



THE LunchBox™

Healthy Tools To Help All Schools

Presents Salad Bars - The Lunch Box Guide



Table of Contents

Table of Figures	2
INTRODUCTION.....	3
Why Salad Bars?	3
The Assumptions.....	4
FIRST STEPS	5
Equipment Selection.....	5
Regulations	7
Federal.....	7
Local Health Authorities	8
Developing Standard Operating Procedures for Salad Bars.....	8
MENU PLANNING	8
Labor Models.....	9
Key Labor Assessment Areas.....	9
The Salad Bar “Recipe”.....	11
Production Record Compliance versus Tracking Item by Item Use	14
IMPLEMENTATION – MAKING “IT” HAPPEN!.....	16
Purchasing.....	16
Creating Vendor Relationships.....	18
Pricing Agreements.....	19
Staying Local.....	19
Staff Training.....	21
MARKETING.....	22
Communication with Principals and Parents.....	22
Student Training	23
Engaging Students in the Dining Room	24
Rainbow Days	25
Tastings and Product Identification	26
Kids and Gardens.....	26
CONCLUSION.....	28
Salad Bars in Schools Quotes from the Field.....	28



Table of Figures

Figure 1 Built-in refrigerated salad bars.....	5
Figure 2 Mobile Insulated Food Bar	6
Figure 3 Table top salad bar using chill packs	6
Figure 4 Mobile electric salad bar	7
Figure 5 From Staff Training to Daily Production.....	10
Figure 6 Cucumbers in production and ready for service at the school site	11
Figure 7 Examples of Salad Bar Layout for 4 or 5 pan bars.....	12
Figure 8 Excerpt from USDA SP02-2011 revised	13
Figure 9 Five-Day Data Collection Worksheet.....	14
Figure 10 Salad Bar Prep	14
Figure 11 Sample Digital Production Record	15
Figure 12 Salad Bar Production Record.....	16
Figure 13 Salad Bar Costing Example	17
Figure 14 Preparing to set up salad bar for service	18
Figure 15 Staff Training	21
Figure 16 Salad Bar Signs.....	23
Figure 17 Sample Poster	24
Figure 18 Make a Rainbow Day.....	25
Figure 19 Promoting New Flavors and Foods through Tastings.....	26
Figure 20 Gardens and Farmers Market Experiences Teach Flavors and Food	27



INTRODUCTION

As a result of the launch of the national initiative for [Let's Move Salad Bars to Schools](#) by [Food Family Farming Foundation](#), [Whole Foods Market](#), [United Fresh Produce Association Foundation](#) and [The National Fruit and Vegetable Alliance The Lunch Box](#) team has had many requests to create a handbook for salad bar implementation in schools.

There are several handbooks and case studies available in our resources now that we'd like to acknowledge because the groundbreaking work dating back to the late 90s has laid the strong foundation for use of salad bars, not only as vehicles to increase consumption of vegetables and fruits, but also as a bridge for partnerships with local communities through creating new markets for farmers' products grown in the region. All of these models were established in California, a state that has been ahead of the rest of nation when it comes to recognizing the connection between fresh produce, better health and creating opportunities for children to learn the value of fresh produce through nutrition education and gardening. The work of [Dr. Wendy Slusser in Los Angeles Schools](#)¹, [Dr. Gail Feenstra's Farmers Market Bar work](#)² in Davis and [Rodney Taylors' work](#) in both Santa Monica and more recently Riverside, CA³ represent the most widely referenced salad bar implementations in the country.

This guide does not intend to replace the important tools that are represented in their examples, but will instead offer some concise discussion of the various ways that salad bars can be implemented in schools, acknowledging the common requirements found in the school food arena and outlining the key resources a school or district must have in place to have salad bars be part of every lunch every day at school.

Why Salad Bars?

Both academic research and actual experience in schools across the country are increasingly demonstrating that school children significantly increase their consumption of fruits and vegetables when given a variety of choices in a school fruit and vegetable salad bar. When offered multiple fruit and vegetable choices, children respond by trying new items, incorporating greater variety into their diets, and increasing their daily consumption of fruits and vegetables.

The benefit of salad bars in schools extends beyond the healthy foods consumed during the breakfast or lunch hour. Increased daily access to a variety of fruits and vegetables provides a personal experience about choices that can shape behavior far beyond the school lunch line. Children learn to make decisions that carry over outside of school, providing a platform for a lifetime of healthy snack and meal choices.

The [White House Task Force on Childhood Obesity](#) has endorsed schools using salad bars and upgrading cafeteria equipment to support providing healthier foods to kids. In 2009, the [National Academy of Sciences' Institute of Medicine](#) concluded that schools need to add as many as two servings of fruits and vegetables daily to meals in order to meet children's basic health requirements.

¹ http://www.thelunchbox.org/sites/default/files/How%20to%20Develop%20a%20Salad%20Bar_Slusser%201998.pdf

² <http://www.sarep.ucdavis.edu/cdpp/farmtoschool/crunchlunch32003.pdf>

³ http://www.thelunchbox.org/sites/default/files/Riverside%20FM%20Salad%20Bar%20Handbook_Edited_2010_.pdf



Salad bars, whether they are free standing units in the dining room or part of the buffet line offer choice and the ability to serve fresh foods as part of the meal. In this handbook we will focus on the free-standing salad bar implementation, whether it is a mechanically cooled unit, a wheeled 4 or 5 pan unit, or a table top bar, the approach is the same for a successful salad bar program.

The Assumptions

The assumption in this guide is that a salad bar will be implemented as part of the reimbursable meal on a daily basis; meaning that a student can select both a hot entrée *and* items from the salad bar every day at lunch. The student could also create a reimbursable meal just from selections from the salad bar. The Lunch Box supports this approach because in our experience of implementing salad bar programs in many districts as well as our discussions with other school food professionals, this approach brings the best return for the investment. As with any tool we provide – customize as you see fit and share your experience and wisdom with us via [The Lunchroom](#), [email](#) or [Facebook](#).

Why should we offer salad bar every day as part of any reimbursable meal?

Efficiency and cost is the simplest answer to this frequent question. To implement salad bars requires investments of capital, staff training, menu development, operational changes and marketing. With students, the investment is in teaching the children the skills of choice, the pleasure of eating fresh foods every day, and the education of learning what foods look like in the raw state. The desired outcome is the creation of the life-long habit of eating plentiful amounts of vegetables and fruits.

Later in this handbook we will discuss the financial sustainability of offering the bar as a daily choice in addition to the hot entrée, as well as a meal choice on its own. In districts The Lunch Box has visited the daily cost of the salad bar offered as part of the lunch averages out across all reimbursable meal participants at 16 to 26 cents per meal depending on the choices offered at the bar; approximately the cost of a single piece of whole fruit.



FIRST STEPS



Equipment Selection

Depending on the physical space where a salad bar will be used there are several choices to consider.

Regular Service Line with cold wells



Figure 1 Built-in refrigerated salad bars

Pros: If a school already owns this, there are no upfront costs. Gives site personnel control during service. Staff can assist younger children from the service line.

Cons: Creates slower lunch lines – is often too high for K-1 and they always need assistance.

Does your current service line have a cold section with a sneeze guard that allows for self service? If yes, are the lunch periods timed with classes released in a pattern adequate to accommodate self-serve from the cold wells without holding up the whole line? That is the primary question and the biggest challenge in this set up.



Free standing wheeled Insulated Salad Bars: By far the least expensive and most frequent choice; the newest versions of these bars, offered in both 4 pan and 5 pan configurations, compress nicely for moving through doorways, have adequate sneeze guards, and now can hold food in temp for 4 hours.⁴



Figure 2 Mobile Insulated Food Bar

Pros: Fully mobile, inexpensive, easy to maintain

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

Table Top insulated Salad Bars: Similar to mobile salad bars, the main difference is they require a table.

Pros: Inexpensive, more compact than a wheeled unit

Cons: Does not store well and appropriate height can be a problem for elementary students because of needing to be on a table



Figure 3 Table top salad bar using chill packs

Free standing mechanically cooled Salad Bars: Very similar to free standing insulated salad bars, the mechanically cooled bars offer the same ability to have two-sided service.

Pros: Hold temp, easy to clean, do not require a freezer to keep unit cold

⁴ http://www.thelunchbox.org/search/luceneapi_node/temperature%20salad%20bar



Cons: Most expensive mobile option, not as compact as mobile units, fewer location choices due to the need to be plugged in, 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

As anyone who works in the school food arena knows regulations and compliance issues are abundant throughout our school food service operations. Salad bars have been the topic of much discussion as the USDA has at times appeared to both support and question the use of salad bars in the National School Lunch Program. The most recent guidance published January 21, 2011, SP 02-2010 – Revised⁵, has answered the many concerns and questions that resulted from their earlier guidance in October of 2010 that had many food service directors wondering if they were going to have to pull out the salad bars in some of their schools because of non-compliance.

USDA encourages the use of salad bars in the school meal programs. The 2005 Dietary Guidelines for Americans and the Institute of Medicine's (IOM) report, "The School Meals Building Blocks for Healthy Children" encourages the consumption of vegetables and fruits. The IOM report cites a 2007 study that determined that "salad bar programs in public schools indicate positive effects on fruit and vegetable consumption". Additional data from the School Nutrition Dietary Assessment Study (SNDA) -II and SNDA-III describes the benefits of utilizing salad bars in the National School Lunch Program; schools with salad bars offer a wider variety of vegetables and fruits than other schools. Salad bars have the potential to improve nutrition and encourage the consumption of fruits, vegetables and legumes. In addition to the nutritional benefits, salad bars may lower plate waste in school feeding programs. While we recognize the many benefits of salad bars, we are cognizant that salad bars are not always a viable option in some school food service operations. 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.

⁵ <http://www.thelunchbox.org/content/usda-memo-salad-bars-national-school-lunch-program>



What the USDA and The Lunch Box both endorse is careful consideration and planning for implementing salad bars. The guidance addresses all the primary challenges.

- Portion size compliance for a reimbursable meal
- Location of the salad bar with regard to Point of Sale (POS)
- Nutrient Analysis
- Food Safety

Local Health Authorities

When considering implementing a salad bar our recommendation is to engage your local health authority in the process. The use of processed foods in school meals does make them less complicated when it comes to managing the safe practices of food handling and the flow of food.

Salad bars mean handling fresh foods, sometimes hazardous foods (such as beans) multiple food items and self-service diners! What your local health authority will want to understand is that your department has a plan, a Standard Operating Procedure⁶ that guides the salad bar protocols and controls the risks that may be associated with the use of salad bars.

Developing Standard Operating Procedures for Salad Bars

[Standard operating procedures \(SOPs\)](#) can be customized to fit particular physical plant designs paired with labor models, but the overall goals are the same; to operate the bar efficiently and safely. Consistent use of [temp logs](#)⁷, chilling the pans that are used on the bar, having plenty of utensil and ingredient back-ups and setting up a pattern of rotating out the products through the meal periods are all key features of a solid SOP. Staff as well as any volunteers or regular lunchroom supervisors, such as vice principals, aides or teachers are important to the overall follow through in [salad bar procedures](#)⁸. Acceptance of the salad bar as part of the daily operation will happen quickly when the school community experiences the students' excitement and pleasure in having more fresh choices.

MENU PLANNING

One of the most common questions we've encountered in discussions of salad bars is how to integrate the use of the salad bar into the menu plan. The short answer is there is no "right" way. There are many approaches and all can be termed "successful" if the definition of success is offering increased choices of vegetables and

⁶ <http://www.thelunchbox.org/content/preventing-contamination-food-bars>

⁷ <http://www.thelunchbox.org/content/salad-bar-temp-log-sample>

⁸ <http://www.thelunchbox.org/sites/default/files/Salad%20Bar%20Procedure.pdf>



fruits to students and doing it safely and at a sustainable cost. Before a district can decide which approach is best for their operation, it is important to consider where the strengths and challenges are. Studying the feasibility for implementation is imperative and should include the following:

- The food service operations model
- The facilities in every school
- Current labor hours on site
- Produce delivery options
- Potential for centralized production and delivery
- Skills of the various food service team members

Labor Models

The handbooks noted in the introduction from Los Angeles, Davis and Riverside all reflect a “staffing up” model with regard to coordinating the salad bar implementation. In the L.A. and Davis models the start up of the salad bars was funded through grants that supported the concept of hiring specialists to help with implementation. Though additional support can be a great help it is The Lunch Box’s contention that having additional new funds for labor for salad bar implementation is not a solution available to many school districts. Reallocation of existing labor is usually sufficient to successfully implement the salad bars when paired with targeted training. Efficiency is gained over time so though there may be a need to allocate some additional hours for start up, this is not generally needed for the long term.

Key Labor Assessment Areas

- Budgeted Labor Hours by Site versus Actual
- Skill Sets of Existing Site Teams
- Current Site Team Efficiency
- Current Site Productivity
- Team Motivation – Is the Food Service 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?)
- Daily ADP at Site – sheer volume of production needs versus current
- Food preparation models – product prep at sites; direct delivery of cut product from production kitchens; direct delivery of either pre cut or uncut product from vendors; etc.





Figure 5 From Staff Training to Daily Production

Depending on the status of all of the above the director may choose the “start simple” method; offering a limited selection of product that they feel they can successfully accomplish given their unique circumstances. Other directors may see the salad bar as a platform for more extensive change; blending an array of proteins, grains, vegetable and fruits, specialty salads or theme days. We’ve seen it all happening out there successfully. Presenting meal components on the salad bar offers the opportunity to change the menu. School districts exchange the canned green beans and canned fruit cocktail, often tagged as the eyesore of school food, with a rainbow of fresh products. Labor attributed to components of the meal that are replaced with salad bar contributes to the shift in labor resources. What we’ve found is once the salad bar becomes an assumed part of the operation, efficiency is gained, directors are often creative with menu choice and the staff is happy to take on the challenge.⁹ **The key is to establish the baseline standards, train and adjust for efficiency and sustainability.** What kids might do the first week 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. If the students’ side of the equation is

⁹ <http://www.thelunchbox.org/content/riverside-farmers-market-salad-bar-handbook> pages 21 to 24



educated and supported as well as the food service teams' side of the equation the salad bar is a win-win for everyone. We'll discuss educating the students later in this guide.



Figure 6 Cucumbers in production and ready for service at the school site

The Salad Bar “Recipe”

So how does a district decide what to offer and what they can afford? The choices are a bit overwhelming, but as with other items in the meal that are offered to all students, the costs are carried by all of 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 or even one. As with all meals the cost of the individual components are carried by the averages of selection. If the budgeted cost per meal is \$1.00 that average may include menus that are 1.40 to .80 cents. Salad bar becomes part of that equation. Studies of districts show average costs for salad bar per elementary student ranging from 16 cents to 26 cents. These are variable 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).

The examples below are just one of a multitude of salad bars that could be offered. This type of set up can be offered daily as part of the reimbursable meal. In this example, aside from a grain salad that is on the bar, grains are offered from the line to keep breads from drying out on the salad bar. Canned beans, defrosted frozen corn, chicken or peas are all items from USDA Foods that can help defray the salad bar costs in the



overall cost structure. These grids are useful to plan out the salad bar layout and to train the school teams. Editable samples like these are available on The Lunch Box in 4-pan or 5-pan configurations and reflecting the seasons.¹⁰

Some districts plan the menu with a combination of set items plus choices that the site staff can choose to offer. Regardless of what method a district implements, the federal guidelines require that the district have a salad bar recipe to comply with nutrient analysis - the conundrum of salad bars as we know them! Customers rarely choose the same combination of ingredients for their salads so to take care of that “problem” the recipe will analyze ALL the ingredients on the salad bar. It sounds odd and it is, but there is no other option at the present time to remain in compliance from the standpoint of having a recipe.

Dressing – 3 Bottles ¼ pan	Salad Mix ½ Pan	Fresh Fruit ½ pan <small>(fruit may be offered on kitchen line instead)</small>	Salad mix ½ pan
Cherry Tomatoes ¼ pan			
Chicken ¼ pan	Salad Mix ½ Pan	Dressing – 3 Bottles ¼ pan	Red Peppers ¼ pan
Carrots ¼ pan			
Jicama or Leftover Slaw ¼ pan	Celery ¼ pan	Cottage Cheese ¼ pan	Chicken OR Diced Egg or Tuna or Egg Salad ¼ pan(alternate daily)
Corn ¼ pan	Kidney OR Garbanzo Beans ¼ pan		
Green Peppers ¼ pan	Broccoli/Peas ¼ pan	Cherry Tomatoes ¼ pan	Celery ¼ pan
Cottage Cheese OR Egg (alternate daily) or Leftover Egg or Tuna Salad ¼ pan	All – Grain Salad or Secondary - Jalapenos Elementary – Canned or Cut Fruit ¼ pan		
Fresh Fruit 1 Full Pan or 2 Half Pans		Carrots ¼ pan	Kidney OR Garbanzo Beans ¼ pan
		Jicama or Slaw ¼ pan	Cucumber ¼ pan
		Grain Salads or Corn (peas) ¼ pan	Cut or Canned Fruit ¼ pan

Figure 7 Examples of Salad Bar Layout for 4 or 5 pan bars

So how do we develop a recipe that will meet the federal compliance? The [federal memo on salad bars](#)¹¹ (Fig 7), updated in January 2011 and well as guidance for writing recipes using local ingredients does mention how to do this¹², but The Lunch Box will try to break down the process as well.

¹⁰ <http://www.thelunchbox.org/content/salad-bar-five-well-grid>

¹¹ <http://www.thelunchbox.org/content/usda-memo-salad-bars-national-school-lunch-program>

¹² <http://www.fns.usda.gov/tn/resources/NAP7.pdf>





Nutrient Analysis

Chapter 7 of the Nutrient Analysis Protocols: How to Analyze Menus for USDA's School Meals Programs describes the process for conducting a nutrient analysis of a salad bar. The recipe and nutrient analysis of the food bar is based on historical usage of food bar items. Standardized recipes can be developed for food bars and entered into the nutrient database at the local level. The recipe should be constructed based on a typical day.

The menu planner would first determine the serving size. Second, the number of servings the recipe produces must be established. Finally, the menu planner must determine the amount of each food ingredient in the recipe by:

- Measuring the amount of each ingredient placed on the food bar on a typical day.
- Measuring the amount of each ingredient left over on the food bar at the end of the meal service and;
- Subtracting the amount left over from the amount placed on the food bar for each ingredient to determine the amount of each ingredient to enter for the recipe.

Figure 8 Excerpt from USDA SP02-2011 revised

In a district where members of The Lunch Box have worked extensively a salad bar recipe was written in readiness for the SMI portion of the district's CRE review. To write a salad bar recipe that includes all of the components that are offered on the bar in the amounts they are actually used, we had our elementary and secondary schools compile their daily production records for the salad bar into a weekly template (Fig 8) The "used" amounts were totaled and then were divided by the total number of meals by meal type, elementary and secondary, which resulted in a "[recipe](#)"¹³ based on actual consumption.

¹³ http://www.thelunchbox.org/sites/default/files/Salad%20Bar%20Side%20Recipe%20Elementary_Sample.pdf



Dec 6 thru Dec 10								
SALAD BAR TOTAL USED								
SALAD BAR ITEM	PAN	6-Dec	7-Dec	8-Dec	9-Dec	10-Dec	TOTAL	TOTAL
SIZE	Used	Used	Used	Used	Used	Used	Used	FITS/PAN
Beans, Garbanzo	1/4 pan	0.25	0.25	0.25	0.25	0.25	1.25	61 oz
Beans, Kidney	1/4 pan						0	61 oz
Broccoli	1/4 pan			0.5	0.5		1	26 oz
Carrots	1/4 pan	1	0.75	0.75	0.75	0.5	5.75	20 oz
Celery	1/4 pan	0.25	0.5	0.5	0.5	0.5	2.25	28 oz
Chicken, Diced	1/4 pan	0.5	0.5	0.5	0.5	0.5	2.5	32 oz
Corn	1/4 pan	0.5	0.5				1	32 oz
Cottage Cheese	1/4 pan	1	0.75	0.75	0.75	0.75	4	64 oz
Egg, chopped	1/4 pan						0	24 oz
Fruit, canned	1/4 pan	6	6	6	6	6	30	61 oz
Jicama	1/4 pan	0.25	0.25	0.25	0.25	0.25	1.25	28 oz
Peas	1/4 pan	0.75	0.25			0.5	1.5	40 oz
Peppers, green	1/4 pan	0.5	0.5	0.5	0.5	0.5	2.5	20 oz
Potatoes, roasted	1/4 pan			0.5	0.5		1	32 oz
Salad Mix - romaine	1/2 pan	2	2	2	2	2	10	32 oz
Salad Mix - spring	pan)	0.25	0.25	0.25	0.25	0.25	1.25	8 oz
Salad Brown Rice	1/4 pan				0.5	0.5	1	2.5 qt
Salad Tabouli		0.25	0.25				0.5	1.5 qt
Dressing Balsamic	bottle	0.1	0.1	0.1	0.1	0.1	0.5	24 oz
Dressing Italian	bottle	0.5	0.25	0.25	0.25	0.25	1.5	24 oz
Dressing Ranch	bottle	1	1	1	1	1	5	24 oz

Figure 9 Five-Day Data Collection Worksheet



Figure 10 Salad Bar Prep

Production Record Compliance versus Tracking Item by Item Use

The salad bar recipe keeps the district in compliance, but for day-to-day operations having the school sites track their daily use and leftovers of individual items in a paper or digital record creates accountability and is imperative for cost control. The [production records](#) are filed at the site and a manager can easily reference the



flow of the products.¹⁴ The record can be edited to fit the salad bar offerings for any particular site or menu changes throughout the year. For the digital production record that many districts use as part of their food service software (Fig 9) the simplest way to record the side salads that are offered daily as part of the reimbursable meal is to record the “used” as having been consumed by all the reimbursable meals sold. For example, if a site served 100 reimbursable meals that day, 100 would be recorded for the line item “SB Side Elem”. Because there is no way to track every item each student may take from the salad and because the sites must prepare enough salad bar items in preparation for this varied consumption, recording that every reimbursable meal served that day had a side salad is appropriate. For a la carte sides sold there would be a count from the POS software to plug into the “non-reimbursable” field for the side salad so that count should be exactly how many sides were sold to brown baggers. If a school does not use a POS system, the easiest way to track those non-reimbursable side salad sales is to count out the side salad containers before service and then record the number handed to students by counting the unused containers at the end of service. That method can also work for salad bar meals if a school does not have the salad bar full meal set up as its own button in the POS.

16200: Create/Edit/Update Daily Production

Site ID: 112 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	Leftover	Portion Size	Projected	Exception	Prepared	Added	Leftover	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 SVO	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 PAPP	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 Records Print Exceptions Update Exceptions Delete Production Update Inventory Complete Production Close

Figure 11 Sample Digital Production Record

The lack of transparency in digital production records for side salads is the reason for maintaining an additional record by item for production and planning purposes. By pairing the digital production record with a live [ingredient-by-ingredient production record](#) the school is proving actual volume of product used against the total meal count. This combined with the tray checks for reimbursable meals proves accountability to the compliance system (Fig 10). In the example below this district chose to create a unit of measure for each item by ¼ pan. They have standardized weights per ingredient in a quarter pan to an agreed upon fill mark and choose to measure that way. Another common method for tracking production and use of individual

¹⁴ <http://www.thelunchbox.org/content/salad-bar-production-record>



ingredients is by weight. Kitchens commonly weigh during prep and then weigh what's left daily. This might be a better choice for schools that use a variety of pan sizes on their bars.



School:
Site Lead:

Week:
Student Lunches Served:
Adult Lunches Served:
A la Carte Lunches Served:

ITEM	AMT/PAN	Monday				Tuesday				Wednesday				Thursday				Friday				
		Prepped Amount	Leftover	Used	Discard	Prepped Amount	Leftover	Used	Discard	Prepped Amount	Leftover	Used	Discard	Prepped Amount	Leftover	Used	Discard	Prepped Amount	Leftover	Used	Discard	
Beans, Garbanzo	1/4 pan 61 oz																					
Beans, Kidney	1/4 pan 61 oz																					
Carrots	1/4 pan 2#																					
Celery	1/4 pan 4#																					
Cherry Tomatoes	1/4 pan 4.5#																					
Chicken, Diced	1/4 pan 2#																					
Corn	1/4 pan 2#																					
Cottage Cheese	1/4 pan 4#																					
Cucumbers	1/4 pan 4#																					
Egg, chopped	1/4 pan 1.5#																					
Fruit, canned	1/4 pan 61 oz																					
Fruit, Apple	full pan																					
Fruit, Bananas	full pan																					
Fruit, Oranges/Tang	full pan																					
Jalapenos	1/4 pan 61 oz																					
Jicama	1/4 pan 4#																					
Peas	1/4 pan 2.5#																					
Peppers, green	1/4 pan 3#																					
Peppers, red	1/4 pan 3#																					
Potatoes, roasted	1/4 pan 2#																					
Salad Mix - romaine	1/2 pan 2#																					
Salad Mix - spring		.5#																				
Salad Brown Rice	1/4 pan 2.5 qt																					
Salad Tabouli	1/4 pan 1.5 qt																					
Dressing Balsamic	bottle																					
Dressing Italian	bottle																					
Dressing Ranch	bottle																					

SALAD BAR PRODUCTION RECORD TO BE FILLED OUT DAILY

Figure 12 Salad Bar Production Record

IMPLEMENTATION - MAKING "IT" HAPPEN!

Purchasing

One of the biggest impacts that utilizing salad bars as part of the reimbursable meal will have is the change in purchases of fresh fruit and vegetable products. This impact will vary based on the practices and menus of the district before implementing salad bars, but it's not uncommon to experience a two to four-fold increase in produce purchases. This does not presume that the district is spending more money across categories on food. More commonly costs are reallocated from another part of the meal to salad bar ingredients as the district



deemphasizes reliance on ready-to-heat foods that may include several meal components in one package. Costs also shift as the salad bar will prompt dropping additional vegetable sides or fruit based desserts that were being used to meet the five meal components. In addition, using USDA foods as a regular part of the salad bar will offset food cost.

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 13 Salad Bar Costing Example

The costing example above aggregated the onsite production data for five days of service in December 2010 in 28 elementary schools for a total of 22,000 reimbursable meals served. The side salad recipe as written using every possible item offered on the salad bar costs out at 24 cents a serving. When analyzing the actual used portion data for a typical week, the cost per serving drops to 15 cents. Secondary salad bar cost per meal averages, using the same method of accounting were 35 cents.

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, purchase of fresh produce used in salad bars and in scratch cooking as a percentage of food cost shifted from 4% of food purchases in 2008-09 school year to 24% of food purchases in 2010-11.¹⁵ Despite an increase in the percentage of the food cost for produce, the overall food cost was not increased, but instead was reduced as a

¹⁵ Data courtesy of [Boulder Valley School District](#)



percentage of the food service budget because of a decrease of reliance on ready-to-heat and ala carte food purchases.



Figure 14 Preparing to set up salad bar for service

Creating Vendor Relationships

It is not uncommon for a school district to never have put their produce purchases out to bid. Why? Mostly because they aren't buying in enough volume from one vendor to do that or more recently, what produce they do buy, they allocate through the [DOD Fresh Program](#).¹⁶

Making decisions about where to purchase produce from will depend in part on the delivery model for the district or the delivery model that local vendors can provide. For example; a district with multiple sites prepping product for salad bars could receive deliveries directly, provided minimum purchase levels can be reached and the vendor is willing to deliver to multiple sites. Typically, the biggest challenge for produce vendors with this model is the delivery window that schools require. Unlike private industry, where weekend business rules and closures are often limited to one day a week, schools have only Monday through Friday service, frequent breaks in the year and many multiple day weekends. All of these things can pose a challenge in vendor relationships. What we recommend is to write a Request for Proposal (RFP). RFPs differ from Bids primarily because the assumption is that there are more considerations than lowest bid. In produce this is especially pertinent because the pricing of many products fluctuate throughout the growing season. Selecting a produce vendor strictly on low bid may mean that the quality of the product is not number 1 grade. What we recommend is to have key items that are used on the bar year round and have less price fluctuation, like lettuce and carrots, and then rotate products where price is more affected by season, for example; tomatoes, broccoli and cucumbers.

¹⁶ <http://www.fns.usda.gov/fdd/programs/dod/default.htm>



Pricing Agreements

The Lunch Box team members have primarily selected “cost-plus” as a model for larger vendor contracts. This requires the vendor to decide a flat rate per case to charge that is added on to their cost of buying the product. This arrangement is more transparent and is easier to rest assured 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 top five most frequently purchased items, but with items that are not as frequently purchased steadily make up the difference by marking them up. With cost plus the district requires that the vendor provides a copy of their purchase records quarterly to the district for a pre-determined list of products. This maintains transparency of the transactions and assures an open vendor relationship.

Another method we’ve seen successfully implemented is to write a RFP that delineates all the requirements to do business with the district, (e.g. delivery requirements, ordering requirements, etc) and then the district posts weekly product needs on their website and the approved vendors can respond. This may bring several vendors to the table, particularly if the district is located in a larger urban area. This method works best for central warehouse deliveries but could be implemented for a site based delivery system. The reason this type of bid may be more compatible is because it doesn’t corner the vendor into pricing a product that may be severely affected by weather conditions for a whole year. It allows both for competition between vendors as well as responding to the current supplies at that particular time of year. The risk of this solution is that in a particular week, no vendors may respond and then the district is left the needed products. It is important to always have a back-up plan with at least one vendor.

Request for Proposals Should Include:

- Primary district contact for response to the RFP
- List of schools and addresses
- Preferred delivery day and time of delivery and any other information that a vendor needs to know about the delivery needs as this will affect who may decide to respond
- Include language about how the RFPs will be evaluated or scored
- Date when proposals are due
- School calendar highlighting three day weekend closures requiring an alternative delivery schedule plus all school breaks
- List of products with projected quantities
- Request records of the vendor’s purchase price of your top 10 (in volume) products over the last 3 quarters
- Identify limitations with regard to Country of Origin
- Identify any other preferences like; prioritizing Local, identification of farms, sending weekly market reports, et cetera

In addition to this information, include all typical contractual language that the district uses as well as all federally required contract language if the RFP.

Staying Local

Opportunities for using the salad bar as a showcase for local seasonal foods and education is tremendous and there are well known examples of salad bars that were established primarily to serve local foods in the schools. In [Denver Public Schools Slow Food](#) helped establish a garden to school protocol so that product from the



gardens would travel from outside directly into the school meals.¹⁷ In California the best known examples are in Davis, Santa Monica and Riverside, all mentioned previously. These districts specifically designed their procurement around farm relationships. Given their location in the primary growing area for produce in the United States the ability to source local foods year round is very different than in regions with cold temperatures or areas that are not within historically agricultural regions. Other limiting factors are lack of a distribution system for local farms or more commonly lack of scale – simply not enough of the necessary product grown in large enough quantities to produce a competitive price or enough volume to stock a district with salad bars in every school. Michigan Farm to School has created a handy [step-by-step guide](#) for schools to begin relationships with farmers.¹⁸



¹⁷ <http://www.thelunchbox.org/content/denver-public-schools-school-gardens-protocol>

¹⁸ <http://www.thelunchbox.org/content/purchasing-local-food-products-step-step-guide>



Staff Training

Many school districts have no or limited professional development days which would allow for adequate training time when trying [to implement](#) new aspects of their programs or to reinforce existing standardized procedures. In the case of salad bars this can be a significant barrier to success depending on the prior experience of the district, service model and the equipment available. In the event that a district has no in-service days to train the recommendation is to ask for fund support from the district, find sponsors for the trainings, or apply for grant monies to cover the costs. The absence of well articulated methods for ordering, receiving, production, service, and sanitation will ultimately heft a larger cost to the district through inefficiency and ineffective programming so the preparation for launch and planned sustainability is essential.

The staff need clear protocols for salad bar implementation. This is a team effort and it is important that everyone is clear what system is in place. Some districts may set up specific check lists for maintaining accountability at the site, making it easier for area managers to identify problems easily. Standardization of the menus, the ordering protocols, preparation, recipes, production records, temp logs, and leftovers all need to be included in training.

Trainings should introduce the district programs, goals, [why it is important](#), and how staff are expected to communicate the addition of salad bars to the students. If there is limited time available for training this can be done with a large group. Doing gradual roll outs of the salad bar implementation in a district is another way to make sure all the kinks are worked out at one school site before another one is implemented.



Figure 15 Staff Training



MARKETING

Communication with Principals and Parents

Informing the broader school community of a district's addition of salad bars, and the 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, as long as the principal and their teams are alerted to the change and understand how it will be integrated into the existing lunch program, there is little resistance.

If "push-back" occurs it is often 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 all the other stakeholders; principals, teachers, assistant teachers, parents and students are more likely to be supportive.

Key Points:

- Individual meetings with school principals – agree on roll out date
- Send information home to parents via the school network; Friday Folders, Newsletters, School Website
- PTA/PTO meetings – if well attended – setting up a sample bar for them to see can be very effective in bringing support
- Press Release via district Communications Office
- Post photos and information about the salad bar program on food service web pages



Student Training

[Engaging the students](#) in the new salad bar can be the best part of this whole process. Kids are enthusiastic about having greater choice. Making sure the students have salad bar etiquette guidelines is very important.

Key Points:

- The sneeze guard is there to keep their heads away from the products!
- Using the utensils every time they reach for something!
- Alerting staff as soon as a spill happens!
- Take only what they believe they can eat!
- Have signage to help remind students of their role.¹⁹
- Utilize posters to engage students.²⁰



Figure 16 Salad Bar Signs

¹⁹ <http://www.thelunchbox.org/content/salad-bar-table-tents>

²⁰ <http://www.thelunchbox.org/content/make-rainbow-salad-bar-informational-poster>



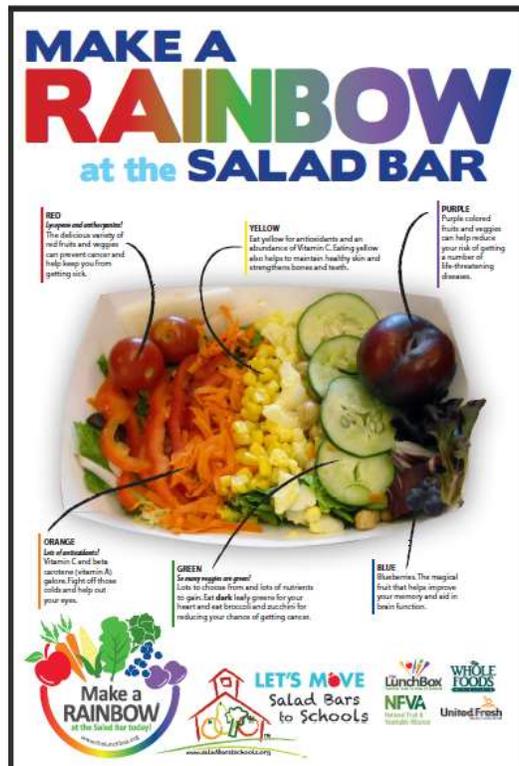


Figure 17 Sample Poster

Engaging Students in the Dining Room

So now you're open and things are going well, but you know there's more that could be done to engage the kids and raise participation. What works?



Rainbow Days

The Lunch Box has developed a student activity called [Make a Rainbow](#) that has been wildly successful in Boulder Valley School District schools. Though some schools had been offering salad bars for three years, the excitement around salad bars truly expanded with a one-day activity called *Make a Rainbow*. The activity and all the pieces were put together into a step-by-step guide, which can be downloaded from The Lunch Box.²¹ The event was held at 31 schools over two months last spring and is being repeated again this fall. The key activity is that kids will choose three food colors, not including white foods, from the salad bar and consume them to receive a prize, in this case a [sticker](#).²²



This activity engages all the key stakeholders so we like to call it a “one-stop shop” engagement.



Figure 18 Make a Rainbow Day

Parent and Caregiver Engagement

²¹ http://www.thelunchbox.org/sites/default/files/Rainbow%20Day%20Packet_0.pdf

²² http://www.thelunchbox.org/sites/default/files/lunchbox_r4.jpg



Many school districts have active parent volunteer programs. Parents can be a positive influence in the cafeteria encouraging the kids to try to new foods, gently guiding them to use the utensils properly, to not reach too far and spill too much. Building confidence is an important part of students' willingness to make a trip to the salad bar daily and 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 always 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 engagement 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 interfacing with the students. The tastings can be introducing students to seasonal products or comparing different varieties of the same item, or tasting something raw versus cooked or trying 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 can be a great resource for creating relationships with local farms and producers.



Figure 19 Promoting New Flavors and Foods through Tastings

Kids and Gardens

Taking the education further – outside – can truly deepen and embed the lessons of where our food comes from and encourages students to taste what they grow. This will help impact the ability of school food service to successfully introduce new foods. In Berkeley Unified School District where every elementary school has a



garden, the Food Services Department integrated the recipes from their kitchen and gardening classes into the menu cycles. In school gardens in Denver Public Schools (DPS) product is harvested and brought to the school kitchens for use in the meal (yes, this is legal unless there is a specific local regulation prohibiting such activity in that municipality). DPS and the local chapter of [Slow Food](#) developed a [garden to kitchen protocol](#)²³ to create oversight and accountability for their standard operating procedures. Another excellent resource is the Maryland University Extension Service's *Grow It Eat It – [Food Safety in School Gardens](#)*.²⁴



Figure 20 Gardens and Farmers Market Experiences Teach 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?

²³ <http://www.thelunchbox.org/content/denver-public-schools-school-gardens-protocol>

²⁴ <http://www.thelunchbox.org/sites/default/files/foodsafety%20in%20the%20school%20garden.pdf>





CONCLUSION

The [Food Family Farming Foundation](http://www.foodfamilyfarming.org) 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 effect on the culture of the cafeteria. We hope this guide provides some ideas and concrete tools for this process. We would love to hear from you. Please contact us at info@foodfamilyfarming.org.

Salad Bars in Schools Quotes from [the Field](#)²⁵

We love our salad bar and use it every day! It has increased healthy lunches in schools and awareness among students. More students are eating fresh fruits and vegetables thanks to our salad bar!

We love our salad bar! I actually had to get out my video camera so that I could share with other principals, teachers and parents how enthusiastic my students are about our new salad bar. My students get so excited to see the salad offerings that are available each day. It is especially rewarding when something that has been harvested from our school garden is being served on the salad bar.

We have received many compliments from students and parents alike. The students enjoy their fresh salads and offerings and participation in lunch program has increased and we know they are eating healthy.

The salad bar units have been very successful at all three schools. We have seen a substantial increase in the amount of fresh fruit and produce we purchase on a weekly basis. Our children are so excited about their salad bar! They love to come and mix all the colors of the veggies into a beautiful salad. We have seen an increase in vegetable consumption and the willingness to try new things. At the beginning some children didn't know what some of the vegetables were or how they taste. It has increased their knowledge and improved their nutrition. We have seen an increase in school lunch participation since the placement of the salad bar. We are so thankful to have it in our school!!

²⁵ These quotes were collected from a survey of salad bar grant recipients, August 2011 – Let's Move Salad Bars to Schools

