



Presents...

Salad Bars

The Lunch Box Guide



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Why Salad Bars?

Research shows that incorporating salad bars into school lunches increases children’s consumption of fresh fruits and vegetables. Salad bars profoundly shift the typical school lunch by offering students not only variety but also choice. Schools with salad bars offer a wider variety of vegetables and fruits than other schools. Through repeat exposure, encouragement to try unfamiliar foods, and education, children respond by trying new items, incorporating greater variety into their diets, and eating more fruits and vegetables each day. As a result of these early, positive experiences, students develop palettes for a lifetime of healthy eating.

To maximize these benefits, the White House Task Force on Childhood Obesity in their [May 2010 Report to the President](#) endorses the use of salad bars in schools and upgrading cafeteria equipment in order to provide healthy meals for kids. The [Healthy Hunger Free Kids Act of 2010](#) and the resulting new school meal guidelines that went into effect in 2012 support increasing vegetable and fruit consumption by changing the school lunch requirements to 6.25 – 10 servings of fruits and vegetables weekly. The USDA encourages the use of salad bars in the school meal programs stating, “Salad bars continue to be a great option for meeting the meal pattern requirements.”



Introduction

The first edition of this handbook was produced in 2011 as a result of the [Let’s Move Salad Bars to Schools Initiative](#), which launched in 2010. As of 2014, the initiative—through donations totaling more than 8 million dollars—has donated 3,300+ salad bars across the country and brought fresh vegetable and fruits choices to over 1.6 million students in participating schools. Today, the salad bar is a proven, accessible tool to A) improve school meals in an immediate way, and B) to comply with the various vegetable sub-groups under the [New Meal Pattern Requirements and Nutrition Standards](#) for the USDA’s National School Lunch and School Breakfast Programs. Many more school districts are now implementing salad bars as a core part of their food service operations.

This second edition was produced in response to many requests for more detailed “how-to” information on planning and implementing salad bars as part of the reimbursable meal. Salad bars (also referred to as vegetable and fruit bars, harvest bars, garden bars, and offering bars) are complex, with multiple foods that require various methods of handling and storage. Just figuring out where a salad bar should “live” in a

cafeteria can be a challenge, and in some cases a free-standing salad bar simply will not work. Purchasing the food as well as training the staff, and educating students, administrators and parents also requires a tremendous amount of planning, time, and patience.

The result, when all of these tasks are complete, is a healthy and positive transformation to the student dining experience. Children are the reason that we do this work; their health and futures are at stake, so let's make salad bars work for them!



Using this Guide

This guide assumes that a salad bar will be implemented as part of the reimbursable meal on a daily basis—meaning a student can select both a hot entrée *and* items from the salad bar or create a reimbursable meal just from salad bar selections. Through our experience of implementing salad bar programs in many districts as well as discussions with other school food professionals, we have learned that this approach brings the best return for the investment. As with any tool that we provide, we encourage you to customize as you see fit and share your experience and wisdom with us via [The Lunch Box](#).

Assessment and Planning



Once a school district establishes the goal of incorporating salad bars into their school lunch program it is necessary to assess each school's assets and challenges for implementation. That must be followed by an assessment of the department and district-wide assets and challenges. Planning for the large and small details of [salad bar implementation](#) ensures that once added, salad bars will be a permanent fixture of your school dining landscape.

To start, we've created a [Salad Bar Site Assessment Tool](#) to help you determine your district's requirements for [salad bar implementation](#). The assessment takes into account: site data, district wide impact areas, budget planning, and timeline action checklists.

Key data collection for each school includes:

- School administration details
- Grades served
- Meal period details
- Average daily participation
- Other programs (breakfast in the classroom or fresh fruit and vegetable program)
- Site type (satellite, base, or production kitchen location)
- Staffing details
- Kitchen, service area, and cafeteria layout
- Delivery access
- Current smallwares inventory
- Current refrigeration and storage assets

The larger, system-wide operations considerations for planning include:

- Who is the district’s primary produce supplier?
- How frequently is produce delivered?
- Is it delivered directly to the site or to a central facility?
- How are sites ordering produce now?
- Is there significant aged inventory of canned or frozen vegetables that needs to be used?
- What is the level of expertise of the team with regard to handling produce?
- Do you currently budget time for staff training and development?
- Does your department have a HACCP plan and are your standard operating procedures reviewed and updated annually?
- Is there a minimum of one person at each school site who has a current Serve Safe manager’s certification?
- Do you have an active relationship with your local health authority?
- Do you have support from administration, teachers, and staff for [salad bar implementation](#)?
- Are parents on your side? Can the food service department count on parents to support salad bars by having their children eat school lunch more frequently?



Evaluating Labor Requirements

It is common for districts to presume that salad bars will require more labor than their current model, but this cannot be ascertained without a critical analysis of the current site’s labor hours. Once assessed, districts often find that there are adequate hours and people, and that satisfying salad bar labor requirements can be achieved by shifting the tasks and times of the existing team.

We also recommend that the salad bar replace hot-line service that serves fruit and vegetables. Likewise, the salad bar can replace the commonly-used cupping/packaging of fruits, salads, or other vegetables that

are part of many menu plans prior to use of a salad bar. As we will discuss later in this guide, a key factor in cost containment is shifting the menu model to rely on the salad bar to fulfill the fruit and vegetable requirements. When assessing the labor component, the following considerations are used to determine a course of action:

- Labor hours assigned compared to labor hours worked (use [Hours Assigned to Hours Worked Worksheet](#) to calculate)
- Skill sets of existing site teams
- Current site team efficiency
- Current site productivity (use [Meals Per Labor Hour Worksheet](#) to calculate)
- Team motivation...Is the food service staff excited to implement?
- Existing menu assumptions (e.g.; what components of the menu will the salad bar replace versus implementing salad bar as an addition to current options?)
- The salad bar menu and layout (e.g.; variety and type)
- Average daily participation at site – sheer volume of production needs versus current (use [Simple Meal Count Average Daily Participation Worksheet](#) to calculate)
- Food preparation models (e.g., product prep at sites, direct delivery of cut product from production kitchens, direct delivery of either pre-cut or uncut product from vendors, etc.)

Budget – Up-front Investment

Given the wide variety of facilities that can be found in a single school district, gathering pertinent data about each location is critical to the planning process. The [Salad Bar Site Assessment Tool](#) includes a budgeting worksheet to help aggregate the up-front expenses in one document and to assist districts in presenting a comprehensive plan to key decision makers. Many districts use a combination of purchasing, equipment donations, and equipment repurposing in order to accomplish the goal of incorporating salad bars in every school. The primary areas of investment are:

- Salad bar units
- Refrigeration
- Sinks/plumbing
- Electricity
- Point-of-Sale mitigation
- Staff training

The [Let's Move Salad Bars to Schools](#) grant program is available to all school districts. We strongly recommend that districts submit an application. The process is easy and could result in funding one or all of the bars required for your district. School districts have also acquired funding through state-based projects, local benefactors, [Fuel up to Play 60 grants](#), and many funding sources.

Salad Bar Equipment Selection

Below are examples of the most common salad bar equipment solutions:

Regular Service Line with Cold Wells

Some schools may have mechanically-cooled wells that are part of their current service line. If the wells also have sneeze guards and are designed to allow for self-service, it may be possible to adapt your current line to include a salad bar. If the line has cold wells without a sneeze guard, or the guard restricts self-service, it is possible to add a sneeze guard or replace it with one that allows self-service. If your line does not have cold wells but includes a long stainless counter of six feet or more, the counter can be cut out so that a mechanical unit can be retrofitted there (provided that adequate electrical power is available or able to be installed). Additionally, if the current line is newer and modular (meaning it can move) with adequate space and power, a cold well module could be integrated in the layout of the servery.



Figure 1. Built-in refrigerated salad bars

Pros: No up-front costs if a school already owns this type of equipment. Gives site personnel control during service. Staff can assist younger children from the service line. Can be the best option in small confined service areas where a stand-alone bar is not a possibility.

Cons: Creates slower lunch lines. Often too high for K-2 students who either cannot reach the product or reach below the sneeze guard which is unacceptable from a food safety perspective. As a solution, these younger grades can be served by staff or an accompanying adult.

Freestanding, Mobile-Insulated Salad Bars

This is by far the least expensive and most frequently chosen option. The newest versions of these bars, offered in both four-well and five-well configurations, compress easily for moving through doorways, come in heights which are acceptable for elementary self-service, have sneeze guards that meet government requirements, and can hold temperatures of 41 degrees and below for four hours. This

improved cold holding allows for using temperature as a Public Health Control (PHC)¹. (See Cambro's [temperature test results](#).) The mobility of these bars allows for flexible dining room layouts, which is helpful when considering customer flow through the line. The bars can also multi-task for other meal periods for example being placed in hallways for Grab n' Go breakfast pick up.



Figure 2. Mobile insulated food bar

Pros: Fully mobile. Inexpensive. Easy to maintain. May be used as either one- or two-sided.

Cons: Requires a freezer to freeze buffet chiller packs, which may not be permitted by some health departments.

Table Top Insulated Salad Bars

These are similar to mobile salad bars, the main difference is that they require a table.

Pros: Less expensive and more compact than a wheeled unit. Can be used as either one- or two-sided.

Cons: Does not store well. Height is an issue so tables must be adjustable to attain the appropriate height.

¹ Appendix 1 - Cambro evaluation of holding temperatures.



Figure 3. Table top salad bar using chill pack

Freestanding, Mobile, Mechanically Cooled Salad Bars

Very similar to the freestanding insulated salad bars, the mechanically cooled bars offer the same ability to have two-sided service.

Pros: Hold temperature. Easy to clean. Do not require a freezer to keep unit cold.

Cons: Most expensive mobile option. Not as compact as mobile units. Fewer location choices due to electrical needs. Requires floor plug to remove tripping hazards. Some locations will require electrical work to use. Fewer models have height options.



Figure 4. Mobile electric salad bar

Regulations

Federal

“USDA encourages the use of salad bars in the school meal programs. We encourage school food authorities (SFAs) to incorporate salad bars into their school food service operations when possible, and to explore other creative options when salad bars are not an option.”

As anyone who works in the school food industry knows, regulations and compliance issues are abundant. The most recent USDA Memo [“Salad Bars in the National School Lunch Program”](#) from March 2013 clarifies the earlier salad bar guidance on key areas of salad bar use including; portion size, salad bar location, POS placement, nutrient analysis, and food safety with regard to serving elementary students. They also acknowledge that state agencies may authorize alternatives to the federal guidance, particularly with regard to placement of the POS.

Local Jurisdictions

You’ll want to engage your local health authority when considering implementing salad bars. Most school districts have very active relationships with their local authorities. By working with them to assure approval, you can fine-tune any issues that may be of concern prior to implementation. Most commonly, you will need to provide a complete salad bar operational plan based on Hazard Analysis and Critical Control Point principles (HACCP). In some cases, only a kitchen equipment plan update will be required.

Salad bars require the handling of fresh foods, many of which are considered PHFs (potentially hazardous foods) like cut tomatoes, melon, or lettuce, as well as protein sources such as chicken, cottage cheese, eggs, and hummus. With proper planning in partnership with local health authorities, any school can safely operate a self-service salad bar.

Developing Standard Operating Procedures for Salad Bars

Developing Standard Operating Procedures (SOPs) is essential to a district’s success. SOPs can be customized to fit various physical plants and labor models, but the overall goals are the same: to operate the bar efficiently and safely. (See a sample of [Salad Bar Standard Operating Procedures](#).) Salad bar

operating plans should be developed for central kitchen and/or satellite or stand-alone kitchens as applicable. Procedures should include guidelines for purchasing, receiving, storing, rinsing, processing, holding, transporting, temperature logging, and serving of fresh produce, with specific guidelines for the handling of temperature controlled for safety (TCS) and potentially hazardous foods (PHF) as shown in the illustration below (fig.5). Key features of a salad bar SOP include:

- Consistent use of temp logs (see sample of a [Temperature log](#))
- Chilling pans that are used on the bar
- Having plenty of utensil and ingredient back-ups
- Setting up a pattern of rotating out products through meal periods

Staff as well as any volunteers or regular lunchroom supervisors (such as vice principals, aides, or teachers) are important to the overall follow through of [Salad Bar Procedures](#). Educating them on proper use of the salad bar is critical to the long-term success of the program. Displaying marketing [Posters and Signs](#) (fig. 6) to help educate students is extremely helpful when used in unison with a trained support team. Community acceptance of the salad bar will happen once everyone experiences the students' excitement and delight in having more fresh food choices.

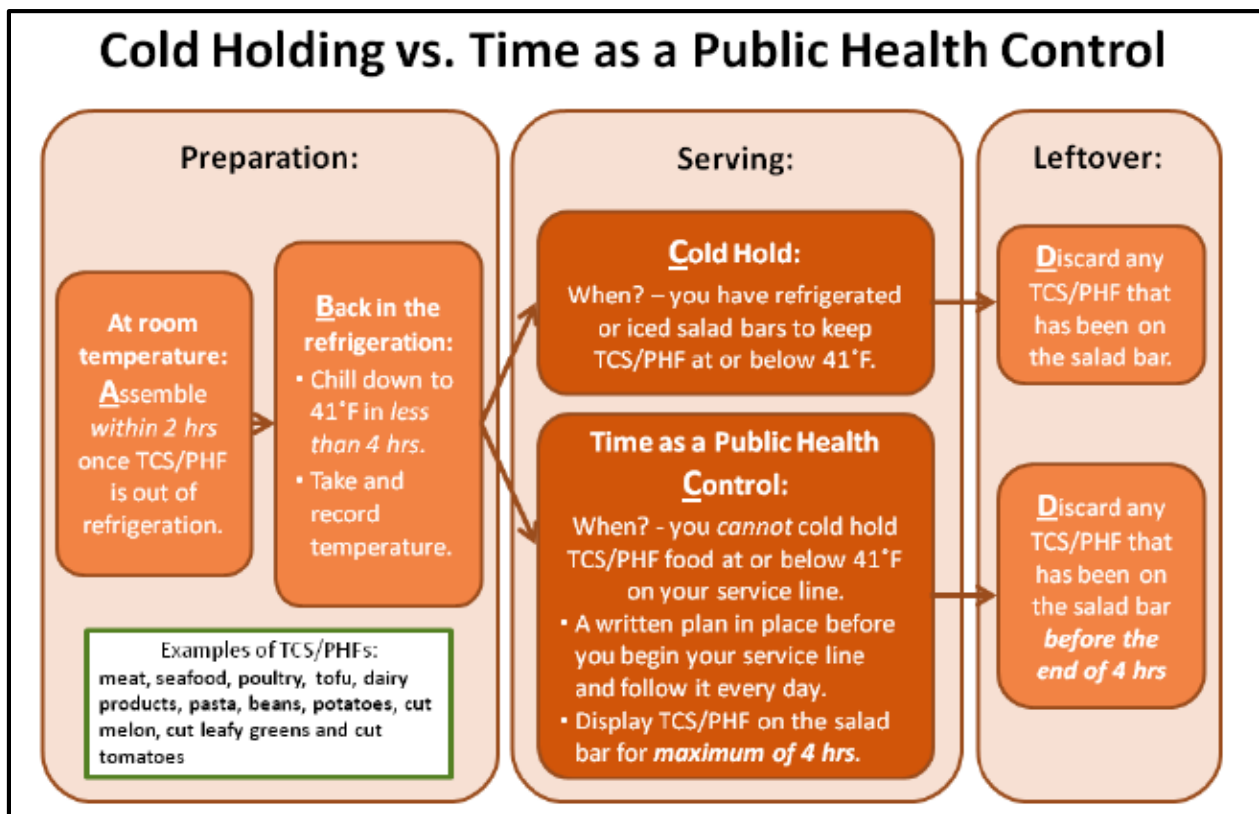


Figure 5. Public health control flow chart – from [Washington Farm to School](#)



Figure 6. Salad bar sign to support student procedures

Training

Many school districts have limited or no professional development days that would provide time for focused training to implement new operational tools such as salad bars (watch our salad bars implementation video). Nor is there much time to reinforce existing standardized procedures in both the kitchen and service areas. In the case of salad bars, training is essential to sustaining the program. When preparing to implement salad bars, the director must plan ahead and factor training time into the budget. Dedicated days or half days are ideal, but multiple shorter trainings can be successful, too. It's common for districts to focus on rolling out a salad bar at one site and then use that as a training location for the next school once that site is running smoothly. If the district is rolling out multiple locations simultaneously, then utilizing professional development days is the most efficient method to ensure that all staff is trained in the same way.

It is possible to find support to help pay for professional development. The district itself may choose to allocate some general fund money to the project. Local sponsors and grants are also options. If the district is dedicating salad bar procurement to local producers, a USDA Farm to School grant is worth considering. Regardless of the uniqueness of the district, inadequate training can lead to additional costs or failure of the program. Poorly articulated methods for ordering, receiving, production, service, and sanitation will ultimately lead to increased costs for the district through inefficiency and ineffective programming. In short, preparation for launch and planned sustainability are essential.



Figure 7. Staff training

The food service director can create an appropriate training outline depending on the operational model of the district. In addition to in-person trainings, the director can utilize the district’s website if a staff section is available to them. Materials posted to the site could be used for refresher training and for new employees joining their team. Consistency is critical to success, so taking the time to articulate your unique salad bar program is imperative. The most common training areas are:

- Salad bar sanitation
- Menu and layout
- Ordering, receiving, inventory
- Preparation and food handling
- Recordkeeping compliance (counting)
- Customer service
- Student education—salad bar as a daily educational tool

District “Training”

Salad bar success is inextricably tied to the district’s embracing of the process. Salad bars are complex additions to the menu and to the day-to-day organization of the “back-of-the-house,” but the activity itself has an equally large impact on the school’s lunch periods. Salad bars in general receive positive reception from adults because they are a tangible sign of school food improvement.

As part of the planning process, it is important to inform the district of the exciting shift in your operation. The administration, school board, and parents can provide critical support for your program. Parents help tremendously by informing their children and supporting school lunch. School boards will see the positive

results of increased participation and interest in nutrition that in turn fosters a better educational environment for the community.

Principals and School Teams

A school administration supports food service by informing their teams about the changes coming to their school site.

Once the food service director and their team have completed the initial work of planning and strategy, they can move on to informing principals at the designated schools about the menu changes. In many districts, it is not uncommon for food service to seek approval from the principal prior to launching a salad bar. We discourage this approach because systemically food service is responsible for managing all aspects of the meal program. While we recognize that principals take on a lot of ownership of their school, it is extremely important to meet with the principals one-on-one to explore their concerns and seek their support, not to ask for their permission. When principals are assured that the food service department is prepared and organized they will almost always support change.

Student Training

Engaging the students in using the new salad bar can be the most rewarding part of this whole process. Kids are enthusiastic about having more choices. While the experience of having a salad bar in the dining room is exciting, it can also be overwhelming for some students. Creating clear guidelines for student participation from the beginning is essential. We recommend introducing the salad bar ahead of time by offering samples and educating the students about salad bar etiquette. [Lunchroom Education](#), such as [Rainbow Days](#), are great ways to engage students in the salad bar.

Food safety concerns can derail a salad bar launch, but we know from thousands of successful operations across the country that salad bars can be operated without harm. Students constantly touch many parts of the cafeteria, from the tables to the service line, and salad bars are no exception. Minimizing risk through student education is imperative. We often see the use of hand sanitizing stations in school districts, but nothing is as effective for student health as hand washing. Many school districts already have extensive educational campaigns to reinforce this important activity for general health. The following list represents the most common food safety practices that we focus on when educating students.

Student etiquette includes:

- Always wash your hands before mealtime.
- The sneeze guard is there to keep your head away from the products.
- Ask an adult if you can't reach.
- Alert staff as soon as a spill happens!
- Food should only be touched with clean utensils—never use your fingers.
- If utensil falls on the floor, don't put it back—tell an adult.
- Don't taste food items while you are standing at the salad bar.
- Only take what you can eat. You can always come back for seconds.
- No coughing, spitting, or sneezing on the food or the salad bar equipment.

- Always use a clean plate/boat for seconds.
- Always be polite in line and wait your turn.
- Use the serving utensils every time you reach for something!

Attractive signage to support safe salad bar usage is essential since your team and cafeteria support staff will always have new students to train. The Lunch Box provides [Posters and Signs](#) that are free for you to download.



Figure 8. Signs to reinforce good student procedure at the salad bar

Food education is as important as food safety and can contribute to a healthy learning environment and academic success. This includes the role of the salad bar as part of the reimbursable meal. Students today are often out of practice with eating fresh vegetables and fruits. The district’s prior practices may have included automatically placing fruits and vegetables on students’ trays.

Creating choices at the salad bar opens up a whole new world of experiences for students. Encouraging them to try new foods is one of the most important tasks given to both the food service and education teams. Identifying foods, tasting new foods, creating composed salads that provide blended tastes—these are all very important lessons that can help students develop healthy eating habits that support classroom success.

In addition, it is essential to make sure that students understand that salad bar choices are required as part of their meal when no vegetable or fruit is offered on the hot line. Using signs to illustrate and train the students about portion size and choice is also important. Menu boards as well as visual aids on or near the salad bar are helpful reminders as the students are waiting on line.



Operations

The Salad Bar Layout

So how does a district decide what to offer and what they can afford? The choices can be overwhelming, but as with the other items in meals offered to all students, the costs are carried by the reimbursable meals sold. Just as with any menu, the assumption is that the meal is “offer versus serve.” Not every student will take milk, not every student will take a roll, and not every student will take every item from the salad bar. As with all meal planning, the cost of the individual components is carried by the averages of selection. If the budgeted cost per meal is \$1.00, then that average may include menus that range from \$1.20 to \$0.80. The salad bar becomes a part of that equation. Studies of districts have shown that average costs for the salad bar per elementary student ranges from \$0.16 to \$0.26. The range is based on the ingredients and method of production (e.g.; purchasing precut vegetables versus cutting whole products, percentage of USDA commodity foods used in the bar).

Utilizing a salad bar grid layout is a great tool for ensuring consistent costs and compliance at the site level for the planned ingredient combinations. The salad bar layout examples are just a few of a multitude of salad bar configurations that could be offered. (figs. 9 and 10)

The layouts shown here can be offered daily as part of the reimbursable meal. In this example, with the exception of a grain salad, grains are offered from the line to keep breads from drying out on the salad bar.

To make this process easier, we have created an editable [4-Well Salad Bar Set-Up Template](#) and [5-Well Salad Bar Set-Up Template](#) that can help you plan the salad bar layout. The template tools allow you to select the pan sizes that you have and configure layouts for either a four-well or five-well bar. Using a consistent plan for ingredients offered helps you determine approximate food costs. Pre-determined salad bar layouts are also helpful in training the school teams in salad bar set-up and the salad bar’s role as a part of the reimbursable meal. Salad bar layouts can be customized to respond to the location and resources of the school site. If the district has a bar with one-sided access, selection of items will be smaller. In some districts, a mirrored approach works best for the flow of the line. Secondary schools will often support more complex choices with mirroring. In addition, the district may shift the combination of items offered to align with menu themes or to create seasonally driven selections. The salad bar is extremely flexible in that regard.

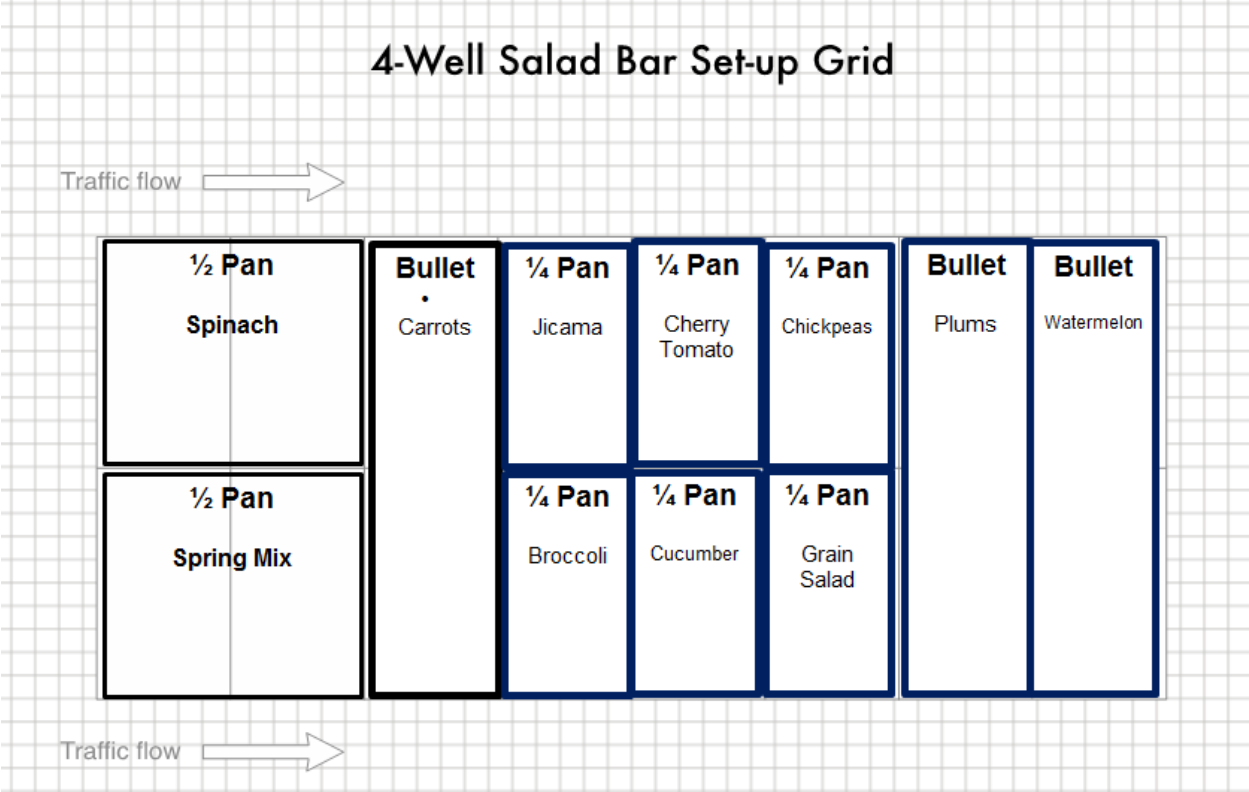


Figure 9. Sample 4-well layout

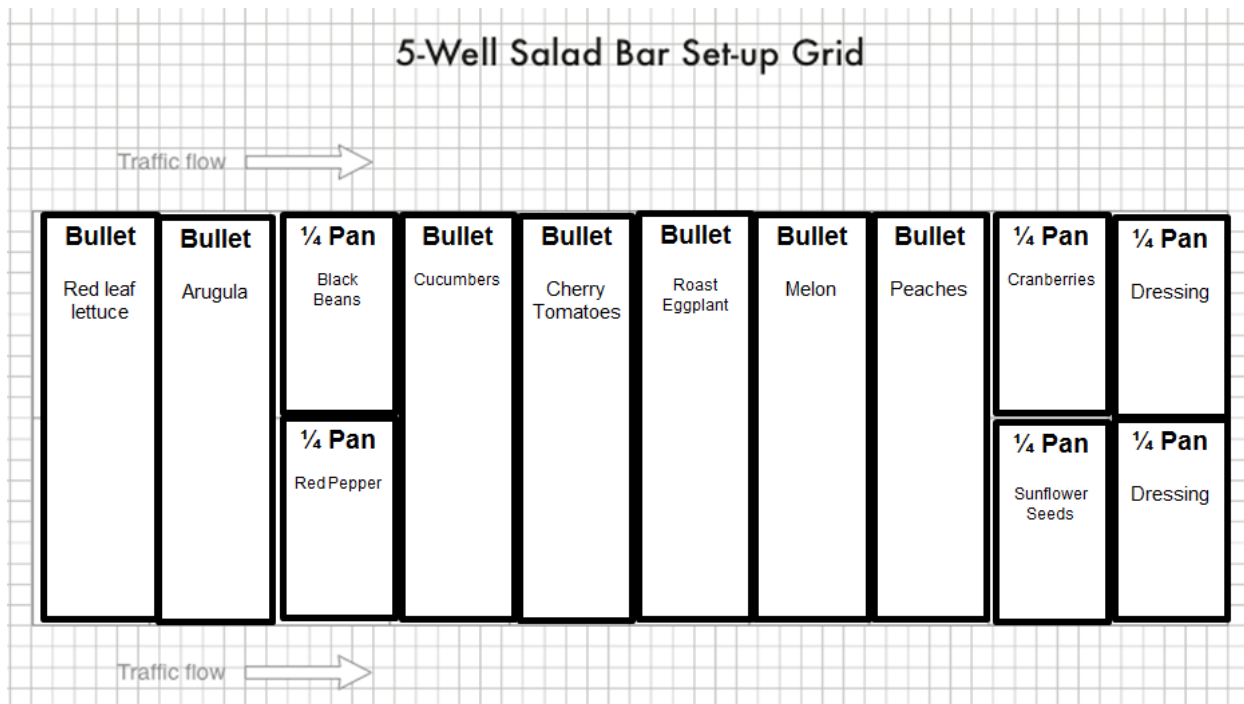


Figure 10. Sample 5-well layout.

Menu Planning

Presenting meal components on the salad bar provides an exciting opportunity for menu planning. School districts exchange the canned green beans and canned fruit cocktail—often seen as the eyesore of school food—with a rainbow of fresh products. Once the salad bar becomes an assumed part of the operation, service is more efficient, directors are often creative with menu choice, and the staff is happy to take on the challenge. The key is to establish the baseline standards, train the team, and adjust for efficiency and sustainability.

Keep in mind, what kids do the first week that a salad bar is launched (eat you out of the house!) will drop and level off as they begin to see the salad bar as part of the daily meal.

Portion Size

The current USDA guidance from their March 2013 [Memo SP 31-2013](#) helped establish guidelines for best practices with respect to menu planning and production compliance, however we still field many questions about portion size. In the guidelines, page 2 addresses portion size. Here are the key points:

- *When planning a salad bar as part of a reimbursable meal, the minimum portion sizes must be consistent with the meal pattern for the age-grade group.*
- *Salad bars can also be used to serve one or multiple food components. It is important to remember that at least 1/8 cup of fruit or vegetable must be served to count towards the fruit or vegetable component, including those served on the salad bar.*
- *If not pre-portioning, then the cashier must determine if the food/menu item can count*

toward a reimbursable meal. Schools should consider placing signage as a visual aid to help students determine what a minimum portion is for self-service items, particularly in the case of leafy greens.

Your team is already expert at recognizing eighth, quarter, half, three-quarter, and cup portions, and the students can become experts as well. When planning the salad bar set up, spoodles may seem like the best utensil to ensure proper portion sizes, but utensils should be chosen based on their ease of use. Recognizing that the salad bar components will be combined, and that ultimately we want the kids to choose several items to make up their portions of fruit and vegetables, we recommend choosing utensils that are easy for kids to use with the type of item (have you tried putting shredded carrots on your salad with a spoodle? It's not ideal.) The goal should be creating a service environment that makes it easy for the students to select multiple items without loading up their tray with more than they can eat. Using posters and signs as well as sample salads to demonstrate how combining vegetables creates a creditable portion helps as well. This will help. (fig. 11)

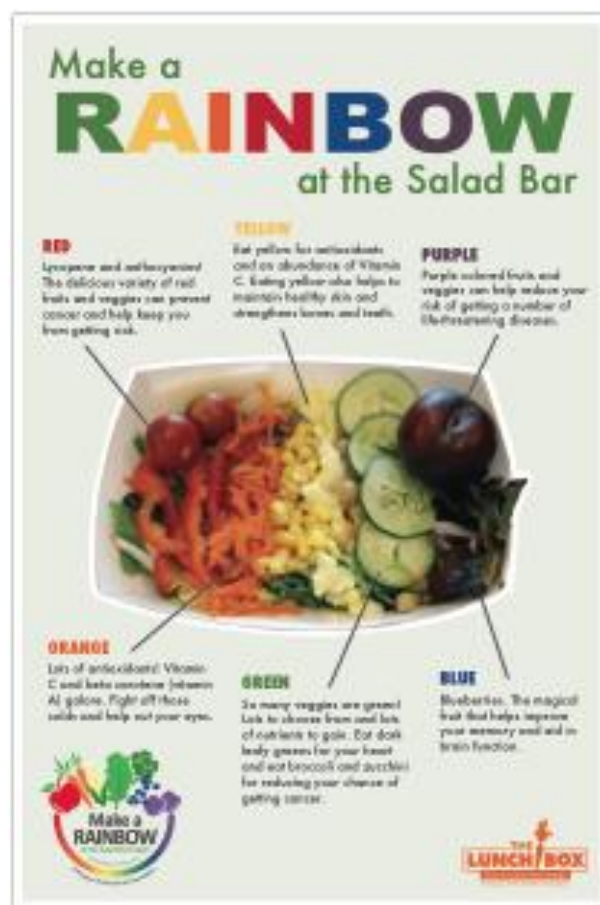


Figure 11. Rainbow Days Poster



The Recipe

In their salad bar guidance, the USDA describes how to create a salad bar recipe:

SFAs are not required to conduct a nutrient analysis, however, many SFAs do monitor the nutrients provided in their menus and it can be a helpful tool to determine the nutrient composition of all the foods offered in the salad bar by considering the foods together as a “recipe”. A standardized recipe is a recipe that has been carefully adapted and tested to ensure that it will produce a consistent product every time it is used. Standardized recipes can be helpful when developing recipes for food bars because they promote consistent food quality, predictable yield, control food costs and help with inventory control. Creating a standardized recipe will also simplify the nutrient analysis process. The standardized recipe should be constructed based on a typical day.

When the USDA says “considering the foods together as a ‘recipe’” what that means is that every ingredient you offer on the salad bar is included in the “recipe” though we know that your customers probably all selected something different. One student might have only lettuce and tomato while another may choose pear, rice salad, carrots and beets. The role of the recipe in this case is ascertaining a nutrient analysis of the amounts of all the items selected by all your students over a set period of time. In our recipe we recommend using a week of data to create the recipe. Though typically districts create recipes and then make the food, in this case you really do need offer the bar and let the students settle into a routine before the data you collect will prove to be very accurate. We recommend collecting the data using a five-day production record that tracks

the product prepared and used by ingredient.

To simplify the task of measuring how much product is prepared and used we recommend creating standard measures for each product using the pan it is served in as the measure. In the examples below (figs. 12 and 13) you can see that each ingredient is identified by a pan size, the weight of the product per pan, and the serving size of the ingredient if served alone. We have found that one of the missteps of [salad bar implementation](#) is that districts do not create standard measures for the bulk pans of ingredients that are used daily in the layout. As a result, their ability to track prepared and used product is often inaccurate.

Salad Bar Production record for K-12

School:		Cycle XX SBPR [School Name] Dates XX to XX													
Site Lead:		Monday				Tuesday				Wednesday					
ITEM	Measure	AMT/PAN	SVG SIZ	Prep ped Amount	Leftover	Used	Discard	Prep ped Amount	Leftover	Used	Discard	Prep ped Amount	Leftover	Used	Discard
VEGETABLES															
Beans, Kidney	1/4 pan	61 oz	1/4 c												
Beans, other	1/4 pan	61 oz	1/4 c												
Broccoli	1/4 pan	2#	1/4 c												
Carrots	1/4 pan	2#	1/4 c												
Celery	1/4 pan	4#	1/4 c												
Cherry Tomatoes	1/4 pan	4.5#	1/4 c												
Corn	1/4 pan	2#	1/4 c												
Cucumbers	1/4 pan	4#	1/4 c												
Hummus	1/4 pan		1/4 c												
Jicama	1/4 pan	4#	1/4 c												
Peas	1/4 pan	2.5#	1/4 c												
Peppers, green	1/4 pan	3#	1/4 c												
Peppers, red	1/4 pan	3#	1/4 c												
Potatoes, roasted	1/4 pan	2#	1/4 c												
Salad Mix - romaine	1/2 pan	2#	1 c												
Salad Mix - spring	w/ rom.	.5#	1 c												
Veg other	1/4 pan		1/4 c												
FRUIT - MUST OFFER A DIFFERENT FRUIT DAILY (5 DIFFERENT FRUITS PER WEEK)															
Fruit, canned	1/4 pan	61 oz	1/4 c												
Fruit, dry	1/4 pan		1/4 c												
Apples	1/2 pan	ea	1/4 c												
Bananas	1/2 pan	ea	1/4 c												

Figure 12. Sample production record (cropped)

Cantaloupe	1/2 pan	ea	1/4 c																
Grapefruit	1/2 pan	ea	1/4 c																
Oranges	1/2 pan	ea	1/4 c																
Peaches	1/2 pan	ea	1/4 c																
Pears	1/2 pan	ea	1/4 c																
Plums	1/2 pan	ea	1/4 c																
Tangerines	1/2 pan	ea	1/4 c																
Watermelon	1/2 pan		1/4 c																
Fruit other	1/2 pan	ea	1/4 c																
<i>PROTEINS - FOLLOW ROTATION, DO NOT PUT MORE THAN ONE PROTEIN ON BAR AT A TIME</i>																			
Chicken, Diced	1/4 pan	2#	2 oz																
Cottage Cheese	1/4 pan	4#	4 oz																
Egg, chopped	1/4 pan	1.5#	2 oz																
Egg Salad	1/4 pan		1/2 c																
Tuna Salad	1/4 pan		1/2 c																
Yogurt, bulk van	1/4 pan	4#	4 oz																
Protein other	1/4 pan		2 oz																
<i>GRAINS</i>																			
Salad Brown Rice	1/4 pan	2.5 qt	1/2 c																
Salad Couscous	1/4 pan	1.5 qt	1/2 c																
Salad Tabouli	1/4 pan	1.5 qt	1/2 c																
Salad Wheatberry	1/4 pan	1.5 qt	1/2 c																
Salad other	1/4 pan	1.5 qt	1/2 c																
<i>SALAD BAR CONDIMENTS</i>																			
Jalapenos/Pickles	1/4 pan	61 oz	1 oz																
Dressing Balsamic	bottle		1 oz																
Dressing Ranch	bottle		1 oz																
Dressing rotation	bottle		1 oz																

Figure 13. Sample production record (cropped)

To create a unit of measure for the pans, the production crew prepped and weighed each item that is offered within the district’s salad bar layout. The line on the pan—which is approximately two-thirds up the side of the pan—is the “fill mark.” We recommend creating these standard measures for the bar because it provides speed and accuracy at the site level, both for inventory and ordering. Without any further measuring, the sites can easily determine how much of a pan is leftover, how many pans were used, etc.

The use of scales is also an accurate and an acceptable method if the school is changing pan sizes often or does not have a standardized daily layout. To use a scale to track production for the salad bar, the staff person would weigh the total product prepped before service and then weigh it again after service.

In the district where this sample production record was sourced, all 50 schools have salad bars and the regional managers review the data at the completion of each six-week cycle. The menu planner updates the recipes as needed. The ingredient measures for the recipe are based on real usage data gathered by adding together the weekly totals by ingredient and school which are then divided by the number of meals served for the week. The recipe reflects every ingredient offered on the salad bar which is an accurate representation of the average consumption of the salad bar ingredients in the district for the week measured. (figs. 14 and 15).



Recipe Production

Printed: 09/05/2014 3:00 PM

Recipe Number: SA690 **Recipe Name:** SALAD BAR SIDE K-5
Hot: No **Recipe Source:** Local **HACCP Process Category:** No Cook
Serving Description: 1 SIDE SVG

Projected Yield	Actual Yield		Leftovers Disposition
Quantity Serving Size	Quantity	Serving Size	
1 1 SIDE SVG			

Labo

Employee Name	Start	Stop Time	Total Time	Rate

Stock Number	Description	Amount 1	Measure 1	Amount	Measure	Location
2502	BEANS RED FCY 6/10	1/2	Ounce			(Unassigned)
2501	BEANS GARBANZO 6/10	1/2	Ounce			(Unassigned)
SA501	CARROTS 1/4 PAN	1/2	Ounce			(Unassigned)
SA502	CELERY 1/4 PAN	1/3	Ounce			(Unassigned)
2547	TOMATO CHERRY 12/PT	1				(Unassigned)
SA503	CUCUMBER 1/4 PAN	1/4	Ounce			(Unassigned)
SA505	JICAMA 1/4 PAN	2/3	Ounce			(Unassigned)
SA504	GREEN PEPPERS 1/4 PAN	1/8	Ounce			(Unassigned)
SA506	RED PEPPERS 1/4 PAN	1/4	Ounce			(Unassigned)
2533	LETTUCE ROMAINE CHP 6/2 LB	1/2	Ounce			(Unassigned)
2542	LETTUCE SPRING MIX 3 LB	1/4	Ounce			(Unassigned)
9002	CHICKEN DICED COMM 30 LB	1/8	Ounce			(Unassigned)
1524	COTTAGE CHEESE 1% 5 LB	1/8	Ounce			(Unassigned)
1512	EGG HDBLED WHL 12 DZ	1/2	Ounce			(Unassigned)
1526	YOGURT LF VANILLA 5 LB	1/8	Ounce			(Unassigned)
SA120	MEDITERRANEAN COUSCOUS 1 QT	1/2	.5 CUP			(Unassigned)
SA010	TABOULI SALAD 1.5 QT	1/2	.5 CUP			(Unassigned)
2510	JALAPENO SLICED 6/10	1/8	Ounce			(Unassigned)
2506	PICKLES 4/1 G	1/8	Ounce			(Unassigned)
DR001	DRESSING BALSAMIC	1/8	Ounce			(Unassigned)
DR005	DRESSING HONEY MSTRD	1/8	Ounce			(Unassigned)

Cooking Instructions

Cooking Temperature: 0 **Cooking Times:** **Hours:** 0 **Minutes:** 0


Pre-Preparation Instructions

- Canned red beans yield 64%
- Canned garbanzo beans yield 65%
- Canned jalapeno slices yield 61%
- Canned pickles yield 64%

Figure 14. Side salad recipe used for every day salad bar in elementary sites (cropped)

The district also creates a fruit recipe for all the seasonal fruits that might be reflected during the year. This district extensively limits the use of canned fruit in the elementary grades and it is not used at all in the secondary grades. Aside from maintaining the detailed by-item production records for development of the recipe, maintaining these records allows the sites to develop realistic weekly produce orders.

Maintaining detailed records provide accountability and cost containment by reducing over-ordering. The salad bar recipes can be found in the [recipe section](#) of The Lunch Box.



Recipe Production

Printed: 09/05/2014 3:02 PM

Recipe Number: SI401

Hot: No

Serving Description: 1/2 Cup

Projected Yield

Quantity Serving Size

10 1/2 Cup

Recipe Name: FRUIT SIDE K5

Recipe Source: Cook Book

Actual Yield

Quantity Serving Size

HACCP Process Category: No Cook

Labo

Employee Name	Start	Stop Time	Total Time	Rate

Stock Number	Description	Amount 1	Measure 1	Amount	Measure	Location
9044	PEACH COMM	1/2	Cup			(Unassigned)
2111	ORANGE TEXAS 113 CT	1/2	Cup			(Unassigned)
2116	MELON CANTALOUPE CO 12 CT	1/2	CUP			(Unassigned)
2104	PEARS BARTLETT 110 CT	1/2	Cup			(Unassigned)
2106	PLUMS RED 50 CT	1/2	Cup			(Unassigned)
2102	APPLES CO 150 CT	1/2	EA			(Unassigned)
2120	TANGERINE FALLGLO 100 CT	1/2	Cup			(Unassigned)
2114	WATERMELON 4 CT	1/2	Cup			(Unassigned)
2107	BANANAS 40 LB CS	1/2	Cup			(Unassigned)
2108	PEACHES CO 70 CT	1/2	CUP			(Unassigned)

Cooking Instructions

Cooking Temperature: 0 **Cooking Times:** **Hours:** 0 **Minutes:** 0

Pre-Preparation Instructions

Yields:

- Canned peaches 75%
- Oranges 76%
- Cantaloupe 56%
- Pears 94%
- Plums 98%
- Apples 91%
- Tangerines 80%
- Watermelon 61%
- Bananas 64%
- Peaches 93%

Preparation Instructions

Wash all fruit in tepid water before serving.

Figure 15. Side of fruit recipe, which reflects the various fruit choices offered on the bar (cropped)

Production Records

As part of the reimbursable, the “salad bar” creates a challenge for the NSLP production records used for meal claiming. The most common accountability method is adding each ingredient offered to either your paper or digital production record with the attendant serving size for the item. Many districts will preprint all the items offered and the site manager will check or circle which items they offered and estimate how many servings of each were prepared, served and leftover.

However that type of accountability is not reflecting the way salad bars actually operate. Students do not typically choose a half-cup of carrot or a cup of lettuce. They are most likely combining several items to comprise at minimum the required serving. That is reflecting quite clearly in the previous section where we discussed developing the recipe.

Another option is schedule the “side salad” recipe (fig.14) and the “fruit” recipes to the production record as well as maintain the detailed ingredient production record described earlier for accountability and efficiency. When the side salad is listed in the production record, the detailed by-item [Salad Bar Production Record](#) backs up the volume of product that was prepared and assures a state inspector that planned quantities produced were adequate for the reimbursable meals served that day. In the record the reimbursable meal count for the day is used as the “served” or “used” quantity for side salad. For example, if a site served 100 reimbursable meals, then 100 would be recorded for the line item “SB Side Elem” (fig. 16). The fruit side can be treated the same way. This method accounts for the individual choices students make at the salad bar, which typically is more than two items.

For *a la carte* side salads sold, there should be an item record from the POS software to record into the “non-reimbursable” field indicating exactly how many were sold to brown baggers or adults (you may have developed a separate recipe for adults). If a school does not use a POS system, the easiest way to track those non-reimbursable salad sales is to count the side salad containers before service and then record the number used by counting the remaining containers at the end of service. That method can also for counting reimbursable salad bar meals if a school has not created a key for a reimbursable salad bar meal in the POS.

16200: Create/Edit/Update Daily Production:1

Site ID: 118 Site Description: BEAR CREEK ELEMENTARY
 Meal Period: Lunch Date: 09/23/2011 Comment: Menu: PASTA CHEESY MAR ELE
 Feeding Figure: 123 Week: 0 Day: 0

1-Item Counts 2-Food Groups 3-Menu Lines 4-Meals/Rev 5-Comments 6-Temperatures

Item Description	Stock Number	Recipe	Left-over	Portion Size	Pro-jected	Excep-tion	Pre-pared	Added	Left-over	Used	Non Reimb.	Adult	Leftov. Code
PASTA CHEESY MAR EL	PV050	Yes		1-6 OZ SPO	121	0	132		5	127		2	5 5
SALAD BAR ENTREE	SA305	Yes		1-11 OUNC	3	0	4		0	4			5
SB SIDE ELEM	SA700	No		1-1 SVG	121	0	120		0	120			5
FRUIT SIDE	SI400	No		1-1 MED PC	123	0	125		4	121			5
MILK BAG ORG 1% 5 G	1500	No		1-1 CUP	122	0	85		40	45			5
MILK SKM 1/2 PT PAPER	1521	No		1-1 CUP	2	0	4		2	2			5

Items with exceptions are highlighted in red * In Description column means that recipe is an ingredient in another recipe
 Leftovers: (1) Freeze (2) Refrigerate (3) Srv Next Day (4) Dispose (5) Rtn Stock (6) Served as Seconds (7) Overserving (8) Srv Next Period

Disposition Comment:

Add Item Substitute Item Delete Item Item Details Adjust Exception Manage Leftovers

Print Tickets Print Recgrds Print Exceptions Update Exceptions Delete Production Update Inventory Complete Production Close

Figure 16. Sample of digital production record



Site Level Ordering

The use of detailed daily production records is essential to the site management of salad bars. Cost over runs due to waste at the site level is one of the most common reasons that salad bar programs fail. Depending on the operational model, the site's role in fiscal sustainability of the salad bar program is extremely important.

There is more protection against waste in a centralized production model where many or all of the salad bar products are ordered and shipped from a central kitchen. Central production allows for more efficient production of cut products, and ordering by sites is simpler because they order by standard measures of

prepared product instead of raw product that they must prep on site. This is especially useful for small school sites where receiving a case of a product like cucumbers is not in scale with the rate the product is used.

In the instance where small sites must prep product from scratch, the district may need to specify to the vendor that broken cases or buying product by the pound will be required. Another solution includes splitting cases between sites—one site receives the full case, splits it, and then a driver moves the balance of the case to the other site. Tracking expenses by site can be challenging via this method, but they can be tracked through inventory transfers and maintaining site accounting codes on the invoices.

The USDA’s Food Buyers Guide, which is now available in an [online tool](#), is helpful in estimating the edible portion of many commonly used salad bar vegetables. Accurate salad bar production recordkeeping is the quickest way to ascertain actual needs. You can also customize the [Salad Bar Site Produce Projection Tool](#) by scaling the yield of key vegetable ingredients in the salad bar recipe.

Procurement

The menu drives everything in procurement. If there is one area that derails food expenses, it is a lack of commitment to menu cycle development. If salad bars are added to current meal costs without any change to the menu cycle, the resulting expense of labor and food will be unsustainable. The most successful programs using salad bars are those that incorporate the salad bar as the primary “go-to” for vegetable side dishes and fruits. Menu cycles should be developed with the understanding that if hot vegetable sides are retained daily, then the department budget may not be able to absorb the increased cost of salad bars unless there is also an increase in participation. Since every district is different, we cannot generalize about what one district can or cannot support, but the primary strategy is to be accountable for the changes ahead of time, track new program costs closely, and adjust if you are not on target

Impact to Food Expense

Since the 2012-13 school year, the new fruit and vegetable serving requirement has resulted in increased produce costs in districts across the country. The old regulations, though they included fruits and vegetables, did little to truly promote kids choosing to eat them. The result is the requirement that a student must take a half cup of fruit or vegetable as part of their reimbursable meal. In districts that had implemented salad bars before the serving guideline change, impact to food cost in the fruit and vegetable category were minimal as student behavior had already shifted and selecting vegetables and fruits every day had become routine.

One of the biggest impacts of adding salad bars as part of the reimbursable meal is a change in the way that fresh fruit and vegetable products are purchased: fresh versus frozen or canned. One of the most common questions we hear from salad bar grantees of the [Let’s Move Salad Bars to Schools](#) program is “How do we plan for purchases?” We recommend planning the department’s food budget based on average menu costs for all meal types (see [Food Costs](#) page for more details), which includes salad bar. Essentially, your food budget would be based on an average cost per meal by type multiplied by the number of projected reimbursable meals you will serve for the coming year. It's important to remember that when adding a totally new feature to your menus like salad bars, rolling over the prior year’s food

expenses as the cost projection for your budget is not accurate enough to protect you from under-budgeting food costs.

Salad bars will transform your approach to menu planning and help you identify which aspects of your menu can be replaced. When adding salad bars to your lunch program, you need to analyze the cost of the fruit and vegetable sides offered in your current lunch menus. As long as you are planning to have the salad bar replace your current fruit and vegetable side costs in your future menu cycles, a reasonable budget is possible and fairly straightforward to project. In analyzing food costs around the country, we find that fruit sides average \$0.18 to \$0.30 per serving and vegetable sides are similar.

Projecting Produce Purchases for Requests for Proposals (RFPs)

As we mentioned earlier, without historical data it is a challenge to know exact volume for each ingredient you want to offer regularly on your salad, but it's not impossible to develop projections to guide you in the first year. The change in procurement practices will vary based on the practices and menus of the district prior to implementing salad bars. If the district is serving a lot of fresh product from the service line prior to implementing the salad bar, the change will not be as dramatic as it will be for a district that limited its menu to primarily canned and frozen product. The use of USDA foods and the DOD Fresh Fruit and Vegetable program will also need to be considered in your overall procurement plan.

Analyze your purchases, commodity and DOD records to establish how much volume in your lunch menus are attributable to fruit and vegetables in your current cycles. If you use digital production records you will be able to export production data that will accurately reflect fruits and vegetables served at each meal period. You can align those numbers with your purchase and commodity history to have a fairly accurate volume of produce served over a set period of time. If you don't have digital production records, you can use a large sampling of your paper records and manually ascertain a percentage of fruit and vegetable served that can be applied to the volume of purchases to arrive at a reasonable estimate of fruit and vegetable use at each meal.

Collecting this information establishes a baseline of past practices, which is really useful for future evaluation of the shift to salad as well as assisting you in establishing some realistic projections for fruit and vegetable volume when preparing to shift to a salad bar model. For districts that have less experience using fresh vegetables and fruits the conversion of canned and frozen to fresh, with regard to envisioning how many cases or pounds of product they may need, is a particular challenge. The following exercise will help you develop a realistic RFP for produce and grapple with the cost of the salad bar ingredients compared to your current practices.

Step One: Analyze Prior Practices

Depending on what time of year it is, you'll either want to analyze the prior year's purchase data or the current year. If it is late February, then use the current year and develop an estimate for the remainder of the year based on the menu volume (servings), ADP, and current vendor costs.

What Do You Need?

- 1. Lunch Production Data:** As discussed above production data provides the actual usage in your current pre-salad bar menus. Given the current regulations you know that students must take at minimum a fruit or vegetable so at minimum your lunch ADP is the baseline to help with volume estimates, though actual production data is most accurate.
- 2. Vendor Velocity Data:** This is a report that your vendor can export from their system. You'll want to see the full school year, July 1 through June 30. It's a by-item report (see examples below), so ask them to provide it in an Excel or csv file to make it easy for you to sort and add columns. If you use your own back-office program that receives invoices, that would be a suitable alternative, but velocity reports are excellent tools and it should be standard practice to receive them monthly as well as annually from your vendors for tracking purposes.
- 3. USDA Food Received Report:** Export a detailed "received" commodity report from WBSCM or whichever tool your state has developed for USDA commodity records.
- 4. DOD Fruit and Vegetable Program:** Depending on the state and your district practices you may also have access to a report of your DOD receipt for the same period. If you do not, you may need to create a report that includes product items, description, amount, and average fair market value for the DOD product in that time period.
- 5. Current Menu Cycles:** These reflect the year represented by the purchase data.
- 6. Future Menu Cycles:** See [Cycle Planning Steps](#).
- 7. Salad Bar Menu:** See [Menu Planning](#) for salad bars.
- 8. District Calendar:** Pull calendars from the period that you are analyzing. You'll need to know the number of serving days by month and year.
- 9. Breakfast and lunch Average Daily Participation (ADP):** The total for the district as well as the school for the year analyzed. If you serve snack or supper you will need those numbers as well. (Use [Simple Meal Count Average Daily Participation Worksheet](#) to calculate.)

FROM 7/01/11 TO 6/30/12							
ITEM #	SIZE	ITEM DESCRIPTION			SHIPPED	TOTAL SALE	AVG PRICE
100199	163/175	APPLES, GALA 163/175 XF	F		593	\$ 17,973.91	\$ 30.31
295040	200/1OZ	CARROTS, SNACK PACK BABY 200/1 OZ	V	*CA*	346	\$ 7,834.53	\$ 22.64
200030	138CT	ORANGES, 138 FANCY	F	*L*	446	\$ 7,570.55	\$ 16.97
560015	5#	JICAMA, STICKS 5#	V	2PM	438	\$ 5,838.17	\$ 13.32
125025	150CT	BANANAS, PETITE GT 150CT 40#	F		125	\$ 3,339.71	\$ 26.71
100195	198/216	APPLES, GALA 198/216 XF	F		105	\$ 3,012.15	\$ 28.68
100939	163/175	APPLES, FUJI 163/175	F		98	\$ 2,768.98	\$ 28.25
550005	5#	CUCUMBERS, SLICED 1/4" W/SKIN 5#	V	2PM	176	\$ 2,313.86	\$ 13.14
565060	6/2#	LETTUCE, ROMAINE SALAD CHOPPED 6/2#	V	*L*	125	\$ 2,093.24	\$ 16.74
530010	4/3#	BROCCOLI, FLORETS 4/3#	V	*L*	66	\$ 1,264.20	\$ 19.15
425160	12 BSKT	TOMATOES, CHERRY 12 BSKT	V	*CA*	48	\$ 938.49	\$ 19.55
130136	8/1#	BERRIES, STRAWBERRIES CONSUMER 8/1#	F	*CA*	33	\$ 667.44	\$ 20.22

Figure 17. Produce vendor velocity report

Vendor Item	TYPE	Item Description	Description 2	UOM	Pack Size	Sales In	Total Sale	case price	svg/oz
24376	fruit, canned	DICED PEACHES IN JUICE	CHOICE	CS	6/#10	12.00	374.04	\$ 31.17	0.194813
64040	fruit, canned	WHOLE MANDARIN ORANGE	AMERICAN ROLA	CS	6/#10	8.00	313.20	\$ 39.15	0.244688
003710092433	fruit, canned	DICED PEACHES IN L/S	CHOICE	CS	6/#10	4.00	133.92	\$ 33.48	0.20925
11047	fruit, canned	FANCY SWEETENED APPLESAUCI	CHOICE	CS	6/#10	4.00	120.80	\$ 30.20	0.18875
93873171/1010	fruit, dried	SEEDLESS RAISIN	IMPERIAL	CS	144/1.5OZ	199.00	5,676.13	\$ 28.52	0.17827
15302	fruit, canned	FRUIT COCKTAIL IN JUICE	MISSION PRIDE	CS	6/#10	142.00	5,243.73	\$ 36.93	0.230798
MCL03622	potato	SPICY SKIN ON SPIRALS	McCAIN	CS	6/4LB	224.00	4,906.16	\$ 21.90	0.136891
MCF03761	potato	OVATIONS 3/8" CRINKLE CUT FR	McCAIN	CS	6/5LB	95.00	2,374.00	\$ 24.99	0.156184
OIF00215A	potato	PLAIN POTATO TATER TOTS	ORE-IDA	CS	6/5LB	76.00	1,551.20	\$ 20.41	0.127566
492277/10326	potato	PREMIUM MASHED POTATOES	BASIC AMERICAN	CS	12/31OZ	8.00	352.40	\$ 44.05	0.275313
27000-37854	tomatoes, canned	DICED TOMATOES IN JUICE	ANGELA MIA	CS	6/#10	2.00	39.76	\$ 19.88	0.12425
15483	vegetable, canned	WHOLE KERNAL CORN IN LIQUID	CHOICE	CS	6/#10	83.00	2,127.09	\$ 25.63	0.160172
7022207425	vegetable, canned	PEAS	CHOICE	CS	6/#10	10.00	311.70	\$ 31.17	0.194813

Figure 18. Prime vendor velocity report sorted by product type

Step Two: Organize the Data by Food Type

Using the reports that you’ve gathered, organize the data by type: fruit or vegetable, and also by sub-category: fresh, frozen, or canned. The data will reflect all meal types. If there are products that are specifically only served at breakfast or snack then you can eliminate that data as it will not affect your lunch food planning. As well, if you have a USDA FFVP and purchase or track that procurement separately you can eliminate those items from the spreadsheet as well.

Step Three: Determine the Volume by Meal Type

Presumably there will be some overlap of items that are used in breakfast, snack and dinner if you serve those. The next step is to isolate the fruit and vegetable purchases by menu category, breakfast, lunch, snack and dinner if you serve that. A la carte produce sales will also need to be isolated if you sell produce in addition to any of your meals.

The most accurate way to determine fruit and vegetables served by meal type would be to use your “items served or used” history from the production records. However if you do not use digital production and your menu cycles repeat the same fruit and vegetables throughout, it is reasonable to analyze a week’s worth of production records to extrapolate out approximately how much fruit and vegetable is attributable to each meal type. The goal is to understand what percentage of your fruit and vegetable volume is attributable to each meal (fig.19).

MEAL TYPE	SVGS OF FRUIT	SVGS VEGGIES
BREAKFAST	20%	0%
LUNCH	70%	95%
SNACK	10%	5%
SUPPER	0%	0%
	100%	100%

Figure 19. Percentage of vegetables and fruits served each meal period.

Comparing the actual volume and expense data of the fruit and vegetable components of your current menu cycles gives you a historical baseline and will also allow you to track the shift in your procurement once the salad bars have been added.

Step Four: Determine Your Salad Bar Menu

The menu drives everything in procurement. If there is one area that derails food expenses, it is a lack of commitment to menu cycle development. If salad bars are added to current meal costs without any change to the menu cycle, the resulting expense of labor and food will be unsustainable. The most successful programs using salad bars are those that incorporate the salad bar as the primary “go-to” for vegetable side dishes and fruits. If hot vegetable sides are retained daily, then the department budget may not be able to absorb the increased cost of salad bars unless there is also an increase in participation. Since every district is different, we cannot generalize about what one district can or cannot support, but the primary strategy is to be accountable for the changes ahead of time, track new program costs closely, and adjust if you are not on target

In your launch year, you may want to keep your salad bar menu plan simple in order to make it easier to develop realistic volume projections to use in a producer vendor RFP. Yes, the salad bar provides lots of opportunity to showcase many choices, but we still recommend keeping it simple at first. Anchor your bars with standard selections and then choose some rotating ones that may be more seasonally driven or more expensive and offered less frequently.

Step Five: Project Product Volumes for Your RFP

With your menu cycle planned and your salad bar menu identified you can determine the highest-volume items that your produce RFP will solicit for pricing. Salad bar is challenging because every student takes a different combination of product. Until you have historical data, you may be nervous, but in your inaugural year you will be pleasantly surprised with how well your launch can go when you keep your salad bar selections moderate, track all production, and allow enough time to train the students on the bar, on how much to take, and encourage them to try new foods.

In the district example below (fig. 20), their breakfasts were prepackaged and they only used juice as the fruit (pre-current regulations). They did have a fresh fruit and vegetable program, but those purchases were isolated to a separate contract, so isolating their fruit and vegetable use at lunch was fairly easy. Due to the size of the district sample, we summarized the item detail. What this illustrates is that daily at lunch their actual purchase of fruit and vegetable was approximately \$0.41 per lunch meal daily, which is well more than what is needed to implement a salad bar program.

Lunch Produce Purchases - Sample District 1 year					
Package	Type	Cases/#s	Servings	Cost	Cost per Svg
Canned	Fruit	47686	6676040	1848767	0.276925692
Canned	Veg	9043	1356450	255070	0.188042316
Dry Pack (potato pearls)	Veg	656	393600	33442	0.084964431
Frozen	Veg	393148	1572592	408245.92	0.259600659
Apples - 125 ct	Fresh	600	75000	14424	0.19232
Peaches - 40 ct	Freash	640	25600	12057	0.470976563
TOTALS			15,293,537.00	\$ 3,493,052.92	
Participation Data					
Daily Lunch ADP	47,720				
Annual Lunch Total - 180 days	8,589,600				
Fruit and Veg Cost per ADP	0.41				

Figure 20. Sample produce purchasing data from one year in a large district.



Figure 21. Preparing to set up salad bar for service

Salad Bar Item Cost Case Study

Once you've started operating salad bars in your district you can perform much more detailed cost analysis if you maintain daily records. In our sample district we did a cost analysis of salad bar consumption in the elementary schools using the by-item production record discussed earlier.

Based on 22,000 Meals	PAN	TOTAL	Total Mon - Fri		
SALAD BAR ITEM	SIZE	FITS/PAN	Used	Unit cost	Weekly cost
Beans, Garbanzo USDA	1/4 pan	61 oz	154.0	2.12	326.48
Broccoli	1/4 pan	26 oz	38.3	3.26	124.70
Carrots	1/4 pan	20 oz	134.1	0.66	88.51
Celery	1/4 pan	28 oz	139.5	2.39	333.41
Chicken, Diced USDA	1/4 pan	32 oz	90.0	0.33	29.70
Corn USDA	1/4 pan	32 oz	111.0	0.66	73.26
Cottage Cheese	1/4 pan	64 oz	99.2	7.09	702.97
Egg, chopped	1/4 pan	24 oz	61.1	1.1	67.21
Jicama	1/4 pan	28 oz	71.3	1.1	78.46
Peas USDA	1/4 pan	40 oz	66.8	1.02	68.09
Peppers, green	1/4 pan	20 oz	62.2	1.99	123.78
Potatoes, roasted	1/4 pan	32 oz	88.0	0.86	75.68
Salad Mix - romaine	1/2 pan	32 oz	235.3	2.73	642.37
Salad Mix - spring	(same pan)	8 oz	46.8	1.83	85.55
Salad Brown Rice	1/4 pan	2.5 qt	25.9	4.64	120.18
Salad Tabouli	1/4 pan	1.5 qt	23.3	2.24	52.08
Dressing Balsamic	bottle	24 oz	38.1	1.64	62.48
Dressing Italian	bottle	24 oz	33.3	1.46	48.55
Dressing Ranch	bottle	24 oz	139.8	0.95	132.76
			Total Weekly Cost		3236.20
22,000			Approx Cost per Svg		0.15

Figure 22. Salad bar costing example (all products except fruit)

The costing example (fig. 22) was aggregated from a week of onsite production data in 28 elementary schools for a total of 22,000 reimbursable meals served. When analyzing the actual used portion for a typical week, the cost-per-serving at the elementary level was \$0.15. Secondary school salad bar cost-per-meal averages -- using the same method of accounting-- were \$0.35.

In this analysis, fruit was factored separately. We recommend costing the salad bar without the fruit because:

- a) The components are separated on the production record.
- b) Most districts have good production data on fruit consumption because they count the fruit individually.
- c) For budget purposes, it is preferable to plan the budget presuming that every student will take fruit *and* salad bar vegetable components.

In this district, protein was also included in the salad bar layout. Since different proteins were offered on different days, the averages from this type of data collection allows the district to capture a fairly precise view of their real costs and volumes used in the menu.

The assumption in this model is that salad bar items are offered as part of the reimbursable meal to every student *and* the student can come back to the bar for seconds. In the sample district, purchases of fresh produce used in salad bars and in scratch cooking shifted from 4% of food purchases prior to their menu shift to 24% of food purchases in the first year they ran salad bars in all sites and removed a majority of the manufactured foods. The increased volume of fresh produce was balanced by abandoning the use of canned vegetables, all baked French fry products, most canned fruit, a deep reduction in the use of juice, as well as an increase in scratch cooking. So though salad bar will increase your produce purchases, if fully embraced within menu planning it will replace other purchase categories and be a sustainable choice.

Vendor Relationships

It is not uncommon to find school districts that have never posted a solicitation for their produce purchases. Why? If fresh produce is a small percentage of their purchases, they may not have thought it warranted a specialized vendor, they may just be in the habit of receiving produce as part of their prime vendor bid or they limit their produce procurement to allocation through the [DoD Fresh Program](#). Once salad bars are introduced into a district, particularly larger districts, produce procurement becomes pretty serious business, so we recommend developing a Request for Proposal (RFP) that outlines the district's requirements. RFPs differ from bids, primarily because there are more considerations than just the lowest bid. This is especially pertinent with produce because the price of many products fluctuates throughout the growing season. Selecting a produce vendor strictly on the lowest bid may mean that the quality of the product is not number one grade.

Making decisions about what vendor to purchase produce from will depend in part on the delivery model for the district or the delivery model that local vendors can provide. Ideally, you want to encourage as much competition between vendors as possible, but realistically the delivery model can often determine how many vendors will respond to your RFP. Your RFP needs to be very clear on the requirements for delivery. For example: a district with multiple sites prepping their own product for salad bars needs to receive deliveries directly to the sites, provided minimum purchase levels can be reached and the vendor is willing to deliver to multiple sites. This model can also apply to districts ordering from DoD which usually only limits delivery locations based on minimum order.

Typically, the biggest challenge for produce vendors is the delivery window that schools require. Unlike private industry, schools only have Monday through Friday service (a relatively short window of business hours compared to restaurants), frequent breaks in the year, and many three-day weekends. All of these can pose a challenge to vendor relationships, but "relationship" is the key word; schools may represent a challenge with regard to delivery and other unique criteria, but they also provide an opportunity for a large volume of sales and reliable payment to the chosen vendor.

Pricing Agreements

Produce differs from other food items due to various factors:

- 1) It is highly seasonal and relies on the weather to a degree that many products do not.
- 2) It is perishable.
- 3) There are a lot of products to choose from.

When school districts solicit for responses to their RFPs it is often a year ahead of the agreement term, so asking a vendor to bid a set price on 30 products a year in advance is simply not in sync with the industry. As an alternative, there are two commonly used practices for produce pricing—short-term bidding and cost-plus pricing.

Short-term bidding consists of the district requiring vendors to provide a price list for a determined length of time. It can be weekly, bi-weekly, monthly, etc. In this arrangement the district is typically assured of benefiting from the lower costs of in-season produce. The downside is the time it will take to monitor the bids, presuming that multiple companies will respond. If there are not multiple bids, then there is no real incentive for competition.

The second practice that has proven successful across many geographic regions is a “cost-plus” pricing model. This requires the vendor to determine a flat rate per case that is added to the cost of the product. This arrangement is more transparent and makes it easier to ascertain that certain products aren’t carrying the cost of the contract. For example, in a conventional low bid contract a vendor could low bid the five most frequently purchased items, but mark-up items that are purchased less frequently. With this cost-plus model, the district requires that the vendor provide copies of their quarterly purchase records to the district for a pre-determined list of products. This records audit of the vendor’s costs maintains transparency of the transactions and assures an open vendor relationship.

Request for proposals should include:

- Primary district contact for response to the RFP.
- Date when proposals are due.
- Date when vendors will be notified of decision.
- List of schools and addresses.
- Preferred delivery day, time of delivery, and any other information that a vendor should know about each delivery location.
- Explanation about how the RFPs will be evaluated or scored.
- School calendar highlighting all school breaks and closures requiring an alternative delivery schedule.
- List of products, their specification and projected annual quantity.
- Request records of the vendor’s purchase price by case of your top 10 products (in volume) over the last three quarters.
- Identify your requirements with regard to Country of Origin.
- Identify any other preferences such as local sourcing, identification of farms, sending weekly market reports, etc.

In addition to this information, be sure to include standard contractual language used by the district as well as all federally required contract language.

Staying Local

There are tremendous opportunities for using the salad bar as a showcase for local, seasonal foods and education. In fact, there are several well-known examples of salad bars that were established primarily to serve local foods in the schools as a means to integrate food education within the cafeteria. In California the best-known examples are in Davis, Santa Monica, and Riverside— these districts specifically designed their procurement around local farm relationships. Given their close proximity to the primary growing area for produce in the United States, their ability to source local foods year-round is very different than in regions with colder temperatures or that are not within historically agricultural regions. Other limiting factors of local farms include: lack of a distribution system and lack of scale—not enough of the necessary product grown to garner a competitive price or meet the district’s demand. Despite these limitations, local produce is a growing industry in regions all over the country and the salad bar is a perfect place to showcase and educate students about the significance of [local foods](#).



1. Marketing

Communication with Principals and Parents

Informing the broader school community of a district’s addition of salad bars and the resulting benefits is an important part of salad bar success. We encourage the director to inform principals directly, meeting with them and explaining the roll out plan. This will assure school leadership that the food services department is prepared for the change and that it will be positive for the school. In our experience, there is little resistance from the principal and their teams when they are alerted to the change and understand how it will be integrated into the existing lunch program.

If “push-back” occurs, it is often concern around the time it may take for students to go through the salad bar in addition to going through the hot line. This is why it is very important to meet with school leadership early, show them how the flow of students will be affected, and literally “sell them” on the positive impact of offering the students more choice, fresher foods, and the opportunity to lay a solid

foundation for life-long health. If food service takes the lead in [salad bar implementation](#), then all the other stakeholders: principals, teachers, assistant teachers, parents, and students are more likely to be supportive.

Key Steps for Communication:

- Set up individual meetings with school principals and agree on a rollout date.
- Send information home to parents via the school network (e.g., Friday folders, newsletters, school website).
- Make announcements at PTA/PTO meetings. If well attended, set up a sample salad bar for them to experience first-hand.
- Distribute a press release via district communications office.
- Post photos and information about the salad bar program on food service web pages.



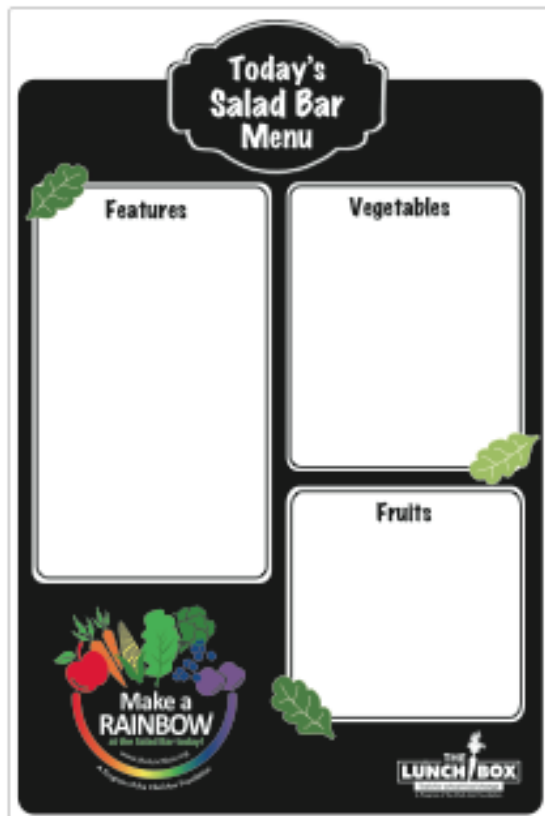


Figure 23. Salad bar menu sign

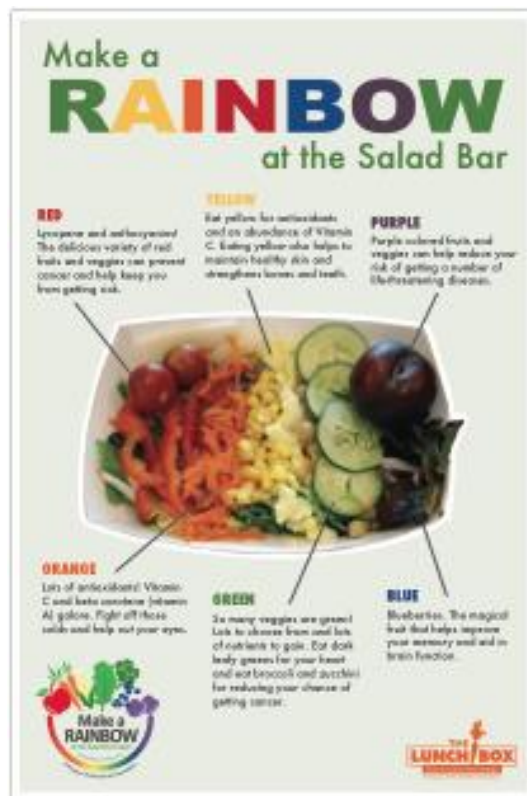


Figure 24. Sample poster

Engaging Students in the Dining Room

So now that your salad bar is up and running and things are going well, there's more that you can do to engage the kids and raise participation. Here's what works:



Rainbow Days Activity

The Lunch Box has developed a student activity called [Rainbow Days](#) that has been wildly successful in increasing salad bar participation in Boulder Valley School District. Though some schools had already been offering salad bars for up to three years, the excitement around salad bars grew tremendously with the introduction of this one-day activity which encourages kids to choose three food colors (not including white foods) from the salad bar and receive a prize once they eat them, in this case an [I Made a Rainbow Sticker](#).

The activity and supporting promotions have been put together in a step-by-step [Rainbow Days guide](#).





Figure 25. Rainbow Days activity

Parent and Caregiver Engagement

Many school districts have active parent volunteer programs. Parents can be a positive influence in the cafeteria by encouraging kids to try new foods, to use utensils properly, to not reach too far, and to avoid spilling too much. Building confidence is an important part of students' willingness to make a trip to the salad bar daily and this is where parent volunteers can really help. We've seen districts set up a parent liaison program to promote stronger communication between food services and the individual school's parent communities. We encourage food services to have a presence at PTO meetings to help grow the relationships and encourage parents to volunteer in the cafeteria.

Tastings and Product Identification

Promoting salad bar participation through tastings is a win-win. As with Rainbow Days, it is useful to have some volunteers out in the dining room to assist the food service staff with student engagement. Ideas for tastings can include having students

- Try seasonal products.
- Compare different varieties of the same item.
- Taste something raw versus cooked.
- Give feedback on a new salad recipe that the district is trying out on the salad bar.

Your produce vendors or local farmer contacts can be very helpful in creating a tasting event by showing up to engage the students and answer questions. Regional [Farm to School](#) networks are a great resource for creating relationships with local farms and producers. "Harvest of the Month" (see [Art Contests](#) page for explanation) is another theme that can be used to educate and support student tastings. Your State Department of Agriculture or local Agricultural Extension office is often a great resource for providing seasonality charts as well as identifying farms to engage with.

The activity and supporting promotions have been put together in a step-by-step [Tastings](#) event guide.



Figure 26. Promoting new flavors and foods through tastings

Figure 27. Gardens and farmers market experiences teach kids about flavors and food

Engaging kids at the farm level is also a great learning tool. [Farm to School](#) relationships can help reinforce where their food comes from. Farms are starting to show up even within the city limits of large cities (for example: Detroit and Denver) as local organizations address the issue of food access in the US. Students' experiences at farmers markets or student run farmers markets is another excellent option for building relationships between kids and food; what does a food look like in the field, what do the seeds look like, how does it taste raw or cooked?



Conclusion

The [Chef Ann Foundation](#) is committed to assisting school districts, food service personnel, parents, and kids by providing resources to help support and implement the access to fresh, whole foods in schools. The addition of a salad bar to a school meal program can have a profound and immediate impact on the culture of the cafeteria. We hope that this guide provides some ideas and concrete tools for this process. If you have any questions or feedback, we would love to hear from you. Please contact us at thelunchbox@chefannfoundation.org