

MENU PLANNING TOOLS



Target Audience

Child nutrition director

Food production staff

Module 4 Estimated Time Required



1 Hour

Objectives

- ▶ Define School Meals Initiative.
- ▶ Know where to find assistance when selecting the best menu planning approach for your operation.
- ▶ Demonstrate how to use the *Food Buying Guide*.
- ▶ Recognize food specifications, Nutrition Facts labels, and Child Nutrition (CN) labels.
- ▶ Recognize the format and information required on a standardized recipe.
- ▶ Demonstrate how to complete a Menu Production Record using the available tools.
- ▶ Know what is required during a School Meals Initiative (SMI) review.
- ▶ Know what resources are available to assist in the School Meals Initiative review process.

Tasks



- ✓ Read Instruction.
 - ✓ Complete Self-Check.
 - ✓ Review Web sites and Resources.
 - ✓ Complete and submit online Quiz.
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Identifying Icons



The light bulb icon with text in a text box indicates a useful **Tip** for the module topic.



The key indicates a **Key Point** important to the topic in the module.



The telephone indicates **Contact Person(s)** for assistance or additional information for the module topic.



The computer with the world on the screen will indicate an important **Web site (s)** for that particular module.

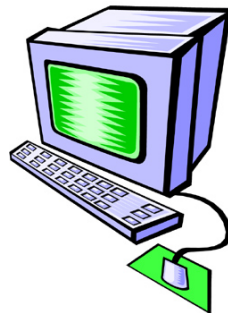
Web sites and e-mail addresses will be underlined and in the color plum.

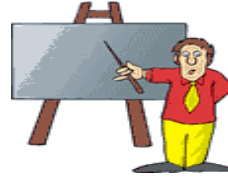
PC computer users: Pressing the “ctrl” button and clicking the mouse on the plum lined area should take you directly to the desired document or information on a Web site.

Macintosh computer users: Clicking the mouse on the plum lined area should take you directly to the desired document or information on a Web site.

In order to encourage the use of Web resources, Web sites are placed throughout each module for easy access while working on a particular topic.

Note: Selected **Quiz questions** may come directly from a Web site linked to a module.



Instruction**What is the School Meals Initiative?**

The School Meals Initiative (SMI) is part of an integrated, comprehensive plan for promoting the health of the nation's school children by updating the nutrition standards for school meals and by providing agencies with the technical assistance and tools to meet these standards.

Menu Planning Approaches

The SMI regulations provide schools with a variety of approaches for planning menus. These approaches include the following:

Food-Based Approaches*	Nutrient-Based Approaches**
Traditional Food-Based Menu Planning Enhanced Food-Based Menu Planning Alternate: SHAPE California Revised Meal Pattern***	Nutrient Standard Menu Planning Assisted Nutrient Standard Menu Planning*** Alternate: SHAPE California Nutrient Standard Menu Planning***

*Meal pattern with components-meat/meat alternate, breads/grains, fruits/vegetables, fluid milk.

**Nutrient standards calculated according to age/grade.

***Alternate Menu Planning and Assisted Nutrient Standard Menu Planning approaches require approval by the Nutrition Services Division. *Shaping Health as Partners in Education (SHAPE), California*, is the only approved Alternate approach at present.



See [CDE School Meals Initiative Summary](#) or [USDA Manual "Road to SMI Success"](#) for in-depth descriptions of each approach and assistance in making a choice.

A Guide to Completing Menu Production Records (MPRs)

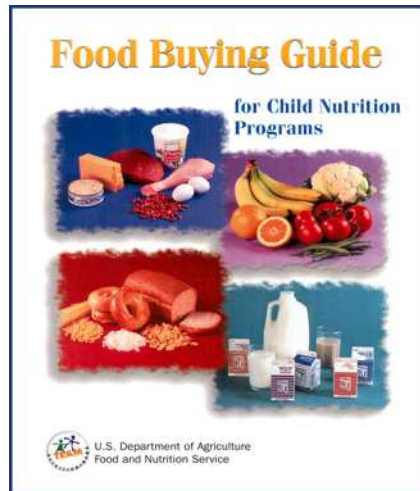
Menu Production Records are a key component of the SMI and are designed to record the type and amount of food used in food preparation for the National School Lunch and School Breakfast Programs.

Minimum Information Required on Menu Production Records (MPR)

- ▶ Number of servings
- ▶ Menu item including form used (i.e., corn, canned)
- ▶ Serving size
- ▶ If using a recipe, name of recipe and/or number
- ▶ If using a processed food, company name and product number (i.e., Margarita's 270 Burrito)
- ▶ Contribution to the meal pattern (if using Food-Based Menu Planning)
- ▶ Total amount of food prepared in purchase units or by recipe (e.g., one #10 can or two #2 cans – see pages I-30 through I-35 in the *Food Buying Guide*)
- ▶ Amount of leftovers

<u>Tool</u>	<u>Use</u>
■ <i>Food Buying Guide (FBG)</i>	Determine quantities of food to purchase and prepare
■ Nutrition Facts Label	Determine weight of serving size listed
■ Food Specifications	Determine contribution to Food-Based Meal Pattern (according to manufacturer)
■ Child Nutrition (CN) Labels	Determine contribution to Food-Based Meal Pattern (according to manufacturer's specifications)
■ Standardized Recipes	Assist in consistent purchasing and preparation of menu items
■ Calculator 	Assist in accuracy of calculations during the Menu Production Record process

Food Buying Guide



Sample Page from the Food Buying Guide

- Column 1 – Food as purchased, AP (as purchased)
- Column 2 – Purchase unit
- Column 3 – Servings per purchase unit, EP (edible portion)
- Column 4 – Serving size or meal contribution

Example: Col. 1 carrots, Col. 2 pound, Col. 3 10.3, Col. 4 1/4-c. servings

Section 2-Vegetables/Fruits

1. Food as Purchased, AP	2. Purchase Unit	3. Servings per Purchase Unit, EP	4. Serving size Per Meal Contribution	5. Purchase Unit for 100 Servings	6. Additional Yield Information
CARROTS, Fresh (without tops)	Pound	10.3	1/4 cup raw vegetable strips (about 3 strips- 4 x 1/2 inch)	9.8	1 lb AP= 0.70 lb. ready-to-cook or serve raw carrot sticks

For vegetables and fruits, the *FBG* lists amounts to buy in 1/4 cup servings (volume).

1. Convert your serving size to the number of 1/4 c. servings you need, and
2. Multiply the result by the number of planned servings to get the total
3. number of 1/4 c. servings.

For example, if you need 50-1/2 cup servings of raw carrot strips, you will need 2-1/4 cup servings X 50 = 100 1/4 cup servings.



Go online to view the Food Buying Guide.

Nutrition Facts Label

Located on the product packaging



Nutrition Facts		
Serving Size 1 Roll (87 gm.)		
Servings Per Container 6		
Amount Per Serving		
Calories 230 Calories From Fat 25		
Total Fat	2.5g	4%
Saturated Fat	1g	0%
Cholesterol	0mg	0%
Total Carbohydrate	44g	15%
Sugars	4 g	

Food Specifications

- ▶ A company’s certification that a product contains specific ingredients in specific quantities that meet the meal pattern requirements
- ▶ Used to verify a food product’s contribution to the meal pattern
- ▶ For **all** processed foods (usually entrée items) that are used to meet the meal pattern requirements

Exceptions include only a few processed items **if they are listed in the FBG, i.e., fish sticks, hot dogs, etc.**

Sample

Manufacturer: Deli Farms Inc.	
Product Description: Thin Sliced Deli Ham	
Serving Size: Five .56 oz slices	
Total Weight of Uncooked Product:	3.40 oz
Weight of Raw Meat:	3.23 oz
Percent Fat of Raw Meat:	<30%
Weight of Finished Product:	2.83 oz
Meat/Meat Alternate per serving:	2.0 oz

Examples of food items requiring a food specification

- Chicken nuggets
- Burritos
- Pizza



How to Obtain a Food Specification

- ▶ Contact the manufacturer or vendor from whom you purchase the product.
- ▶ Call a nearby school district.
- ▶ If a food specification is not available:
 - Select another vendor who has the product specification.
 - Make the product from scratch.
 - Do not claim the meal for reimbursement.
 - Use the food item as an extra food.

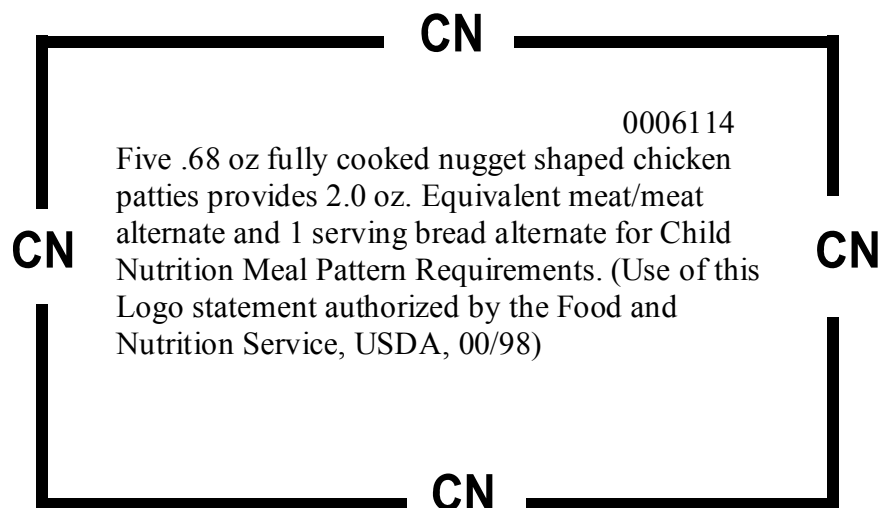


Food specifications must be signed by a company representative other than a salesperson.

Child Nutrition (CN) Label

The USDA Child Nutrition Label guarantees accuracy of CN-labeled products and allows manufacturers to state a product's contribution to the Food-Based meal pattern.

Sample



Standardized Recipes

Recipes which, when prepared, consistently produce the same products in quality and quantity.

Components of a Standardized Recipe

- ▶ Name of recipe
- ▶ List of ingredients
- ▶ Weights and/or measures of ingredients
- ▶ Preparation directions
- ▶ Yield
- ▶ Portion size and serving instructions
- ▶ Pan size
- ▶ Nutrients per serving (optional)

Advantages of Standardized Recipes

- Standardized recipes help ensure product quality.
- Menu planning can be more consistent.
- Costs are easier to control.
- The purchaser knows the quantities to buy.
- The same good results can be produced time after time.
-



Sample Recipe

STANDARDIZED RECIPE FORM



RECIPE NUMBER: D-35 RECIPE TITLE: Spaghetti with Meat Sauce

YIELD: 6 pans (#Pans/Gallons/Loaves/Etc.) PORTION SIZE: 1 Cup PORTIONS PER RECIPE: 100

INGREDIENTS	100 SERVINGS		DIRECTIONS
	Weight	Measure	
Raw ground beef	17 lb		1. Brown ground beef. Drain. Continue immediately. Add onions. Cook for 5 minutes. 2. Add granulated garlic, pepper, tomato puree, water, salt, parley, basil, oregano, marjoram, and thyme. Simmer about 1 hour. CCP: Heat to 155° F or higher for at least 15 seconds 3. Heat water to a rolling boil. Add salt. 4. Slowly add spaghetti. Stir constantly, until water boils again. Cook 10-12 minutes or until tender, stir occasionally. DO NOT OVERCOOK. Drain well. Run cold water over spaghetti to cool slightly. 5. Stir into meat sauce. 6. Divide mixture equally into medium half-steam table pans (10" x 12" x 4"), which have been lightly coated with pan- release spray. For 100 servings, use 6 pans. CCP: Hold for hot service at 135° F or higher 7. Portion with 8 oz ladle (1 cup) per serving.
Fresh onions, Chopped	1 lb	2 2/3 cups	
OR	OR	OR	
Dehydrated onions	3 oz	1 1/2 cups	
Granulated garlic		3 Tbsp	
Ground black or white pepper		1 Tbsp	
Canned tomato puree	10 lb	1 gal 1 cup (1 1/2 No. 10 Cans)	
Water		1 gal	
Salt		2 Tbsp	
Dried parsley		1/2 cup	
Dried basil		1/4 cup	
Dried oregano		1/4 cup	
Dried marjoram		2 Tbsp	
Dried thyme		1 Tbsp	
Water		12 gal	
Salt		1/4 cup	
Enriched spaghetti, broken into thirds	9 lb 8 oz		

NUTRIENTS PER SERVING*:

Calories	Protein	Carbo.	Fat	Sat. Fat.	Cholesterol	Vit. A	Vit. C	Sodium	Fiber	Contribution to Meal Pattern:
322	21.23 g	34.24 g	10.71 g	4.38 G	51 mg	636 IU	5.3 mg	310 mg	2.9 g	2 oz. meat/meat alternate, 3/8 c vegetable, 1 serving grains/bread

* Other nutrients to be analyzed include Iron and Calcium.

Steps for Getting Started on the Menu Production Record (MPR)

- ▶ **Step 1: Determine how much food to prepare.**
 - Estimate number to be served.
 - Estimate amount to be prepared.
- ▶ **Step 2: Complete the Menu Production Record (MPR).**

Step 1: Find out how much you must prepare (in Purchase Units).

- ▶ Estimate the number of serving needed.
- ▶ Find each food item on the menu in the Food Buying Guide.
- ▶ Divide the number of servings needed by the number of servings per purchase unit (*from column 3 of the Food Buying Guide*) for the amount of food required.

For Example: If there are 11.2-1 oz cooked meat portions in each lb (purchase unit) of turkey ham and you need 16-1 oz cooked meat servings, $16 \div 11.2 = 1.42$ lb of turkey is needed for the estimated number of servings.

- The serving size for 1 oz of meat does not allow for the water or extenders that are often added to meat as part of the weight. Therefore, 1.4 oz of turkey ham usually provides 1 oz of cooked meat.
- Some food items in the FBG show servings per Purchase Unit for different portions sizes- i.e., 1 oz & 1.5 oz. Make sure you use the appropriate serving size.
- If the serving size listed in the FBG is not the serving size needed for the menu item and the age/grade group you are serving, you may have to increase or decrease the number of portions/Purchase Unit.

For Example: If the FBG states there are 46.9-1/4 cup servings of Fruit Cocktail per Purchase Unit (#10 can) and the portion size for your age/grade group is 1/2 cup, the corrected servings/Purchase Unit would be $46.9-1/4 \text{ cup servings} \div 2 = 23.45-1/2 \text{ cup servings}$.

Note: Estimating the amount of food to prepare will also be an aid in calculating the amount of each food item on the menu to purchase.

Calculating Grains/Breads Contribution



Grains/Breads pose a special situation for calculating contribution to a food pattern and for purchasing the correct amount.

When calculating grains and breads contributions, use the *FBG* to determine how much food to purchase. Refer to the **Grains/Breads Chart** (pages 3-15) to determine the weight of one serving OR use the **Nutrition Facts label**.

Acceptable grain or bread product as indicated on the label:

- All grains and breads must be enriched, whole grain or made from whole-grain meal or flour.
- Cereals must be whole-grain, enriched or fortified; bran and germ are credited the same as enriched or whole-grain meal or flour.
- The smallest serving size that may be credited is $\frac{1}{4}$ grain or bread serving.

Determining a Grains/Breads Contribution: Wheat Deli Roll

- A. In the *FBG*, locate the food in the form intended to serve.
- B. If the food is not listed, check the Grains/Breads List on page 3-15. (Deli Roll is in Group B).
- C. Determine the serving size for 1 serving on the Chart (Group B - 1 serving = 25 grams or 0.9 oz.).
- D. The Nutrition Facts label, located on the product packaging, states there are 87 grams in a one-roll serving.
- E. Divide serving size weight on the Nutrition Facts label by the serving size for 1 grain/bread serving ($87 \div 25 = 3.48$ or $3 \frac{1}{4}$ grain and bread servings.) Because it is less than 3.5, count only $3 \frac{1}{4}$ G/B servings per roll.



Step 2: Complete the Menu Production Record

Food Based Menu Production Record #6

Purpose: One day on one page

California Department of Education
Nutrition Services Division

Date: _____ Site: _____

Offer vs. Serve: (circle) yes / no

Menu		Meal counts					
		Students			Adults	Total	
		Record groups			Group		
		Age/grade groups					
		Estimated					
		Actual					
Menu item and form used	Recipe or product (Name & No.)	Planned Serving Size (By wt. or portion)	Contribution to meal pattern (E.g. 2oz. M/MA)	Number of Portions Prepared	Amount of food used in purchase units (lbs., qty.)	A la carte & adult servings	Leftover servings
Meat/meat alternate							
Grains/breads							
Vegetables/fruits							
Milk							
Extra foods							

Menu Production Records: Keys to Success

- ▶ Use the **FBG**, standardized recipes, food specifications, CN labels, and the Nutrition Facts labels to accurately complete your MPRs.
- ▶ Be specific.
- ▶ Record substitutions.
- ▶ Include condiments and extra foods.

The sample above is just one of several menu production records from which to choose.



See the CDE website for samples of acceptable forms that may be used for Menu Production Records, [**SMI Menu Production Record Forms**](#)

Computerized systems may provide Menu Production Record formats.

✓ Self –Check

Using Traditional Food-Based Menu Planning, the Healthy Food School District is serving a Turkey Ham and Cheese Deli Sandwich. They need 8 servings of the sandwich, 2 of which will be adult servings. Place the following items properly in the Menu Production Record (Use “Copy” and “Paste” on your computer).

- 2 M/MA*
- 1 M/MA*
- 3 ¼ G/B*
- 1 1/2 lb
- 1/2 lb
- 3 oz
- 1 oz
- 1 Roll

- 8
- 2
- 2 bags, 6 rolls/bag
- 10 Tbsp
- 1 ¼ cup
- 1 Tbsp
- 2 Tbsp
- 4

* What tools provide this information? _____

Food Based Menu Production Record #6

California Department of Education
Nutrition Services Division

Purpose: *One day on one page*

Date: 9/20/2007 Site: Good Food School

Offer vs. Serve: (circle) yes / no

Menu		Meal counts					
Turkey Ham and Cheese Deli Sandwich Lettuce & Tomato (For Sandwich) Fruit Cocktail Milk Mayonnaise Mustard		Students			Adults	Total	
		Record groups			Group		
		Age/grade groups	7-12				
		Estimated	6	6		2	8
		Actual	6	6		2	8
Menu item and form used	Recipe or product (Name & No.)	Planned Serving Size (By wt. or portion)	Contribution to meal pattern (E.g. 2oz. M/MA)	Number of Portions Prepared	Amount of food used in purchase units (lbs., qty.)	A la carte & adult servings	Leftover servings
Meat/meat alternate Turkey Ham, Sliced Cheese, Sliced	Recipe # 303						
Grains/breads Deli Roll 2.9 oz	Recipe # 303						
Vegetables/fruits Sliced tomatoes & Lettuce Fruit Cocktail	Produce Commod.	1/8 c 5/8 c	1/8 c F/V 5/8 c F/V				
Milk Milk, 1%, Non-fat Chocolate		8 fl oz	1 Milk				
Extra foods Mayonnaise Mustard	Recipe # 303						

✓ Self –Check Answer

Using Traditional Food-Based Menu Planning , the Healthy Food School District is serving a Turkey Ham and Cheese Deli Sandwich. They need 8 servings of the sandwich, 2 of which will be adult servings. Place the following items properly in the Menu Production Record:

- 2 M/MA*
- 1 M/MA*
- 3 ¼ G/B*
- 1 1/2 lb
- 1/2 lb
- 3 oz
- 1 oz
- 1 Roll

- 8
- 2
- 2 bags, 6 rolls/bag
- 10 Tbsp
- 1 ¼ cup
- 1 Tbsp
- 2 Tbsp
- 4

* What tools provide this information? Recipe, Meat/Meat Alternate- CN label on the meat and cheese or Food Buying Guide, Grain/Bread-Nutrition Facts Label on the package of rolls.

Food Based Menu Production Record #6

California Department of Education
Nutrition Services Division

Purpose: One day on one page

Date: 9/20/2007 Site: Good Food School

Offer vs. Serve: (circle) yes / no

Menu		Meal counts					
Turkey Ham and Cheese Deli Sandwich Lettuce and Tomato (For Sandwich) Fruit Cocktail Milk Mayonnaise Mustard		Students			Adults	Total	
		Record groups			Group		
		Age/grade groups	7-12				
		Estimated	6			2	8
		Actual	6			2	8
Menu item and form used	Recipe or product (Name & No.)	Planned Serving Size (By wt. or portion)	Contribution to meal pattern (E.g. 2oz. M/MA)	Number of Portions Prepared	Amount of food used in purchase units (lbs., qty.)	A la carte & adult servings	Leftover servings
Meat/meat alternate Turkey Ham, Sliced Cheese, Sliced	Recipe # 303	3 oz 1 oz	2 M/MA 1 M/MA	8 8	1 1/2 lb 1/2 lb	2	
Grains/breads Deli Roll 2.9 oz	Recipe # 303	1 Roll	3 ¼ G/B	8	2 bags, 6 rolls/bag	2	4
Vegetables/fruits Lettuce & Tomato Fruit Cocktail	Produce Commod.	1/8 c 5/8 c	1/8 c F/V 5/8 c F/V	8	1 head lettuce; 2 tomatoes; 1 #10 can Fruit Cocktail	2	½ #10 can
Milk Milk. 1%, Non-fat Chocolate		8 fl oz	1 Milk	8	8-1/2 pints	2	
Extra foods Mayonnaise Mustard	Recipe # 303	1 Tbsp 2 Tbsp		8 8	10 Tbsp 1 ¼ cup	2 2	

Goals of an SMI Review

- ▶ To ensure program meals meet the nutrient standards
- ▶ To ensure that agencies receive the technical assistance and resources needed to meet the nutrient standards



What to Expect During an SMI Review

- The California Department of Education (CDE) will conduct a nutrient analysis of Food-Based Menu Planning (Enhanced or Traditional) for the agency.
- CDE will review nutrient analysis conducted by the agency for Nutrient Standard Menu Planning.



One week of MPRs are reviewed during an SMI Review.

Records Required for an SMI Review

1. Menus and menu planning approach for each school and age/grade group being analyzed.
2. Menu Production Records (MPR) for **week** of review. (If more than one site is being analyzed, MPRs are needed for each site.)
3. Nutrition Facts labels or nutrition information sheets for **all** processed foods, including those within a recipe, on the menu for week of review.
 - CN labels are not needed for nutrient analysis.
 - If only a CN label is available, make sure the brand name and item product code (not the CN code) is shown.
4. Standardized recipes for all menu items with more than one ingredient on the menu for the week of review.



Menus, Menu Production Records (MPRs), product nutrition information, and standardized recipes are the key documents needed for an SMI review.



To keep nutrition information organized and accessible, file these documents in a notebook **OR** copy and attach the copies to the appropriate menu production records.

After the SMI Review

- ▶ The state agency will analyze the results of your review to determine how closely your program is meeting the *Dietary Guidelines for Americans* and the nutrient standards and nutrition goals.
 - ▶ The state agency may make suggestions and/or assist you in developing a Corrective Action Plan (CAP). This will be developed with the needs of your program in mind.
 - ▶ An exit conference will be held with the state agency following the review in which results of the review and requirements for the program will be discussed.
-