

**BUILDING QUALITY MEALS:
STANDARDIZED RECIPES AND
PORTION CONTROL**

April 12, 2000
A National Satellite Seminar



**NUTRITION SATELLITE NETWORK
National Food Service
Management Institute**

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Pretest and Posttest Answer Sheet (Purple General Purpose Answer Sheet, Form No. 16485)	Not Numbered

Coming October 25, 2000...
Production Planning

Satellite Seminar times to be announced.



INTRODUCTION

The purpose of this satellite seminar, *Building Quality Meals: Standardized Recipes and Portion Control*, is to provide an opportunity for Child Nutrition Program personnel to learn about using standardized recipes and portion control techniques to prepare quality, nutritious meals for customers.

The following topics will be covered during this satellite seminar:

- ~ Understanding standardized recipes
- ~ Weighing and measuring techniques for preparing standardized recipes
- ~ Culinary terms and techniques
- ~ Portion control techniques
- ~ Modifying recipes
- ~ Standardizing recipes to meet the quality and preference standards of student customers

***It is important to follow recipes exactly
because our customers expect
consistent quality.***



COOKING TERMS

Al dente	An Italian cooking term meaning to cook until tender but still slightly firm. Translated literally from Italian "to the tooth," the term is usually used to describe cooking pasta, but it can also apply to vegetables.
A.P.	An abbreviation for "As Purchased" weight (in other words, before trimming or other preparation).
Bake	To cook by dry heat, usually in an oven. A suitable cooking method for meat, bread, and casseroles.
Barbecue	To roast or broil a food which is usually brushed with a highly seasoned sauce.
Baste	To spoon liquids, sauce, or meat juice over food to keep it moist during cooking and to add flavor.
Batch cooking	To cook smaller "batches" of food (rather than cooking one large amount and holding it throughout the meal). Also: cooking in smaller batches to meet the demand of children who eat at different times. Batch cooking is often done in food service with foods (such as pasta, steamed spinach, and hamburgers) that will not retain their fresh properties if large quantities are made and held.
Batter	A thin mixture of flour and liquid which can be poured or dropped from a spoon, such as for pancakes. Also, "to batter" means "to coat with batter."
Beat	To mix vigorously by hand or with mixing equipment to make a mixture light, fluffy, or smooth.
Blend	To mix (stir) two or more ingredients.
Boil	To cook rapidly in water or liquid so that bubbles rise and break on the surface.
Braise	To cook slowly in a covered container with a small amount of liquid or water. A suitable cooking method for less tender cuts of meat.
Bread (Dredge)	To coat food with bread crumbs, cracker crumbs, or flour before cooking.
Broil	To cook by direct heat from a flame, electric unit, or glowing coals; a suitable cooking method for tender cuts of meat.
Brown	To cook food, generally meat, until it is uniformly brown on all sides.
Chill	To cool a food with ice water or refrigeration.
Chop	To cut food into small pieces with a knife or chopping equipment.
Convection oven	A more rapid way of cooking and browning foods due to a strong circulation of hot air.



COOKING TERMS CONTINUED...

Cream	To work foods (such as shortening and sugar) together with a spoon or mixer, until soft, fluffy, and thoroughly blended.
Crumb (Coat)	To cover with crumbs, flour, or sugar.
Cut in	To mix solid fat, such as butter or margarine, into dry ingredients with a cutting motion until the shortening remains in small particles.
Dice	To cut into small cubes with a knife or cutting equipment.
Dough	A stiffer version of a batter, such as for bread or cookies.
Dredge (Bread)	To coat a food by dipping in crumbs, flour, cornmeal, sugar, or other coatings.
Fold	To combine food ingredients into a mixture using gentle turning motions (as few as possible) until the ingredients are blended.
Fry	To cook food in a small amount of fat over heat in a skillet, pan, or griddle. This can also refer to "deep frying" or "French-frying" in a large volume of preheated fat.
Glaze	To coat with an egg, sugar, or gelatin mixture to produce a glossy appearance on a food.
Grind	To mince or pulverize food, such as meat, into small particles by using a food chopping device or meat grinder.
IQF	An acronym for "Individually Quick Frozen."
Julienne	To cut into thin, short strips.
Knead	To work with dough, such as bread dough, by pressing, folding, and stretching to develop the gluten in the dough structure.
Marinate	To modify a food's flavor or texture by soaking, for a period of time, in a medium of oil, acid, and flavorings. Meats and vegetables are sometimes marinated, especially if they are to be grilled.
Melt	To turn a solid food into a liquid by heating.
Mince	To finely chop food, such as garlic, into very small pieces.
Mix	To blend or combine two or more foods or ingredients.
Parboil	To boil in water briefly as a preliminary cooking step. May be used with vegetables or meat before roasting or barbecuing.
Pare	To thinly trim off the outer covering or skin of a food, such as potatoes.
Peel	To strip off the outer covering of a food, such as oranges or bananas.



COOKING TERMS CONTINUED...

Punch down	To remove air bubbles from risen yeast dough by pushing the dough down with the fists.
Reconstitute	To restore a concentrated food (such as a juice concentrate) to its original strength by adding liquid; to restore dried foods (such as nonfat dry milk or onions) to their original state by adding liquid.
Rehydrate	To add fluids back into a dried food such as dehydrated onions.
Roast	To bake without water, uncovered, in an oven. A suitable cooking method for tender meats or poultry.
Saute	To cook in a small amount of fat at a very high heat until tender.
Scald	To heat a liquid, such as milk, to a temperature just below the boiling point. Tiny bubbles will appear around the edge of the pan.
Score	To make shallow cuts lengthwise and crosswise on the surface of a dough or meat.
Shred	To cut or grate foods into narrow strips.
Simmer	To cook in liquid that is kept just below the boiling point.
Slice	To cut a food with a knife or slicing equipment.
Steam	To cook food in steam generated by boiling water or steam equipment.
Stir	To mix ingredients with a circular motion without beating.
Stir-fry	To quickly cook, in a small amount of oil, tossing and stirring lightly to preserve the shape of the food.
Stock	A natural soup or gravy base made from cooking vegetables, meat, fish, or poultry, in water.
Tender-crisp	To cook vegetables until "tender-crisp" means to cook until they are just beginning to become tender. Vegetables cooked this way remain bright in color.
Whip	To rapidly beat a food, such as eggs or cream, incorporating air to lighten the mixture and to increase its volume. Usually, whipping is done with a whisk, fork, or mixing equipment.

Source: *Child Care Recipes: Food for Health and Fun*

***Don't guess about a term that you don't know....
that may lead to disaster!***



PORTION CONTROL UTENSILS

Scoops (or Dishers) (or Dippers)	
Size	Measure
6	$\frac{2}{3}$ cup
8	$\frac{1}{2}$ cup
10	$\frac{3}{8}$ cup
12	$\frac{1}{3}$ cup
16	$\frac{1}{4}$ cup
20	$3\frac{1}{3}$ Tbsp
24	$2\frac{2}{3}$ Tbsp
30	2 Tbsp
40	$1\frac{2}{3}$ Tbsp
50	$3\frac{3}{4}$ tsp
60	$3\frac{1}{4}$ tsp
70	$2\frac{3}{4}$ tsp
100	2 tsp

Source: *Child Care Recipes: Food for Health and Fun*

Spoodles	
Spoodle Size	Contains Approximately
2 oz	$\frac{1}{4}$ cup
3 oz	$\frac{1}{3}$ cup
4 oz	$\frac{1}{2}$ cup
6 oz	$\frac{3}{4}$ cup
8 oz	1 cup

Ladles	
Ladle size	Contains approximately
1 oz	$\frac{1}{8}$ cup
2 oz	$\frac{1}{4}$ cup
4 oz	$\frac{1}{2}$ cup
6 oz	$\frac{3}{4}$ cup
8 oz	1 cup

Source: *Child Care Recipes: Food for Health and Fun*

Portion control ensures that customers receive equal amounts of food.



PORTION CONTROL - PERFORMANCE CHECKLIST

Technician's Name: _____	Date: _____
Instructor's Name: _____	Title: _____
School: _____	Date: _____

ACTIVITY

- " Controls the portion size by cutting appropriate foods into the number of specified portions.
- " Serves the cut portions with appropriate utensil.
- " Uses the correct procedure to check the weight of a portion.
- " "Spot-checks" the portion sizes of foods, such as meats or cheese, being sliced into servings on the slicer.
- " Serves the specified number of a counted food item.
- " Uses the correct size scoop, spoodle, or ladle.
- " Fills and serves one level scoop, spoodle, or ladle.
- " Checks the serving size of foods which must be served with a serving spoon or tongs.
- " Fills steamtable pans and sheet pans with appropriately sized servings of food.

Adapted from *Louisiana Food Service Training Program*



EIGHT STEPS TO STANDARDIZE A RECIPE

1. Begin with one recipe.
2. Review the ingredients and follow the directions exactly.
3. Prepare a recipe for 25 portions. Weighing is a two-step process. Weigh and record total combined ingredient weight and a portion size to equal the total given yield. Weights of ingredients are also used to determine pan sizes. Repeat process again, after the completion of the finished product. Note problems and suggestions.
4. Taste-test the product with the food service staff and students. Judge the product for appearance, consistency, texture, flavor and overall acceptability.
5. Make adjustments, if needed. If changes are necessary, repeat the recipe preparation process until a consistent quality product is achieved. Re-test, if necessary.
6. Increase the recipe to 50 and 100 portions before increasing the recipe to the number needed for the meal service. Repeat the weighing process. Note adjustments and suggestions. As a general rule, double the spices and herbs in a recipe when increasing from 50-100 portions. Increase the spice or herb by 25 percent for each additional 100 portions.
7. Review the recipe with the preparation staff.
8. Record the recipe in a standard format for the recipe card file.

***Every recipe should be standardized
for your facility!***



STANDARDIZED RECIPES - PERFORMANCE CHECKLIST

Technician's Name: _____	Date: _____
Instructor's Name: _____	Title: _____
School: _____	Date: _____

ACTIVITY

- " Reads the complete recipe carefully. Asks questions to clarify instructions and terms.
- " Assembles ingredients, utensils, and equipment in order of use.
- " Does pre-preparation steps (greasing pans, preheating equipment, etc.).
- " Uses scales correctly to measure most dry ingredients.
- " Uses liquid volume measures correctly.
- " Uses dry volume measures to correctly measure small amounts of dry ingredients.
- " Stirs food which packs before measuring by volume.
- " If scales are not available, packs brown sugar or presses solid shortening into volume measure.
- " Follows procedure specified in the recipe and asks for clarification when in doubt.
- " Follows recipe instructions, recording any modifications. Keeps record of preparation and cooking time.
- " Portions and serves finished products properly.

Adapted from *Louisiana Food Service Training Program*

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PRETEST

(Directions: Please indicate your answer by darkening the appropriate circle on the purple answer sheet.)

1. A standardized recipe:
 - a. Has been tested and adjusted in a school facility and is proven to produce good results.
 - b. Is written by USDA for the Child Nutrition Program.
 - c. Comes from a food journal.
 - d. Has a picture of the food.
2. Quantity recipes from USDA include:
 - a. The recipe title and its file number.
 - b. Nutrients per serving.
 - c. A marketing guide.
 - d. All of the above
3. Using standardized recipes:
 - a. Provides the same number of servings every time.
 - b. Increases food cost.
 - c. Decreases the accuracy of nutrient analysis.
 - d. All of the above
4. When using a standardized recipe,
 - a. Read it completely.
 - b. Check with the manager if you do not understand terms.
 - c. Assemble all materials before starting preparation.
 - d. All of the above
5. Weighing food is:
 - a. More exact than measuring volume.
 - b. Less exact than measuring volume.
 - c. Harder than measuring volume.
 - d. Only used for liquid ingredients.
6. Stir ingredients and lightly spoon ingredients that tend to pack such as:
 - a. Flour
 - b. Brown sugar
 - c. Powdered sugar
 - d. Both a and c
7. To quickly cook in a small amount of oil, tossing and stirring lightly to preserve the shape of the food.
 - a. Braise
 - b. Steam
 - c. Stir-fry
 - d. Roast
8. Serving the correct portion size:
 - a. Helps students feel they are treated fairly.
 - b. Is not important as long as every student is served.
 - c. Helps prevent running out of food.
 - d. Both a and c
9. Which of the following make exact measurements?
 - a. Ladles
 - b. Spoodles
 - c. Scoops
 - d. All of the above
10. Standardized recipes are required for every menu item that has two or more ingredients or that requires any preparation.
 - a. True
 - b. False



POSTTEST, Page 1

(Directions: Please indicate you answer by darkening the appropriate circle on the purple answer sheet)

11. A recipe is standardized when:
 - a. It is found in a culinary magazine.
 - b. USDA prints it.
 - c. It is evaluated and adjusted in the kitchen where it will be prepared.
 - d. Students like it.
12. USDA quantity recipes need to be standardized in a facility for the following reasons:
 - a. New equipment
 - b. Ingredient availability
 - c. Method of service
 - d. All of the above
13. Using standardized recipes:
 - a. Provides the same number of servings every time.
 - b. Increases food cost.
 - c. Decreases the accuracy of nutrient analysis.
 - d. All of the above
14. Standardized recipes produce products consistent in:
 - a. Quality
 - b. Yield
 - c. Nutritional value
 - d. All of the above
15. Volume measure is recommended for:
 - a. Liquid ingredients
 - b. Solid shortening
 - c. Large amounts of sugar
 - d. Both a and b
16. The number on a scoop or disher indicates the number of:
 - a. Fluid ounces per level scoopful
 - b. Tablespoons per level scoopful
 - c. Level scoopfuls per quart
 - d. Teaspoons per level scoopful
17. To cut food like carrots or zucchini in narrow, lengthwise strips, resembling matchsticks is to:
 - a. Shred
 - b. Julienne
 - c. Dice
 - d. Chop
18. When using a traditional spring scale:
 - a. Make sure the scale is calibrated on a regular basis.
 - b. Be sure the pointer is on zero when you begin.
 - c. Place ingredients directly on the platform.
 - d. Both a and b
19. Advantages of using standardized recipes are:
 - a. Easier to train new employees and cross train personnel.
 - b. Helps managers in menu planning for costing menus and purchasing.
 - c. Will serve as documentation for reviewers to analyze for compliance with nutritional goals.
 - d. All of the above
20. Once a recipe is standardized, it never has to be standardized again.
 - a. True
 - b. False



POSTTEST, Page 2

(Directions: Please darken the appropriate circle on the answer sheet to indicate how much you agree or disagree with the following statements.)

USE THE FOLLOWING SCALE:

- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
21. The satellite seminar was presented at a convenient time of day for me.
- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
22. The length of this satellite seminar was good.
- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
23. This satellite seminar presented information which will be valuable to me or members of my staff.
- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
24. The speakers who illustrated key points were effective.
- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
25. This satellite seminar maintained my interest.
- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
26. The overall content presented in this satellite seminar was appropriate for the topic.
- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
27. The printed materials which accompanied this satellite seminar were effective.
- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
28. I received at least one idea which I can use in my program.
- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
29. The television production quality of this satellite seminar was good.
- A. Strongly agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly disagree
30. My position title:
- A. Principal, Teacher, Counselor
 - B. State Office/Personnel
 - C. Director or Supervisor
 - D. Manager
 - E. Food Service Assistant

If you had a question that was not answered, write the question below. We will compile a list of questions with answers and return it to your state director.

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REFERENCES AND RESOURCES

NFSMI Materials*

Cooking for the New Generation
Creating Healthy Menus for the Mainline, Part II
Culinary Techniques for Healthy School Meals
Healthy Cuisine for Kids
On the Road to Professional Food Preparation

USDA Materials*

Child Care Recipes: Food for Health and Fun
A Menu Planner for Healthy School Meals
Quantity Recipes for School Food Service
A Tool Kit for Healthy School Meals: Recipes and Training Manual

Other Materials

Cross, E.V. & Louisiana Department of Education. (1997). *Louisiana Food Service Training Program, Phase I*. (Rev. ed.). Baton Rouge: Louisiana Department of Education Bureau of Food and Nutrition Services.
*Travel Guide to Healthy School Meals** (Oregon Department of Education)

***Please refer to the NFSMI Resource Guide for more complete information.**

PRETEST/POSTTEST ANSWER KEYS

Pretest 1.a, 2.d, 3.a, 4.d, 5.a, 6.d, 7.c, 8.d, 9.d, 10.a

Posttest 11.c, 12.d, 13.a, 14.d, 15.a, 16.c, 17.b, 18.d, 19.d, 20.b

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**National Food Service Management Institute
The University of Mississippi**

American School Food Service Association

Continuing Education Credit Request

DATE _____

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ASFSA MEMBERSHIP NUMBER _____

NAME _____

ADDRESS _____

CITY _____ **STATE** _____ **ZIP** _____

TELEPHONE _____

NUMBER HOURS CREDIT EARNED _____

Please complete form and hold until re-certification is due. Submit this form along with re-certification application and other documentation to your state School Food Service Association processor or to the ASFSA Certification Department at the address below:

**Certification Department
American School Food Service Association
700 South Washington Street, Suite 300
Alexandria, VA 22314-4287**