Food and Nutrition, In-Service Training for Extension Aides: A Problem-Centered Approach.


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This guide is intended to assist trainer agents in providing inservice training for extension aides working with low-income families whose resources are limited. Included are a list of reference materials from which additional information may be obtained as well as outlines for units of study on: (1) What Food Means To People, (2) Breads and Cereals, (3) Milk and Milk Products, (4) Meats and Meat Substitutes, (5) Fruits and Vegetables, and (6) Eating Patterns and a daily food guide. (SN)
FOOD and NUTRITION...

in-service training for extension aides

A PROBLEM-CENTERED APPROACH
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Nutrition is a problem. Hence it follows that a replacement of Food for Families PA-743, it was produced under the direction of Dr. Evelyn B. Spindler, Nutritionist, Home Economics, Extension Service, USDA, with the cooperation of Extension nutritionists:
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SUGGESTIONS FOR TRAINER AGENT

STOP! Review all related materials in this guide.

THINK! Adapt them to your local situation.

PLAN! Allow enough time to prepare for training aides.

PROBLEM-CENTERED APPROACH

The problem-centered approach focuses on real-life problems that Extension aides face in working with low-income families. A series of learning experiences is suggested to assist aides in finding effective ways for helping families make necessary changes to improve their nutrition. The problem-centered approach can be used effectively to provide in-service training for aides who have varying amounts of education and experience and different cultural, ethnic and economic backgrounds. This approach could also be adapted for use with other paraprofessional aides and leaders.

PURPOSES OF THE SERIES

To guide the Trainer Agent in providing in-service training for Extension aides working with low-income families who have limited resources.

1. To increase Extension aides' sensitivity to differences in family situations, to assess needs and determine priorities of program families.

2. To develop Extension aides' abilities to apply basic information on choosing, buying, using, storing and preparing food.

3. To increase the abilities of Extension aides to help improve family nutrition.
SCOPE OF THE SERIES

This in-service training series is planned to build upon previous learning aides acquired during the orientation period. Suggestions are given for reviewing relevant learning with references to Food and Nutrition - Basic and Supplemental Lessons used during orientation training.

The in-service training series includes:
- What Food Means to People
- Breads and Cereals
- Milk and Milk Products
- Meat and Meat Substitutes
- Fruits and Vegetables
- Eating Patterns and the Daily Food Guide

The series may be adapted for use during a period of in-service training under continually changing conditions. Each trainer agent will need to select and adapt suggestions to her local situation.

GUIDELINES FOR IN-SERVICE TRAINING OF EXTENSION AIDES USING PROBLEM-CENTERED APPROACH

Allow enough time to study, plan, and prepare for in-service training. To get ready, review suggested references. Consult your Extension nutritionist for additional help.

Keep class size small enough so that everyone can participate.

Arrange for a suitable meeting place. Try to find an easy-to-reach place which will not involve much travel for the group. A place with kitchen facilities and an informal meeting room is desirable.

Know the food habits of the local families, what foods they use, how they cook and serve them. Both you and the aides need first-hand knowledge of the families and their situations in order to understand available resources and limitations.

Consider the characteristics of the local families. Cultural background and education help determine how a family spends its food dollar. Visit families so that you are familiar with their nationality, customs and values. Recognize and accept differences between your own values and those of the families.

Assess the needs of the local families. Show the aides how to use family and homemaker records to identify problems and set priorities for helping families to meet urgent needs.

Set realistic goals that the aides can achieve. At first they must be simple and easy enough for the aides to succeed. Later they can become more difficult.

Plan the training around focal problems. Select those that will help improve nutrition of these families. Do not try to include everything you know. Stress main points.

Relate knowledge, concepts and skills to on-the-job activities and experiences. Insure essential knowledge and skills for performing effectively on the job.

Adapt plan to fit the education and experience of the group. Allow time for aides to master knowledge and skills for performance of required tasks before going on to more advanced tasks. Avoid imposing too much information on the aides too quickly. If too much factual knowledge is required too soon, the aide will experience confusion, frustration and even failure.

Use a variety of training methods. Give aides a chance to participate. Encourage them to share their on-the-job experiences in planned discussions. Have them discuss their ideas for solving the problems. Review essential information to the point of overtraining.

Include activities; don’t just lecture. Allow each aide to learn creatively. Each one will approach the situation in a different way.

Increase skill of aides in analyzing the factors involved in making decisions. It may not be enough for a family to have more money. They may need help in learning to spend it wisely. For example, if they have more money, they may spend it on foods such as sweets and soft drinks.

Help aides recognize and take advantage of the “teachable moment.” The time to help a family may be when they have more food money or begin to use USDA Food Stamps or donated foods. Young mothers may be interested in learning how to feed their children. Older people with small incomes may need help with meals to improve nutrition.

Select educational materials to meet needs and interests of local families. Every homemaker needs to know how to select foods that will meet the needs of her family. Some are not
interested in the scientific reasons. Translate scientific nutrition research into meaningful acceptable food practices - for example, use the Daily Food Guide.

Help aides recognize the steps in the process of change. Be sure they understand ways they can help families modify their food habits to improve nutrition. Help them select the important things to try to change. Make certain that the change is an improvement and no “change for change’s sake.” Don’t try to impose your values on them.

Find ways to bridge the gap between the aides’ classroom experiences and their work with families. For example, try role playing case studies.

Develop a strong group spirit among the aides. This will help them learn from each other as well as from you.

Explain to aides where and how to refer problems they can’t handle. They need to realize that they do not have all the answers.

Evaluate the progress of each aide. Observe each aide in a variety of working situations. Fill in gaps with more training.

Provide continuing support and assistance to meet the needs of the aides.

Plan for continuing in-service training. Adapt for task phasing to insure success in learning the required skills at each stage. Encourage aides to take advantage of other educational opportunities.

Involve aides in planning their in-service training. Learning experiences, emerging out of job needs, provide highly effective motivation for aides.

Get feedback from on-the-job experience of the aides’ efforts to introduce improvements in food practices. Encourage sharing and comparing of experiences—both successes and frustrations in a supportive climate. Encourage record keeping which documents change in food practices.

**SELECTED REFERENCES**

A few well-chosen references should be used with each lesson. Examine these carefully to be sure they apply. You need at least one up-to-date nutrition text.

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*Yearbook of Agriculture*


*E.S. Lessons for Training Aides*


*Textbooks on Nutrition*


Introductory Nutrition, Helen A. Guthrie. C.V. Mosby and Sons, 11830 West Line Industrial Drive, St. Louis, Mo. 63141. 1971. $9.25.

Teaching Nutrition


Miscellaneous


Effects of Pesticides on Fruit and Vegetable Physiology, Principles of Plant and Pest Control, Volume 6, National Academy of Sciences, 2101 Constitution Avenue, Washington, D.C. 20418.

Food Intake and Nutritive Value of Diets of Men, Women, and Children in the United States, Spring 1965. ARS, USDA.


Periodicals

Additional Reference Materials


Journal of Nutrition Education, 119 Morgan Hall, University of California, Berkeley, California 94720. Subscription $6.00 per year.


Educational materials may be ordered from:


American Dry Milk Institute, 221 North LaSalle St., Chicago, Illinois 60611.


California Citrus, Sunkist Growers, Inc., Consumer Service Division, 722 7th West 5th Street, Los Angeles, California.

Cereal Institute, Inc., Educational Director, 136 South LaSalle Street, Chicago, Illinois 60603.

Cereal Cookbook.


Florida Citrus Commission, 148, Lakeland, Florida 33802.

Green Giant Company, Office Services Building, LeSuer, Minnesota 56058.

Metropolitan Life Insurance Company, 1 Madison Avenue, New York, N.Y. 10010.


A catalog is available listing current materials. Requests for materials should be sent to the local affiliated Dairy Council Unit.

“How Your Body Uses Food,” B-77. $0.25.

National Live Stock and Meat Board, 36 South Wabash Avenue, Chicago, Illinois 60603.

Lessons on Meat, revised. $1.00.

Pocket Guide to Pork. No charge.


Common Sense Fish Cookery, 149. 49-2:13. $0.60.


Standard Brands, Inc., Educational Services, Box 2695, Grand Central Station, New York, New York 10017.

Mr. Peanut's Guide to Nutrition

New Treasury of Yeast Baking, Fleischmann's et al.

Wheat Flour Institute, 14 East Jackson Boulevard, Chicago, Illinois 60604.
SELECTED GENERAL REFERENCES FOR AIDES

Aides need to learn to use references. The following list of references should be helpful in supplementing specific references at the end of each section.


Eat to Live. Wheat Flour Institute, 14 East Jackson Boulevard, Chicago, Illinois 60601. $1.00.


Flipcharts

Food For Your Table . . . Let’s Talk About It, FNS, USDA, Washington, D.C. 20250.


USDA Publications

Bulk quantities of USD.- pamphlets are usually obtained through your State publications distributions officer.

Publications NOT available free may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, at the prices indicated. There is a 25 percent discount for 100 or more copies on all GPO orders.

Family Fare, G-1, $0.45.

Money Saving Main Dishes, G-43, $0.30.

Nutritive Value of Foods, G-72, $0.75.

Storing Perishable Foods in the Home, G-78, $0.10.

Conserving the Nutritive Value in Foods, G-90, $0.10.

Eggs in Family Meals, G-103, $0.20.

Vegetables in Family Meals, G-105, $0.20.

Poultry in Family Meals, G-110, $0.20.

Cheese in Family Meals, G-112, $0.15.

Beef in Family Meals, G-118, $0.20.

Eggs in Family Meals, G-118, $0.20.

Lamb in Family Meals, G-124, $0.20.

Fruit in Family Meals, G-125, $0.20.

Milk in Family Meals, G-127, $0.15.

Cereals and Pasta in Family Meals, G-150, $0.20.

Pork in Family Meals, G-160, $0.20.

How to Buy Dry Beans, Peas and Lentils, G-177, $0.25.

Your Money’s Worth in Food, G-183, $0.25.

Food Makes the Difference

Ideas for Economy-Minded Families, PA-934, $0.10.

Ideas for Families Using Donated Foods, PA-935, (From FNS).

Ideas for Leaders Working with Economy-Minded Families, PA-937, $0.10.

U.S. Department of Agriculture’s Food Donation Programs, PA-667 and PA-667-S (Spanish) from FNS.

U.S. Department of Agriculture’s Food Stamp Program - More Food Better Diets for Low-Income Families, PA-930, $0.10.

“Food for Thrifty Families” Leaflets FNS-14 through 37 (English) and FNS-38 through 61 (Spanish). FNS leaflets and the Daily Food Guide (FNS-13 and FNS-13-S) poster are available singly and in bulk quantities for educational programs relating to the U.S. Department of Agriculture’s Stamp Program and Family Food Donation Program. Address your request to: Food and Nutrition Service, U.S. Department of Agriculture, Washington, D.C. 20250.

SELECTED PUBLICATIONS

Suggested publications and visual materials are listed with each lesson. Make sure that these teaching aids are on hand before you begin teaching.
USDA slide sets may be purchased from the Photography Division, Office of Information, U.S. Department of Agriculture, Washington, D.C. 20250. Copies of the filmstrips may be ordered from Photo Lab., Inc., 3825 Georgia Avenue, N.W., Washington, D.C. 20011, for $5.50 each.

Evaporated Milk Association, 228 North LaSalle Street, Chicago, Illinois.

“Mix and Match for Good Meals,” filmstrip

General Mills, Inc., Department 320, 400 Second Avenue, South, Minneapolis, Minnesota, 55440.

“Better Biscuit” or “Muffin Making,” filmstrips. Free on loan.


Green Giant Company, Office Services Building, LeSueur, Minnesota, 56058.

“Vegetable Treasures,” filmstrip kit, $2.50.


Phono-viewer Programs, (Produced by E.S.)

Double Sixteen Company, 1038 College Avenue, Wheaton, Illinois, 60187. Shows are $4.00 each.

Shows: “Good Food Works For You”

“The Science of Nutrition or You Are What You Eat”

“4-4-3-2 Way” - “Breakfast”

“Food For Teens” - “Snacks That Count”

“How To Be A Wise Shopper” - “Buying Meat”

“Getting To Know Fruits and Vegetables” - “Serving Fruits and Vegetables”

“Food For The Elderly”

“Weight Control”

“Feeding Young Children”

“Food Needs Of Family Members”

WHAT FOOD MEANS TO PEOPLE

PURPOSE

Trainer agent to help aides:

1. Understand the many beliefs and attitudes people have about food.
2. Appreciate how attitudes and beliefs influence family food habits.
3. Develop skill in working with families.

REVIEW OF PREVIOUS LEARNING RELATED TO THE MEANING OF FOOD

- Review cultural food patterns. See Supplemental Lesson 1 Food Needs of Family Members.

- Review the reasons why people eat as they do. Ask the aides to help you develop a list. Write down the reasons.
  — Ask the aides to give examples of each reason from their experiences in working with local families.
  — Discuss reasons and their effect on food habits.

- Some typical reasons and examples of their effect on food habits include:
  — Nationality food patterns. Some families may still try to eat as they did “back home,” rather than using local foods which can cost less and be as nutritious.
— Status. Some families may be spending extra money for status food such as steak rather than making use of more economical, nutritious choices.

— Security. Food represents security to families who often have been hungry, thus overeating may be a problem.

— Food fads. Misinformation about food and lack of nutritional knowledge may limit use of some nutritious foods.

— Family customs. Most people prefer foods that their family has used. These traditional customs may not reflect sound nutrition practices at the present. For example, the use of rich desserts at every meal may reflect affluence rather than nutritional needs.

— Religion. Various religious groups may place restrictions on certain foods such as limiting all animal protein.

— Skepticism about the safety of our food supply. Some people have come to question the effects of chemicals in and on foods, such as additives, pesticides, and fertilizers and as a result are eating poorly balanced diets.

Discuss other reasons where applicable.

PROBLEM CENTERED LEARNING EXPERIENCES

— Assess the present food practices of local families. Use information from 24-hour dietary recalls (Family Records, Parts 1 and 2).

— What are the problems that prevent families from eating the food they need?

— Identify and discuss the most common problems. List.

— Select top priority problems.

— Plan learning experiences for priority problems, such as:

  Recognizing differences in food practices of various ethnic groups.

  Present a typical case study for discussion. Here is one example. (You will be able to plan one that meets your needs.) A family has recently come to the locality from Puerto Rico. There are four children—6 to 15 years and their parents. They want to use familiar foods and prepare them in the traditional way. Their funds are very limited.

  How can the Extension aide best help this family to plan and prepare low cost meals?

  What help in food buying do they need?

  What suggestions might she make to help familiarize them with locally grown or processed foods that may be cheaper than the imported Puerto Rican foods they have been using?

  Are there food assistance programs for which the family might be eligible?

  How can the Extension aide help them participate in the programs?

Combating misinformation about the safety of the local food supply.

Discuss the need for the use of chemical fertilizers if we are to feed the world's people. Help the aides to understand what we mean by "chemical additives" and the functions they serve in food processing.

Use appropriate slides from the series "Ann's Additive Story."

Use role playing to bridge experience from training to actual discussion in a home visit. Ask for volunteers. Have one play the role of Extension aide and another the role of homemaker who is challenging the safety of our food supply. This homemaker has been buying some food items at special health food stores and since the food is considerably more expensive has not been able to stretch her food dollars to buy the quantity of food needed. How can the aide help to clarify the situation and help the homemaker spend less money on some foods?

Lack of appreciation of the relationship between food and health.

Review the nutrients and the functions which they serve in the body. Use large chart or slides "How Food Affects You." Discuss:

  How a variety of foods is necessary for a balanced diet.
How nutritional status affects physical and mental development, and the fulfillment of social goals.

A case study may be used:

A young mother has 3 small children, ranging in age from 6 months to 5 years. The mother is thin and anemic. The doctor has advised her to eat a “better diet,” so that she can gain weight. The children have frequent colds and infections and appear to be undernourished. They are pale, thin, and listless.

How can the Extension aide help this young mother to improve the family’s nutrition?

What steps might she take in an effort to help the homemaker understand the relationship between food and health? How might better food habits help improve her health and that of the children?

- Plan additional learning experiences.

To increase the aides’ abilities to understand the beliefs and attitudes of local families.

To enable aides to use their increased understanding and ability in helping families improve nutrition.

REFERENCES FOR TRAINER AGENT

2. Culture and Poverty, Charles Valentine.
3. Effects of Pesticides on Fruit and Vegetable Physiology, Principles of Plant and Pest Control, Volume 6, National Academy of Sciences.
4. Food and Man, M.E. Lowenberg and others.
7. Let’s Talk About Food, Philip White.
10. The Effect of Soils and Fertilizers on the Nutritional Quality of Plants, ARS, USDA.
11. Understanding Food Patterns in the USA, American Dietetic Association.

REFERENCES FOR AIDES

2. How Food Affects You, charts, ES, USDA.
5. Understanding Food Patterns in the USA, American Dietetic Association.
6. Family Record, Parts 1 and 2, ES, USDA.

VISUALS AND EQUIPMENT

Chalkboard or newsprint.

Daily Food Guides, FNS-13; FNS-13(S), USDA.

Food Models to represent “ethnic” foods; “status” foods.


How Food Affects You, flip chart or slide series, ES, USDA.

Phono-viewer Programs, “Good Food Works for You.”

BREADS AND CEREALS

PURPOSE

Trainer Agent to develop aides’ abilities to:

1. Help families choose, store and use breads and cereals.
2. Help families stretch their bread and cereal dollar.
3. Help families improve nutrition.
REVIEW OF PREVIOUS LEARNING RELATED TO BREADS AND CEREALS

- Review foods included in the bread and cereal group. Use Daily Food Guide. Explain the terms whole grain, enriched, restored and fortified products. Discuss how these products can be used with other foods to increase adequacy of diet.

- Discuss various contributions of cereals and breads. Refer to Lesson 8, Supplemental Lessons for Training Aides—Key Nutrients.
  - Acceptable and satisfying.
  - Variety of ethnic choices.
  - Sources of vitamins and minerals. (Stress B-vitamins and iron.)
  - Source of plant protein.
  - Extenders of more expensive protein foods.

- Point out recommended amounts of whole grain, enriched or fortified breads and cereals needed to meet varying needs of family members.
  - Four servings a day is a general recommendation.
    - A slice of whole grain or enriched bread or 2/3 cup of cereal counts as one serving.
  
  Servings for young children should be smaller.
  
  Men who do physical labor and teenagers need more than four servings in order to meet their caloric needs.

PROBLEM-CENTERED LEARNING EXPERIENCES.

- Ask aides what additional information they need about breads and cereals.

- Identify problems aides have observed in working with local families.

- Assess the knowledge and practices related to breads and cereals of program families. Use data from 24-hour dietary recalls. Point out needs for improvements.

- Determine priorities for in-service training of aides based on the needs as indicated by available data.

- Plan learning experiences for top priority problems such as:

  Getting money’s worth in choosing breads and cereals.
  
  - Use market basket to show and tell how to improve choices. Select a variety of commonly used breads and cereal products. For example: enriched bread, rice, macaroni, noodles, oatmeal, cornmeal, crackers, doughnuts, sweet rolls, cake mix, dry cereal, frosted cereal may be used. Indicate cost. Determine unit pricing.
  
  - Show by simple comparison, some price-wise selections. Stress the importance of selecting enriched, whole grain, restored and fortified bread and cereal products.
  
  - Point out choices that would be most costly. Discuss why these are often chosen by families with limited budgets.

  - Have aides visit local food markets and bakeries to check prices and variety of locally available cereals, mixes, bread and other baked products. Discuss ways they could help families get their money’s worth in choosing foods from bread and cereal group.

Selecting breads and cereals for a variety of ethnic backgrounds.

  - Choose examples of acceptable choices for each ethnic group with whom aides are working. Involve aides in making choices.

  Identify wise choices considering cost, nutritive value, ease of preparation and storage.

  Point out that there are high and low calorie choices.

  - Discuss ways of introducing less familiar breads and cereals to increase nutritional adequacy of meals and snacks.

Improving storage practices.

  - Demonstrate suitable clean storage for flour, dry cereal, breads and other baked products.

  - Discuss ways of preventing problems with insects and moisture.
Encourage aides to meet limitations in both successes and frustrations in a supportive climate.

Plan additional learning experiences to increase aides’ abilities to help families with other problems in local situation.

REFERENCES FOR TRAINER AGENT
4. Introductory Nutrition, H.A. Guthrie, chapters 6 and 12.

REFERENCES FOR AIDES
2. How Food Affects You, Flip Chart, USDA.
3. Eat to Live, Wheat Flour Institute, pp. 30-33 and 45.
5. Cereals and Pasta in Family Meals, G-150, USDA.
7. Storing Perishable Foods in the Home, G-78, USDA.

VISUAL AIDS AND EQUIPMENT
Market basket with food or empty food containers with prices.

Daily Food Guides (poster) FNS 23, USDA.
“How Food Affects You,” selected slides, USDA.
“Food Value Stretcher,” slides, USDA.
MILK AND MILK PRODUCTS

PURPOSE
Trainer Agent to develop aides’ abilities to:

1. Help families choose, store and use milk and other dairy foods.
2. Help families stretch their milk dollar.
3. Help families to get more nutrition from money spent for milk and milk products.

REVIEW OF PREVIOUS LEARNING RELATED TO MILK AND MILK PRODUCTS

Review foods included in the milk group. Use the Daily Food Guide or food models.

Stress contributions of milk and milk products for increasing adequacy of diets. (Refer to Lessons 4 and 10, Supplemental Lessons - Key Nutrients.)

- As source of calcium.
- Economical source of quality protein.

Discuss amounts of milk or milk products needed by different members of family. Discuss calcium equivalents. Refer to Lesson 11, Basic Lessons for Training Aides, page 46.

- 2-3 cups for children under 9.
- 3 cups for children 9 to 12, and pregnant women.
- 4 cups for teenagers and nursing mothers.
- 2 cups for adults of all ages.


- Point out convenience of nonfat dry milk and evaporated milk when refrigeration is limited.
- Ask aides to suggest ways families could improve storage of milk products.

PROBLEM-CENTERED LEARNING EXPERIENCES

- Ask aides to share what they have observed in choices and uses of dairy foods by local families.
- Determine factors that influence ways in which families use milk products. For example:
  - Dislike of milk as a beverage; preference for soft drinks and coffee.
  - Cost of various milk products.
  - Attitudes towards milk products.
  - Knowledge of acceptable ways of using dry milk products.
  - Available storage facilities.
- Identify problems the families have in using foods in the milk group.
  - Refer to 24-hour dietary recalls (Family Records, Parts 1 and 2).
    How many families need to use more milk? -What milk products are they already using? -In what ways are milk products included in the diet?
- Rank problems according to importance. Start with top priority problems.
- Plan learning experiences for priority problems such as:

Increasing consumption of milk and milk products.

- Use role playing to bridge experience from training to actual home visit. Ask for volunteers. Have one aide play the role of Extension program aide and another the homemaker. Describe a typical local situation. For example, “A family with four school age children buys food stamps but the children are not drinking enough milk.” What are the problems? - Do the children like milk? - Do they know why milk is important to
the whole family? - What beverages are the children drinking? - Can they afford to buy the amount of milk they need?

Ask the role players to act out what they think the aide and the homemaker should and do. Have other aides ask questions of the role players.

Decide on ways the aide can be more helpful to the homemaker. What is the first problem they should try to change? How will they start?

**Stretching the Milk Dollar**

- Dramatize savings that can be made by using various forms of milk—fresh, dry and evaporated. Compare cost per quart of each form of milk: compare cost at point of purchase, home delivery versus local retail markets or vending machines; compare cost of size of container—half-pint, quart, half-gallon and gallon.

- Figure costs, using local prices, for a typical family for a week or month. Keep in mind acceptability of various forms of milk.

- Make comparisons in terms of food value as well as money value.

- Compare whole and skim milk products using Food Comparison cards, for Vitamin A and D content, for calories, for protein.

- Explain the effect of fortification on food value of milk products. Show how food value increases after fortification.

**Using nonfat dry milk in appealing ways.**

- Demonstrate use of nonfat dry milk in beverages.

  Ask aides what beverages families are already drinking.

  Try mixing well liked beverages with milk. For example, fruit juices, vitamin C-enriched fruit drinks, coffee or chocolate.

  Show how to mix fluid milk with equal amounts of prepared dry skim milk for an acceptable product at low cost.

  Have aides taste test new milk drinks to insure their acceptability.

- Give tips for easy ways to use nonfat dry milk in cooking tasty main dishes and desserts.

- Have work meetings for aides to prepare dishes using dry milk in place of fluid milk. Select dishes that will be acceptable to aides and local families. Plan luncheon or taste sampling.

- Demonstrate convenience of nonfat dry milk in baking. Show use in both dry and reconstituted forms. Make up mixes such as quick bread mix, master mix and cookie mix.

  Compare cost and food value of homemade mix with commercial mix.

**Using foods in milk group to improve family nutrition.**

- Show, with charts, how foods from the milk group can contribute calcium and protein to both meals and snacks.

- Show amounts of cheese, ice cream and other calcium-rich dairy foods that can be used in place of milk.

- Explain how milk and dairy foods can be used to supplement vegetable and cereal proteins.

- Use food models to show pleasing combinations. Involve aides in planning combinations that will appeal to their families.

- Discuss how individual families might differ in accepting foods from the milk group. Point out ethnic differences and preferences—for example some use more cheese and less milk. In the various age groups, children may prefer milk drinks while adults may prefer cheese.

- Plan additional learning experiences for other problems in your unit.

**REFERENCES FOR TRAINER AGENT**

1. *Food and Nutrition, Basic Lessons for Training Extension Aides.*
2. *Food and Nutrition, Supplemental Lessons for Training Extension Aides, Key Nutrients, Food Buying and Food Preparation.*


4. *Yearbook of Agriculture,*


REFERENCES FOR AIDES
1. *Milk in Family Meals,* G-127, USDA.
2. *Cheese in Family Meals,* G-112, USDA.
3. *How Food Affects You,* Flip Chart, USDA.
4. *Nutritive Value of Foods,* G-72, USDA.
8. *Storing Perishable Foods in the Home,* G-78, USDA.

VISUALS AND EQUIPMENT
Milk and other dairy foods. Models or empty packages may also be used.

Daily Four Food Guide
Chalkboard or newsprint
Equipment and supplies for food preparation
Food comparison cards and food models, National Dairy Council
"How Food Affects You," slide series C-156, USDA
"Milk: Basic to Good Nutrition," slide series C-158, USDA
"The Basic Four Way to Good Meals," slide series C-158, USDA

"Milk the Magnificent," slide series C-161, USDA
"Food Value Stretchers—Using Evaporated Milk and Other Donated Foods," slide series C-152, USDA
"Non-Instant, Non-Fat Dry Milk," slides or filmstrip C-169, USDA.

MEATS AND MEAT SUBSTITUTES

PURPOSE
Trainer agent to develop aides’ abilities to:
1. Help families choose, use, and store meats and meat substitutes.
2. Help stretch their money spent for meat.
3. Help families improve nutrition.

REVIEW OF PREVIOUS LEARNING RELATED TO MEATS AND MEAT SUBSTITUTES

- Review foods included in the meat group—poultry, fish, eggs, dry beans, peas, and nuts. Use the Daily Food Guide to show how they can combine with other groups for an adequate diet.
- Explain contributions of the meat group. See Supplemental Lesson 1, *Key Nutrients.*
  - Important sources of top quality protein.
  - Sources of B-vitamins, minerals and fats.
  - Add pleasing flavors to meals.
- Discuss amounts needed daily by persons of different ages. See Supplemental Lesson 3, *Food Needs of Family Members.*
  - Two servings are recommended. Size of servings should be adjusted to needs of family members for growth, pregnancy, lactation, and weight control.
  - Relate preparation method to various cuts and grades of meat.
Stress methods of tenderizing meat—moist heat, acid foods, and use of commercial meat tenderizers.

- Check aides’ abilities to prepare meat alternates—fish, eggs, dried beans, and peas.

**PROBLEM-CENTERED LEARNING EXPERIENCES**

- Assess the present practices of local families. Use data from 24-hour dietary recall, Family Records, Part 2.

  - How many homemakers (families) are getting 2 servings from the meat group each day? How many eat less? How many eat more? What are the most frequent choices?

  - What are the most important factors that influence choices made by local families?
    
    - Age and sex of family members.
    - Ability to select and prepare.
    - Likes and dislikes.
    - Storage facilities.
    - Equipment available.
    - Status.
    - Cost.
    - Food value.
    - Preparation time.
    - Amount of waste.

- Identify and rank problems the families have in using foods from the meat group. Discuss and select top priority problems.

- Plan learning experiences for priority problems such as:

  **Buying foods from the meat group:**
  
  - Explore ways families can get the most protein for available money. Consider family preferences.

  Compare cost per serving for different types and cuts of meat; of whole poultry with poultry cut in pieces; and forms of fish.

  Explain the meaning of “servings.”

  Point out differences between serving sizes needed and amounts usually eaten.

  Compare cost per serving of meat alternates and substitutes that provide similar amounts of protein.

- Stress taking advantage of featured specials.

- Arrange field trip to local retail markets. Involve aides in deciding what they need to know about buying meat. Review selection of meat according to cut and grade. Point out number of servings per pound available from meat with varying amount of bone and fat.

  At the meat market, compare per serving costs of various cuts of meat. Relate quality to intended use.

- Plan additional field trips as needed to increase aides’ ability to help families select poultry and fish. Point out variety of economical choices from meat group.

- Have aides take a homemaker shopping for enough food from meat group to feed her family for a week. Consider number in family, their ages, income, ethnic background, cooking and storage facilities. Determine with homemaker the amount she can afford to spend on foods from the meat group. Stress use of USDA donated foods and food stamps as appropriate.

- Share experiences at the next in-service training.

**Storing meat, fish and poultry to insure safety and quality.**

- Demonstrate storage of meat, fish, and poultry for quality retention and safety.

  Consider storage of uncooked and cooked meats.

  Consider storage of canned, frozen, and fresh meats, poultry, and fish.

- Discuss changes that could be made to insure safe storage.

  Improved use of storage facilities.

  Improved buying practices.

**Using foods from meat group in economical combinations to improve family nutrition.**

- Involve aides in planning economical food combinations that extend the more expensive protein foods in main dishes such as stews, hearty soups, casseroles.
sandwiches, stuffed vegetables, and salads.

- Consider use of organ meats, protein rich vegetables, whole grain and enriched cereals and USDA donated foods as appropriate.

Would these meet with approval of the families? Which ones would they prefer?

How do they compare in food value? In calories? In cost?

- Have work meeting to prepare and taste suggested combinations. Assess them according to popularity, economy, food value, and ease of preparation.

Discuss ways aides can motivate families to use some of these new combinations. Suggest that each aide try out one or more ideas in working with families.

- Have aides share experiences at next in-service training. What were the homemakers' reactions to suggestions? Did they seem willing to try them? Why? If not, why not?

- What other problems have aides encountered in helping families use foods from meat group?

- Plan additional in-service training to consider these problems.

REFERENCES FOR TRAINER AGENT
1. *Food and Nutrition, Basic Lessons for Training Extension Aides*, USDA.
2. *Food and Nutrition, Supplemental Lessons for Training Extension Aides, Key Nutrients, Food Preparation, Food Needs of Family Members, Meal Planning, Food Buying*, USDA.
4. *Food For Us All*, Yearbook of Agriculture, 1969, pp. 94, 117, 127, 139, USDA.

REFERENCES FOR AIDES
1. *Your Money's Worth in Food*, G-183, USDA.
2. *Beef and Veal in Family Meals*, G-118, USDA.
3. *Lamb in Family Meals*, G-124, USDA.
5. *Poultry in Family Meals*, G-110, USDA.
7. *Money-Saving Main Dishes*, G-43, USDA.
9. *How To Buy Dry Beans, Peas and Lentils*, G-177, USDA.
10. *Thrifty Family Series*, FNS, USDA.
11. *Keeping Food Safe to Eat*, G-162, USDA.

VISUALS AND EQUIPMENT
Food and equipment for food preparation.

Pictures or models of foods from the meat group.

*Daily Food Guides*, FNS-13, USDA.

"How Food Affects You," slide series or flip chart, USDA.

"Meat from Store to Table," slides or filmstrip, National Livestock and Meat Board.

Posters and charts, National Livestock and Meat Board.

Phono-viewer show, "Buying Meats," ES, USDA.

FRUITS AND VEGETABLES

PURPOSE
Trainer agent to develop aides' abilities to:

1. Help families choose, use, and store fruits and vegetables.
2. Get more food value from money spent for fruits and vegetables.

3. Improve nutrition of family members through better use of fruit and vegetables.

REVIEW OF PREVIOUS LEARNING RELATED TO FRUIT AND VEGETABLE GROUP

- Review foods included in fruit and vegetable group. Use the Daily Food Guide.
- Discuss the contributions of fruits and vegetables to family diets. See Supplemental Lessons 7 and 9, Key Nutrients.
  - Group fruits and vegetables as to sources of:
    - Vitamin A.
    - Vitamin C.
    - Minerals, especially calcium and iron.
    - Protein.
    - Calories. Make a list of those low in calories.
    - Bulk (fiber).
  - Stress variations in color, flavor, and texture.
- Point out that four servings or more each day are recommended.
  - Include choices for Vitamins A and C.
  - Have aides find recommended amounts for various members of the family. See Supplemental Lessons 3 and 6, Key Nutrients. Adjust size of servings to meet the needs of family members.
- Review Buying of Fruits and Vegetables—Supplemental Lessons 11 and 12, Food Preparation 13, 14, 15, and 16.

PROBLEM-CENTERED LEARNING EXPERIENCES

- Review State and national studies that indicate the extent of need for increased use of fruits and vegetables.
  - Point out problems of inadequate intake of Vitamins A and C and weight control.
- Involve aides in identifying problems local families have in using fruits and vegetables. Refer to 24-hour dietary recall data. Family Records, Parts 1 and 2.
  - How many servings of fruits and vegetables are they using?
  - What kinds of vegetables and fruits do they use most frequently?
  - How many families are using fruits and vegetables high in Vitamin C? Vitamin A?
  - What others are available in local markets?
  - What are the implications for aides working with families?
- Rank identified problems according to importance to local families as well as value for improving nutritional status.
- Plan learning experiences for priority problems such as:
  - Increasing use of fruits and vegetables to improve nutrition.
    - Ask aides to list factors that limit use of fruits and vegetables by local families, such as cost, storage, dislikes, food preferences, seasonal availability, and lack of knowledge and skill in selection and preparation.
    - Discuss practical ways aides could help families increase their use of fruits and vegetables, especially those that are good sources of Vitamins A and C.
    - Arrange work meetings for aides to practice ways they can help families to:
      - Prepare vegetables and fruits to conserve food value and quality. Relate preparation to eye and appetite appeal. Use a variety of seasonings for the same vegetable.
        - Glamorize preparation of fruits and vegetables in attractive but economical main dishes, salads, desserts and snacks. Involve aides in choosing the dishes to be prepared. Start with the most acceptable suggestions.
        - Combine vegetables with a favorite protein food for economical main dishes, for example, stuffed vegetables, casseroles and stews.
Use economical alternates in place of more expensive fruits and vegetables. Consider cultural preferences of local families.

Serve raw vegetables in salads and as raw relishes for finger foods, fresh and dried fruit for snacks and desserts. Stress ease of preparation and importance of carefully washing fresh produce.

Try low calorie ways of using fruits and vegetables in meals and snacks for weight control.

Experiment with acceptable ways of replacing soft drinks with inexpensive fruit and vegetable juices, Vitamin C enriched fruit drinks or economical combinations of fruit and milk.

Project ways aides could help families to increase their use of fruits and vegetables.

Focus on ways aides could help homemakers with school age children use more fruits and vegetables. Ask volunteers to role play a scene between mother and aide.

What are the factors that influence choices of fruits and vegetables?

What change is the homemaker ready to make?

How can the children be interested in eating fruits and vegetables?

Give the aides a chance to ask questions and make suggestions as to how they might help this family. Decide on the next approach the aide would take with the homemaker.

**Stretching the fruit and vegetable dollar.**

- Dramatize the choices that can give families the most food value for their money. Consider cultural preferences and availability.
  
  Select examples that are high in Vitamin A, in Vitamin C.
  
  Highlight vegetables and fruits that are high in both Vitamins A and C.
  
  Point out economical, vitamin-rich, lower calorie choices. Contrast these with higher calorie choices.
  
  Compare cost per serving of fresh, frozen, and canned forms of fruits and vegetables. Select examples of vegetables and fruits high in Vitamins A and C to display with cost per serving.
  
  Point out seasonal variations of most economical choices.
  
  Stress desirability of using home canned and frozen products.
  
  Demonstrate comparison of cost and quality as basis for making wise choices when buying canned fruits and vegetables.

  Point out economical choices: standard pack versus fancy packs; store brand versus name brand.

  Discuss how to decide which to buy for various uses.

  Discuss practical ways aides could help families make acceptable choices they can afford.

  Watch for featured specials.

  Look for sales on multiple items of old stock as new supplies arrive.

  Take advantage of fresh fruits and vegetables in season.

  Consider growing a garden and canning or freezing at home.

  Encourage use of food stamps or donated foods so that families can stretch their money to buy more fruits and vegetables.

**Storing fruits and vegetables for quality.**

- Demonstrate storage of various types of fresh, frozen, canned, and dried fruits and vegetables. Relate storage practices to quality, flavor, texture, and food value.

- Discuss ideas for helping families manage to make the most of limited storage for perishable foods. Suggest ways to improvise suitable storage.

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Stress the importance of washing fresh fruits and vegetables before they are eaten. Discuss reasons.

- Plan additional in-service training on fruits and vegetables.

REFERENCES FOR TRAINER AGENT

5. Introductory Nutrition, H.A. Guthrie, pp. 176-211.

REFERENCES FOR AIDES

1. Conserving the Nutritive Value of Foods, G-90, pp. 4-10; 15.
2. Fruits in Family Meals, G-125, USDA.
3. Nutrition Up To Date, Up To You, GS-1, USDA.
5. Vegetables in Family Meals, G-105, USDA.
6. Nutritive Value of Foods, G-72, USDA.

VISUALS AND EQUIPMENT

Food and equipment for food preparation.


EATING PATTERNS AND THE DAILY FOOD GUIDE

PURPOSE

Trainer agent to develop aides’ ability to:

1. Help families use the Daily Food Guide in planning for their food intake.
2. Help families choose, store, and use food combinations to improve their nutrition.
3. Help families stretch their food dollars.

REVIEW OF PREVIOUS LEARNING RELATED TO EATING PATTERNS

- Discuss the Daily Food Guide as a useful tool in planning meals. Show how food guides can be adapted to a variety of eating patterns.
- Discuss the importance of considering the food needs of family members, and any special problems, as weight control.
- Refer to Food and Nutrition, Supplemental Lessons for Training Extension Aides, Food Needs of Family Members.
- Review food preparation procedure to assure maximum retention of food values and quality.

Posters and charts from commercial sources: United Fruit and Vegetable Association, Green Giant Company, Florida Citrus Commission, California Citrus, Sunkist Growers, Inc.

Comparison Cards; Fruits and Vegetables, National Dairy Council.

How Food Affects You, selected slides, USDA.

“Selecting and Buying Food for Young Families,” USDA.

Phono-viewer shows, “Fruits and Vegetables,” ES, USDA.
• Discuss importance of variety in order to increase nutrients, as well as to add flavor, color, and texture.

PROBLEM-CENTERED LEARNING EXPERIENCES

• Assess the present eating patterns of local families. Use information from 24-hour dietary recalls (Family Records, Parts 1 and 2).
  
  — What foods are the families presently eating?
  
  — What are the patterns and styles of eating? Which meals do they eat together?
  
  — How may the family’s food patterns be supplemented with foods, acceptable to them, which would improve the family’s nutrition?

• Identify and rank problems the families have in planning eating patterns that provide good nutrition. List on chalkboard. Discuss and select top priority problems such as:

  Planning eating patterns for ethnic groups represented by families.

  Discuss with aides the physiological value of dividing intake of nutrients throughout the day so as to provide more efficient utilization of the nutrients by the body.

  Have aides plan menus that they believe would be acceptable to the families, and at the same time would be well balanced and low in cost. Use the food models. Include different cultural groups with whom the aides are working.

  Stretching the food dollar to feed the family.

  Have the aides describe how participation in the Food Stamp or Commodity Food program has helped to improve the family’s nutrition and to cut food bills.

Show aides flipchart “Food for Your Table” or “Food Stamps for You” and discuss how to use with homemakers.

Discuss how the use of a home garden could, where it is possible to have one, help to improve family nutrition.

Discuss foods which give a high return in food value for dollars spent.

Discuss how aides can help families use less costly snack foods.

Have aides tell how they have accompanied the homemaker when they have gone food shopping to show her how to get the best buys for her money.

Show how aides can help the homemaker, when they return from the market, put away groceries using the best storage principles.

Purchasing quantities of food that can be properly stored.

Discuss how limited space for food storage must be considered in food buying.

Discuss methods of improving storage. Can the family devise better storage?

Discuss importance of food sanitation in handling foods.

Preparing and serving of appetizing and attractive foods in order to improve eating patterns.

Discuss the importance of considering special family needs; for example, the pre-school child, the teenager, the elderly diabetic parent, and the overweight mother.

Discuss the importance of eye and taste appeal.

• Plan additional problems to meet local needs.

REFERENCES FOR TRAINER AGENT

1. *Family Fare*, G-1, USDA.


4. *Food and Nutrition, Basic Lessons for Training Extension Aides*, ES, USDA.
5. *Food and Nutrition, Supplemental Lessons for Training Extension Aides, Meal Planning, Food Needs of Family Members*, ES, USDA.

**REFERENCES FOR AIDES**
1. *Family Fare*, G-1, USDA.
2. *Nutritive Value of Foods*, G-72, USDA.
3. *Family Records, Parts 1 and 2*, ES, USDA.
4. *Food for Your Table*, FNS, USDA, or *Food Stamps for You*, FNS-67.
5. Phono-viewer shows: “Good Food Works For You,” and “You Are What You Eat - Key Nutrients,” USDA.

**VISUALS AND EQUIPMENT**
Comparison Cards, National Dairy Council.
Daily Food Guide, FNS-13, USDA.
Food Models, National Dairy Council.
“Mix and Match for Good Meals,” filmstrip, Evaporated Milk Association.
“The Basic Four Way to Good Meals,” C-158, USDA.

*Note: The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.*
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