

Documenting Meal Pattern Contribution

Breakfast Activity

Working in pairs, determine how you would document meal pattern contribution for each menu item.

Sample Menu #1	How would you verify meal pattern contribution?
Pancakes w/ turkey sausage	Pancakes: Product label with serving size, ingredient list, and nutrition facts. USDA Fact Sheet if USDA commodity product used. Sausage: CN label or Manufacturers Product Formulation Statement
Cereal w/ yogurt	Product label with serving size, ingredient list, and nutrition facts.
Site prepared muffin w/string cheese	Muffin: Standardized recipe with meal pattern contribution, and nutrient information. String Cheese: Product label
Apple Juice	Food Buying Guide
Orange Wedges	Food Buying Guide
Milk Choice	Product Label

Sample Menu #2	How would you verify meal pattern contribution?
Breakfast Pizza	If purchased pre-prepared: CN label or Manufacturers Product Formulation Statement. If prepared on site: Standardized recipe with meal pattern contribution, and nutrient information. USDA Fact Sheet if USDA commodity product used.
Toast w/sun butter	Product label with serving size, ingredient list, and nutrition facts.
French Toast	If purchased pre-prepared: CN label or Manufacturers Product Formulation Statement. USDA Fact Sheet if USDA commodity product used. If prepared on site: Standardized recipe with meal pattern contribution, and nutrient information.
Orange Juice	Food Buying Guide
Fresh Strawberries	Food Buying Guide
Milk Choice	Product Label

Breakfast Menu Planner All Grades

School / Site Name:

Menu Week:

Component	Weekly Requirement (daily)	Monday	Tuesday	Wednesday	Thursday	Friday	Weekly Total
Milk							
-At least two varieties	All Grades: 5 cups (1)						
Grain							
-Weekly minimum and maximum** -At least half whole grain rich SY13-14 -All whole grain rich beginning SY14-15	Grade K-5: 7-10* (1) Grade 6-8: 8-10* (1) Grade 9-12: 9-10* (1) ■ Whole Grain						
Meat / Meat Alternate							
None required, but may substitute 1oz equivalent of m/ma for 1 oz eq grain after minimum daily grain is met							
Fruit							
-Daily and Weekly minimum	All Grades: 5 cups*** (1)						
Vegetables							
None required but may substitute for fruits (first 2 cups/week from a subgroup other than starchy)							
Extras / Condiments							

*Ounces or equivalent

** Maximums relaxed for SY 2013-14

*** Effective beginning SY 2014-15

Worksheet for Calculating Grains Contribution from a Recipe

(for the Types of Food Products in Groups A-G, Using Grams of Creditable Grains)

Instructions:

1. On the worksheet, list each creditable enriched or whole-grain meal and/or flour, bran, and/or germ ingredient in the recipe.
2. Fill in the quantity (cups, pounds, kilograms, ounces, grams, etc.) of each grain ingredient in the recipe.
3. Convert the amount of each grain ingredient in the recipe to grams. If you do not know the weight per cup of the grain you are using, here are some commonly used conversions:

Number of pounds of ingredient X 453.6 grams
Number of ounces of ingredient X 28.35 grams

Number of cups of

Enriched White Flour	X	125 grams
Regular Rolled Oats	X	81 grams
Quick Cooking Oats	X	81 grams
Regular Oatmeal	X	122 grams
Stone Ground Cornmeal	X	132 grams
Wheat Bran	X	58 grams
Wheat Germ	X	115 grams
Whole Wheat Flour	X	120 grams

4. Add the grams for each grain ingredient to determine the total grams of grains in the recipe.
5. Divide the total grams of grains in the recipe by the number of portions in the recipe to determine the number of grams of creditable grains per portion of food product.
6. Divide the number of grams of creditable grains per portion by 16 grams (reference amount of grain in one grains serving).
7. Round down to the nearest 1/4 grains serving.

Worksheet for Calculating Grains Contribution from a Recipe

Steps 1 – 4

Creditable Grain Ingredient	Quantity	Convert to Grams	Grams
		X	=
		X	=
		X	=
		X	=
Total Grams			=

Step 5

Total grams *divided by* number of portions in recipe:

(Total grams creditable grain)

_____ =

Number of grams creditable
grains per portion

(Number of portions per recipe)

Step 6

Divide number of grams per portion by 16

(Number of creditable grams per portion)

_____ =

16

Grains servings

Step 7

Round *down* to the nearest 1/4 grains serving.

= creditable grains servings

Figuring Meal Pattern Contribution

Recipe Name: Record the name of the recipe

Portions per Recipe: Record the number of portions the recipe yields.

Column 1 – Ingredients: List the recipe ingredients in Column 1 of the worksheet. It is not necessary to list ingredients that do not contribute towards meal pattern requirements. Record a description of each ingredient as precisely as possible. It is a good idea to group ingredients together that contribute to the same meal component.

Column 2 – Quantity of Ingredients as Purchased: Record the “as purchased” weight or volume measure of each ingredient in the recipe in Column 2 of the worksheet. Convert ounces to their decimal equivalent of a pound. (See table 5 on page I-36 of *The Food Buying Guide* for more assistance) The quantity specified in column 2 must be in the same units as the purchase unit which will be recorded in Column 3. (For example, if 2 No. 10 cans record in Column 2, make sure the purchase unit in Column 3 is a No 10 can also. (See Appendix A in the *Food Buying Guide* for additional information)

Column 3 – Purchase Unit: Record the purchase unit in which you buy the ingredients such as pound, No. 10 can, etc., in Column 3. It is important to use the same purchase unit of the ingredient as specified under *Column 2 of the Food Buying Guide*.

Column 4 – Servings per Purchase Unit: Record the number of servings per purchase unit of the ingredient in Column 4. This information is found in *Column 3 of the Food Buying Guide*. The number of servings per purchase unit varies for different preparation methods or forms of the ingredient as served. Therefore, you should pay particular attention to the description of the food as served when selecting the number of servings per purchase unit to use in the calculations. The description of the form of the food should be most like that of the food after preparation of the recipe is complete and as it is served.

Column 5- Calculation of Meat/Meat Alternates:

-For each meat or meat alternate ingredient in the recipe, multiply the number recorded in Column 2 by the number recorded in Column 4 (column 2 x column 4 = column 5). Record the answer to two decimal places.

-If more than one meat or meat alternate ingredient is used in the recipe, add all the numbers recorded in Column 5 to determine the total ounces of meat or meat alternate. Then record the sum in the space provided for the total.

-Divide the total of Column 5 by the number of portions the recipe yields to determine the contribution per portion.

-Round down to the nearest $\frac{1}{4}$ ounce.

*The minimum oz equivalent of meat or meat alternate provided by a portion of the recipe must be $\frac{1}{4}$ ounce to be credited.

Column 6 and 7-Calculation of Vegetables and Fruits:

- For each vegetable or fruit recipe ingredient on the worksheet, multiply the number recorded in Column 2 by the number recorded in column 4 (column 2 x column 4 = column 6 or 7). Record the answer to 2 decimal places.
- If more than one fruit or vegetable is used in the recipe, add all of the numbers recorded in Column 6 or 7 to determine the total number of $\frac{1}{4}$ cup vegetable or fruit serving in the recipe. Then, record the sum in the space provided for the total.
- Divide the total number of $\frac{1}{4}$ cup servings by 4 to convert to cups.
- Divide the total number of cups by the number of portions the recipe yields to determine the contribution per portion.
- Record the answer to two decimal places and convert decimal places to the nearest portion of a cup. Always round down to the nearest $\frac{1}{8}$ cup

Converting Decimal equivalents to the Nearest Portion of a Cup for Fruits and Vegetables	
If decimal equivalent is:	The recipe contributes:
.125 - .249	$\frac{1}{8}$ cup
.250 - .374	$\frac{1}{4}$ cup
.375 - .499	$\frac{3}{8}$ cup
.500 - .624	$\frac{1}{2}$ cup
.625 - .749	$\frac{5}{8}$ cup
.750 - .874	$\frac{3}{4}$ cup
.875 - .999	$\frac{7}{8}$ cup
1.00 - 1.124	1 cup

*Minimal creditable serving of a vegetable or fruit is $\frac{1}{8}$ cup.

Column 8: Calculation of the grains:

- For each grain recipe ingredient listed on the worksheet, multiply the number recorded in column 2 by the number recorded in Column 4 (column 2 x column 4 = column 8). Record the answer to two decimal places.
- If more than one grain ingredient is used in the recipe, add all the numbers record in Column 8 to determine the total number of grains serving in the recipe. Record the sum in the space provided for the total.
- Divide the total figure in Column 8 by the number of portions the recipe yields to determine the contribution per portion.
- Round down to the nearest $\frac{1}{4}$ oz. eq.

Totals: Record the sum or total for the numbers record in each component column.

Portions per Recipe: Record the total number of portions a recipe provides or yields. This number will be the same for each of the components columns.

Calculations: Note the number you will use to calculate or determine the contribution of each component.

Each Portion Contributes: This row provides a space to record the final rounded down, calculated answers of how one portion will credit toward each meal pattern component.

Meal Pattern Contribution Worksheet

Recipe Name: _____

Portions per Recipe: _____

Ingredients	Quantity of Ingredient as Purchased	Purchase Unit	Servings per Purchase Unit in Food Buying Guide	Meat/Meat Alternates (oz. eq.)	Vegetables (1/4 cup)	Fruits (1/4 cup)	Grain / Breads (oz. eq.)
Notes:	Totals						
	Portions per Recipe						
	Calculations				total ÷ by portions	total ÷ by 4 (to get units in cups) then ÷ by # of portions	total ÷ by 4 (to get units in cups) then ÷ by # of portions
This recipe provides ___ portions	Each Portion Contributes			oz Meat/meat alternate	cup Vegetable	cup Fruit	oz eq Grains

National School Lunch Meal Pattern

Food Components	Grade K - 5	Grade 6 – 8	Grade 9 - 12
Milk	5 cups/week (1 cup daily)	5 cups/week (1 cup daily)	5 cups/week (1 cup daily)
Meat or Meat Alternates -Weekly minimum - maximum	8–10 oz equivalent/week (1 oz daily minimum)	9–10 oz equivalent/week (1 oz daily minimum)	10-12 oz equivalent/week (2 oz daily minimum)
Vegetables (total) -Weekly minimum	3¾ cups/week (¾ cup daily minimum)	3¾ cups/week (¾ cup daily minimum)	5 cups/week (1 cup daily minimum)
<i>Dark Green Subgroup</i>	½ cup/wk	½ cup/wk	½ cup/wk
<i>Red / Orange Subgroup</i>	¾ cup/wk	¾ cup/wk	1¼ cup/wk
<i>Legumes Subgroup</i>	½ cup/wk	½ cup/wk	½ cup/wk
<i>Starchy Subgroup</i>	½ cup/wk	½ cup/wk	½ cup/wk
<i>Other Subgroup</i>	½ cup/wk	½ cup/wk	¾ cup/wk
Fruits -Weekly minimum	2½ cups/week (½ cup daily minimum)	2½ cups/week (½ cup daily minimum)	5 cups/week (1 cup daily minimum)
Grains / Breads -Weekly minimum - maximum -At least half whole grain beginning School Year 2012-13 -All whole grain beginning School Year 2014-2015	8-9 oz equivalent/week (1 oz daily minimum)	8-10 oz equivalent/week (1 oz daily minimum)	10-12 oz equivalent/week (2 oz daily minimum)
Minimum – Maximum Calories (kcal) -Weekly average	550 – 650	600 – 700	750 - 850
Saturated Fat (% of total calories) -Weekly average	<10%	<10%	<10%
Sodium** -Weekly average	≤1230 mg*	≤1360 mg*	≤1420 mg*
Trans Fat	0 grams / serving	0 grams / serving	0 grams / serving

*Effective School Year 2014-15

**Increasingly restrictive targets in School Year 2017-18 and School Year 2022-23

School Breakfast Meal Pattern

Food Components	Grade K - 5	Grade 6 – 8	Grade 9 - 12
Milk	5 cups/week (1 cup daily)	5 cups/week (1 cup daily)	5 cups/week (1 cup daily)
Meat or Meat Alternates None required but may substitute 1 oz equivalent of meat /meat alternate for 1 oz equivalent grains after minimum daily grain is met			
Vegetables May be substituted for fruits, but the first 2 cups/week must be from a subgroup other than starchy (dark green, red/orange, legumes, other)			
Fruits	5 cups/week* (1 cup daily minimum)	5 cups/week* (1 cup daily minimum)	5 cups/week* (1 cup daily minimum)
Grains / Breads -minimum - maximum -At least half whole grain beginning School Year 2013-14 -All whole grain beginning School Year 2014-2015	7-10 oz equivalent/week (1 oz daily minimum)	8-10 oz equivalent/week (1 oz daily minimum)	9-10 oz equivalent/week (1 oz daily minimum)
Minimum – Maximum Calories (kcal) Weekly average	350 – 500	400 – 550	450 - 600
Saturated Fat (% of total calories) Weekly average	<10%	<10%	<10%
Sodium** Weekly average	≤ 540 mg*	≤ 600 mg*	≤ 640 mg*
Trans Fat	0 grams/serving	0 grams/serving	0 grams/serving

*Effective School Year 2014-15 **Increasingly restrictive targets in School Year 2017-18 and School Year 2022-23

Sample Product Formulation Statement (Product Analysis) for Meat/Meat Alternate (M/MA) Products

Child Nutrition Program operators should include a copy of the label from the purchased product carton in addition to the following information on letterhead signed by an official company representative.

Product Name: _____ Code No.: _____

Manufacturer: _____ Case/Pack/Count/Portion/Size: _____

I. Meat/Meat Alternate

Please fill out the chart below to determine the creditable amount of Meat/Meat Alternate

Description of Creditable Ingredients per Food Buying Guide (FBG)	Ounces per Raw Portion of Creditable Ingredient	Multiply	FBG Yield/ Servings Per Unit	Creditable Amount *
		X		
		X		
		X		
A. Total Creditable M/MA Amount¹				

*Creditable Amount - Multiply ounces per raw portion of creditable ingredient by the FBG Yield Information.

II. Alternate Protein Product (APP)

If the product contains APP, please fill out the chart below to determine the creditable amount of APP. If APP is used, you must provide documentation as described in Attachment A for each APP used.

Description of APP, manufacture's name, and code number	Ounces Dry APP Per Portion	Multiply	% of Protein As-Is*	Divide by 18**	Creditable Amount APP***
		X		÷ by 18	
		X		÷ by 18	
		X		÷ by 18	
B. Total Creditable APP Amount¹					
C. TOTAL CREDITABLE AMOUNT (A + B rounded down to nearest 1/4 oz)					

*Percent of Protein As-Is is provided on the attached APP documentation.

**18 is the percent of protein when fully hydrated.

***Creditable amount of APP equals ounces of Dry APP multiplied by the percent of protein as-is divided by 18.

¹Total Creditable Amount must be rounded **down** to the nearest 0.25oz (1.49 would round down to 1.25 oz meat equivalent). Do **not** round up. If you are crediting M/MA and APP, you do not need to round down in box A (Total Creditable M/MA Amount) until after you have added the Total Creditable APP Amount from box B to box C.

Total weight (per portion) of product as purchased _____

Total creditable amount of product (per portion) _____

(Reminder: Total creditable amount cannot count for more than the total weight of product.)

I certify that the above information is true and correct and that a _____ ounce serving of the above product (ready for serving) contains _____ ounces of equivalent meat/meat alternate when prepared according to directions.

I further certify that any APP used in the product conforms to the Food and Nutrition Service Regulations (7 CFR Parts 210, 220, 225, 226, Appendix A) as demonstrated by the attached supplier documentation.

Signature

Title

Printed Name

Date

Phone Number

Soy Company X
Soy Protein Concentrate
Product Y

Documentation for Company X Product(s) Used as Alternate Protein Products (APP) for Child Nutrition Programs

- a) Company X certifies that Product Y meets all requirements for APP intended for use in foods manufactured for Child Nutrition Programs as described in Appendix A of 7 CFR 210, 220, 225, and 226.
- b) Company X certifies that Product Y has been processed so that some portion of the non-protein constituents have been removed by fractionating. This product is produced from soybeans by removing the majority of the soybean oil and some of the other non protein constituents.
- c) The Protein Digestibility Corrected Amino Acid Score (PDCAAS) for Product Y is 0.99. It was calculated by multiplying the lowest uncorrected amino acid score by true protein digestibility as described in the Protein Quality Evaluation Report from the Joint Expert Consultation of the Food and Agriculture Organization/World Health Organization of the United Nations, presented December 4-8, 1989, in Rome, Italy. The PDCAAS is required to be greater than 0.8 (80% of casein).
- d) The protein level of Product Y is at least 18% by weight when fully hydrated at a ratio of 2.43 parts water to one part product.
- e) The protein level of Product Y is certified to be at least 61.8% on an “as-is” basis for the as-purchased product. (*Note: Protein is often provided on a moisture free basis (mfb) which is not the information FNS requires.*)

All of the above information is required for APP and must be presented for approval.

Note: *It is also helpful to have the ingredient statement for product Y. For example, if the product is uncolored and unflavored the ingredient statement might be “soy protein concentrate” or if the product is colored and textured the ingredient statement might be “textured vegetable protein (soy flour, caramel color)”*