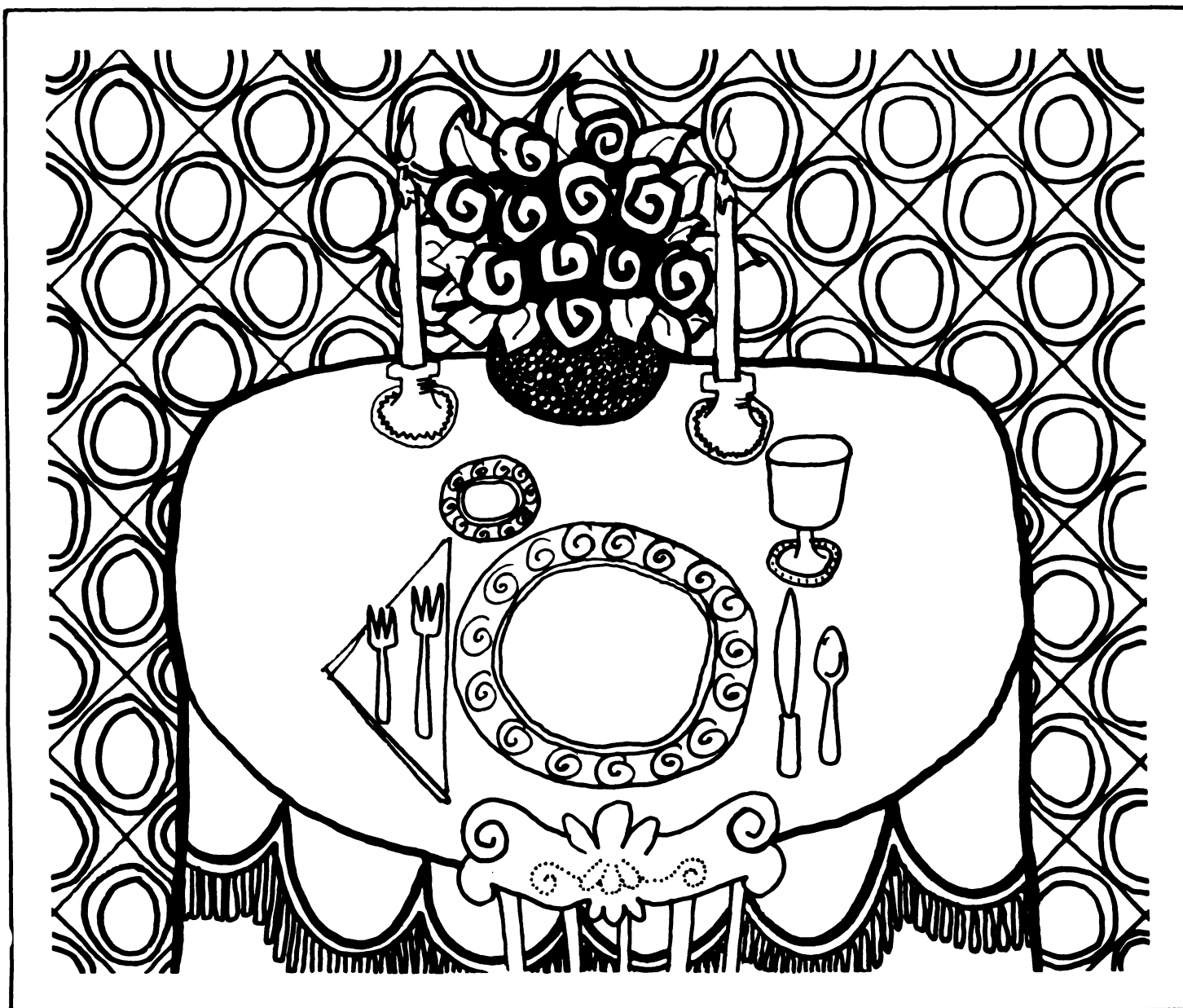


4-H Foods & Nutrition 4

Dinnertime with Virginia Teens

Publication 17
Revised October 1980



For Parents

Participation in this 4-H project will bring several valuable learning experiences for your daughter or son. She or he will learn to prepare a variety of foods which can be combined for tasty, nutritious meals. Just as important is the experience of working with others. Giving a demonstration or illustrated talk helps to develop poise in speaking before a group.

You can help by (1) encouraging attendance at each 4-H project meeting; (2) providing opportunities for the 4-H'er to prepare foods and meals at home; (3) giving a pat on the back for a job well done; (4) providing a place to keep 4-H project literature and records; (5) encouraging 4-H'ers to keep project records; and (6) encouraging participation in club and county 4-H events and activities.

DINNERTIME WITH VIRGINIA TEENS

4-H Foods and Nutrition 4

Prepared by

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It's good to have you enrolled in a 4-H Foods and Nutrition project again!

In Units 1, 2, and 3, you learned what foods you need to eat each day to get the needed nutrients. You have learned to prepare foods for snacks, breakfast, lunch, and supper. The emphasis in this project is on dinner, the main meal of the day.

You will also learn more about the relationship between what you eat and your appearance. You may decide you'd like to improve your appearance and your eating habits.

Many of the foods you've already learned to prepare can be used for family and company dinners. You will learn to prepare additional foods in "Dinnertime With Virginia Teens." You should be able to plan, prepare and serve tasty, appetizing, and nourishing dinners for your family and guests when you have finished this project. You may start by helping your mother or sister prepare meals but you should prepare some meals all by yourself.

You may want to assume some responsibility for buying food for the family.

Study the suggested activities. Plan with your 4-H project leader and mother what you will do in the project. You may want to take the project for more than 1 year. If you do, choose different activities.

You will learn more and increase your chances of earning recognition by keeping a neat, complete, and accurate 4-H project record.

Suggested Activities

- A. Participate in project meetings conducted by your 4-H leader or Extension Agent.
- B. Keep a record of work done in this 4-H project. Summarize on Form 103 which is available from the Extension Agent. Turn this record in when it is requested.
- C. Keep a record of all the food you eat for a week. Total the number of calories consumed each day. Check to see if the recommended servings from each of the Four Food Groups were included each day.
- D. Keep a record of everything you do each day for a week. Total the number of calories used each day.
- E. Compare calories used with calories in the food you eat. Make needed adjustments.
- F. You may feel you can improve your personal appearance by changing food habits. Talk with your family doctor before making drastic changes in what you eat.
- G. Prepare 15 salads for family or company meals.
- H. Prepare fruits and vegetables (other than salads) for family or company meals 20 times. Prepare at least 8 different ones.
- I. Prepare the meat for family or company meals 5 times.
- J. Make and bake a variety of breads (quick and/or yeast) for family or company meals. You may want to perfect skills in making a special product.
- K. Prepare 10 packages of vegetables or fruits for freezing.
- L. You could choose to do a major portion of the freezing of fruits and vegetables for the family. See USDA Home and Garden Bulletin No. 10, *Home Freezing of Fruits and Vegetables*, for approved methods.
- M. Bake 5 cakes. Do at least one without a mix.
- N. You may want to decorate a cake or cakes honoring a special occasion such as a birthday, graduation, or a holiday.
- O. Plan and prepare 5 complete dinners for the family.
- P. Plan and prepare a day's meals. Be sure to include the suggested number of servings from each of the Four Food Groups. You may want to take over the meal planning and preparation for a week to give your mother a vacation.
- Q. Your 4-H project group might like to honor parents with a dinner. Work together in planning the event. Decide who will do what and when it is to be done. Be sure you carry out your assignments.
- R. Set the table as attractively as possible for all meals. Be creative in using available materials.
- S. Help with the family food shopping. Consider cost per serving, quality, convenience, and nutritional value in deciding which products to buy.
- T. Read labels. You might make a collection of labels from food products. Underline helpful information.
- U. Your club group might tour a bakery, cannery, or other food processing plant in your

area. Or you might tour the meat cutting and storage area of a store.

- V. Show and tell others what you have learned by giving demonstrations and illustrated talks. You may want to participate in one of the contests.
- W. Evaluate the quality of products you prepare. You might like to devote one project meeting to judging cakes.
- X. Exhibit products you have made at fairs and food shows if possible.
- Y. You might prepare an exhibit on foods and nutrition for National 4-H Week, the Fair, a Parents' night program or other event.
- Z. You will, of course, want to add tested and liked recipes to your collection.

Healthy, Happy You

You want to have a trim figure, glossy hair, a clear complexion, shining eyes, a lot of pep, and genuine good health. Eating the right kinds of food in amounts suited to you is imperative if you are to have good looks and good health. Food alone isn't the whole story. You should have regular medical and dental checkups. Get plenty of sleep. Be active. Keep yourself, your clothes, and your surroundings spotlessly clean.

What are the right foods? Each of us needs to eat the recommended servings from each of the Four Food Groups every day. These foods provide the nutrients which we must have for building new body tissues such as muscle, blood and hair, for repairing body tissues, and for energy for work and play.

All foods have value but no 2 are exactly alike. Foods grouped together in the Daily Food Guide make similar contributions of the essential nutrients. The table below shows the most important nutrient contributions of each group.

	Meat Group	Milk	Fruits & Vegetables	Breads & Cereals
Protein	X	X		X
Fat	X	X		
Carbohydrates			X	X
Minerals				
Iron	X		X	X
Calcium		X		X
Vitamins				
A	X		X	
C			X	
Niacin	X		X	X
Thiamin	X		X	X
Riboflavin	X	X		X
Water		X	X	

Do you see why it is important to eat foods from each group? If you are interested in learn-

ing more about the specific functions of the nutrients, ask your 4-H project leader or Extension Agent for more information.

Calorie Intake

Often we value a food because of its calorie content or its lack of calories. This isn't a very good standard. Let's see why.

First, what is a calorie? A calorie is a unit of measure just as an inch, a mile, and a kilowatt hour are units of measure. A calorie is a way of measuring energy. The calorie value of a food is the amount of potential energy available to the person who eats it. For example, a piece of chocolate cake with chocolate frosting has an energy value of 445 calories. If you eat the piece of cake, you will have 445 calories of energy avail-

A calorie is the amount of energy (heat) required to raise the temperature of one kilogram of water one degree Celsius (or 4 pounds of water one degree Fahrenheit).

able for use. All of the foods you eat have potential energy with the exception of black coffee and tea. Some have a great deal more than others. A stalk of celery has only 5 calories in contrast to the 445 in the piece of cake.

How much potential energy is in the food you eat each day? *Keep a record of everything you eat each day for a week. Record how much you ate as well as what you ate. Include snacks and nibbles. Figure the energy value of the foods you ate.* USDA Home and Garden Bulletin 72, "Nutritive Value of Foods," lists the food energy value of most ordinary foods.

How much energy do you need? This will depend on how active you are and how fast you are growing. Energy is not destroyed so any which is not needed immediately for growth or activity will be stored. Most of the extra energy is stored as body fat. An excess of stored energy results in curves in the wrong places. If the food we eat does not provide enough fuel to meet our energy needs, then we use some of the energy which we have stored. This is what happens when we lose weight.

It isn't enough just to look at calorie content when choosing foods. Some foods which are high in calories have very small amounts of the essential nutrients. Other foods which are low in calories have generous amounts of one or more of the essential nutrients. This is why it is said that one should choose calories by the company they keep.

Take another look at your daily record of food eaten. *Check each day's intake against the recommended servings from the Four Food Groups.* How many days during the week did you have 2 or more servings from the Meat and Meat Substitutes Group? 4 or more servings from the Milk Group? 4 or more servings from the

Fruit-Vegetable Group? ----- 4 or more servings from the Breads and Cereals Group? -----
 Do you need to do a better job of choosing calories by the company they keep?

How is calorie content determined? Food is burned in a Bomb Calorimeter (similar to the burning which occurs in your body). The amount of heat (energy) given off is measured and this is converted to calorie value.

Calorie Output

How active are you? Do you spend most of your time at sit-down activities? Or are you up and going most of the time? Using larger muscles for a long period of time uses more energy than using small muscles for a long time or large muscles for a short time.

Some everyday activities are listed below. They have been divided into 5 different levels according to the amount of energy required.

A range of values is given to allow for differences in activities and people.

Type of Activity	Calories per hour
Sedentary activities, such as: Reading; writing; eating; watching television or movies; listening to the radio; sewing; playing cards; and typing, miscellaneous officework, and other activities done while sitting that require little or no arm movement.	80-100
Light activities, such as: Preparing and cooking food; doing dishes; dusting; hand washing small articles of clothing; ironing; walking slowly; personal care; miscellaneous officework and other activities done while standing that require some arm movement; and rapid typing and other activities done while sitting that are more strenuous.	110-160
Moderate activities, such as: Making beds; mopping and scrubbing; sweeping; light polishing and waxing; laundering by machine; light gardening and carpentry work; walking moderately fast; other activities done while standing that require moderate arm movement; and activities done while sitting that require more vigorous arm movement.	170-240
Vigorous activities, such as: Heavy scrubbing and waxing; handwashing large articles of clothing; hanging out clothes; stripping beds; other heavy work; walking fast; bowling; golfing; and gardening.	250-350
Strenuous activities, such as: Swimming; playing tennis; running; bicycling; dancing; skiing; and playing football.	350 or more

How Much Energy Do You Use?

Underline the activities which you performed yesterday. Estimate the total amount of time you spent at each level. For example, if you spent 6 hours in class, 2 hours at the movie, 1½ hours doing homework, and 1½ hours eating, you would have spent a total of 11 hours in sedentary activity. Multiply 11 x 80 to find out approxi-

mately how much energy you used. Add to this the energy used for other activities.

In addition to the energy used for activity or external work, some energy is needed for internal work. Examples of internal work are growth and tissue repair and activities of the heart, lungs, kidneys, and other organs. These activities continue even when we are asleep.

To estimate the amount of energy needed for internal work, first convert your body weight from pounds to kilograms. Each kilogram is equal to 2.2 pounds. So if you weigh 100 pounds, your weight in kilograms would be 45. Girls need approximately 0.9 calorie per kilogram each hour for internal work; boys approximately 1.0 calorie per kilogram each hour. The girl who weighs 45 kilograms would find the energy needed for internal work in a day by multiplying 45 x 0.9 x 24. Her approximate basal energy needs are 972 calories.

Your total energy need is the sum of the energy used in work and play (external work) and that needed for internal work.

If you have a weight problem, you may want to keep a record of the number of calories you consume each day and the number you use. Try to balance the 2 to keep your weight where it is. You'll need to use up more energy than you take in if you are to lose weight.

Perhaps you could be more active and use up some of that stored energy. It takes 19 minutes of walking to use up the food energy in one large apple!

	Activity			
	Walking minutes	Riding Bicycle minutes	Swimming minutes	Reclining minutes
Apple, large -----	19	12	9	78
Carbonated beverage, 8 oz. -----	20	13	9	82
Carrot, raw -----	8	5	4	32
Malted Milk Shake	97	61	45	386
Pizza, cheese ¼ --	35	22	16	139

Maybe your 4-H project group would like to get together regularly for hiking, bicycling, swimming, or other active sports to use up some of that stored energy.

It is important to balance the intake and output of energy if you wish to maintain your weight. But it is also important to eat foods which supply the essential nutrients. You have learned to prepare some of these foods. In this unit, you will learn to prepare additional ones. Let's start with meat.

MEAT AND MEAT ALTERNATES GROUP

Foods in the Meat and Meat Alternates Group are important nutritionally because of their protein content. That same protein is important in selecting a cooking method.

Heat causes protein to get hard (coagulate). If protein

foods are cooked too long, or at too-high temperatures, the protein will be tough. That's what happened to the eggs in the experiment in "Breakfast — The Best Start." The eggs cooked at high temperatures or for a long time were less tender than those cooked at lower temperatures or for shorter periods of time. The first rule then is to cook meat and other protein-rich foods at low temperatures for as short a time as possible.

Some cuts of meat — those we call the less tender cuts — have large amounts of connective tissue in addition to the protein. Biting connective tissue is like biting a rubber band! It is possible to soften the connective tissue by using a combination of moisture and heat. You can accomplish this by adding liquid or by keeping-in the moisture which occurs naturally in the meat. We call this *moist heat cooking*. The cuts of meat which have little connective tissue can be cooked using heat alone. This is *dry heat cooking*. A second rule of meat cookery is to suit the cooking method to the cut of meat. Use dry-heat methods for tender cuts; moist-heat methods for less tender cuts.

Exception to the Rule

Sometimes we use high temperatures for meat cookery as in broiling, pan broiling, and grilling. If high temperatures are used, shorten the cooking time. These are dry-heat methods and should be used only for tender pieces of meat.

Dry-Heat Methods

Roasting
Broiling
Pan frying
Grilling
Pan broiling

Moist-Heat Methods

Braising
Stewing
Pot roasting
Cooking in foil
Poaching

Fish, whether finfish or shellfish, have very little connective tissue and can be cooked by either dry or moist heat methods. Whatever the method, the cooking time should be short. Finfish is done when the flesh changes from translucent to opaque and will flake easily when tested with a fork in the thickest portion. Doneness tests for shellfish vary with the species.

Oven Crisped Chicken (dry heat method)

1 broiler-fryer, cut-up, 2½-3 lbs. 1 tsp salt
½ cup milk or cream ¼ tsp pepper
1 cup cereal crumbs

Mix crumbs, salt, and pepper. Dip chicken pieces in milk; roll in seasoned crumbs. Place skin-side-up in ungreased shallow baking pan. Bake in moderate oven (350° F) for 1 hour or until tender.

Pot Roast (moist heat method)

Melt 1 tablespoon of fat in a heavy saucepan or roaster which has a lid. Put the roast into the pan. Brown meat on all sides. Add a small amount of liquid (water, tomato juice, or bouillon). Cover tightly. Simmer (do not boil) until meat is tender. Allow 30 to 45 minutes per pound.

For a meal cooked in one pot, add potatoes, carrots, and onions about 45 minutes before roast is done. Serve with a congealed salad and hot biscuits.

Poached Fish with Egg Sauce (moist heat method)

2 lbs. fish fillets or steaks, 3 peppercorns
fresh or frozen 2 sprigs parsley
2 cups boiling water 1 bay leaf
¼ cup lemon juice egg sauce
1 small onion, thinly sliced paprika
1 tsp salt

Thaw fish if frozen. Remove skin and bones from fish. Cut fish into 6 portions. Place fish in well-greased 10-inch fry pan. Add remaining ingredients. Cover and simmer for 5 to 10 minutes or until fish flakes easily when tested with a fork. Carefully remove fish to hot platter. Pour Egg Sauce over the fish. Sprinkle with paprika. Makes 6 servings.

Egg Sauce:

¼ cup butter or margarine dash pepper
2 Tbsp flour 1¼ cups milk
¼ tsp powdered mustard 2 hard-cooked eggs,
½ tsp salt chopped
1 Tbsp chopped parsley

Melt butter. Stir-in flour and seasonings. Add milk gradually and cook until thick and smooth, stirring constantly. Add eggs and parsley. Heat. Makes ½ cups sauce.

Baked Stuffed Fish (dry heat method)

1 dressed fish (3 lbs) fresh or bread stuffing
frozen 2 Tbsp melted fat
salt or oil
pepper

Thaw fish if frozen. Clean, wash, and dry fish. Sprinkle inside with salt and pepper. Place fish on a well-greased bake-and-serve platter, 18x13 inches. Stuff fish loosely. Brush fish with fat. Bake in a moderate oven, 350° F., for about 45-60 minutes or until fish flakes easily when tested with a fork. Makes 6 servings.

Bread Stuffing:

¼ cup butter or margarine, melted 1 egg, beaten
½ cup chopped celery ½ tsp sage
¼ cup chopped onions ½ tsp salt
4 cups dry bread crumbs ¼ tsp thyme
dash pepper

Cook celery and onions in butter until tender. Combine all ingredients and mix well. Makes 3 cups stuffing.

Pork and Potato Supper (moist heat method)

6 pork blade or arm steaks (about 2½ pounds)
¼ cup all-purpose flour
1 tsp salt
dash pepper
1 cup water
4 medium potatoes, peeled and sliced ½-inch thick
2 medium onions, thinly sliced

Coat steaks with a mixture of flour, salt, and pepper. Brown steaks on both sides in hot fat. Drain off any excess fat.

Add water. Cover tightly and simmer for 25 to 30 minutes. Place potato and onion slices over meat; season with salt and pepper. Cover and simmer until potatoes and onions are tender, about 25 to 30 minutes longer. Makes 6 servings.

Find other recipes in cookbooks for preparing meats. You may want to add some of the recipes to your collection. Indicate whether the meat is prepared by a moist or a dry heat method.

Buying Meat and Fish

Foods from the meat group of the Daily Food Guide take about 1/3 of every dollar spent for food. Fortunately, the cheaper cuts and grades of meat are just as full of food value and every bit as tasty as the higher-priced steaks and roasts. Here are a few tips that will help you in buying meat.

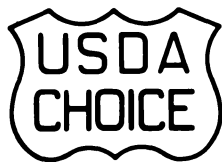
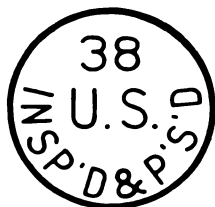
Buy a variety of meats. The red meats — pork, beef, veal, and lamb — have similar amounts of the essential nutrients. Chicken, turkey, fish, and seafood differ only slightly from the red meats.

Consider the number of servings needed when buying meat. If the meat is boneless, you can serve 4 persons from a pound. If the meat has a moderate amount of bone and fat, you can get 2 to 3 servings from a pound. If the meat is very bony and has a lot of fat, allow 2/3 to 1 pound for each serving.

Meat prices vary from season to season. When pork is

in short supply, the price will go up, but beef may be plentiful and inexpensive. You have to be alert to be a good shopper.

Look for the round purple inspection stamp bearing the legend "U.S. Inspected and Passed." Meat bearing this stamp complies with rigid standards of the U.S.D.A. for safety, purity, and wholesomeness.

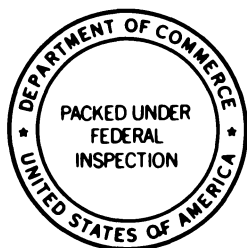


Beef often carries a shield-shaped stamp indicating quality. The stamp is placed there by a highly qualified meat grader. Prime is the top quality but we rarely see this grade in retail stores. Choice and Good are the two most popular grades.

Fish products are commonly divided into two groups — finfish and shellfish. Among the seafood categorized as finfish you will find flounder, bluefish, sea trout, croaker, shad, mullet, mackerel, and many others. The category shellfish encompasses such animals as crabs, clams, oysters, scallops, lobster, crayfish, and squid.

Here are some general buying tips that apply to either finfish or shellfish. Check these qualities when buying fresh finfish. The eyes of the fish should protrude from the head and be clear, not cloudy. The flesh should be firm and elastic, not soft, and should be lustrous, not dull. The gills of the fish should be pink or red and free of slime, not brownish. *The fish should smell fresh!* Allow 1/2 pound dressed fish (head and entrails removed) or 1/3 pound fish fillets or steaks per serving. Raw shellfish purchased in the shell should be alive. If you intend to purchase shellfish in shucked or picked form, ask your 4-H leader or Extension Agent for guidance. Allow 1/6 quart (2/3 cup) shucked oysters and clams or 1/4 pound crabmeat, scallops, or shrimp (cleaned) per serving.

Unlike other animal foods, fish do not have to be inspected. Inspection is done at the request of the seafood processor by qualified inspectors of the United States Department of Commerce (USDC). USDC inspectors can use two marks or shields on products. The Packed Under Federal Inspection mark (PUFI), indicates that an inspector was on-site when the processing was done and the Grade Shield indicates the product quality. Since this inspection program is voluntary, many fish products are not inspected; but lack of inspection is not an indication of low quality.



Meat and Fish Storage

Keep meat clean and cold — in the refrigerator (35° to 40° F) or in the freezer (at 0° F or below). The cold temperature slows down changes that affect eating quality and cause food spoilage.

Prepackaged meat may be refrigerated in its original transparent wrapper for 1 to 2 days. For longer refrigerator storage, rewrap the meat loosely so that air will circulate and dry the meat surface slightly.

Fresh sausage, ground meats, variety meats, stew meats, and poultry are highly perishable and should be used within 1 to 2 days of purchase.

Fish are highly perishable and should be kept in the refrigerator or freezer until used. Fish can be stored varying lengths of time depending on the kind and form purchased and, if frozen, the method used. In general, fresh finfish or thawed finfish should be used within 24 hours.

Meat Alternates

A number of foods other than meat contribute protein to the diet. Mature beans and peas are popular meat alternates. Peanuts belong in the pea and bean family.

A serving of this hearty peanut soup with a deviled egg would supply the protein needed in a meal.

Peanut Soup

2 tbsp butter	1/2 cup peanut butter
2 tbsp grated onion	1/4 tsp salt
1/2 cup celery, thinly sliced	2 tsp lemon juice
2 Tbsp flour	2 Tbsp chopped roasted peanuts
3 cups chicken broth	

Melt butter in a saucepan over low heat; add onion and celery. Saute for about 5 minutes. Add flour and mix until well blended. Stir in chicken broth and simmer for about 30 minutes. Remove from heat; strain broth. Stir the peanut butter, salt, and lemon juice into the strained broth until well mixed. Serve hot. Garnish each cup with a teaspoon of chopped peanuts.

VEGETABLE-FRUIT GROUP

Congeaed Salads

Congeaed salads may be molded into a variety of shapes. Baking pans, mixing bowls, and measuring cups can be used for molds as well as utensils especially designed for that purpose.

Dissolve gelatin in liquid. Let set until consistency of thick egg white. Add other ingredients. Pour into mold. Chill until firm.

To unmold, first dip the point of a knife in warm water and then run it around the top edge of the mold to loosen gelatin mixture. Or moisten fingertips and gently pull mixture away from top edge of mold. Moisten a chilled plate or platter to make it easier to center unmolded salad.

Dip the mold in warm water for about 10 seconds. Lift from water, hold upright and shake slightly to loosen the salad from the mold. Invert moistened plate on mold. Then invert plate and mold together. Lift off mold carefully. Garnish with salad greens and serve.

You will find many ideas for combinations of foods in congealed salads. Try several. Make copies of the recipes you like for your collection.

Freezing Vegetable

Most vegetables that are served cooked can be frozen with good results. Lettuce, cabbage, tomatoes and other salad type vegetables lose their crispness on freezing and thawing. Fresh, tender vegetables straight from the garden are best for freezing.

Wash vegetables thoroughly in cold water. Lift them out of the water and drain. Peel, trim and cut into pieces as needed.

Heat or "blanch" before freezing. Heating slows down or stops the action of enzymes which cause vegetables to mature. If enzyme action is allowed to continue, changes in the texture, color, and flavor of the vegetables may occur. Heating also wilts or softens vegetables and makes them easier to pack.



The time required to stop enzyme action depends on the size of the piece. Green peas need to be blanched only 1½ minutes but corn on-the-cob should be heated 7-11 minutes. Timing is very important. If the vegetable stays in the hot water too long, it will have a cooked flavor. Plunge the blanched vegetable into ice cold water to stop the cooking action.

Package, label, and freeze. Store at 0°F. or lower. See USDA Home and Garden Bulletin No. 10, "Home Freezing of Fruits and Vegetables" for more specific directions for individual vegetables.

You may give a demonstration on preparing a vegetable for freezing at a 4-H project or club meeting.

BREAD-CEREAL GROUP

Muffins and biscuits are just as good for dinner as for breakfast, lunch, and supper. You may want to perfect your skills for making these quick breads.

Or you may want to try your hand at making yeast breads. Try this recently developed meth-

od of making rolls.

Dinner Rolls

2¾ to 3¼ cups unsifted
all-purpose flour

¼ cup sugar
½ teaspoon salt

1 package active dry yeast
5 Tbsp softened butter or
margarine
2, 3 cup very hot tap water
1 egg

Put ¾ cup of the flour, the sugar, salt and undissolved dry yeast in a large bowl. Blend with electric mixer set at low speed. Add softened butter or margarine. Using medium speed of mixer, gradually mix in very hot tap water. Scrape down the sides of the bowl occasionally. Mix 2 minutes from time you started adding water. Add egg and an additional cup of flour. Beat at high speed 2 minutes, scraping bowl occasionally. Stir in enough additional flour to make a soft dough. Dough will still be sticky at this stage but should not cling to sides of bowl.

Turn dough out onto a lightly floured board or pastry cloth. Sprinkle a little flour on your hands. Pick up the edge of the dough farthest away from you and fold over on top of the edge nearest you. With the heels of your hands, push the dough away from you using a rocking, rolling motion. Press lightly as you push. With both hands, turn the dough a quarter turn on the board. Repeat folding, pushing, and turning until the dough is smooth and elastic. Work in as little flour as possible. The softer the dough, the better the rolls.



Place the dough in a greased bowl, turning to grease top. Cover the bowl with a clean towel. Set in a warm place (about 85° F.) until doubled in bulk, about 1 hour. Test by sticking a finger about ½" into the top of the dough. If the dent stays when you pull your finger out, the dough is light enough to be called "doubled in bulk." If the dent fills immediately, let the dough rise about 15 minutes longer and test again.

When the dough has doubled in bulk, punch

down by pushing your fist into the center of the dough. Then pull the edges of the dough to the center and turn the dough so the bottom is up. Divide into 2 balls. Let the dough rest 5 to 10 minutes before shaping.

When ready to shape, put ball of dough on lightly floured board or pastry cloth. Flatten with your hands or a rolling pin to a $\frac{3}{8}$ " thickness. Cut into 1" squares. Place squares in a greased baking pan. Leave about $\frac{1}{2}$ " of space between squares. Cover baking pans. Set in warm place until doubled in bulk, 45 to 60 minutes. Brush rolls with melted butter or margarine. Bake at 400° F. for 10 to 15 minutes. Makes 2 to 3 dozen rolls.

This dough can be shaped in many different ways. Your 4-H leader, Extension Agent, and mother can show you how to make other shapes. You might demonstrate shaping rolls at a 4-H project or club meeting or for other interested groups.

Cakes

Cakes are divided into 2 groups: shortened and foam. Shortened cakes usually contain a chemical leavening agent. Foam cakes are leavened by incorporating air into eggs. True angel food and sponge cakes contain neither shortening nor chemical leavening. Shortened cakes are sometimes called white, yellow, or gold depending on whether egg whites, whole eggs or egg yolks are used.

The method of combining ingredients is quite important in making cakes. There are 3 major ways of combining ingredients. The **conventional** method is probably the oldest method. The shortening is creamed until soft and plastic. Sugar is then added gradually while creaming continues until the mixture is light and fluffy. Eggs or egg yolks are beaten into the creamed mixture. Dry ingredients and milk are added alternately. Beaten egg whites are sometimes folded in as the final step.

In the **muffin** method, the egg, milk and melted shortening are combined, then beaten with the dry ingredients until smooth. This method is quick but the cakes are not of as high quality as those made by the conventional method.

Probably the most popular method is the **one-bowl** method. All of the ingredients are combined in 1 or 2 steps. If a second step is used, part of the liquid and the eggs are added after some of the beating has been done.

Recipes developed for the one-bowl method usually contain higher proportions of sugar and liquid than recipes for the conventional method. Cake mixes are prepared by this method.

You will want to learn to bake good cakes. You may ask your 4-H leader or mother to help you. You might start with a commercial cake mix. After you have learned to make good cakes from mixes, select a recipe from a cookbook and

start from the beginning. We often describe this as "starting from scratch."

Judging Cakes

These are the characteristics of a good cake made with fat and a leavening agent, whether made from a mix or from scratch. How does yours rate?

	Good	Fair	Poor
Appearance			
Texture			
Flavor			

Butter Cake

Appearance—Layers should be light and of uniform size with straight sides and slightly rounded tops. The crust should be smooth and fine grained, not cracked, sticky, sugary, pale, or burned.

Texture—The texture should be fine and even grained, smooth and velvety throughout. The crumb should be tender and moist and should not crumble when cut.

Flavor—The flavor should be delicate, sweet, and well blended. No one ingredient should stand out.

MEAL PLANNING

Meals should do more than nourish the body. They should appeal to the senses. Eye and taste appeal of a meal influence whether it will be eaten and enjoyed. A glance or sniff is often sufficient to stimulate or inhibit the appetite. Unappetizing looking and tasting food may be rejected no matter how nourishing.

When you plan a meal, try to picture the way it will look and taste.

Flavor—Avoid several strong or distinctly flavored foods in the same meal. But a meal made up entirely of mild flavored foods lacks zest.

Taste—Looks are not everything. Food must taste good, too.

A meal pleases most when several taste sensations are felt.

Texture—Some textures such as smoothness, crispness, and moisture are pleasant. Others such as lumpiness, dryness, and stringiness, are not.

Provide an assortment of pleasant textures in each meal.

Color—A pleasing combination of colorful foods makes meals more appetizing. Use art principles when planning meals. Avoid the monotony of foods of all one color. Scrambled eggs will be less appealing when served with corn than with a few slices of tomato.

Form or Shape—A meal made up of foods in similar forms is likely to be uninteresting.

Vary the shapes of vegetables, especially those served frequently. Carrots can be cut in circles, strips, chunks, halves, or left whole.

Limit the number of mixed dishes in a meal. Avoid serving a combination such as beef stew with a mixed vegetable salad.

Temperature—Serve hot foods hot and cold foods cold for maximum appeal.

Generally include both hot and cold foods in one meal.

Meals are usually planned around the main dish or chief protein source. Other foods in the meal should complement the main dish and supply needed nutrients.

Main Dish

Starchy Vegetable or Cereal Product

Fruit or Vegetable

Salad

Beverage

Bread

Dessert