

**CH.3**

**Menu  
Development**



# Menu Development

## CH.3

*Envision a cafeteria full of students enjoying safe, nutritious, flavorful meals presented in an appealing manner. These meals supply nutrients for growth, activity, and academic success. They are both economical to produce and affordable for students and staff to purchase. The focus of this chapter is to help make that vision a reality every day in your school(s). Before menus can be prepared and served, careful planning needs to take place. In addition to the meal pattern guidance and dietary specifications for each grade group, many other important aspects of menu development must be considered.*

### **In this chapter, you will learn about:**

- Basic menu development resources and tools, including:
  - Grade group meal patterns for both lunch and breakfast menus
  - Planning resources such as your records from past menus and ideas from new sources
  - Templates with built-in checks for program requirements
  - Cycle menus focused on seasonal foods.
- Tips for planning a lunch menu from the main dish to milk, including how to offer all vegetable subgroups with a salad bar, and food safety concerns of fruit and vegetable bars.
- Options for planning breakfast menus and the district-level choices that drive menu planning.
- Variety as a key principle of successful menu development.
- Checklists and tools to confirm menus meet all National School Lunch Program (NSLP) and School Breakfast Program (SBP) requirements.
- Training resources for your staff.

### **INTRODUCTION**

How important is menu development? In a successfully managed school lunch or breakfast

program, it may be the *most* crucial step. The nutritional value of meals and compliance with Federal program requirements depend on careful menu planning, but that is not all.

The menu influences every aspect of the school nutrition operation – from purchasing and preparing foods, to whether or not meals are popular with students. Good planning can make a huge difference in the success of your program!

This chapter explores successful menu planning for school meals. Included is a review of the process with attention given to important planning principles. You will also learn how to use the nutrition standards for school meals as a planning tool.

### **DETERMINE THE MENUS FOR YOUR SCHOOL DISTRICT**

Start your menu planning by focusing on the grade group meal patterns. Charts 1–3 show the lunch and breakfast meal pattern requirements and nutrition goals. It is also important to consider the ages or grades to plan meals that pique the interests of your most valued customers – the students! What captures the interest of high school students may not appeal to elementary school students and vice versa.

**CHART 1**
**Lunch Meal Pattern**

For the meal components shown below, the amounts listed are daily (D) and weekly (W) minimums. According to the 2012 final rule on Nutrition Standards in the National School Lunch and School Breakfast Programs and the 2022 final rule on Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium, all lunch meal patterns require <10 percent of total calories from saturated fat, all products be labeled zero (<0.5) grams *trans* fat per serving, and meet daily average sodium requirements.

GRADE GROUP	FLUID MILK (cups) Daily and Weekly		FRUITS (cups) Daily and Weekly		VEGETABLES (cups) Daily and Weekly		GRAINS (oz eq) Daily and Weekly		M/MA (oz eq) Daily and Weekly		CALORIE RANGE Daily Average	SODIUM TARGET 1 SY 2022-2023 Daily Average (mg)	SODIUM TARGET 1A SY 2023-2024 Daily Average (mg)
	D	W	D	W	D	W	D	W	D	W			
<b>K-5</b>	1	5	½	2½	¾	3¾	1	8	1	8	550-650	≤ 1,230	≤ 1,110
<b>6-8</b>	1	5	½	2½	¾	3¾	1	8	1	9	600-700	≤ 1,360	≤ 1,225
<b>K-8 Option</b>	1	5	½	2½	¾	3¾	1	8	1	9	600-650	≤ 1,230	≤ 1,110
<b>9-12</b>	1	5	1	5	1	5	2	10	2	10	750-850	≤ 1,420	≤ 1,280

**CHART 2**
**Vegetable Subgroup Weekly Required Serving Amounts for Lunch**

In addition to the subgroup amounts listed, weekly menus need to include additional vegetables (1 cup for grades K-8 and 1½ cups for grades 9-12) to meet weekly minimums of vegetables for each grade group. Additional vegetables can be from any subgroup.

VEGETABLE SUBGROUP	WEEKLY MINIMUM K-5 AND 6-8	WEEKLY MINIMUM 9-12
<b>Dark Green*</b>	½ cup	½ cup
<b>Red/Orange</b>	¾ cup	1¼ cups
<b>Beans and Peas (Legumes)</b>	½ cup	½ cup
<b>Starchy</b>	½ cup	½ cup
<b>Other* **</b>	½ cup	¾ cup

\* Raw leafy greens (iceberg lettuce) credit for half the volume; ¼ cup credits as ½ cup.

\*\* Other vegetable subgroup requirement may be met with any additional amounts from the dark green, red/orange, and beans and peas (legumes) subgroups.

**CHART 3****Breakfast Meal Pattern**

For the meal components shown below, the amounts listed are daily (D) and weekly (W) minimums. According to the 2012 final rule on Nutrition Standards in the National School Lunch and School Breakfast Programs and the 2022 final rule on Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium, all breakfast meal patterns require <10 percent of total calories from saturated fat, all products be labeled zero (<0.5) grams *trans* fat per serving, and meet daily average sodium requirements.

GRADE GROUP	FLUID MILK (cups) Daily and Weekly		FRUITS* (cups) Daily and Weekly		GRAINS** (oz eq) Daily and Weekly		CALORIE RANGE Daily Average	SODIUM TARGET 1 SY 2022-2023 & SY 2023-2024 Daily Average (mg)
	D	W	D	W	D	W		
K-5	1	5	1	5	1	7	350-500	< 540
6-8	1	5	1	5	1	8	400-550	≤ 600
K-8 Option	1	5	1	5	1	8	400-500	≤ 540
9-12	1	5	1	5	1	9	450-600	≤ 640
K-12 Option	1	5	1	5	1	9	450-500	≤ 540

\* Vegetables may also be substituted.

\*\* After 1 oz eq daily grains is offered, schools may substitute 1 oz eq M/MA to credit toward 1 oz eq of weekly grains requirement.

**Planning Menus for School Grade Levels**

In most cases, you will use the grade group that corresponds to the school type; for example, the meal pattern for grade group 9–12 served at high school with grades 10–12. You may have schools with grades that differ from the three grade groups. You will decide which menu plan works best for your needs, either one of three grade groups or a blend of two groups when possible.

A secondary school with grades 6–12 needs two lunch menu options. The required serving amounts for the meal components are different between the 6–8 and 9–12 grade groups. In this case, the menu may be similar for the school, but the planned serving amounts are different for each grade group. A school with grades 6–12 requires separate menus for grades 6–8 and 9–12.

As noted in chapter 2, it is possible to plan a K–12 breakfast that meets requirements for all three grade groups. You will decide if the advantages of a single menu outweigh the benefits of planning separate menus aligned closer to grade group needs. The meal pattern grade groups allow you to tailor menus to the needs and preferences of students as they grow and develop.

**Planning for Offer Versus Serve or Served**

Your choice of Offer Versus Serve (OVS) or Served will also affect your menu development (see chapter 2 and the *Take a Closer Look* feature on page 70 for more details on OVS and Served). OVS at lunch is required for grades 9–12 and optional for grade K–8. OVS at breakfast is optional for all grade groups.

## Blended Grade Groups Need Special Attention

Be sure to note specific concerns of a blended grade group. These menus require:

- Calories meet the needs of all grade groups served, thus a narrower range.
- Sodium content is at or below the requirement for the youngest grade group.
- Weekly totals of grains and M/MA meet all grade group minimums, which is the oldest grade groups for blended groups.



From a menu planning standpoint, OVS may not affect lunch menus much, because you develop meals that offer all five component groups. OVS has a bigger impact on breakfast menu planning. Breakfast meal patterns require three component groups: fluid milk, fruits, and grains. OVS breakfasts offer at least *four items that credit* as components. At breakfast, you have the flexibility to credit vegetables toward fruits and M/MA toward weekly grains totals. These options require attention to specific aspects of breakfast menu planning.

Consider which service type, OVS or Served, is the best fit for your breakfast operations. For example, breakfast in the cafeteria may be OVS, whereas breakfast outside the cafeteria, such as in the classroom or at a grab-and-go kiosk, may be Served (no option to decline foods). Each service type requires a different menu, even though all may feature similar foods.

### Offering Students Choices

Menus that offer students choices are popular and can increase participation. You will need to decide how many choices to offer students each day. All students will have a choice between at least two types of milk; at least one unflavored option must be offered. Provide as many choices as are practical for your program. Be consistent with the number and types of menu choices from day to day. Consistency helps your staff manage the demands of meal service.

Students in lower grades may be overwhelmed if offered too many decisions in the serving line. You may limit choices to side items on the menu, such as offering different fruits and vegetables. Older students respond positively to choices between entrees, self-serve bars, and ethnic cuisine, in addition to fruits and vegetables. Plan menus with choices so older students can choose reimbursable meals that fit their preferences.

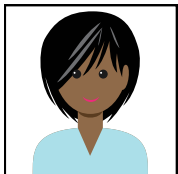
Menus for different service lines need to be planned as complete meals unless the lines share a common component choice, such as a salad bar. When lines are separate, be sure to check that each line meets the meal components and dietary specifications, including vegetable subgroups.

While menu planning seems more complicated for multiple lines, the same basic steps apply. Keep in mind that the number of choices you offer provides the framework for menu development. Once you know what needs to be included in your menus, you can organize your time and resources to begin the task.

## Menu Chat



## Hello!



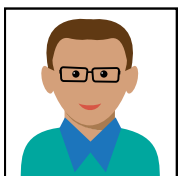
Sandra

Do you have suggestions for offering choices to students, especially students that want to eat vegetarian meals?



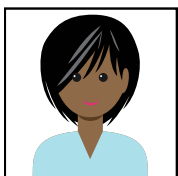
Lin

We have many students that choose to eat vegetarian. We plan our menus with a choice to decline the meat and accept legumes or cheese, such as a burrito with meat/bean mix or beans only. We handle this through OVS. We would prefer they choose and eat our entire meal, but we respect their personal preference for plant foods.



Dylan

I realize that our students have many dining options today. I believe that when we give our students choices, they will choose our meals. We provide a vegetarian choice each day, primarily on our build a meal line.



Sandra

**THANK YOU**

Thanks for sharing these ideas. I agree! I see the value of choices.



### Culinary Arts Students Test Recipes for School Lunch Program

Kyleen Harris, Food Service director, Abilene Public Schools, had a goal to involve high school students in selecting menu items for lunch and breakfast. She collaborated with the high school family and consumer sciences teacher. High school culinary arts students tested new recipes for the school’s lunch program as part of their final grade last semester. They used recipes from the Healthier Kansas cycle menus and from Vermont’s New School Cuisine cookbook. After testing a dozen recipes, the class picked out their favorites. During lunch period, the culinary students gave samples of Asian cabbage salad, whole grain corn bread, and taco soup to students for a taste test. The culinary students generated great feedback from other students through an online survey. The taco soup was a big success, and it’s now part of the seasonal soup and sandwich bar.



**School District:**  
Abilene Public Schools

**Located:**  
Abilene, Kansas

**Enrollment:**  
2,100

**Website:**  
[www.abileneschools.org](http://www.abileneschools.org)



Healthier Kansas 8-week cycle menus for lunch and 6-week cycle menus for breakfast are available at <https://cnw.ksde.org/>



Vermont’s New School Cuisine cookbook, featuring Farm to School is found at <https://vermontfarmtoschool.org/resources/new-school-cuisine-cookbook-nutritious-and-seasonal-recipes-school-cooks-school-cooks>

## GET ORGANIZED! MENU PLANNING TOOLS AND TIME

Well-planned menus take time and effort. When you plan in advance, you can take advantage of many tools and resources. If possible, develop your menus for the next school year by January or February. Then you will know which products to include when writing solicitation (bid) specifications (see chapter 5 for more details). The time devoted to the planning stage helps organize other aspects of meal production. Getting an early start on menu development will allow you to:

- Study current food inventories, past menus, and food production records for student preferences, as well as current market and price reports.
- Involve students, parents, and other interested parties in the planning.
- Select and test new food products and recipes.
- Review important program information, such as requirements and nutrition goals.
- Review lists of available USDA Foods and local, seasonal foods.
- Note important dates on the school calendar and other opportunities for special promotions.

### Use Menu Writing Tools

A variety of menu planning tools exists, from templates to software. Some schools will write menus the old-fashioned way using paper and pencil. Others may use a computerized form or menu planning software. No matter which method is used, menu writing brings the meal pattern and guidance to life.

The meal pattern food requirements and nutrition standards are based on a week's menu. Planning by the week, whether you use a traditional 5-day week or a variation, helps you meet requirements. Each menu day has requirements that contribute to the week. A menu template helps ensure you include all guidance details when creating your menu(s).

Menu templates are useful tools to start the process. Forms with boxes to categorize menu items into meal components provide an easy way to check that the meal is reimbursable during the planning process. These forms often include cues for required menu items, such as vegetable subgroups. And your template can reflect the length of your school week when it varies from a 5-day week. Sample menu templates are in Appendix 3.A.

Cycle menus are another useful planning tool. When you combine several weeks of menus in a rotation, you create a cycle menu. Common menu cycles are 3 or 5 weeks, or you may choose to have a 30-day cycle menu that you use all year long.

The cycle menu features a variety of foods, including seasonal items. For example, a 3-week cycle menu used in three rotations (cycles) would provide menus through the first 9 weeks of school. You can match the length of the cycle to your growing seasons to maximize the use of local foods. In general, buying fruits and vegetables in season helps make the most of your produce budget.

Cycle menus also help with forecasting. They control food and labor costs when production includes foods from a previous menu cycle day.

Proper food safety practices must be in place when production from another day is part of the menu plan. For example, if chili is produced for cycle week 1 Wednesday's entree, the production could include the amount of chili needed for a future menu day. The chili produced in advance (and any leftovers) must be properly chilled and frozen. Then the chili is safely thawed and reheated for service on week 3 Thursday's baked potato bar.





## Cycle Menus and Recipe Ideas

Today it is easier than ever for school nutrition programs to share best practices and winning menu ideas. Instead of starting from a blank sheet of paper or computer screen, take some time to see the ideas others have to share.

However, before you borrow, here is a note of caution: components and nutrient information are recipe- and product-specific. Chances are you will substitute products and modify others' cycle menus and recipes. You *must* update the information based on your changes and product inventory. Verify that the menus and recipes reflect the most current meal guidance. While seasonal foods vary by location, you can find new seasonal ideas. Cycle menus for local, in-season foods are available online. Here is a sampling:

### Lunch Meals Cycle Menus

*Menus that Move*, published by the Ohio Department of Education, is a set of seasonal cycle menus for schools. Each season (fall, winter, summer, spring) features local foods and cultural flavors. All include complete USDA Menu Certification Worksheets. Some features of the project are:

- Five weekly menus per season for grades K–8 and 9–12 with meal components and nutrients per serving
- Fifty standardized recipes that include:
  - Dark green and red/orange vegetables
  - Beans and peas (legumes)
  - Whole grain-rich foods
- Recipes and menus with USDA Foods
- Reduced sodium recipes.

An advisory group of school nutrition directors reviewed and evaluated the cycle menus for preparation ease, cost, equipment, and taste acceptance. Students in five regional school districts taste-tasted the recipes.

For more information, visit <http://education.ohio.gov/Topics/Other-Resources/Food-and-Nutrition/Resources-and-Tools-for-Food-and-Nutrition/Menus-that-Move>.

### Iowa Gold Star Breakfast Menu

Looking for a breakfast cycle menu? Iowa's Gold Star Breakfast Menu features a 2-week cafeteria-based menu and a 1-week grab-and-go menu. The menus feature USDA Foods. Each menu lists component and nutrition information.

Iowa's menu cycle showcases the best in sharing resources. They give credit to a Healthier Kansas Recipe (whole grain-rich Pumpkin Chocolate Chip Muffin) that Iowa modified for the cycle menu.

Find the cycle menus at [https://educateiowa.gov/sites/default/files/documents/1314\\_np\\_it\\_goldstar\\_cyclemenu.pdf](https://educateiowa.gov/sites/default/files/documents/1314_np_it_goldstar_cyclemenu.pdf).

If carefully planned, cycle menus offer a number of advantages. They can:

- Save time in repetitive functions such as pre-costing and work schedules.
- Improve the accuracy of forecasting.
- Decrease inventory costs.
- Adapt easily to varied grades and ages.
- Allow flexibility for such things as seasonal changes, availability of USDA Foods, and special events.
- Allow more time for training and marketing.

To use cycle menus to the best advantage, be careful to avoid some potential pitfalls. Here are some tips:

- Evaluate menus for too much repetition or monotony, and be sure to check the end of 1 week or cycle menu with the first day of the

following week or cycle menu to catch repeats. This is also good advice when you include a special menu.

- Note holidays and special school activities in advance for celebration menus, and make sure these menus, when inserted into the cycle, meet all weekly requirements.
- Be flexible to take advantage of seasonal foods and special buys from vendors.
- Be ready to make adjustments; for example, you may want to make changes to maximize the use of the USDA Foods items you receive throughout the year.

With menu templates and an understanding of cycle menus, you are now ready to start filling in the blanks. All schools in the NSLP serve lunch, so the next section will focus on the lunch meal first.



**School District:**  
Federal Way  
Public Schools

**Located:**  
Federal Way,  
Washington

**Enrollment:**  
21,800

**Website:**  
[www.fwps.org](http://www.fwps.org)

### Cycle Menus That Engage Students

Federal Way Public Schools have increased average daily participation with creative menu options and names. High school lunch rates increased the most, 7.2 percent in the first few months of the school year. The school nutrition program branded Asian-inspired entrees featuring USDA Foods on their cycle menus. On Asian Cuisine Days, cycled weekly on Tuesdays, mainline entree sales are up as much as 1,500 servings districtwide. Cougar and Huskies menu days added in the cycle menu tout the two popular colleges in the State. Ragin' Cajun Jambalaya is an example of another creative menu name.



Federal Way Public Schools added creative menu options such as Asian Cuisine Days and saw an increase in participation rates.



### DEVELOPING LUNCH MENUS

In this section, you will learn how to develop lunch meals using meal components. When it comes to planning a meal, where do you start? A good place is the center of the tray.

#### Main Dishes (Entrees)

There is no single right way to plan menus. However, starting with the main dish or center of the plate/tray helps provide a framework for other menu choices. Meats/meat alternates (M/MA) and grains frequently provide part of the entree. Use the meal component crediting on your standardized recipes, product package Child Nutrition (CN) labels, or Product Formulation Statements (PFS), and note how each item fits the meal pattern. Provide variety in M/MA and grains combinations as you select lunch main dishes.

Expand your menu options with fruits and vegetables as part of the entree. This strategy also helps students select a meal with at least  $\frac{1}{2}$  cup of vegetables/fruits. For example, offer a combination food such as vegetable stir-fry. When using OVS, this meal option helps students select the  $\frac{1}{2}$  cup of vegetable for a reimbursable meal in the main offering. Consider other ways to incorporate  $\frac{1}{2}$  cup of fruits and/or vegetables as part of the items students are most likely to select.



## Culinary Skill Training Programs

School meals are fresh and flavorful. Menus should balance student favorites with new recipes. Today's schools feature more foods prepared from scratch. Scratch cooking requires that staff know and use basic culinary techniques. These are skills that everyone can use at home, too. Several training programs are available to help bridge the gap for employees with fewer culinary skills and to boost the mastery of accomplished cooks.

Culinary skills are a topic identified in Professional Standards. Check to see whether the training you provide meets annual Professional Standards requirements (<https://www.fns.usda.gov/cn/professional-standards>).



The Institute of Child Nutrition's Culinary Institute of Child Nutrition (CICN) provides culinary training and resources for school nutrition professionals who strive to prepare and serve healthy, culinary-inspired school meals from scratch and elevate the cafeteria atmosphere for students. The CICN offers a variety of culinary trainings and resources at <https://theicn.org/cicn/> including the USDA Recipe Standardization Guide, standardized recipes with meal pattern crediting information, herb and spice guides, infographics, culinary demo videos, and culinary training resources for schools.



The quantity recipes used with this training are the winning entries of the Recipes for Healthy Kids Competition. In addition to whole grains, these recipes feature contemporary taste profiles and plenty of red/orange and beans and peas (legumes) vegetable subgroups. Ten recipes that provide at least ½ cup fruit and/or vegetable per serving include:

**Aztec Grain Salad** – Granny Smith apples, dried cranberries, and butternut squash

**Bok Choy Wrappers** – Bok choy, pineapple tidbits, and romaine lettuce leaves

**Crunchy Hawaiian Chicken Wrap** – Broccoli, carrots, spinach, and crushed pineapple



**Harvest Stew** – Carrots, celery, sweet potatoes, red potatoes, great northern beans, and spinach

**Lentils of the Southwest** – Lentils, onions, and tomatoes

**Roasted Fish Crispy Slaw Wrap** – Cabbage, carrots, bok choy, romaine, and avocado

**Smokin' Powerhouse Chili** – Carrots, red peppers, sweet potatoes, and black beans

**Squish Squash Lasagna** – Butternut squash and baby spinach

**Stir-Fry Fajita Chicken Squash and Corn** – Butternut squash, corn, red peppers, tomatoes, and chilies

**Tasty Tots** – Fresh sweet potatoes and garbanzo beans

You can find the entire recipe collection at <http://www.fns.usda.gov/tn/recipes-healthy-kids-cookbook-schools>.

Serving vegetable-rich entrees is one way to lead students toward better nutrition; chances are they will accept the offer of additional fruit and vegetable choices from the serving line. For example, have your staff ask, “Would you like an apple or pear with your vegetable stir-fry?”

Build-a-lunch concepts offer four components individually to create a personalized reimbursable meal. For example, offer the parts of a rice bowl: brown rice, a variety of steamed vegetables, choice of tofu or chicken, topped with pineapple, sliced almonds, and low-sodium teriyaki sauce. Build-a-lunch is a delicious way to offer students a nutritious meal in which they are creatively involved. Give it a try. You may find that both meal enjoyment and participation increase.

Be deliberate when selecting entrees:

- Follow a plan for providing a *variety* of entrees, including a variety of M/MA options.
- Vary other foods served with entrees that are repeated during a 2-week period.
- Follow Smart Snacks in Schools standards (see Appendix 3.B) if an entree is offered as an a la carte item.

### Side dishes and side items

After you decide on entrees, plan side dishes. Select items that complement your main dish offerings. Side dishes can be a wide variety of fruits and vegetables. Choose some traditional pairings (baked beans with a summer picnic theme meal) and add innovative options (slices of a Granny Smith apple and red pepper strips to add crunch to a fold-and-go cheese flatbread sandwich). Keep in mind that students like many vegetables raw as well as cooked. When introducing new foods, start with small amounts to reduce waste and improve acceptance.

Additional grains may be side items, such as rolls, bread sticks, or grain-based salads and side dishes. Occasionally you can include a grain-based dessert, but no more than 2 ounce equivalents (oz eq) per week.

### Fruit and Vegetable Bars

Self-select bars are one of the best ways to encourage student intake of fruits and vegetables. When students have a choice among vegetables, they are likely to select something they want to eat. A variety of fruit choices can be hard to resist. Salad bars can also be a great assistance to providing the vegetable subgroups throughout the week.

Your bar choices may be as simple as raw fruits and vegetables. Or, you can add specialty salads, for example, three-bean or marinated carrot coins. You may plan a salad bar that provides a complete meal by including grains and M/MA. Condiments require extra attention, because condiments must be added into the weekly averages for dietary specifications. You must plan a service method that provides portion control.

Schools without salad bar equipment can create choice bars of preportioned fruits and vegetables to achieve the same goal. Foods without sneeze guard protection must be covered. Placing ice packs under foods keeps items cold and out of the temperature danger zone (41 °F–135 °F). Here are two ways to offer a choice bar for students:

- Portion cups with lids
- Individual plastic bags.



### Rearranging Serving Line Increases Fruits and Vegetable Consumption

Post Falls School District rearranged the serving lines in schools districtwide to have students go through a salad bar before being served the main entree. The school nutrition staff interact with the students to encourage fruit and vegetable consumption with positive cues, such as, “You’re welcome to take more veggies if you would like to!” and “The salads are so beautiful today! Would you like one?” This service change has increased students’ consumption of fruits and vegetables.



Post Falls School District students select more fruits and vegetables due to lunch line changes and staff training.



**School District:**  
Post Falls School District

**Located:**  
Post Falls, Idaho

**Enrollment:**  
5,700

**Website:**  
[www.pfsd.com](http://www.pfsd.com)



## **Salad Bars: A Student-Friendly Strategy to Offer Vegetable Subgroups**

Salad bars are popular with schools and students and are a great way to offer the vegetable subgroups. The option to build a salad to personal tastes is a winner with students. When students select and serve their own salad, they are likely to eat more vegetables. Let's explore salad bars from several viewpoints.

### **Vegetable Subgroup Strategies**

Many schools feature all of the vegetable subgroups on their bars daily, thus meeting the weekly requirements. Use the daily salad bar tab in the USDA Certification of Compliance Worksheets to check your plans for components. Follow these few steps when planning a food bar that meets reimbursable meal requirements:

- Complete a salad bar production record.
- Identify the items to offer each day; vary choices for interest.
- List a planned serving amount for each item.

In the simple example below, each vegetable subgroup is included in the daily salad bar. For most subgroups, the daily planned serving amount is the minimum creditable  $\frac{1}{8}$ -cup portion. Over a 5-day week, this daily amount totals  $\frac{5}{8}$  of a cup. Thus, the sample salad bar meets (actually exceeds) the  $\frac{1}{2}$ -cup weekly requirement for dark green, beans and peas (legumes), and starchy subgroups for all grades K–12 and other vegetable subgroup for grades K–8.

For grades 9–12, the weekly minimum requirement for the other vegetable subgroup is  $\frac{3}{4}$  cup. Remember, dark green, beans and peas (legumes), and red/orange can credit toward the other vegetable subgroup, after the weekly minimum totals for each are met. When the extra  $\frac{1}{4}$  cup from these subgroups ( $\frac{1}{8}$  cup each dark green and legumes) is added to the  $\frac{5}{8}$  cup of other, the total is  $\frac{7}{8}$  cup which meets the requirement.

Note that for all grade groups, the planned daily amount of red/orange subgroup is  $\frac{1}{4}$  cup. A daily  $\frac{1}{4}$  cup totals  $\frac{1}{4}$  cups red/orange subgroup for the 5-day week. Weekly red/orange subgroup minimum totals for grades 9–12 ( $\frac{1}{4}$  cups) are met and for grades K–8 ( $\frac{3}{4}$  cup) are exceeded.

Including the  $\frac{1}{4}$ -cup portion of red/orange subgroup daily also means this bar meets the meal pattern requirement for least  $\frac{3}{4}$  cup total vegetable daily for grades K–8. For grades 9–12, additional vegetable is needed to meet the 1-cup daily requirement at lunch. Vegetable choices on the serving line or planned larger portions of all subgroups on the salad bar are ways to meet both the daily 1 cup and weekly subgroup totals for grades 9–12.

**Planned serving amounts for a sample salad bar to meet weekly subgroup requirements for K–8 and 9–12**

SUBGROUP REQUIREMENT PER WEEK BY GRADE GROUP	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	PLANNED WEEKLY TOTALS OF CREDITABLE VEGETABLES
<b>Dark Green*</b> ½ cup K–8 ½ cup 9–12	¼ cup romaine*	⅛ cup broccoli	¼ cup baby spinach*	⅛ cup broccoli	¼ cup spinach romaine blend*	⅝ cup* (creditable)
<b>Red/Orange</b> ¾ cup K–8 1¼ cups 9–12	¼ cup carrots	¼ cup red pepper	¼ cup grape tomatoes	¼ cup carrots	¼ cup raw sweet potato	1¼ cups
<b>Beans/Peas (legumes)</b> ½ cup K–8 ½ cup 9–12	⅛ cup black beans	⅛ cup kidney beans	⅛ cup garbanzo beans	⅛ cup black beans	⅛ cup garbanzo beans	⅝ cup
<b>Starchy</b> ½ cup K–8 ½ cup 9–12	⅛ cup jicama	⅛ cup chilled corn	⅛ cup green peas	⅛ cup jicama	⅛ cup potato salad	⅝ cup
<b>Other* **</b> ½ cup K–8 ¾ cup 9–12	⅛ cup cucumber	¼ cup iceberg*	⅛ cup cauliflower	¼ cup iceberg*	⅛ cup celery	⅝ cup** (creditable)
<b>Total Creditable Vegetable per Day</b>	¾ cup	¾ cup	¾ cup	¾ cup	¾ cup	3 ¾ cups

\* Raw leafy greens (including iceberg lettuce) credit for half the volume; ¼ cup credits as ⅛ cup.

\*\* Other vegetable subgroup requirement may be met with any additional amounts from the dark green, red/orange, and beans and peas (legumes) vegetable subgroups.

For the sample salad bar plan above, the last student in the line must have access to at least the minimum planned serving amount of each subgroup each day (or at least 3 days for red/orange at K–8 level). This assures the bar provides the required weekly subgroup totals across the menu week. Students will select vegetables from the variety available and have the opportunity to create different salad options each day. Staff will record leftovers after the end of meal service on the production record. See Appendix 4.A for a sample production record for a salad bar. You will notice that the sample production record includes fruits as do many salad bars.

The example described here is one way to use a salad bar to meet vegetable subgroup requirements. You will decide which approach works best for your students, staff, food budget, and menu variety. You may consider another approach that meets the guidance, such as:

- Using fewer daily choices with larger planned serving amounts
- Planning a different combination of foods than in the example
- Creating grade group-specific salad bars
- Combining options for some vegetables from the service line and others from a salad bar.

Salad bars are a flexible way to meet weekly vegetable subgroup requirements. This flexibility requires that child nutrition staff is trained to recognize creditable amounts and serving volumes that meet requirements, including OVS when implemented.

### Food Safety Considerations for Salad Bars

Safe food practices for salad bars focus on preparation and service. Train staff to follow standard operating procedures (SOPs) for handling and preparing fresh produce. A sample SOP for preventing contamination at food bars is one of the many SOPs available from the Institute of Child Nutrition (ICN). See chapter 4 in this Menu Planner for more information on food safety SOPs.

The ICN fact sheet *Handling Fresh Produce on Salad Bars* (<https://theicn.org/icn-resources-a-z/produce-safety>) gives complete safe food practices, such as:

- Preparation and set up, including:
  - Equipment needs
  - Options for preportioned servings
  - Portion control for condiments
  - Recommendations for serving containers and utensils
- Temperature control, including:
  - Equipment temperature prior to service
  - Produce temperature prior to service
  - Guidance for ice or ice pack use for equipment without a refrigeration unit
- Supervisory needs, including:
  - Student instruction and assistance for safe-food practices
  - Guidance for replenishing food
  - Bar maintenance for cleanliness during service
- Cleanup, including:
  - Removal of food after service for proper storage or discard
  - Cleaning of equipment.

The bar requires adult supervision for more than food safety reasons. Your staff monitors the choices students select for sufficient serving amounts to meet reimbursable meal criteria. Also, replenishing foods as they deplete is necessary to assure all students have access to all vegetable subgroups.



### Handling Fresh Produce on Salad Bars\*

#### Preparation and Set Up

- Use equipment with food shields or sneeze guards. In elementary schools, equipment with a solid barrier between the students and the food is recommended.\*\*
- Consider offering pre-packaged or pre-portioned items for students in all grades. In elementary schools, pre-packaged or pre-portioned items are recommended for all self-service items.\*\*
- Place a clean and sanitized utensil in each container on the salad bar. Consider replacing utensils at the beginning of each meal period.
- Label containers to identify foods and condiments.
- Use dispensers or single-use packages for salad dressings and other condiments.
- Set up the salad bar just prior to the meal period.
- Select container size so that food is used within one meal period.
- Provide individually wrapped eating utensils, or keep unwrapped utensils in containers with the handles up.

#### Temperature Control

- Verify that the temperature of equipment is at 41 °F or below before use.
- Check to be sure the bottom of the pan comes into contact with the ice or ice pack, when using them for temperature control.
- Chill foods to an internal temperature of 41 °F or below before placing on the salad bar.
- Check and record internal temperatures of each food item with a clean, sanitized, and calibrated thermometer before placing it on the salad bar. Check at least every two hours to verify that it remains at or below 41 °F.

#### Supervision

- Consider using a serving line with a solid food shield in elementary schools, allowing students to select items for assisted service rather than self-service. Employees place selected items on a plate or tray, then pass it over the food shield to students.\*\*
- Monitor self-service salad bar in middle and high schools to ensure that students do not:
  - Touch food with bare hands.
  - Touch food with clothing or jewelry.
  - Cough, spit, or sneeze on food.
  - Use utensils in multiple containers.
  - Place foreign objects in food.
  - Place dropped food or utensils back into containers.
  - Use the same plate or tray on subsequent trips.
- Assist students with utensils, if needed.
- Avoid adding or layering freshly prepared food on top of food already on salad bars and self-service lines. Check with your state or local health department for regulations on replenishing food.



### Teaching Food-Safe Habits for Salad Bars

Creating a culture of food safety includes teaching students and adults proper salad bar etiquette. The entire school’s actions, from food service staff to students and faculty, contribute to food-safe salad bars.

Craven County Schools introduced garden bar etiquette to all their 23 schools by partnering with a high school media class and football team. The resulting video shows self-service the right way, modeled by football players in uniform. The video is also a source of education for the greater community: parents, patrons, and media.



**Craven County Schools garden bar**



**School District:**  
Craven County Schools

**Located:**  
New Bern, North Carolina

**Enrollment:**  
14,700

**Website:**  
[www.cravenk12.org/](http://www.cravenk12.org/)

### Farm to School and School Gardens – Lunchroom, Classroom, and Community

Ed Christensen, assistant supervisor, Food and Nutrition Services, Missoula County Public Schools, and his staff began to introduce local foods into their school menus a few years ago. The program began with apples from the Bitterroot Valley, soon followed by squash, pinto beans, flour, honey, and broccoli. Now MCPS has a “school farm” with 16 raised garden beds built at the central kitchen site. The first year, they planted the beds with onions, reaping a harvest of over 300 pounds that were diced, stored, and used in recipes throughout the school year. Each



year they try something different; their latest success story is ... kale! As a “kale ambassador,” Ed Christensen has led the way in developing a student-favorite, foolproof recipe for kale chips. With a recipe that the kids love, the natural next step was to plant bunches of kale in the six school garden plots. One of Ed’s goals is to meet the school district demand of kale by growing it themselves. With over 300 pounds harvested so far, it just may happen.

**School District:**  
Missoula County Public Schools

**Located:**  
Missoula, Montana

**Enrollment:**  
8,700

**Website:**  
[www.mcpsmt.org](http://www.mcpsmt.org)

**Assistant supervisor Ed Christensen creates kale chips for school menus from kale grown in school garden plots in Missoula County Public Schools.**

## Menu Chat

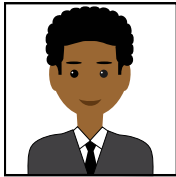


Hi,



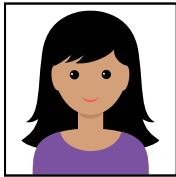
Megan

I'm looking for some help. How do you make sure you have all the vegetable subgroups offered over the week?



Tyler

Our menus use a fresh fruit and vegetable bar to offer all vegetable subgroups. Then, we offer additional hot vegetables on our serving line, a different subgroup each day. We credit all the beans and peas (legumes) on the serving line as meat alternates. We cover offering the weekly vegetable subgroup requirements by including all on our vegetable bar.



Elena

I plan all five of our high school lunch lines to offer the same vegetable subgroup each day. We might serve cooked carrots for two different lines that share serving space, a marinated carrot salad as part of the self-serve salad bar and the pizza line, and baby carrots with the sandwiches.



Megan

**THANK YOU**

I think a fruit and vegetable bar is the solution for our schools. Thanks for the ideas!



**Juice**

Over the course of a week, up to half the fruits and/or vegetables at lunch can be pasteurized, full-strength, 100% juice. Be aware that while students may choose both juice and milk for breakfast or lunch, serving juice may reduce milk consumption. Limiting juice helps encourage milk consumption.

**Fluid Milk**

Menu planning for milk is simple. You must provide at least two choices at every meal. Fat-free and 1% (low-fat) unflavored or flavored milks are the allowable choices provided that unflavored milk is offered at each meal service. Some dairy suppliers offer milk in a variety of flavors. You can include a flavored selection on a regular or occasional basis. Some schools provide unflavored milk choices at breakfast and include a flavored option at lunch 1 or more days a week.

Although flavored milk may contain more calories and added sugars than unflavored milk, studies show students choose milk more often when flavored is a choice. Not only do students drink

more milk when it is flavored, they also eat more of the accompanying food on their tray. Flavored milk can help increase or maintain participation.

Offer options consistent with students' preferences. Also, evaluate preferences from the prior school year and make changes accordingly.

**Water**

Drinking water (potable water) is neither a component nor a menu item. However, it must be accessible to students during meal service, free of charge. A water fountain in the cafeteria or nearby adjacent hallway fulfills this requirement as long as the water is available without restriction in the location where meals are served. Offering bottled water is not required, but it is an allowable expense. Keep in mind that while water must be available during meal service, it must never be promoted as an alternative selection to fluid milk.

This section covered lunch planning from main dish to milk. If you offer breakfast, read the next section. If you do not offer the SBP, you can skip to the next step in menu planning: evaluate for variety.

**Encourage Unflavored Milk**

Try this technique to encourage the selection of unflavored milk! Students may be likely to take an easy-to-reach option rather than a hard-to-reach one. This can nudge students to make healthier choices without eliminating their options.

How To Do It:

Rearrange coolers to:

- Place unflavored milk in front of other milk options.
- Place milk first in line, before other drinks.

Both actions will position unflavored milk in the first and easiest-to-access location. Research shows this switch can increase voluntary selection of unflavored milk.

What It Will Cost:

- Time: 5–10 min
- Money: \$0



## PLANNING BREAKFAST MENUS

### Important Meal With Important Choices

You might be familiar with the saying, breakfast is the most important meal of the day. How you plan this meal matters because of the SBP's flexibility. Breakfast menus may take a bit more planning than lunch, depending on your local district choices. Breakfast preparation time, staffing resources, and the service style may differ from lunch. However, you will use many of the same development steps used for lunch menus. Your district-level choices for breakfast determine aspects of your menu. Review key features of the SBP before you begin menu planning. Here is a summary of what you learned in chapter 2:

- Breakfast requires three meal components for all grade groups: fluid milk, fruits, and grains.
- Except for weekly minimum grain requirements, the breakfast meal pattern is the same for all age groups.
- Because the dietary specifications overlap, a single K–12 breakfast menu is possible.
- OVS is optional for all grade groups at breakfast.
- Breakfast patterns offer school districts flexibility on service and crediting of vegetables and M/MA.

### Flexibility in District-Level Choices

Breakfast meal patterns offer flexible meal choices, but with choices come decisions. The first choice is between OVS and Served. OVS is recommended to help reduce costs, reduce food waste, and increase participation. Served may be the best choice in some schools, such as K–5 breakfast in the classroom, while OVS works well in the cafeteria. Once you decide to use OVS or Served, you need to follow it each menu day.

Whether you choose OVS or Served, all breakfast menus must provide the three required meal components, the daily required serving amounts, and the weekly total grains, and meet the

combined dietary specifications for any blended grade group. The daily components and required amounts are:

- 1 cup milk, from at least two allowable milk variety choices; if flavored milk is offered, then unflavored milk must also be available.
- 1 cup fruits, with no more than half of week's offerings as pasteurized, full-strength 100% juice
- 1 oz eq grains daily and additional grains to meet weekly totals per grade group.

An OVS breakfast must offer four items that credit as full servings of components. Remember the *Menu Chat* about breakfast between the school menu planners in chapter 2. Each took a different approach for crediting the same breakfast menu.

During menu development, you will decide whether or not to take advantage of flexibility in crediting vegetables and M/MA toward the required breakfast components. If you include vegetables or M/MA at breakfast, remember the following:

- Vegetables can be an extra food, not a component of a reimbursable meal, or
- Vegetables may credit for some or all of the required fruits component when these guidelines are followed:
  - Equal volume measures of vegetables can be substituted for equal volume measures of fruits.
  - Vegetable juices must be pasteurized, full-strength 100% juice and count toward the limit on juice offered weekly.
- M/MA can be an extra food, not a component of a reimbursable meal, or
- M/MA may credit toward the required weekly total grains, *only after* meeting the daily grains requirement.



**“M/MA can meet the entire grains component at breakfast three times per week for preschoolers.”**

---

Some school nutrition programs keep breakfast meals as simple as possible. They provide a Served breakfast of the three components. When M/MA or vegetables are included at breakfast, these foods are extra items, not components. In this meal scenario, every student must leave the serving line with 1 cup of milk, 1 cup of fruit, and at least 1 oz eq of grains for a reimbursable meal. Extra foods are optional so the student has a choice to accept or decline. Any extra foods are part of meal totals for calories, saturated fat, and sodium.

You can choose to credit vegetables and M/MA in your Served breakfast menus. If so, follow the guidance to correctly credit additional components (vegetables and M/MA) toward the required components (fruits and grains, respectively) for breakfast. Careful menu planning helps assure that the crediting is correct.

Other schools choose to provide an OVS breakfast. They provide at least four items that credit as components. Students must leave the serving line with at least three items. One item must credit for at least ½ cup of the fruits component. Under OVS, you also have the option to credit vegetables and

M/MA as part of the required meal components at breakfast, and you must follow the guidelines to do so. *Following the guidelines cannot be emphasized enough.* However, you can also choose to include these foods as extras that do not count as components toward the reimbursable meal. Again, remember that extra foods add to the weekly menu totals for calories, saturated fat, *trans* fat, and sodium.

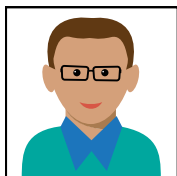
Be sure to record on production records your decisions on OVS or Served and how any vegetables and M/MA included in breakfast menus may credit toward reimbursable meals. For example, on the production record, vegetables will appear with fruits when guidance for crediting is followed and will appear as an extra when not counted toward a reimbursable meal. When vegetables are credited toward the fruits requirement, your staff must understand the guidance; any menu changes must follow the substitution rules for the week. Similar clear communication is needed for any M/MA included in breakfast.

Once your menus for lunch and breakfast are developed, the next step is to evaluate for variety. You may discover a need to make a few adjustments.

## Menu Chat



Hi,



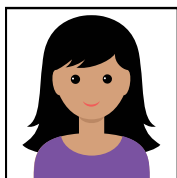
Dylan

I am looking for creative ideas for meeting the meal pattern guidance at breakfast. What is working for you?



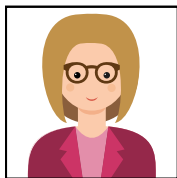
Lin

Our first priority is to follow the meal pattern and meet the component requirements daily and weekly. Once we have our milk, fruits, and grains on the menu, we look to see how we can meet our students' preferences within the dietary specifications. For example, our students love grits, so we offer a whole-wheat toast to meet the grains requirement at breakfast and grits as an extra every once in a while. The grits we purchase do not credit as whole or enriched grains so they do not count as a component in reimbursable meals. If you choose to go this route, explain this to your staff. Be sure to include all foods that are offered in the nutrient totals for calories, saturated fat, and sodium. In another menu week, we might choose a day to offer O'Brien potatoes at breakfast as an extra. The students look forward to these items on an occasional basis. We meet the program requirements and satisfy our customers.



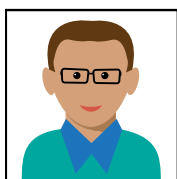
Elena

We found a creative use for the salad dressing shaker we use for lunch. At a grab-and-go station, we offer the shaker with yogurt and flavored applesauce layered on top. Students can grab a juice and milk and shake their own smoothie to enjoy with a granola bar. Or they can enjoy them as a parfait.



Megan

I keep a copy of the Meal Requirements under the National School Lunch and School Breakfast Program: Questions and Answers for Program Operators handy during menu planning. I refer to it and the policy memos to make sure I adjust my menus to the latest information. For example, we offer smoothies made with vegetables. We follow the guidance for substituting vegetables for fruits at breakfast. I keep in mind the total limit on juice at breakfast – no more than half of the offerings over the week. We also credit the yogurt in our smoothies as a meat alternate. We may expand smoothies to lunch menus for a grab-and-go option.



Dylan

**THANK YOU**

Great suggestions, everyone! Thanks for sharing with me.

### EVALUATING FOR VARIETY

As you work to plan meals that are nourishing, appealing, and taste good, think about how to vary your menus. Serving a variety of foods is important because no one food or group of foods provides everything needed for a healthy diet. Variety also makes menus interesting and appealing to students, which enhances participation. That is not all. Menu variety may support other goals for your school nutrition program, such as controlling costs and incorporating local and regional foods.

Across the country, schools are offering meals in a variety of interesting forms, from simple boxed lunches to multi-item buffets. Just as school lunches and breakfasts come in many forms, so do the foods that go into them. Advances in food technology make it possible to select foods in many forms. Choices include products that are frozen or chilled, partially or fully prepared, preportioned, or bulk. Use a variety of ingredients easily put together “from scratch.”

All these choices make menu planning exciting as well as challenging. Where do you begin? The basic menu planning principles listed below center around incorporating variety.

When building variety into your menus, think about your customers’ preferences and nutrition needs. Evaluate whether your menus vary within each meal and/or over time in terms of:

- Foods within each meal component
- Foods served at lunch and breakfast on the same day
- Color
- Flavor
- Texture
- Shapes and sizes
- Ethnic styles
- Temperature
- Preparation method
- Cost
- USDA Foods
- Local and regional foods, including Farm to School and school gardens
- Presentation on the serving line.

Let’s look at each of these principles in more detail. This information is adapted from the Institute of Child Nutrition’s (ICN) *Introduction to School Nutrition Leadership: Customer Experience* (<https://theicn.org/icn-resources-a-z/introduction-to-school-nutrition-leadership>).

### Variety of Foods Within Each Meal Component

Serving a variety of foods within each meal component helps keep menus interesting and appealing. Additionally, there is a nutritional benefit, because foods within the same group have different combinations of nutrients and other beneficial substances.

For M/MA, build in five different M/MA foods for 5 days of menus. For example, M/MA as menu items for 1 week could be spinach and cheese lasagna, hamburgers, turkey sandwiches, tofu stir-fry, and fish tacos. For grains, include foods made with a variety of grains, such as whole-wheat bread, quinoa, brown rice, oatmeal, and corn tortilla across the menu week.

### Variety of Foods Served Within Each Day's Menu

Be sure to compare the foods at breakfast with lunch items for the same day. Look for repeats in similar items, such as breakfast pizza the same day as pizza for lunch. Make sure different forms of the same fruit are not planned for the same day, such as apple juice and apple slices at breakfast and applesauce at lunch.

### Variety of Colors

Use combinations of colors that go together well, and strive for contrast and maximum color presentation. A good rule of thumb is to use at least two colorful foods in each menu for visual appeal.



#### School District:

Postville  
Community School  
District

#### Located:

Postville, Iowa

#### Enrollment:

700

#### Website:

[www.  
postvilleschools.  
com/](http://www.postvilleschools.com/)

### Collaboration Fosters Awareness and Promotion of Local Foods

At Postville Community School District, classroom activities, parent communication, and lunchroom tastings are coordinated to highlight local foods. Once a month, high school 4-H members visit second grade classrooms to talk about a different local food and conduct taste tests. In the classroom, high school students describe



Student helps harvest sweet potatoes from the school garden in Postville, IA.

how the food is grown/raised and what nutrients it contains, and then conduct a taste test of that food. Parents receive information detailing the benefits of eating locally along with a recipe that they can make using the “food of the month.” For example, in December, carrots are the harvest of the month vegetable in the lunchroom. A taste testing featured a carrot-sweet potato mash made from local carrots and sweet potatoes from the school garden.



In addition, too many foods of the same color limit appeal. A meal with turkey, cauliflower, brown rice, and pears lacks color contrast. A better combination is turkey and cranberry sauce, green peas, whole-wheat bread, and pears.

Remember that fruits and vegetables are wonderful for adding natural color to side dishes as well as entrees. A radish slice really brightens up a potato salad. A fresh grape or strawberry livens up a dish of diced pears or peaches.

Use colorful foods in combination with those that have little or no color. Serve broccoli spears with whipped potatoes, for example. Add pimento or green pepper to corn. Offer a bright red apple and green lettuce with a hamburger and baked beans. Serve green beans and apricots with oven-fried chicken and mashed potatoes.

And don't forget spices and garnishes. Even if they are not creditable, they add color. It's easy to include carrot curls or a dash of paprika for extra color.

**Variety of Flavors**

Use a combination of mild and strong flavors to balance flavors in appealing ways. Make sure individual foods, when paired, make a winning combination. Too many strongly flavored foods may make a meal unacceptable to children. As students get older, they seek out stronger flavors. However, a meal that is overloaded with flavor is problematic, no matter what the age. For example, a meal of pepperoni pizza, Cajun potatoes, coleslaw, and a brownie has too many spicy and strong flavors. Conversely too many mild flavors may make a meal too bland.

**Variety of Textures**

As you plan a meal, think about the texture of foods. Do you have a balance of crunchy, soft, chewy, and other textures? Crisp, firm foods pair well with soft, creamy ones. Serve a green salad or raw vegetable with spaghetti. Offer a crunchy fruit or vegetable with a burrito, and crisp, steamed carrots and broccoli with meatloaf. Pair toasted garlic bread and cold broccoli salad with cheese ravioli.

**Variety of Shapes and Sizes**

To make a menu interesting, include different shapes and sizes. Within a meal, present foods in several different shapes, such as cubes, mounds, shredded bits, and strips. If you plan fish sticks, oven-baked French fries, carrot sticks, and apple slices, you have several similarly shaped foods. A meal with more varied shapes might feature a baked chicken leg, mashed potatoes with low-fat, low-sodium gravy, green beans, and a watermelon wedge.

**Variety of Ethnic Styles**

Consider the regional, cultural, and personal food preferences of your students. Also, keep in mind that students are exposed to a variety of ethnic foods outside of the school setting. By building varying ethnic styles into your menu, you keep students interested. Additionally, ethnic styles will probably increase variety because they incorporate different ingredients. Alternate Mexican, Mediterranean, Asian, Indian, and other ethnic styles with the more traditional American fare. Ethnic cuisine can be a great source of flavorful dishes featuring beans and peas (legumes). The spice and herb combinations may help lower sodium, too.

**Variety in Temperatures**

As you plan menus, think about how a balance of hot and cold foods adds variety. Try topping steaming hot tamales with cool zesty salsa. Offer a chicken Caesar salad wrap with baked sweet potato fries. Serve Thai tofu stir-fry with a crisp green salad.

**Variety in Preparation Methods**

Vary the types of main courses you serve. For example, serve soup and sandwiches one day, and casseroles or a main-dish salad the next. Include a wide variety of foods from day to day. Unless you provide choices, avoid planning the same form of food on consecutive days, such as meatballs with spaghetti on Monday, followed by meat ravioli on Tuesday.

Include different forms of foods, and prepare them in a variety of ways. For instance, some vegetables are tasty served raw. Others are delicious oven roasted. If you usually serve a particular vegetable cooked, serve it uncooked if it is good that way. Or cook it but use different sauces or seasonings. In any case, be sure the “different way” of serving is as appealing as the “usual way.”

Be sure to consider the kind and size of ovens, kettles, steamers, and other equipment needed for different preparation methods. Also think about freezer and refrigeration space. Questions to ask include:

- Does the kitchen have sufficient ovens for the amount of baked items on the menu?
- Is there enough cold holding space for a day of main dish salads only?
- Can the product be batch cooked to maximize food safety, flavor, and cost savings with minimal overproduction?

### Variety in Costs

Be sure to consider cost when planning menus for variety. You can build in popular menu items that may be more expensive by reducing costs for other meals. Keep records of the approximate cost per serving of each menu item to determine what each lunch will cost as well as the average lunch cost per month. Also, keep in mind that more expensive items may make up for themselves in cost if participation jumps due to popularity. Conversely, if you serve a less expensive meal that students will not buy, it is not really saving money; it may be costly and wasteful.

### Variety with USDA Foods

With a wide variety of nutritious food items available (fresh, frozen, packaged, canned, dried, and bulk), USDA Foods can help you improve your menu variety while staying in budget. USDA Foods can also help you meet nutrient requirements because many low-sodium, no-salt-added, and reduced-fat food items are available. You will find more information about USDA Foods in chapter 5.

### Variety in Local and Regional Foods

Local and regional foods enhance variety, especially by increasing the mix of fruits and vegetables in your menus. Use local produce in season. Plan to serve lots of fresh fruits and vegetables when they are plentiful and at the peak of quality. Remember to list all local foods, including fluid milk, grains, and M/MA, in addition to produce, in your marketing efforts. The USDA Farm to School Program (<https://www.fns.usda.gov/cfs>) includes research, training, technical assistance, and grants to help schools source more locally or regionally produced foods, develop school gardens, and provide complementary educational activities (see chapters 4 and 7 for more information).

### Variety in Serving Line Presentation

Your customers’ first impression of your school nutrition program is how a meal looks. Make sure the menu items look and taste great. Students eat with their eyes first. If the food looks good, they will taste it. If it tastes good, they will eat it. The importance of linking food presentation and merchandising to customer service cannot be overstated. Here are presentation tips:

- **Think of the total presentation.** As you plan for color, consider your serving dishes, plates, or trays, as well as the colors of the foods.
- **Make the serving line attractive.** Try to add color and texture to the service line. Where possible, garnish food in steam table pans. For example, add a few red or green pepper rings to a pan of macaroni and cheese. Put parsley, a tomato wedge, or a piece of brightly colored fruit on a tray of sandwiches.
- **Plan the way you will place the menu items on the tray or plate.** Visualize how the food will look when plated and decide on the most attractive arrangement. Before serving the lunch, portion a sample tray/plate so that all servers can see how it should look. This is also a good way to show correct serving sizes to students and staff.

## Linking School Gardens to Fitness, Nutrition, Science, and Discovery Lessons

St. Joseph Community School is known in northeast Iowa for its garden and garden-related activities connected to fitness, nutrition, science, and discovery lessons. The school nutrition program features school garden produce in meals. A variety of grants helps the Pre-K, K–8 school pay for a Food and Fitness FoodCorps or AmeriCorps representative who helps with fitness activities, the school garden, taste testing during lunch, and cooking activities in the classroom. The school hosted its third annual Spaghetti Supper fundraiser featuring tomatoes from the school’s garden. They processed 300 pounds of school-grown, garden fresh tomatoes into 125 quarts of spaghetti sauce for the event.



**School District:**  
St. Joseph  
Community School

**Located:**  
New Hampton,  
Iowa

**Enrollment:**  
200

**Website:**  
[www.stjosephcommunityschool.com](http://www.stjosephcommunityschool.com)

**Train your staff to present choices and prompt students to try foods.** Sometimes all a student needs is a little encouragement to try a new food or add another vegetable to a self-selected salad. Your staff’s suggestions for adding certain foods to trays/plates can greatly affect what students try and what they eat.

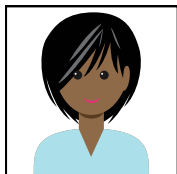
**Find creative ways to use signage to encourage the choices you want students to make.** Signs identify a reimbursable meal for students at the beginning of the service line. Promote the concept of personal choices and what *they can have* rather than focusing on what they can’t have. For example, “How many colors can you put in *your* signature salad?” may spur a confetti creation!

Connecting to your student customers with varied, attractive, healthy, and flavorful foods increases the likelihood that they will participate in the school nutrition program. If the meal service and food presentation do not meet the expectations of today’s student customers, they will choose other options over school meals. Maintaining a strong customer base can make the difference between financial success and failure for the school nutrition program. The school nutrition program, from menus to daily meal service, must be customer focused!

## Menu Chat



## Hi fellow menu planners!



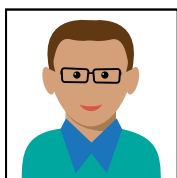
Sandra

I am looking for ideas for new lunch items and ways to get my students to try them. Any ideas you can share?



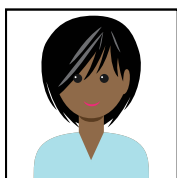
Lin

I am amazed at how food preferences can vary within our district. At one school, fish tacos are the top item; at another, we sell half the amount. I pay attention to local food choices throughout our district and often consider menu ideas from neighborhood restaurants.



Dylan

We “preview and review” our new menu items by offering just a taste and asking students to vote if they would choose the item at lunch in the future.



Sandra

**THANK YOU**

I can always count on this group to share useful tips! Thanks!

After you have planned your menus and evaluated for variety, take one more step. Review your menus to ensure they meet all meal patterns. Note, the meal patterns are designed to help you meet the dietary specifications.

### EVALUATING FOR COMPONENT REQUIREMENTS

Check your menus one final time for program compliance. Planned menus must provide all of the meal patterns' required components in the daily minimum and weekly minimum serving totals.



**Verify your menus meet requirements by checking meal components one at a time, and the complete menu 1 day at a time, including the weekly totals. You will use the Food**

**Buying Guide for Child Nutrition Programs (FBG) (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>), CN labels, PFS, and your standardized recipes as verification tools.**

Modify your menus as needed to meet any crediting requirements. It is possible that after reviewing for variety, a necessary menu change may create a crediting issue. For example, if you noticed that a menu was too tan/orange and substituted green beans for diced carrots, double-check that your menus meet the weekly total for red/orange vegetables. If not, consider making a change elsewhere. For example, change the fruit from peaches to strawberries.

After you are sure all meal components are correct and the meal patterns are met, check your menus to see if they meet dietary specifications for calories, saturated fat, and sodium over a week's time, and that all foods contain 0 grams (<0.5 grams) *trans* fat per serving.

### CHECKING FOR DIETARY SPECIFICATIONS

In chapter 2, the meal components, meal patterns, and dietary specifications were presented. The chapter highlights a prominent feature of the meal patterns: they are designed for success.

If you follow the meal patterns closely and make wise choices, your menus are more likely to meet the dietary specifications than if you do not do so. Here is why: fruits and vegetables are naturally low in calories, sodium, and saturated fat, and have no *trans* fats. Because you provide plenty of fat-free and 1% (low-fat) milk, fruits, vegetables, and whole grains, your menus take advantage of the combined nutrient profile of these foods. When you choose fresh, frozen, or low-sodium canned vegetables, your menus are based on foods that help meet the requirements. By carefully choosing these foods, the menu items that may have more calories, saturated fat, or sodium will balance into your weekly menus.

Use the strategies presented in chapter 2 to guide your menu planning for calories, saturated fat, and sodium. Check all product labels to assure each states zero (<0.5) grams *trans* fat per serving. Use Chart 11 from chapter 2 to evaluate commercial products. This chart presents a handy rule of thumb to assess how an entree or recipe will fit into the week's average for saturated fat. Follow these tips to keep calories, saturated fat, and sodium within the required limits:

#### Calories

- Offer food items from each meal component with few or no calories from added fats and sugars.
- Prepare lean and low-fat M/MA foods with as little added oil/fat as possible.
- Limit the frequency and portions of any desserts and non-creditable food items.



## Menu Checklist for Component Crediting

Use this checklist to verify you meet the component crediting requirements for meal patterns.

MEAL COMPONENT CATEGORY	LUNCH	BREAKFAST
<b>Fluid Milk</b>		
1. Provide 1 cup (8 fl oz) serving size for all grade groups.		
2. Include at least two choices at each meal, lunch and breakfast.		
3. Choose from unflavored or flavored fat-free and 1% (low-fat) milk only. Unflavored milk must be offered at each meal service.		
4. Follow the guidance on milk substitutions when these options are offered to students.		
<b>Fruits</b>		
1. At lunch, provide $\frac{1}{2}$ cup daily in grades K–5 and 6–8, and 1 cup daily in grades 9–12.		
2. At breakfast, provide 1 cup daily for all grade groups.		
3. Credit dried fruits at twice the volume served (for example, $\frac{1}{8}$ cup credits as $\frac{1}{4}$ cup).		
4. Limit pasteurized, 100% fruit juice to half or less of the fruits component weekly, including fruits credited in smoothies.		
<b>Vegetables</b>		
1. At lunch, provide $\frac{3}{4}$ cup daily in grades K–5, 6–8, and 1 cup daily in grades 9–12.		
2. Meet subgroup weekly requirements across menu week.		
3. Credit raw leafy greens at half the volume served.		
4. Credit concentrated tomato products according to FBG, 1 Tbsp paste as $\frac{1}{4}$ cup; 2 Tbsp puree as $\frac{1}{4}$ cup red/orange subgroup.		
5. Credit beans and peas (legumes) as legumes vegetable subgroup or as M/MA, but not both for the same menu item.		
6. Limit pasteurized, 100% vegetable juice to half or less of the vegetables component weekly, including vegetables credited in smoothies.		
7. Follow substitution guidance if crediting vegetables toward the required fruits component <b>at breakfast only</b> .		



MEAL COMPONENT CATEGORY	LUNCH	BREAKFAST
<b>Grains</b>		
1. Determine that at least 80 percent of weekly offered grains are whole grain-rich and remaining items are made with enriched grains.		
2. Meet daily minimums for each grade group and meal.		
3. Meet weekly minimums for each grade group.		
4. Limit grain-based desserts to 2 oz eq or less <b>weekly</b> for all grade groups at lunch.		
5. Verify that baked goods served at breakfast are allowed items as designated in Exhibit A: Grain Requirements for Child Nutrition Programs – Ounce Equivalents from Groups B-F.		
<b>Meats/Meat Alternates</b>		
1. Meet daily minimums for each grade group at lunch.		
2. Meet weekly minimums for each grade group at lunch.		
3. Credit nuts/seeds for up to half the M/MA requirement.		
4. Credit beans and peas (legumes) as vegetables or M/MA, but not both for the same menu item.		
5. Follow substitution guidance if crediting M/MA toward the required weekly grains component at breakfast.		
<b>Other Crediting Checks and Concerns</b>		
1. Verify that creditable foods meet USDA’s definition of “recognizable” for crediting purposes.		
2. Verify smoothies follow crediting criteria for milk, yogurt, fruits, and vegetables.		
3. Verify crediting amounts for products in menus match current CN labels, Product Formulation Statements (PFS), and USDA Foods Product Information Sheets.		
4. Verify crediting amounts in menus match current standardized recipes.		
5. Verify all foods served in NSLP and SBP are labeled as zero (<0.5) grams <i>trans</i> fat per serving.		
6. Verify that free potable water is available at lunch and breakfast.		

### Saturated Fat and *Trans* Fat

- Vary your M/MA choices and use the portion size guidance.
- Balance meat- and cheese-containing entrees with fish and plant-based meat alternates.
- Use oils in food preparation rather than solid fats (for example, butter, lard, shortening, margarine).
- Use only products labeled zero (<0.5) grams *trans* fat per serving.

### Sodium

- Evaluate your standardized recipes or explore new recipes to see where gradual changes can lower sodium. Review your products for sodium content; identify new items with reduced sodium content.
- Select more USDA Foods, which offer lower sodium choices for schools.
- Consider adding a “flavor station” in your cafeteria where students can add herbs and spices (without added sodium) to their own taste.
- Check with your food vendors on a regular basis to identify lower sodium foods coming onto the market. Manufacturers are producing more foods with reduced-sodium levels for schools.

If you offer multiple service lines or more than one choice for the main dish, you need to consider which choices may be more popular than others. Your planning should take into account student choice patterns. This approach will provide an accurate picture of your menu’s overall nutrition profile.

For example, a menu features a chef salad entree and sausage pizza as competing choices. Your past records show 80 percent of the students selected the pizza. You need to consider that your weekly averages will reflect more of the nutrition profile of the pizza than the salad. A nutrient analysis weights the values for the pizza so that 80 percent of the analysis reflects that choice.

### Evaluating Your Menus for Nutrition Goals

Several methods are available for evaluating your menus for nutrition goals. USDA-approved computer software, USDA Certification of Compliance Worksheets, and an assessment tool are three choices that use different technology. Choose one of these or another method that best fits your school needs and resources.

#### Computer Software

If you use menu planning software, a module for nutrient analysis is often an available option. Make sure you are using the most recent version of software that is USDA-approved. You will also want to follow USDA protocols for nutrient analysis. The USDA’s *Nutrient Analysis Protocols: How to Analyze Menus for USDA’s School Meals Programs* (<https://www.fns.usda.gov/tn/Nutrient-Analysis-Protocols-Manual>) covers the key concepts for an accurate analysis. Even if you do not perform nutrient analyses, you may benefit from reading selected chapters in this resource.

Remember, nutrient analysis of menus by the school food authority (SFA) is not required. However, many school districts choose to use this tool as a program management option. If you decide to perform nutrient analyses on menus, an accurate process is critical. Follow the protocols to achieve an accurate nutrition analysis.

#### Certification of Compliance Worksheets

Every school program that has been certified for the performance-based reimbursement has completed a set of USDA or USDA-approved Certification of Compliance Worksheets (Menu Worksheets) (<https://www.fns.usda.gov/school-meals/certification-compliance>). Depending on how long you have been planning menus, you may or may not be familiar with this tool. The Menu Worksheets demonstrate that menus meet components and dietary specifications to qualify for an additional performance-based reimbursement. You can use the Menu Worksheets as a menu planning tool and as a way to evaluate your menus for nutrition goals. Use the simplified nutrient assessment tab to enter your information. For the most accurate assessment, be sure to enter planned amounts of each choice, such as the salad and pizza example above.

## Salt and Sodium: Tips to Help You Cut Back

Use these helpful tips, adapted from *Recipes for Healthy Kids Cookbook for Schools* (<https://www.fns.usda.gov/tn/recipes-healthy-kids-cookbook-schools>) to reduce sodium.



### Focus on fresh vs. processed foods

Most of the sodium Americans eat is found in processed foods. Create menus that focus on fresh foods which are generally lower in sodium. Use highly processed foods less often and in smaller portions, especially cheesy foods, such as pizza; cured meats, such as bacon, sausage, hot dogs, and deli/luncheon meats; and ready-to-eat foods, like canned chili, ravioli, and soups.

### Menu site-prepared foods

Cook more often from scratch, where you are in control of what's in the food. Preparing your own foods allows you to limit the amount of salt in them.

Roast vegetables to bring out the flavor. Add herbs and spices during the roasting process in order to enhance flavor.

Encourage children to select and try veggies and fruits by calling them fun names or offering them in creative and appealing ways; they are naturally low in sodium.

### Tempt those taste buds

Cut back on salt little by little, and play up the natural tastes of various foods. Use spices, herbs, garlic, vinegar, or lemon juice to season foods, or use no-salt seasoning mixes. Consider offering a seasoning station or "flavor station" with shakers of herbs and spices so students can shake on a personal preference.

### Read the label

Read the Nutrition Facts label and the ingredients statement to find packaged and canned foods lower in sodium. Look for foods labeled "low sodium," "reduced sodium," or "no salt added." Maximize your use of USDA Foods, which offer a variety of lower sodium options.

### Pay attention to condiments

Foods like soy sauce, ketchup, teriyaki sauce, pickles, olives, salad dressings, and seasoning packets are high in sodium. Choose low-sodium soy sauce and ketchup. Garnish with a carrot ribbon or celery stick fan instead of olives or pickles. Make your own creamy salad dressings using Greek yogurt and herbs.



## Menu Planning Tool – USDA Certification of Compliance Worksheets

School nutrition professionals are resourceful. You are skilled at getting the most from any resource or tool. The USDA Certification of Compliance Worksheets (Menu Worksheets) are a multiple-use resource. Every school food authority (SFA) is required to submit Menu Worksheets for a week's worth of menus, breakfast and lunch, to qualify for additional performance-based reimbursement. Access the Menu Worksheets along with answers to common questions at <https://www.fns.usda.gov/school-meals/certification-compliance>.

These Menu Worksheets include step-by-step instructions and are helpful menu planning tools for the weeks of menus you are not required to submit. You can enter each week of a cycle menu on a separate worksheet. When products or menu items change, the updates are quick. If several of your menu items are constant from cycle to cycle, you can create seasonal cycle menus by:

- Copying worksheets
- Renaming the file (be sure to save!)
- Updating menu items and component contributions
- Updating vegetable subgroup contributions
- Updating planned amounts of main dish items
- Updating nutrient data for new menu items.

The simplified nutrient analysis section of the worksheet helps you know your menus meet the dietary specifications. If the calories, saturated fat, or sodium exceed the required limits in your menu week, make a few menu changes and recheck. You may only need a couple of changes to your menu to be within required dietary specifications ranges. Be sure to use either the Menu Worksheets developed by USDA or a USDA-approved software program.

For additional resources on this topic, please visit the *Menus that Move* website at <http://education.ohio.gov/Topics/Student-Supports/Food-and-Nutrition/Resources-and-Tools-for-Food-and-Nutrition/Menus-that-Move>. It features resources developed by Ohio school nutritional professionals, to include the following:

- Four seasonal menus for grade K–8 and 9–12
- Completed Certification of Compliance Menu Worksheets for each menu week
- Standardized, tested recipes and more.

## Menu Chat



### Hello friends!



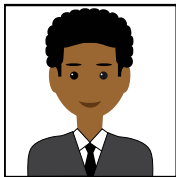
Lin

I am revising many of our cycle menus. How do you make sure you meet the dietary specifications?



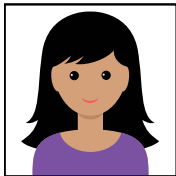
Megan

I use existing resources to help monitor menu changes and requirements. For example, even though we do not have to fill out a USDA Certification of Compliance Worksheet (Menu Planning Tool for Certification) for every menu week, I like using this tool to help plan menus that meet the requirements. I can also use it to add in a new menu day and test how it fits in a menu week. If it fits, great! If not, I try it in another week.



Tyler

We use a “grams of saturated fat per calorie level chart” (similar to chart 11 in chapter 2) to help guide our menu planning. For example, in our high school menus, I use 8 grams of saturated fat as my daily limit, because it corresponds with 750 calories in the meal. I evaluate main dish options and know if any one exceeds 7 grams, the menu must be balanced with another day that has an entree with a lower saturated fat content. It is easier for me to look at recipes and product labels for the grams of saturated fat than to calculate the total percentage for every menu week to see if it is below 10 percent. Based on our students’ choices of our menu, I estimate that we average 1 gram of saturated fat from the other component items. That is because we use oils in food preparation, in the smallest amounts possible, and the rest of the menu features foods naturally low or free of saturated fats.



Elena

Our State agency staff members are very helpful. I ask for their assistance if I am not sure if I have planned the menus correctly. After all, we have a shared goal of serving healthy food to students.



Lin

### THANK YOU

Thanks for the tips and the reminder to check out the available tools and resources when we revise menus.

### Dietary Specifications Assessment Tool

The Dietary Specifications Assessment Tool (Appendix 3.C) is used in a targeted menu review during an Administrative Review (AR). You can also use the assessment tool to help guide menu planning. Some questions/statements directly assess specific menu options, such as types of milk served. Others provide a way to evaluate how overall food choices fit with the dietary specifications. For example, one question addresses how often your recipes substitute herbs and spices for salt. If your response is “never” or “some,” your menus may exceed the sodium requirement. Look for ways to change menus and recipes so that your response become “most” or “always.”

After learning the many aspects of menu development, it is easy to see how important training is to your program. Once you have finalized your menus, it is time to make sure your staff understands your plan.

### STAFF TRAINING

Implementing your menu requires well-trained staff. They must understand your menu from preparation through service.



***In addition, your SFA must be in compliance with Professional Standards annual training requirements and will need to demonstrate***

***compliance with them during an AR. The Guide to Professional Standards for School Nutrition Programs (<https://www.fns.usda.gov/tn/guide-professional-standards-school-nutrition-programs>) will provide the necessary information for meeting the training standards for all school nutrition professionals.***

And it is just as important to train and empower your staff to encourage students to select healthful meals. Students react differently to, “We have

ginger-sauced carrots or a raw veggie cup today, would you like one or both?” compared to “You have to have this vegetable on your tray—you can’t leave the line without it.” One approach is likely to result in the student selecting and eating the vegetable; the other may increase plate waste.

To learn more about ways to encourage students to voluntarily choose healthy meals, be sure to read chapter 7; it focuses on marketing your school nutrition program.

Of course, you must train your staff to recognize reimbursable meals. The ICN has training programs on reimbursable meals, including Meal Pattern Training Resources for lunch and breakfast.

The USDA Professional Standards Training Database offers many low-cost or free trainings: <https://professionalstandards.fns.usda.gov/>. Track your progress toward meeting annual requirements using the Professional Standards Training Tracker Tool: <https://www.fns.usda.gov/tn/professional-standards-training-tracker-tool/>.

### CONCLUSION

In successfully managed school lunch or breakfast programs, planning is crucial. Compliance with Federal program requirements as well as the nutritional value of meals depends on careful menu development. Beyond that, menu writing influences every aspect of the school nutrition operation, from procurement and preparation of foods to the education and participation of students.

Let’s review key points in this chapter:

- When developing menus:
  - Start with grade group meal patterns for each menu.
  - Consider how Offer Versus Serve (OVS) or Served affects your menus.
  - Look at records from past menus and ideas from new sources.
  - Use menu templates with built-in checks for program requirements.
  - Use cycle menus.



- Start well in advance to take advantage of tools and resources, and ensure enough time to write solicitation (bid) specifications.
- Build menus by meal components, starting with the main dish.
- Variety is a central aspect of successful menu development, so evaluate your daily and weekly meals, and cycle menus, for variety.
- After you plan and evaluate your menus, check one final time for program compliance using software, the USDA Certification of Compliance Worksheets, an assessment checklist, or other appropriate method.
- Your staff should be trained to:
  - Understand your menu from preparation through service.
  - Encourage students to voluntarily choose healthy meals.
  - Recognize a reimbursable meal.

Once your menu is planned, it is time to move on to production and service. In chapter 4, the essential written tools for meal production are explained: production records, standardized recipes, and a food safety program with standard operating procedures based on the Hazard Analysis and Critical Control Point (HACCP) principles.

**Review and answer each of these questions. You will find the answer key at the end of the Menu Planner.**

1. What are three advantages of using cycle menus?
2. What strategies could you use to increase students selecting fruits and/or vegetables at lunch?
3. A menu offering baked fish, mashed potatoes, applesauce, nonfat vanilla pudding, and choice of unflavored milk (fat-free or low-fat) is lacking variety in what ways?
4. What are three reasons salad bars need trained adult supervision?
5. To encourage students to choose unflavored milk over flavored milk, how would you arrange the milk in your serving line?

**If you got the answers right, great job! You are ready for the next chapter. If you missed any, review that section of the chapter before moving on to the next chapter.**



## LINKS TO ADDITIONAL RESOURCES

Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium, Final rule. 7CFR § 210, 215, 220, 226. February 7, 2022 (<https://www.govinfo.gov/content/pkg/FR-2022-02-07/pdf/2022-02327.pdf>).

Institute of Child Nutrition, Child Nutrition Recipe Box, University, MS (<https://theicn.org/cnrb>).

Institute of Child Nutrition, Handling Fresh Produce on Salad Bars, University, MS (<https://theicn.org/icn-resources-a-z/produce-safety>).

Institute of Child Nutrition, Meal Pattern Training Resources (<https://theicn.org/>).

Institute of Child Nutrition, Introduction to School Nutrition Leadership, University, MS (<https://theicn.org/icn-resources-a-z/introduction-to-school-nutrition-leadership>).

Iowa Department of Education, Iowa Gold Star Cycle Menus ([https://educateiowa.gov/sites/default/files/documents/1314\\_np\\_lt\\_goldstar\\_cyclemenu.pdf](https://educateiowa.gov/sites/default/files/documents/1314_np_lt_goldstar_cyclemenu.pdf)).

Kansas Department of Education, Healthier Kansas, 8-Week Lunch Cycle and 6-Week Breakfast Cycle (<https://cnw.ksde.org/>).

Nutrition Standards in the National School Lunch and School Breakfast Programs, Final rule. 7CFR § 210.10(d)(3). (2012) – 77 Fed. Reg. January 26, 2012, 4146 (<https://www.govinfo.gov/content/pkg/FR-2012-01-26/pdf/2012-1010.pdf>).

Ohio Department of Education, Menus that Move (<http://education.ohio.gov/Topics/Other-Resources/Food-and-Nutrition/Resources-and-Tools-for-Food-and-Nutrition/Menus-that-Move>).

U.S. Department of Agriculture, Food and Nutrition Service, Certification of Compliance (<https://www.fns.usda.gov/school-meals/certification-compliance>).

U.S. Department of Agriculture, Food and Nutrition Service, Farm to School Program (<https://www.fns.usda.gov/cfs>).

U.S. Department of Agriculture, Food and Nutrition Service, Food Buying Guide for Child Nutrition Programs, Alexandria, VA (<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>).

U.S. Department of Agriculture, Food and Nutrition Service, The Guide to Professional Standards for School Nutrition Programs, Alexandria, VA ([https://fns.usda.gov/sites/default/files/resource-files/Professional\\_Standards\\_Guide.pdf](https://fns.usda.gov/sites/default/files/resource-files/Professional_Standards_Guide.pdf)).

U.S. Department of Agriculture, Food and Nutrition Service, Healthier School Day, Tools for Schools: Focusing on Smart Snacks (<https://www.fns.usda.gov/cn/tools-schools-focusing-smart-snacks>).

U.S. Department of Agriculture, Food and Nutrition Service, Child Nutrition Programs, Administrative Review Manual (please contact your State agency for the most current version).

U.S. Department of Agriculture, Food and Nutrition Service, Team Nutrition, Recipes for Healthy Kids Cookbook for Schools, Alexandria, VA (<https://www.fns.usda.gov/tn/recipes-healthy-kids-cookbook-schools>).

U.S. Department of Agriculture, Food and Nutrition Service, Whole Grain Resource for the National School Lunch and School Breakfast Programs, Alexandria, VA (<https://www.fns.usda.gov/tn/whole-grain-resource-national-school-lunch-and-breakfast-programs>).

Vermont Farm to School Network, New School Cuisine Cookbook: Nutritious and Seasonal Recipes for School Cooks by School Cooks (<https://vtfeed.org/resources/new-school-cuisine-nutritious-and-seasonal-recipes-school-cooks-school-cooks>).



**APPENDIX ITEMS**

**Appendix 3.A** Sample Menu Planning Templates

**Appendix 3.B** Smart Snack Guidelines and a la carte items

**Appendix 3.C** Dietary Specifications Assessment Tool