districts around the country for recommendations and inspiration is an excellent place to begin seeing the possibilities for change, but it is critical to remember that each district is unique and must develop place-specific solutions. Federal school nutrition programs serve an essential function in our communities, and building a culture of respect for these programs and the people who run them is an important first step toward realizing their full potential.



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