Food Quality: Making the Grade in Child Nutrition, Part I

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  (Purple General Purpose Answer Sheet, Form No. 16485)

NFSMI SATELLITE PROGRAM SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 25, 1999</td>
<td>Food Safety (Live &amp; Interactive)</td>
</tr>
<tr>
<td>October 27, 1999</td>
<td>Food Quality, Part II</td>
</tr>
<tr>
<td>January 26, 2000</td>
<td>Continuous Quality Improvement (Live &amp; Interactive)</td>
</tr>
<tr>
<td>April 12, 2000</td>
<td>Topic To Be Announced</td>
</tr>
<tr>
<td>October 25, 2000</td>
<td>Topic To Be Announced</td>
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INTRODUCTION

The purpose of the satellite seminar, Food Quality: Making the Grade in Child Nutrition, Part I, is to consider how to determine what students define as quality and show how to apply a set of standards to judge the quality of the foods prepared.

Participants in this satellite seminar will have the opportunity to observe:

◆ The link between child nutrition, learning, and health – how the quality of the foods prepared for students can affect overall health and education

◆ What students think about the quality of the food – what do they want or expect?

◆ How to incorporate students suggestions or requests into menu planning

◆ How to define standards of food products according to sensory perceptions

◆ How to evaluate efforts in producing quality foods – from the students perspective.

We need to give kids what they want . . . but we also need to teach them to want what they need.
STUDENT OPINIONS ABOUT SCHOOL FOOD SERVICE

In a survey of over 40,000 students across the country, these factors were found to be important:

<table>
<thead>
<tr>
<th>MIDDLE SCHOOL</th>
<th></th>
<th>HIGH SCHOOL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Quality</td>
<td>Flavor, taste, appearance, and variety of the food</td>
<td>Staff</td>
<td>Friendliness and courteousness of the servers and cashiers</td>
</tr>
<tr>
<td>Ambiance</td>
<td>Aesthetic appeal of the serving lines and dining area</td>
<td>Food Quality</td>
<td>Flavor, quality of choices, quality of brands offered, and the attractiveness of the food</td>
</tr>
<tr>
<td>Price</td>
<td>Price value relationship of the foods</td>
<td>Nutrition</td>
<td>Availability of nutrition information about calories and fat in the food items</td>
</tr>
<tr>
<td>Staff</td>
<td>Friendliness and politeness of the servers and cashiers</td>
<td>Diversity</td>
<td>Cultural and religious diversity of the menu</td>
</tr>
<tr>
<td>Time</td>
<td>Time given for meal periods as well as the time to eat after students are seated</td>
<td>Time/Cost</td>
<td>Time available to eat, as well as the price value relationship of the foods</td>
</tr>
<tr>
<td>Ambiance</td>
<td>Aesthetic appeal of the dining area and offering of special events and promotions</td>
<td></td>
<td></td>
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</tbody>
</table>

How can you find out what your students think about your school nutrition program?

It’s simple… Ask them!
SENSORY CHARACTERISTICS OF FOOD

Characteristics That Entice Us to Select One Food Over Another

◆ Flavor and Aroma
◆ Texture
◆ Serving Temperature
◆ Appearance

The eye appeal of a food must be pleasing to the student customer. *Children eat with their eyes first.*

ADVANTAGES OF OFFERING CHOICES

◆ New and interesting foods will expand students' experiences and knowledge about food.

◆ More choices will mean a more attractive presentation.

◆ Since students are more likely to eat foods they like, there will be less plate waste.

◆ There will be renewed interest and excitement for the mealtime experience.

*You can make a difference.*

*You determine the quality of the final product with proper cooking, holding, serving, keeping a clean and attractive facility . . .*
QUALITY STANDARDS FOR FOOD PREPARATION

All food products have standards that are used to measure the quality of a product. To consistently achieve quality products, a Quality Score Card should be established for each recipe produced. It tells what the quality standards of a food should be during preparation and what the finished product should look and taste like.

◆ Plan food production for just-in-time service.
◆ Review the Quality Score Card and the recipe and organize equipment and ingredients before beginning production.
◆ Always use the right culinary technique.
◆ Deliver only the products that meet quality standards.

<table>
<thead>
<tr>
<th>EVALUATION FACTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
</tr>
<tr>
<td>Texture or Consistency</td>
</tr>
<tr>
<td>Flavor</td>
</tr>
<tr>
<td>Service Temperature</td>
</tr>
</tbody>
</table>

PRODUCT QUALITY FACTORS DURING PRODUCTION

◆ Standardized recipes
◆ Production schedules
◆ Production equipment
◆ Sanitation practices
◆ Food production handling techniques
# Quality Score Card for Cooked Vegetables

<table>
<thead>
<tr>
<th>DATE</th>
<th>NAME OF MENU ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Proudly Prepared by**

**Quality Scored by**

**Directions:** When the food is ready to serve, use this Quality Score Card to evaluate the quality. Mark **Yes** when the food meets the standard and **No** when it does not. Mark **NA** (Not Applicable) when a specific quality standard does not apply to the food being evaluated. Use the **COMMENTS** section to explain why a food does not meet a standard.

*Remember, if a food does not meet the quality standards, it should not be placed on the service line.*

<table>
<thead>
<tr>
<th>Quality Standard</th>
<th>YES</th>
<th>NO</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bright color typical of the vegetable..........................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable pieces are similar in size.........................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable pieces are intact (pieces are not overcooked with a mushy appearance)...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is no visible oil or fat.................................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garnish is edible and appropriate for the dish.............................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Texture or Consistency</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable is fork-tender (slightly crisp and not overcooked)...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All pieces of the vegetable have the same texture.................................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetables in casserole-type recipes are well blended, tender, and identifiable...............</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flavor and seasoning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable has a definite, good flavor..........................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seasonings are detectable but not overpowering.................................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seasonings enhance the vegetable flavor..........................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimal amount of salt has been added (recipe used).........................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimal amount or no fat has been added (recipe used).................................</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If a sauce is used, it complements the vegetable (mild, not overpowering)...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Service Temperature</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>160°-180° F.................................</td>
<td></td>
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TIPS FOR QUALITY FOOD PREPARATION

Preparation procedures that minimize the addition of fat and sodium, conserve nutrients, and limit holding time between preparation and service contribute to nutritious, high quality food products.

◆ Vegetables and Fruits

✓ Prepare small amounts rather than large single batches. Avoid overcooking; nutritive value is lost and quality is lowered through long exposure to heat. Fresh or frozen vegetables can be steamed, baked, or sautéed.

✓ To retain nutrients and bright color, cook "just until tender." A good way to cook vegetables is using a convection steamer.

✓ Baking soda should not be added to green vegetables to retain color during cooking. It makes the cooking water alkaline, destroying thiamin and vitamin C.

◆ Grains and Breads

✓ Never wash rice before cooking. Rice is enriched by spraying with vitamins and minerals. When rice is washed, the enrichment goes down the drain. Rinsing cooked grains and pastas also causes considerable loss of nutrients and is not recommended.

✓ Browning or toasting uncooked rice before adding water can destroy thiamin.

✓ To make breads more nutritious, consider substituting whole-wheat flour for part of the white flour in recipes. When introducing whole grains, try starting with 10% whole-wheat flour or grains and gradually increase the amount over time. While students might not like a 100% whole-wheat crust, some food service operations have found that children like a pizza crust made with 1/3 whole-wheat flour and 2/3 white flour.
TIPS FOR QUALITY FOOD PREPARATION

Minimizing Salt and Fat

◆ Lower Sodium (while maintaining flavor)

✓ Select foods and recipes carefully. Read the labels! Processed products are often loaded with sodium. Recipes can be full of ingredients that contain high amounts of salt.

✓ Add salt only if absolutely necessary. If some of the ingredients in a recipe already contain salt (canned soup, canned vegetables, or cheese, for example), you may not need to add salt at all.

✓ Gradually reduce the amount of salt in recipes. Try decreasing it by a fourth, then gradually by half.

✓ Add less salt to the water when cooking pasta, rice, or hot cereal. Use one tablespoon of salt per gallon of water. This provides flavor but is still low in sodium.

✓ Use fresh or fresh-frozen meats in recipes instead of canned meats whenever possible.

✓ Enhance flavor with spices and herbs. Keep in mind that when you reduce salt, you may need to adjust other seasonings.

◆ Cut Back on Fat (without sacrificing quality)

✓ When adding fats to recipes, select unsaturated fats such as liquid, oils, or soft margarine.

✓ Make marinades without oil.

✓ Cook rice and other grains and beans in de-fatted broth and add herbs, garlic, or onions for more taste.

✓ When possible, skin chicken before cooking.

✓ Drain all meats after cooking.

✓ De-fat whenever possible. If your school has the ability to quickly chill and reheat foods in a safe manner, allow time to let soups, stews, and braised dishes cool so the fats will rise to the top, congeal, and be easy to spoon off.
TIPS FOR QUALITY FOOD PREPARATION
Cutting the Fat Without Sacrificing Quality

◆ Baking

✓ Replace butter and lard with soft margarine or vegetable oil.
✓ Use a non-stick cooking spray on baking pans.
✓ Check ingredient labels and recipes for high-fat foods. When possible, choose similar products without high-fat ingredients.
✓ Use fruit purees, such as prune puree or applesauce, in place of up to half the fat in some baked goods.
✓ Decreasing the fat too much in rolled cookies can make dough that is difficult to roll out. Soft drop cookies to allow fat to be decreased with better results.

◆ Sautéing or Stir-frying

✓ Brush the pan with oil just to coat it or use a non-stick spray made from vegetable oil. (Vegetable oil spray will add less than 10 fat calories to a pan of sautéed vegetables – 2 tablespoons of oil add an extra 240 fat calories.)
✓ Cut back on buttering vegetables by using one part margarine and one part lemon juice.
✓ Experiment with ways to add flavor and moisture without adding fat, such as using marinades, chicken or meat broth, concentrated fruit juice, fresh fruit, or apple juice.

◆ Fat-frying

✓ Heat oil to the highest recommended temperature for the food being fried, so food will cook quickly. (If a food has to sit in oil for longer periods of time to cook thoroughly, it will absorb more oil and, therefore, more fat calories.)
✓ Do not overload the fryer.
✓ Allow the oil to reheat between batches.
✓ Gently shake the basket before taking it out of the fryer to help remove excess fat.
✓ Drain food on absorbent paper over racks, changing paper frequently.
✓ Strain the fat to remove foreign materials. (Foreign materials can lower the smoke point of the fat that is reused, making the temperature for the next batch of food incorrect.)
PRETEST

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

1. Food quality means different things to different people.
   a. True  b. False

2. Offering choices is one way to meet the quality expectations of the student customer.
   a. True  b. False

3. Color, size, form, and arrangement of menu items on the plate and serving line either attract students' interest or turn them away.
   a. True  b. False

4. Food quality standards are based on appearance, texture or consistency, flavor, and service temperature of the food. Who in the Child Nutrition Program is best able to see that each of these quality factors is met?
   a. Child Nutrition Program director
   b. Manager at the local school
   c. Food service assistant responsible for food preparation and serving
   d. Purchasing agent

5. Foods that do not meet the quality standards of your Child Nutrition Program should not be served to the student customers.
   a. True  b. False

6. Nutritional quality of foods is an essential component of food quality.
   a. True  b. False

7. All food items should be evaluated for quality before they are placed on the serving line.
   a. True  b. False

8. Excessive amounts of vitamins may be lost from some foods when they are:
   a. Left to soak in water for a long time
   b. Held at high temperatures for extended periods of time
   c. Cut and left open to the air
   d. All of the above

9. Taste-testing is one way to involve students in establishing quality standards for foods served in the Child Nutrition Program.
   a. True  b. False

10. Which of the following is not a tip for lowering the sodium in a food?
    a. Using herbs and spices for seasoning
    b. Replacing butter or lard with soft margarine or vegetable oil
    c. Using only one tablespoon of salt per gallon of water when boiling pasta
    d. Using fresh or fresh-frozen meats in recipes instead of canned meats whenever possible
POSTTEST, Page 1

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

11. All food items should be evaluated for quality before they are placed on the serving line.
   a. True  b. False

12. Excessive amounts of vitamins may be lost from some foods when they are:
   a. Left to soak in water for a long time
   b. Held at high temperatures for extended periods of time
   c. Cut and left open to the air
   d. All of the above

13. Color, size, form, and arrangement of menu items on the plate and serving line either attract students' interest or turn them away.
   a. True  b. False

14. Food quality standards are based on appearance, texture or consistency, flavor, and service temperature of the food. Who in the Child Nutrition Program is best able to see that each of these quality factors is met?
   a. Child Nutrition Program director
   b. Manager at the local school
   c. Food service assistant responsible for food preparation and serving
   d. Purchasing agent

15. Foods that do not meet the quality standards of your Child Nutrition Program should not be served to the student customers.
   a. True  b. False

16. Which of the following is not a tip for lowering the sodium in a food?
   a. Using herbs and spices for seasoning
   b. Replacing butter or lard with soft margarine or vegetable oil
   c. Using only one tablespoon of salt per gallon of water when boiling pasta
   d. Using fresh or fresh-frozen meats instead of canned meats whenever possible

17. Nutritional quality of foods is an essential component of food quality.
   a. True  b. False

18. Taste-testing is one way to involve students in establishing quality standards for foods served in the Child Nutrition Program.
   a. True  b. False

19. Food quality means different things to different people.
   a. True  b. False

20. Offering choices is one way to meet the quality expectations of the student customer.
   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.

   ______________________________________
   ______________________________________
   ______________________________________
REFERENCES AND RESOURCES*

NFSMI Materials
- Cooking for the New Generation
- Culinary Techniques for Healthy School Meals
- Food Quality Evaluation and Assurance Manual for School Food Service
- Healthy Cuisine for Kids
- Healthy Cooking for Kids
- High School Foodservice Survey
- Middle/Junior High School Foodservice Survey
- On the Road to Professional Food Preparation
- Preparation and the Dietary Guidelines
- Quality Receiving Practices for Healthy School Meals

USDA Materials
- Cooking A World of New Tastes
- Healthy School Meals Training Manual
- A Menu Planner for Healthy School Meals
- Quantity Recipes for School Food Service
- A Tool Kit for Healthy School Meals (recipes and training materials)

*Please refer to NFSMI Publications Guide for more complete information.

PRETEST/POSTTEST ANSWER KEYS

Pretest 1.a, 2.a., 3.a, 4.c, 5.a, 6.a, 7.a, 8.d, 9.a, 10.b
Posttest, Page 1 11.a, 12.d, 13.a, 14.c, 15.a, 16.b, 17.a, 18.a, 19.a, 20.a
Food Quality: Making the Grade in Child Nutrition, Part I

A National Satellite Seminar
April 21, 1999

National Food Service Management Institute
The University of Mississippi

AMERICAN SCHOOL FOOD SERVICE ASSOCIATION
CONTINUING EDUCATION CREDIT REQUEST

DATE__________________________________________
SITE__________________________________________
FACILITATOR____________________________________
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
American School Food Service Association
1600 Duke Street, 7th Floor
Alexandria, VA 22314-3436