



Short Lessons for School Nutrition Assistants

Identifying the Parts of a USDA Quantity Recipe

Lesson Overview

Lesson Participants: School Nutrition Assistants/Technicians, School Nutrition Managers, and CACFP Staff

Type of Lesson: Short, face-to-face training session

Time Needed to Conduct the Lesson: 20 minutes

Lesson Description: This lesson explains the differences between a recipe, a quantity recipe, and a standardized recipe. Participants will complete activities that will identify abbreviations used in recipes and the parts of a recipe from *USDA Recipes for Schools*. The lesson is designed for managers to teach child nutrition assistants/technicians.

Lesson Objectives:

At the end of this lesson, the participant will be able to

1. Identify a recipe, a quantity recipe, and a standardized recipe,
2. Discuss the advantages of using standardized recipes, and
3. Identify abbreviations and parts of a recipe from *USDA Recipes for Schools*.

Get Ready to Train

Note: This lesson should be taught along with the No Time to Train lesson *Herbs, Spices, and Seasonings* and *Adjusting a Recipe with Herbs and Spices*.

The format for this **No Time to Train** lesson includes: a lesson overview, preparation checklist, lesson at a glance with timeline for conducting the lesson, references, an instructor's script, and handouts. The manager/instructor will use the script to present the lesson to participants. The script gives directions to the manager/instructor—**DO, SAY, ASK, LISTEN, AND ACTIVITY**—for delivering the lesson.

No special audiovisual or electronic equipment is needed to conduct the lesson. The lesson can be presented in the cafeteria, media center, or classroom.

Preparation Checklist

Directions: Use the Preparation Checklist to prepare for the training session. Track your progress by checking off tasks as they are completed.

Done	Lesson Tasks
<input checked="" type="checkbox"/>	
	<p>Gather Materials</p> <p>Materials Needed:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Instructor’s Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 1: Abbreviations Used in Recipes
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 1: Abbreviations Used in Recipes (Answers)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 2: Parts of a USDA Quantity Recipe for Schools
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 2: Parts of a USDA Quantity Recipe for Schools (Answers)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Pencils (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Session Evaluation form (one for each participant)
	<p>Prepare for Lesson</p> <p>Before the Training:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Handouts 1 and 2 (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Handouts 1 and 2 Answers (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Make copies of Session Evaluation form (one for each participant)
	<p>On Training Day:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Place pencils on tables (one for each participant)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Distribute Handouts 1 and 2 to each participant
	<p>On the Instructor’s Table:</p>
<input type="checkbox"/>	<ul style="list-style-type: none"> • Instructor’s Script
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 1: Abbreviations Used in Recipes
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 1: Abbreviations Used in Recipes (Answers)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 2: Parts of a USDA Quantity Recipe for Schools
<input type="checkbox"/>	<ul style="list-style-type: none"> • Handout 2: Parts of a USDA Quantity Recipe for Schools (Answers)
<input type="checkbox"/>	<ul style="list-style-type: none"> • Session Evaluation forms

Lesson at a Glance
(20 minutes)

Time	Topic	Task	Materials
3 minutes	Introduction and Overview Objective 1: Identify a recipe, a quantity recipe, and a standardized recipe.	Instructor introduces topic and discusses the differences between a recipe, a quantity recipe, and a standardized recipe.	Instructor's Script
3 minutes	Objective 2: Discuss the advantages of using standardized recipes.	Participants will brainstorm and discuss the advantages of using standardized recipes.	
10 minutes	Objective 3: Identify abbreviations and parts of a recipe from <i>USDA Recipes for Schools</i> .	Distribute Handouts 1 and 2. Participants will complete activity on abbreviations. Participants will complete parts of a USDA Recipe for schools. Distribute Handouts 1 and 2 (Answers)	Handout 1: Abbreviations Used in Recipes Handout 2: Parts of a USDA Quantity Recipe for Schools. Handouts (Answers)
2 minutes	Wrap up and Review	Volunteers share their answers in a group discussion.	
2 minutes	Session Evaluation	Conduct a short evaluation of the lesson.	Session Evaluation form

References:

National Food Service Management Institute. (2007). *On the road to professional food preparation*. (2nd ed.). University, MS: Author.
<http://nfsmi.org/documentlibraryfiles/PDF/20111118033712.pdf>

National Food Service Management Institute. (2009). *On the road to professional food preparation-standardized recipes* online course. University, MS: Author.
<http://www.nfsmi.org/onlinecourses>

National Food Service Management Institute, & U.S. Department of Agriculture, Food and Nutrition Service. (2011). *Food buying guide calculator for child nutrition program*. University, MS: Author. <http://fbg.nfsmi.org/>

U.S. Department of Agriculture, Food and Nutrition Service. (2008). *A menu planner for healthy school meals...to help you plan, prepare, serve, and market appealing meals*.
http://www.fns.usda.gov/tn/resources/menuplanner_chapter7.pdf

U.S. Department of Agriculture, Food and Nutrition Service, and National Food Service Management Institute. (2002). *Measuring success with standardized recipes*. University, MS: Author. <http://nfsmi.org/ResourceOverview.aspx?ID=88>



Instructor's Script



SAY:

As a school nutrition professional, your responsibility is to prepare and serve foods that are nutritious, appealing, good tasting, and safe. A good food item should be the same each time it is served. To achieve this consistency, we must use standardized recipes.



ASK:

Do you know the differences between a recipe, a quantity recipe, and a standardized recipe?



LISTEN:

Listen and acknowledge individual responses.



SAY:

A **recipe** states how to make a certain menu item. It specifies the ingredients, the amounts needed, how to combine them, and other steps to take to prepare the menu item. A **quantity recipe** is any recipe that produces 25 servings or more.

USDA Recipes for Schools are **quantity recipes** that have been developed and tested for yields of 50 and 100 servings. The meal contributions per serving are included on each recipe as appropriate. These recipes will need a final step in the standardization process which is for each individual school nutrition service to further adapt these recipes to meet its own particular needs.

For example, adjustments may need to be made in the recipes to fit a particular school's equipment. It is possible that the amount and types of seasonings used in the recipes may need to be adjusted to local tastes. Portion sizes may need to be adjusted to complement other menu items as well as the meal pattern or the age/grade groups being served. Schools cooking in high altitude areas will need to make basic adjustments to certain recipes.

A **standardized recipe** is a recipe that has been tested several times and resulted in a consistent product each time. In addition, a **standardized recipe** in local schools or school districts must meet the taste preferences of students.

A **standardized recipe** gives the ingredients to use, weights and measure, step-by-step directions, temperature and time, yield or number of servings, the type of utensils and equipment to use for cooking and serving the food, and the Critical Control Points of HACCP (Hazard Analysis Critical Control Points). Understanding and following a standardized recipe will help control food and labor costs, ensure preparation of the right amount of food, ensure preparation and service of good quality food, and meet the nutritional guidelines of a meal component or menu requirements.



ACTIVITY:

Organize the participants into small working groups for the following activities.



SAY:

Working in your small groups, let's take about 30 seconds to brainstorm the advantages of using standardized recipes.



DO:

Call for volunteers to provide answers.



LISTEN:

Listen to individual responses.



SAY:

Let's review the advantages of using standardized recipes:

- Food and labor cost control
- Predictable yield
- Consistent food quality
- Customer satisfaction
- Consistent nutrient content
- Increased employee confidence
- Efficient purchasing procedures
- Inventory control
- Reduced record keeping
- Successful completion of state/federal reviews
- Foundation of menu planning, equipment, and utensil requirements, and the primary document to justify production records

There is always a concern about preparing enough food for the customers. The *USDA Recipes for Schools* indicate the yield, the number of servings, and the size of servings. By following correct procedures for measuring and combining ingredients, the expected number of servings will be achieved.



ACTIVITY:

Participants will complete **Handout 1: Abbreviations Used in Recipes**. Allow 2 minutes for the group to complete the activity.



DO:

Distribute copies of **Handout 1: Abbreviations Used in Recipes**. Call for volunteers to provide answers. Acknowledge the participants' answers, and then distribute copies of **Handout 1: Abbreviations Used in Recipes (Answers)**.



SAY:

Let's take 2 minutes to complete the activity before regrouping.

As a group, let's look at **Handout 1: Abbreviations Used in Recipes (Answers)**. In order to follow the recipes exactly, you need to understand the abbreviations and parts of a recipe. Let's review the abbreviations.



ACTIVITY:

Participants will complete **Handout 2: Parts of a USDA Quantity Recipe for Schools**. Allow 5 minutes for the group to complete the activity.



DO:

Distribute copies of **Handout 2: Parts of a USDA Quantity Recipe for Schools**. Call for volunteers to provide answers.



SAY:

Let's take 5 minutes to complete the activity.

As a group, let's look at **Handout 2: Parts of a USDA Quantity Recipe for Schools**. In order to follow the recipes exactly, you need to understand the parts of a recipe. Let's review the parts of a recipe. The parts are

1. Recipe Name
2. Food Components (contributing credit toward the reimbursable meal)
3. Category and Recipe Numbers (recipe file location)
4. Ingredients
5. Weight and Measure for 50 servings and 100 servings
6. Directions
7. Pan Size (small equipment)
8. Equipment (oven and temperatures)
9. Critical Control Points (CCP)
10. Marketing Guide for Selected Items
11. Serving
12. Yield–Volume for 50 and 100 Servings
13. Special Tips, if applicable
14. Nutrients Per Serving

Note: Marketing guide gives the amount of product needed as purchased (AP) to yield edible portion (EP) required for the recipe. Critical Control Points (CCP) or Hazard Analysis and Critical Control Points (HACCP) provide procedures to reduce the risk of foodborne illness.

Since the recipes used in school nutrition programs have been carefully planned, selected, and tested, you will save time, food, and money when you follow them exactly. In order to follow the recipes exactly, you need to understand the abbreviations, ingredients, directions, time and temperature, yield, utensils and equipment, and weights and measures that are used in recipes.



DO:

Distribute copies of **Handout 2: Parts of a USDA Quantity Recipe for Schools (Answers)**.



ASK:

Do you have any questions about identifying the parts of a USDA quantity recipe?



LISTEN:

Listen to individual responses. Answer questions to the best of your ability. If there are questions you can't answer, tell the participants you will find out the answer and let them know later. If you need assistance in finding answers, please call the National Food Service Management Institute at 800-321-3054.



DO:

Distribute the Session Evaluation form.



SAY:

Thank you for participating in the lesson today. Please take a couple of minutes to complete the Session Evaluation form. Thank you for your input.

Handout 1: Abbreviations Used in Recipes

Directions: Working individually or in pairs, write the abbreviations for the following words that are often used in a recipe.

<u>Words</u>	<u>Abbreviations</u>
Edible Portion	_____
As Purchased	_____
Cup	_____ or _____
Degree Fahrenheit	_____
Fluid Ounce	_____
Gallon	_____
Number	_____
Ounce	_____
Package	_____
Pint	_____
Pound	_____ or _____
Quart	_____
Tablespoon	_____ or _____
Teaspoon	_____ or _____
Weight	_____
Critical Control Points	_____

Handout 1: Abbreviations Used in Recipes (Answers)

Directions: Working individually or in pairs, write the abbreviations for the following words that are often used in a recipe.

<u>Words</u>	<u>Abbreviations</u>
Edible Portion	EP
As Purchased	AP
Cup	c or cup
Degree Fahrenheit	°F
Fluid Ounce	fl oz
Gallon	gal
Number	No.
Ounce	oz
Package	pkg
Pint	pt
Pound	lb or #
Quart	qt
Tablespoon	T or Tbsp
Teaspoon	t or tsp
Weight	wt
Critical Control Points	CCP

Handout 2: Parts of a USDA Quantity Recipe for Schools

Directions: Working individually or in pairs, identify where each part is located on a USDA quantity recipe for schools.

The parts are

1. Recipe Name
2. Food Components (contributing credit toward the reimbursable meal)
3. Category and Recipe Numbers (recipe file location)
4. Ingredients
5. Weight and Measure for 50 servings and 100 servings
6. Directions
7. Pan Size (small equipment)
8. Equipment (oven and temperatures)
9. Critical Control Points (CCP)
10. Marketing Guide for Selected Items
11. Serving
12. Yield and Volume for 50 and 100 Servings
13. Special Tips, if applicable
14. Nutrients Per Serving

NOTE: The marketing guide gives the amount of product needed as purchased (AP) to yield edible portion (EP) required for the recipe.

Critical Control Points indicate the correct temperature the menu item must be held or stored at to prevent the rapid growth of bacteria or food spoilage.

Handout 2: Parts of a USDA Quantity Recipe for Schools

Chicken Tomato Bake

Meat/Meat Alternate-Vegetable-Grains/Breads

	50 Servings		100 Servings		
Water	4 gal		8 gal		1. Heat water to a rolling boil. Add salt.
Salt	1 Tbsp 2 ½ tsp		3 Tbsp 2 tsp		
Enriched elbow macaroni, uncooked	3 lb	2 qt 2 ½ cups	6 lb	1 gal 1 ¼ qt	2. slowly add elbow macaroni. Stir constantly, until water boils again. Cook, about 8 minutes or until tender; stir occasionally. DO NOT OVERCOOK. Drain well.
*Cooked chicken, diced (see Special Tips)	3 lb 2 oz	3 qt	6 lb 4 oz	1 gal 2 qt	
Canned tomato paste	12 oz	1 ¼ cups 1 Tbsp	1 lb 8 oz	2 ½ cups 2 Tbsp	3. Combine the elbow macaroni, chicken, tomato paste, tomato sauce, water, Cheddar cheese, marjoram, and salt in a large bowl. Mix well.
Canned tomato sauce	4 lb	1 qt 3 ¾ cups (¾ No. 10 can)	8 lb	3 qt 3 ½ cups (1 ¼ No. 10 can)	
Water		2 cups		1 qt	4. Place 8 lb 6 oz of this mixture into each steamtable pan (12" x 20" x 2 ½") which has been lightly coated with pan release spray. For 50 servings, use 2 pans. For 100 servings, use 4 pans.
Reduced fat Cheddar cheese, shredded	6 oz	1 ½ cups	12 oz	3 cups	
Dried marjoram		2 tsp		1 Tbsp 1 tsp	5. Top each pan with ½ cup of breadcrumbs. Cover with foil or lid.
Salt		2 tsp		1 Tbsp 1 tsp	
Enriched dry bread crumbs	2 oz	½ cup	4 oz	1 cup	6. Bake: Conventional oven: 350° F for 30 minutes Convection oven: 325° F for 30 minutes CCP: Heat to 165° F or higher for at least 15 seconds.
					7. CCP: Hold for hot service at 135° F or higher.
					Score each pan 5 x 5 (25 portions per pan) with a spatula.

Food as Purchased for	50 Servings	100 Servings
Chicken, whole, without neck and giblets OR	8 lb 11 oz OR	17 lb 6 oz OR

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Chicken Tomato Bake

Meat/Meat Alternate-Vegetable-Grains/Breads

Turkey, whole, without neck and giblets 6 lb 11 oz 13 lb 5 oz

1 portion provides 1 oz equivalent of meat/meat alternate, ¼ cup of vegetable, and 1 serving of grains/breads.

50 Servings: about 13 lb 3 oz

50 Servings: 2 steamtable pans

100 Servings: about 26 lb 6 oz

100 Servings: 4 steamtable pans

Edited 2004

Special Tips:

1. *Cooked turkey can be substituted for chicken.
2. For a zestier flavor, substitute spaghetti sauce for the tomato sauce. For 50 servings, use 4 lb 1 oz (¾ No. 10 can). For 100 servings, use 8 lb 2 oz (1 ¼ No. 10 cans).

Calories	200	Saturated Fat	1.09 g	Iron	2.01 mg
Protein	13.84 g	Cholesterol	27 mg	Calcium	51 mg
Carbohydrate	28.03 g	Vitamin A	566 IU	Sodium	455 mg
Total Fat	3.48 g	Vitamin C	8.7 mg	Dietary Fiber	2.2 g

Adapted Source: U. S. Department of Agriculture, Food and Nutrition Service, and National Food Service Management Institute. (2006). *USDA Recipes for Schools*.

http://www.nfsmi.org/USDA_recipes/school_recipes/D-20.pdf



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Handout 2: Parts of a USDA Quantity Recipe for Schools (Answers)

Chicken Tomato Bake

1. Recipe Name: Meat/Meat Alternate-Vegetable-Grains/Breads 3. Category and Recipe Numbers: 41

2. Food Components

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	

4. Ingredients

6. Directions

Water		4 gal		8 gal	1. Heat water to a rolling boil. Add salt and macaroni. Cook until water boils again. Stir constantly, until water boils again. Cook, about 8 minutes or until tender; stir occasionally. DO NOT OVERCOOK. Drain well. 2. slowly add elbow macaroni. Stir constantly, until water boils again. Cook, about 8 minutes or until tender; stir occasionally. DO NOT OVERCOOK. Drain well. 3. Combine the elbow macaroni, chicken, tomato paste, tomato sauce, water, Cheddar cheese, marjoram, and salt in a large bowl. Mix well. 4. Place 8 lb 6 oz of this mixture into each steamtable pan (12" x 20" x 2 1/2") which has been lightly coated with pan release spray. For 50 servings, use 2 pans. For 100 servings, use 4 pans. 5. Top each pan with 1/2 cup of breadcrumbs. Cover with foil or lid. 6. Bake: Conventional oven: 350° F for 30 minutes Convection oven: 325° F for 30 minutes CCP: Heat to 165° F or higher for at least 15 seconds. 7. CCP: Hold for hot service at 135° F or higher for 2 hours. Score each pan 5 x 5 (25 portions per pan) with a spatula.
Salt		1 Tbsp 2 1/2 tsp		3 Tbsp 2 tsp	
Enriched elbow macaroni, uncooked	3 lb	2 qt 2 1/2 cups	6 lb	1 gal 1 1/4 qt	
*Cooked chicken, diced (see Special Tips)	3 lb 2 oz	3 qt	6 lb 4 oz	1 gal 2 qt	
Canned tomato paste	12 oz	1 1/4 cups 1 Tbsp	1 lb 8 oz	2 1/2 cups 2 Tbsp	
Canned tomato sauce	4 lb	1 qt 3 3/4 cups (3/4 No. 10 can)	8 lb	3 qt 3 1/2 cups (1 1/4 No. 10 can)	
Water		2 cups		1 qt	
Reduced fat Cheddar cheese, shredded	6 oz	1 1/2 cups	12 oz	3 cups	
Dried marjoram		2 tsp		1 Tbsp 1 tsp	
Salt		2 tsp		1 Tbsp 1 tsp	
Enriched dry bread crumbs	2 oz	1/2 cup	4 oz	1 cup	

7. Pan Size

8. Equipment (Oven)

9. Critical Control Points

10. Marketing Guide for Selected Items

Marketing Guide for Selected Items		
Food as Purchased for	50 Servings	100 Servings
Chicken, whole, without neck and giblets OR	8 lb 11 oz OR	17 lb 6 oz OR



Chicken Tomato Bake

Meat/Meat Alternate-Vegetable-Grains/Breads

Main Dishes

D-41

Turkey, whole, without neck and giblets 6 lb 11 oz 13 lb 5 oz

SERVING:

1 portion plus amount of meat/meat alternate, ¼ cup of vegetable, and 1 serving of grains/breads.

11. Serving

YIELD:

50 Servings: about 13 lb 3 oz

100 Servings: about 26 lb 6 oz

12. Yield & Volume

VOLUME:

50 Servings: 2 steamtable pans

100 Servings: 4 steamtable pans

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13. Special Tips

Special Tips:

- *Cooked turkey can be substituted for chicken.
- For a zestier flavor, substitute spaghetti sauce for the tomato sauce. For 50 servings, use 4 lb 1 oz (¾ No. 10 can). For 100 servings, use 8 lb 2 oz (1 ¼ No. 10 cans).

14. Nutrients Per Serving

Nutrients Per Serving			
Calories	200	Saturated Fat	1.09 g
Protein	13.84 g	Cholesterol	27 mg
Carbohydrate	28.03 g	Vitamin A	566 IU
Total Fat	3.48 g	Vitamin C	8.7 mg
		Iron	2.01 mg
		Calcium	51 mg
		Sodium	455 mg
		Dietary Fiber	2.2 g

Adapted Source: U. S. Department of Agriculture, Food and Nutrition Service, and National Food Service Management Institute. (2006). *USDA Recipes for Schools*.
http://www.nfsmi.org/USDA_recipes/school_recipes/D-20.pdf



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 Identifying the Parts of a USDA Quantity Recipe



National Food Service Management Institute
The University of Mississippi

Session Evaluation

Instructions:

Completely fill in the circle of your answer. Use a #2 pencil.

Please select only one response for each statement. Do not fold or crease this sheet.

Title of Meeting: _____	
Session Topic: _____	Trainer's Code: _____
Date: _____	Time Slot: _____ Location: _____ Length of Event (hrs/min): _____

Attendee Status:

- | | | |
|--|---|--|
| <input type="radio"/> District director | <input type="radio"/> Major city director | <input type="radio"/> Private consultant/trainer |
| <input type="radio"/> State agency staff | <input type="radio"/> Site-level manager | <input type="radio"/> Foodservice assistant |
| <input type="radio"/> Educator | <input type="radio"/> Other (please list) _____ | |

Reaction to this Session		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Please read the following statements related to the session. Rate your level of agreement by using the scale 5 (Strongly Agree) to 1 (Strongly Disagree).						
1.	The session objectives were clearly presented.	5	4	3	2	1
2.	The session objectives were achieved.	5	4	3	2	1
3.	I can apply what I learned in this session to my job.	5	4	3	2	1
4.	Attending the session increased my skill on the topic.	5	4	3	2	1
5.	Attending the session increased my knowledge on the topic.	5	4	3	2	1
6.	I would recommend this session to others.	5	4	3	2	1
7.	Overall, the session met or exceeded my expectations.	5	4	3	2	1

Comments about this Session
<p>The information I found MOST useful was:</p> <hr/> <hr/> <hr/>
<p>Please share any additional comments:</p> <hr/> <hr/> <hr/>

National Food Service Management Institute - The University of Mississippi

