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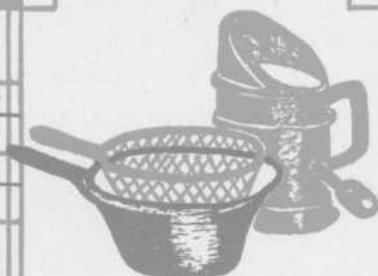


University of Arizona

COLLEGE OF AGRICULTURE
AGRICULTURAL EXTENSION SERVICE

ARIZONA MEALS THE 4-H WAY THIRD YEAR

From the Office of
The Extension Nutritionist



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CHAS. U. PICKRELL, *Director*

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ARIZONA
MEALS THE 4-H WAY
THIRD YEAR

BY LOLA T. DUDGEON*

THE FOUR-H CLOVER AND THE ROSE

The four-H clover for the junior clubs,
Like roses for the month of June,
Has a meaning of the highest worth
For our country and our home.
There is skill and training for the best
In the field that beckons all;
'Tis the life on the farm where roses bloom,
And the trees in the woods grow tall.

The H in the clover leaf which stands for Head
Always signals thinking clear and true;
The one for Hands speaks of deeds well done,
While the Heart H throbs anew
With kindness, sympathy, and joy
In the life that the Health-H gives;
And the rose stands for love with service true
In the Home where the Farm Girl lives.

—Harriet F. Johnson

Arizona Meals the 4-H Way—Third Year has been planned for 4-H members between the ages of twelve and twenty. It is a continuation of *Arizona Meals the 4-H Way—First Year* and *Arizona Meals the 4-H Way—Second Year*. In the first and second years you learned how to plan your work so that you could easily prepare and serve a variety of foods. You learned how to measure accurately, wash dishes correctly, and how to set a table. You also learned good table manners and kitchen etiquette.

By the end of your third year of meal planning, the family should be able to depend upon you for a good

*Extension Nutritionist, September, 1941, to October, 1943.

share of the planning, preparing, and serving of the meals.

Just for your own satisfaction, should you like to check yourself to see how much you have learned? If so, answer the questions which follow.

ACHIEVEMENT CHECK SHEET

	Check	
	True	False
Example: A very hot oven is always best for baking.		✓
1. One egg should be included in each day's meals.		
2. Biscuits have a better texture when kneaded a few strokes.		
3. Milk is the best food for building bones and teeth.		
4. An apron should be used to handle hot pans and dishes.		
5. Flour is never sifted before it is measured.		
6. Three level teaspoonfuls equal one tablespoonful.		
7. It saves time to collect and arrange foods and utensils before beginning work.		
8. Hot foods should be served hot and cold foods cold.		
9. Enriched flour supplies body-building and body-regulating material.		
10. For accurate measuring, a teacup may be used.		
11. Citrus fruit or tomatoes should be eaten every day.		
12. Almost all foods needed for a satisfactory diet can be produced on the farm.		

	Check	
	True	False
13. Muffins should have peaked tops.		
14. A whole slice of bread should be buttered at once.		
15. Eggs are best cooked at low temperatures.		
16. One should not hesitate to enter a conversation with food in his mouth.		
17. The water in which vegetables are cooked should be used in soups, sauces, or gravies.		
18. Table decorations should be high and large.		
19. One should sit down at the table and begin to eat immediately.		
20. Four-H boys and girls doing hard work should eat light breakfasts.		
21. When too much sugar is eaten, it is stored in the body as fat.		
22. Meat is an important body-building food.		
23. After the silver has once been used during a meal, it is not again laid on the tablecloth.		
24. It is not important to scald dishes after washing them.		
25. Regular health habits and correct food habits are necessary for an attractive appearance.		

THIRD-YEAR REQUIREMENTS

1. Score the food you eat for one day at the beginning and one day at the end of the project on the Daily Food Guide.

2. Plan, prepare, and serve at least twelve different foods at home, three from each group—meats, vegetables, cakes, yeast rolls.
3. Plan, prepare, and serve the meals for the family for at least two days (six meals). Record on the record sheet on page 64 the meals prepared and served.
4. Exhibit on Achievement Day or at a fair or at a public meeting one of the following:
 - a. A well-planned dinner for a 4-H Club boy or girl. This may be exhibited as a poster, by food models, or by fresh food. Do not use food that cannot be used afterward, or
 - b. Well-selected table covers suitable for a regular or holiday meal, or
 - c. Any exhibit which is acceptable to your leader and the home demonstration agent.
5. In this book and in your Home Economics Record Book keep a record of the things you do.
6. Give one demonstration or assist with one at a club or community meeting.

SUGGESTIONS FOR ADDITIONAL PROBLEMS

1. Have a physical examination.
2. Have a dental examination.
3. In addition to the twelve different dishes you prepare, prepare twelve more of your own choice from the various recipes in your 4-H Club bulletins.
4. Collect illustrations on correct table setting, decorations, and attractive ways to serve foods. It is suggested that these be mounted in a scrapbook.
5. Help your brothers and sisters to form good food habits.
6. Be responsible for the washing and ironing of the table linen at home.

FOOD AND HEALTH

THE FOOD WE EAT

In your second-year work you learned that the food we eat supplies materials to our bodies for *building* or *growth*; for *energy* to work and play; for *regulating* our bodies or for keeping them in working order.

BUILDING MATERIAL

Body-building materials are of two kinds, *protein* and *mineral*.

Protein is the building material out of which muscle, skin, nerves, glands, and other tissues are built. As long as you are growing, protein is needed to build new cells and replace the old ones as they wear out. Grown-ups need protein to repair and replace worn-out tissues.

Foods which supply the best quality of protein are meats of all kinds, milk, cheese, and eggs. Dried peas and beans, especially soybeans, and peanuts supply a good-quality protein. Our bodies will be able to use the protein of dried beans better if an extra glass of milk is included with the meal. Cereals provide some protein but they too need to be supplemented with milk, cheese, or eggs. The same foods that supply proteins are also good sources of many of the minerals needed. Minerals, which are also body-building materials, are discussed below.

ENERGY MATERIAL

Energy material is supplied by fats, sugars, and starches. Sometimes these foods are called fuel foods because they make our bodies "go," just as gasoline makes the family car go. Everything we do, even such simple action as blinking the eyes, uses some energy. The more strenuous the activity, the more energy we shall need. For example, 4-H Club members will need much more food fuel in helping with the roundup than in operating a sewing machine.

Foods that are good sources of energy are all kinds of fats, peanut butter, cream, sugar, cereals, cake, pie, candy, and ice cream. When we eat more fuel food than we need, the surplus is stored in our bodies as fat. Then any time we have not eaten enough fuel food our bodies will use the stored fat for energy.

BODY-REGULATING MATERIAL

Body-regulating materials are *minerals* and *vitamins*. Minerals have been mentioned as building material for our bodies. They are also needed in the everyday work of our bodies. We must select our food so that the minerals will be supplied each day. The minerals you hear most about in nutrition are described below.

1. *Calcium* is essential for building bones and teeth and for the regular beating of the heart and the clotting of blood. Milk is our best food source of calcium. Unless we use the amount of milk indicated in the Daily Food Guide, it is doubtful whether we can get our daily requirement of this important mineral.
2. *Phosphorus* is essential for building bones and teeth; it is a part of every cell in the body. Good sources of phosphorus are milk, meat, eggs, and dried beans.
3. *Iron* is essential for building good red blood. Foods which are good sources of iron are whole-grain cereals, green leafy vegetables, dried beans, meat, especially liver, kidney, heart, and eggs.
4. *Copper* helps iron to build blood efficiently. It is found in those foods containing iron.
5. *Iodine* controls the use of foods by our bodies. It is found chiefly in sea foods.

The second group of body-regulating materials is known as *vitamins*. Although they are very important to our health, we need only a very small amount of them. They cannot be substituted for one another.

Vitamin A is necessary for growth and good health at all ages. It prevents night blindness and keeps the mucous membrane healthy throughout the body. This important vitamin is found in liver, eggs, butter, yellow fruits and vegetables, and leafy green vegetables.

Vitamin B complex is now known to contain several vitamins—important ones, too. The first one is *thiamine*

which we need for a good appetite and the proper digestion of the food we eat. There is much thiamine in whole-grain cereals and lean meat, especially pork.

The second B vitamin is *riboflavin*. It is needed for health and growth. If the body gets too little, ugly sores may form around the mouth and the eyes may see dimly, be bloodshot, and be pained by the light. Riboflavin is found mostly in meats, especially organ meats, milk, eggs, and leafy green vegetables.

The third vitamin, and a very important one, too, is *niacin*. It is necessary for the health of the skin and the nervous system. A lack of niacin in our daily food causes a disease known as pellagra. There will be little danger of this disease if we follow the Daily Food Guide and include meat, milk, eggs, and vegetables in our daily meals.

Vitamin C is needed for good teeth, healthy gums, strong blood vessels, and protection of the body against disease. The wounds of soldiers on the battle front heal more quickly when the soldier has had plenty of this vitamin. Arizona is fortunate to have oranges, grapefruit, cantaloupes, and tomatoes to supply vitamin C the year round. Strawberries, new potatoes, and cabbage all contain vitamin C.

Vitamin D, or the sunshine vitamin, is needed for the building of strong bones and good teeth. It is made in our bodies if we allow our skin to be exposed to the sun. It is fortunate that our bodies can manufacture their own supply of this vitamin, since it is found in very few foods. The best food source is the fish liver oils.

As we have mentioned the various foods supplying these necessary elements for growth, for energy, and for regulating the body processes, all the foods mentioned in the Daily Food Guide have been covered. You can readily see that our bodies require a variety of different foods to keep them in good working order.

Assignment

1. *Keep a record of the food you eat for one day and check on the Daily Food Guide below. Can you score 100?*
2. *Review "Meal Preparation and Serving" in the bulletins covering first- and second-year work.*

DAILY FOOD GUIDE

For health eat some foods from each group every day. After eating these foods, eat any others you want.

Food groups	My score	
	At the beginning	At the end
1. Leafy yellow or green vegetables , two or more servings, one raw....	Yes or No*	Yes or No
2. Tomatoes, oranges, grapefruit, or cantaloupe , one or more servings		
3. Potatoes and other vegetables or fruits , two or more servings..... ..		
4. Milk —children 4 cups, adults 2 cups or more, expectant or nursing mothers 4 cups or more.....		
5. Eggs , one or at least four per week; meat, poultry, fish, cheese, or dried beans , one serving.....		
6. Cereals , one or more servings of whole-grain cereals and whole-wheat or enriched bread at every meal.....		
7. Butter and fortified margarine		
My score is		

To make my score 100 I should eat _____

*"Yes" in each group equals a total score of 100. Deduct 15 points for each "No." A score of 100 is excellent; a score of 85 is good; a score of 70 is fair; a score of 55 is poor.

PREPARING THE TABLE AND SERVING THE MEAL

TABLE LINEN

The term table linen is used to refer to tablecloths, luncheon cloths, runners, place mats, and napkins made of linen, cotton, rayon, oilcloth or other materials used on dining-room tables. Regardless of the material of which the table linen is made, it must be fresh and clean to have an attractive table.

LAUNDRING TABLE LINENS

Cotton or linen.—Cloths may be washed with the family washing in the washing machine. Should the linen be badly soiled, cover it with lukewarm soapy water and soak it over night. In the morning remove it from the water in which it was soaked and place it in the washing machine in soapsuds as hot as the hand can bear. The linen may need to be washed through a second suds. It should be thoroughly rinsed in plenty of hot, clear water. After you wring it from the rinse water, hang it to dry in the sunshine, if possible. The cotton materials will iron better and appear fresher if they are dipped in a very light starch after rinsing.

Rayon cloths.—Table linen made of rayon should be washed separately. Make a suds with a mild soap, using lukewarm water. Wash quickly, squeezing the suds through the fabric. Rinse thoroughly in lukewarm water, gently squeeze out the water, and roll it in a Turkish towel until the excess moisture has been removed. Iron it with a warm iron.

REMOVING STAINS FROM TABLE LINEN

Frequently table linen is stained by spilled food, including tea, coffee, cocoa, fruits, and berries. The first rule for success in removing a stain is to begin while it is fresh—even before it dries, if possible. Hot soapsuds or heat of an iron sets some stains so that it takes strong treatment to remove them.

Coffee and tea.—Remove fresh stains from washable materials by pouring boiling water on the stain from a height of 2 or 3 feet, then washing the article in warm, soapy water. If a trace remains, dry in the sun or bleach with hydrogen peroxide and sodium perborate.

Fruits and berries.—Treat fruit and berry stains immediately, if possible. Boiling water, or sometimes even warm water, will remove most fruit stains. It is better not to use soap, as alkalis set some fruit and berry stains. Use the same method for removing stains of cooked fruits and berries as for fresh.

For removing other stains refer to *U.S.D.A. Farmer's Bulletin No. 1474*, which may be obtained from the office of the County Extension Service.

OILCLOTH OR OTHER WASHABLE MATERIALS

Oilcloth covers, runners, or place mats are easily cared for by wiping them with a damp cloth after each use. Plastic, cork, and straw place mats may also be wiped with a damp cloth.

IRONING TABLE LINEN



Plate I.—Linen and cotton materials should be well dampened several hours before ironing.



Plate II.—Iron linen on the wrong side, placing the hemmed edges parallel with the ironing board. A place mat is ironed without folds.

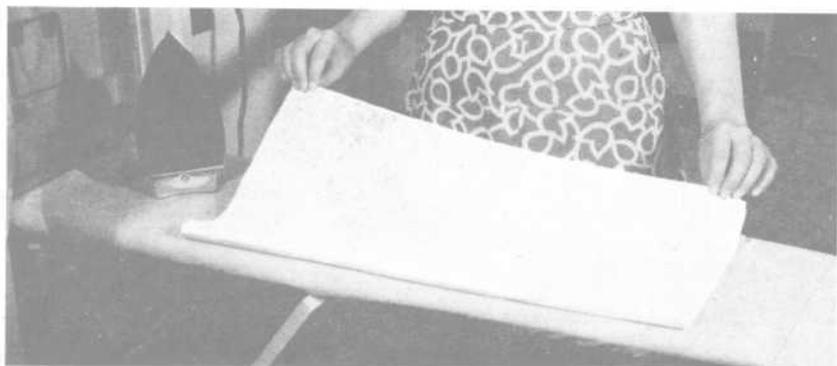


Plate III.—In ironing a napkin, fold the hemmed edges together with the top one a little short of the bottom edge. Keep the hems next to you. Iron the top side.

To iron a tablecloth, make the fold lengthwise through the center. Iron it on both sides and roll it so it will have no other folds. A pasteboard roll is excellent for rolling a tablecloth.



Plate IV.—Bring the folded edge over to the hemmed edges. Fold just short of the hemmed edge and iron the top side.



Plate V.—Fold the right-hand selvage of the folded napkin to within $\frac{1}{4}$ inch of the left-hand selvage and iron.



Plate VI.—Bring the folded edge of the right-hand side to within $\frac{1}{4}$ inch of the selvage and press.



Courtesy of Agricultural Extension Service, State College of Washington

Plate VII.—Turn the napkin over and iron the top side. Thus the ironed napkin is folded so that when it is placed on the table the hemmed edge is parallel to the edge of the table and the selvage edge next to the fork. As it is transferred to the lap, it opens correctly.

TABLE SETTINGS

(Continued from First- and Second-Year *Arizona Meals the 4-H Way*.)

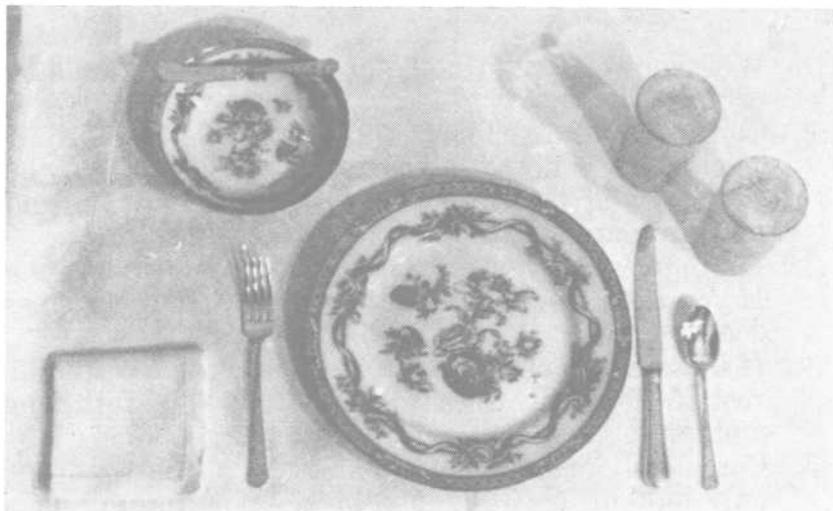


Plate. VIII.—An attractive table setting where a white linen damask cloth is used.

The individual butter spreader is placed across the edge of the bread-and-butter plate, parallel to the edge of the table.

The salad plate is usually placed at the left and below the bread-and-butter plate. If the salad is served with a dinner, a salad fork is not necessary.

The cup and saucer are placed at the right, with the handle of the cup to the right.

Salt and pepper shakers may be set between each two places or near the ends of the table.

If the father does the serving, the platter and the necessary silver are placed in front of him; the vegetable dishes will be placed at his right and left or in front of another person who will serve the vegetables.

Coffee, tea, or cocoa may be served with the main course, with dessert, or at the end of the meal. It may be served at the table or from the kitchen, as your family may decide. If the beverage is served at the table, the cups and saucers may be placed in front of the person who is to serve it.

MORE TABLE COURTESIES

“Politeness is to do and say the kindest thing in the kindest way.”

1. Whether you are at home or a guest, you should be prompt at meals.
2. Confusion and embarrassment will be avoided if everyone sits down at the table and rises from the same side of the chair, usually the left side. Stand by your chair until everyone is ready to sit down.
3. Begin to eat only when your father and mother do so. If you are a guest, you begin to eat when the hostess does.
4. If it is necessary for you to leave the table while the rest of the family are still eating, ask your father or mother to excuse you.
5. Completely unfold the napkin if it is a small one, but only half unfold it if it is large. The unfolding is done below the level of the table. If you use the napkin at only one meal, it is left at the table partly folded; but if you are to use it a second time, refold it and place it at the left of your place.
6. When you eat soup, dip the spoon away from you and sip quietly from the side of the spoon.
7. Hold your glass near the bottom. The hands should not touch the edge which comes in contact with the mouth.
8. Use the spoon to test a hot beverage, or to stir it, if necessary; then place it on the saucer.
9. Always use the serving silver to serve food from the platter or vegetable dish to your plate.
10. Never reach in front of a person.
11. Take part in mealtime conversations. They should be pleasant and of general interest.
12. You may read at the table only when you are eating alone.
13. Should you have an accident at the table, such as tipping over a glass of water, simply express a regret. Do not continue to talk about it or a similar experience.

14. When you wish a second serving, place your knife and fork on one side of the plate before passing it. After silver has been used it is never laid on the tablecloth.
 15. The cost of food is not discussed at the table.
 16. If you are asked to express a choice of food, as ice cream with or without chocolate sauce, do so at once.
 17. If you feel that certain important table manners have been omitted in either the first-, second-, or third-year bulletin, add your suggestions in the space provided below.
-
-
-

Assignment:

1. *Plan with your mother to wash and iron the table linens used by your family.*
2. *Read the section on meat in this bulletin.*
3. *Review the section on meat in Arizona Meals the 4-H Way—Second Year.*

MEAT

You have learned that meat is a body-building and body-regulating material. The body-building materials which it supplies are protein and minerals. Meat, as eggs and milk, furnishes our bodies with the very best kind of protein. The minerals which are found in meat not only serve as building material, but they help regulate the body-processes. Meat also supplies vitamins to help regulate the body-processes. The vitamins most important in meat are the B vitamins. However, the livers from all meat animals are very rich in vitamin A.

COOKING MEAT

Upon the cook rests the responsibility of preparing the meat so that it retains the valuable food materials it contains, tastes good, and looks attractive. To do this you will need to know two things about the meat you are preparing.

1. Whether it is a tender or a less-tender cut.
2. The best methods of cooking tender and less-tender cuts.

Tender cuts usually include prime ribs and loin roasts, porterhouse and sirloin steaks from beef; leg of lamb; chops from pork, lamb, veal, and chevon;* fresh ham. The other cuts of meat from the various animals will be called the less-tender ones. The tender cuts come from the muscles which are used very little by the animals, and the less-tender from the muscles which are used a great deal. It must be remembered that the less-tender cuts have more good flavor than the tender ones. Regardless of cut, if you want good, tender, juicy, tasty meat, it is important that you cook it at a *low temperature*.

TENDER CUTS OF MEAT

There are three ways to cook tender cuts of meat: roasting, broiling, and pan broiling. See illustrations of broiling and pan broiling in your *Arizona Meals the 4-H Way—Second Year*. The illustrations on page 19 show how to roast meat step by step. If you follow the instructions as they are given, your roasts will make you a popular cook with your family.

If you do not have a meat thermometer for roasts, ask your mother to help you decide when it is done. If beef is roasted at the oven temperature suggested (300-350° F.), it will require about 20 minutes per pound, if you like your beef rare; about 25 minutes per pound for medium-well-done beef; about 30 minutes per pound for it to be well done.

When your roast is pork, veal, or lamb, follow the steps outlined for roasting beef. It should, however, be cooked to the well-done stage. A whole ham, leg of lamb, veal, or chevon will require about 30 minutes per pound for roasting. A temperature of 350 degrees F. is recommended for pork. If it is only half a ham you will need to allow a little more time per pound for the roasting.

*Goat meat.

ROASTING

Plate IX.—Wipe meat with a damp cloth. Rub it with salt and pepper. Insert meat thermometer so that bulb reaches center of the largest muscle.

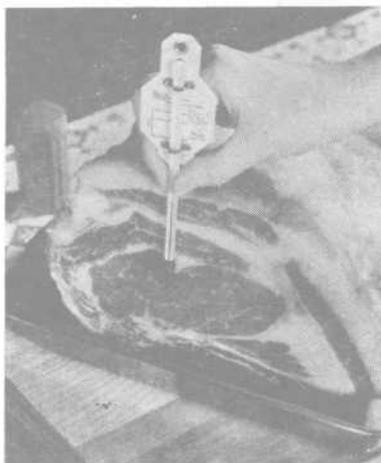


Plate X.—Place roast on rack, or on standing ribs as shown in the picture, fat side up, in an open roasting pan. Do not add water, do not cover, do not baste.



Plate XI.—Roast at a moderate temperature (300-350° F.).





Courtesy of the National Livestock and Meat Board

Plate XII.—Place on heated platter. To serve, slice from the outside edge across the grain toward the ribs.

LESS-TENDER CUTS OF MEAT

The less-tender cuts of meat are from the muscles of the animal which are used more often. These cuts are used for pot roasts, stews, Swiss steaks, and soups. They are cooked by moist heat rather than by the dry heat which is suitable for tender cuts. However, if the less-tender cuts are ground, they may be cooked the same as tender cuts.

The illustrations on pages 21 and 22 show the step-by-step preparations in pot-roasting. This is the method by which those delicious Swiss steaks are prepared.

When you plan to have a stew, follow the instructions on pages 22 and 23. To have an especially tasty stew, be sure that you have kept the temperature below the boiling point and that the vegetables have not been overcooked.

Swiss Steak

Ingredients

- 3 pounds round steak,
1 or 2 inches thick
- 3 tablespoons melted suet
- $\frac{1}{2}$ cup flour
- $1\frac{1}{2}$ teaspoons salt
- $\frac{1}{8}$ teaspoon pepper
- $2\frac{1}{2}$ cups hot tomato juice
or pulp or hot water

Utensils

- Skillet or heavy kettle
- Meat pounder
- Measuring cup
- Measuring spoons
- Flour sifter

1. Wipe the meat with a damp cloth.
2. Sift the flour, salt, and pepper together and beat them thoroughly into the steak with a meat pounder or the edge of a saucer.
3. Cut the steak into individual portions, if desired.
4. Brown the meat in the moderately hot fat in a heavy skillet or kettle.
5. Cover the meat with the tomato juice or pulp or hot water and *simmer* in the covered skillet or kettle until it is tender enough to be cut with a fork.

Note:—If the gravy becomes too thick, add a little hot water from time to time. If your family likes onions with Swiss steak, brown them and cook them with the meat.

TO POT-ROAST

Plate XIII.—Season meat with salt and pepper. Dredge with flour, if desired.



Plate XIV.—Brown meat on all sides in hot fat.





Courtesy of the National Livestock
and Meat Board

Plate XV.—Add a very small amount of liquid. Cover with a tight-fitting lid. Cook below the boiling point until tender. Meat should never boil. Pot roasts may be baked in a tightly covered pan.

Country Boiled Dinner (Stew) (6 servings)

Ingredients

- 1½ pounds short ribs of
pork or beef
- 1 tablespoon salt
- ½ teaspoon pepper
- 2 bunches carrots
- 8 onions
- 8 potatoes
- Small head of cabbage

Utensils

- Clean cloth for wiping
meat
- Kettle or saucepan
- Measuring spoons
- Paring knife

1. Wipe the meat with a damp cloth. Cover it with water and allow it to simmer until it is nearly tender—about one and one half hours. Season it.
2. Prepare the vegetables and add the carrots and onions whole.
3. Cook fifteen minutes and add the potatoes whole.
4. Cook twenty minutes and add quartered cabbage. Cook until the cabbage is done.

Curried Lamb or Chevon (6 servings)

Ingredients

- 2 pounds lean lamb or kid
shoulder
- 4 tablespoons butter
- 1 clove garlic

Utensils

- Clean cloth for wiping
meat
- Kettle or saucepan
- Measuring spoons

- 1 large onion
- $\frac{1}{4}$ cup flour
- 1 or 2 tablespoons curry powder
- 1 medium-sized apple
- $\frac{1}{4}$ cup chopped celery

Measuring cup
Paring knife

1. Wipe the meat with a damp cloth.
2. Cover it with water and simmer until it is tender—about one hour. When it is cool, cut it into small cubes, removing all fat.
3. Melt the butter and add the chopped garlic and onion; cook it slowly until the meat is brown.
4. Mix the flour and a small amount of water to a smooth, thin paste and add. Cook until smooth, adding more water or lamb broth if necessary.
5. Add the chopped apple and celery and curry powder to taste. Cook for about 10 minutes.
6. Combine the sauce with the cooked lamb. Cook it slowly for about twenty minutes, until the flavors are well balanced.
7. Serve with steamed or boiled rice.

COUNTRY BOILED DINNER (STEW)



Plate XVI.—Brown meat on all sides, if desired, in its own fat or hot lard.



Plate XVII.—Cover with water. Cover kettle and cook below boiling point until tender. Meat should never be boiled.



Courtesy of the National Livestock
and Meat Board

Plate XVIII.—If vegetables are added, they are put in just long enough before serving to become tender but not overcooked.

VARIETY MEATS

(ORGAN MEATS)

As special treats you may wish to serve your family some of the variety meats which include liver, kidneys, heart, brain, sweetbreads, tongue, and others. These meats are especially rich in vitamins and minerals.

Heart Fricassee (6 to 8 servings)

Ingredients

- 1 small beef heart, 3 pork,
4 lamb, or 2 veal hearts
- Flour
- $\frac{1}{4}$ cup bacon drippings or
lard
- 2 teaspoons salt
- $\frac{1}{4}$ teaspoon pepper
- $\frac{1}{2}$ cup sliced onion
- 1 cup diced carrots
- 1 cup canned tomatoes

Utensils

- Heavy sharp knife
- Skillet or kettle
- Paring knife
- Measuring cup
- Measuring spoon

1. Wash the heart and trim off any hard parts.
2. Slice it across the grain. Dredge it in flour and brown it in bacon drippings. Season.

3. Add onion and brown.
4. Add carrots and tomatoes and cover tightly.
5. Simmer about one and one half to two and one half hours, or until it is tender.

Braised Liver with Vegetables
(8 servings)

Ingredients

- 1½ pounds sliced liver
Flour
2 tablespoons bacon
drippings
6 carrots
2 green peppers
6 small onions
Salt and pepper
½ cup water

Utensils

- Skillet or kettle
Paring knife
Measuring cup
Measuring spoon

1. Dredge the liver with flour. Brown it in hot drippings.
2. Clean and dice the vegetables. Arrange them in piles on slices of liver. Add the seasoning.
3. Add water, cover and cook slowly until both vegetables and liver are done. Beef liver will take about forty-five minutes; the pork, lamb, and veal liver about thirty.

Brains Scrambled with Eggs
(8 servings)

Ingredients

- 1 pound brains
6 eggs
½ cup milk
¾ teaspoon salt
¼ teaspoon pepper
3 tablespoons bacon
drippings

Utensils

- Saucepan
Measuring cup
Measuring spoons
Egg beater
Skillet
Spatula or stirring
spoon

1. Wash the brains and simmer them for twenty minutes in water to which 1 teaspoon salt and 1 tablespoon vinegar have been added for each quart of water used. Drain.

2. Beat the eggs and add the milk, salt, and pepper.
3. Brown the brains in hot bacon drippings.
4. Add the egg mixture and cook slowly, stirring constantly.
5. Serve immediately.

When you prepare meat dishes, judge them according to the score card on meats.

SCORE CARD FOR JUDGING MEAT

Kind of meat.....				
	Yes or no	Yes or no	Yes or no	Yes or no
Appearance:				
Well browned (chops, steaks, roasts).....				
Plump (no shriveling)..				
Flavor:				
Flavor characteristic of kind of meat.....				
Well seasoned.....				
Texture:				
Tender				
Juicy				

What do you need to do to improve the meat which you prepared? _____

Assignment:

1. Plan three or more meals with your mother for the family. They should include at least three meat dishes, which you will prepare.
2. Record the meals in the space provided on pages 28 and 29. Record in your Home Economics Record Book the meats which you prepared.

3. *Check in the food group column to be sure you have included in your meals food from all the food groups.*
4. *Read the section on vegetables.*

WORK SHEET

FAMILY MEALS PLANNED WITH MOTHER
(Meats to be prepared by club member)

Example	Food Group	Date.....	Food Group
Breakfast:			
Fruit (orange).....	2		
Cereal (oatmeal)...	6		
Bread (whole-wheat toast).....	6		
Milk (cocoa).....	4		
Dinner:			
Meat or substitute*	5		
Potatoes	3		
Leafy green or yellow vegetable.....	1		
Raw vegetables or salad (tomatoes)	2		
Butter	7		
Bread (whole-wheat)	6		
Dessert (baked apple)	3		
Milk	4		
Supper or lunch:.....			
Main dish* (creamed eggs)...	4&5		
Vegetable (spinach)	1		
Bread and butter...	7		
Dessert (cake).....	--		
Milk or milk drink	4		

*Underline the meats you prepare.

Date.....	Food Group	Date.....	Food Group

VEGETABLES

Come, let us fill our garden beds
With spinach, chard, and cabbage heads;
For were we short of leafy greens,
What would we do for vitamins?

—Bob Adams.

NUTRITIVE VALUE OF VEGETABLES

How many different kinds of vegetables do you have in your 4-H garden? First, do you have carrots, spinach, green beans, peas, cabbage, Swiss chard, sweet potatoes, and broccoli? If you have all or some of them, they belong to Group One on the Daily Food Guide. Are there beets, onions, potatoes, summer squash, eggplant, and turnips? These vegetables belong to Group Three on the Daily Food Guide.

Since these foods are important enough for classification in the Daily Food Guide, shall we find out why they are so important? The vegetables in Group One are rich in both minerals and vitamins. Of the minerals these vegetables contain, iron is the the most important. Iron is especially important for boys and girls of your age because you are entering a period of rapid growth and development. It is most important to your appearance and general well being that you keep your blood in good condition at this time.

Plenty of iron-rich foods are needed for building up the blood. When you do not have enough iron in your food, you lack pep and your color is pale. Consequently, there should be some vegetables from Group One in your meals every day.

Along with the excellent supply of iron in these vegetables, there are large supplies of vitamins A and C. As you have already learned, these vitamins are necessary for healthy eyes, teeth, and tissues.

The vegetables in Group Three do not supply as much iron and vitamins as do those of Group One, but they do supply important amounts of these nutrients. The green tops of beets and turnips really belong to Group One, since they are very rich in iron and vitamin A.

COOKING VEGETABLES

Since vegetables supply important minerals and vitamins, we must take much care in their preparation and cooking to keep all the food materials in them.

Suggestions follow for preparing and cooking vegetables so they are attractive and tasty and important food materials are retained in them:

1. Gather the vegetables from the garden just before mealtime.
2. Plan to cook them in the skins as often as possible.
3. If they must be peeled, make the peelings thin.
4. Do not allow prepared vegetables to stand in water before putting them on to cook.
5. Start cooking *all* vegetables in salted boiling water.
6. Cook vegetables *only until* they are tender.
7. Cook all green vegetables in a small amount of water, leaving them uncovered the first few minutes. Then cover, if you wish.
8. Cook strong-flavored vegetables like cabbage, broccoli, cauliflower, Brussels sprouts, turnips, and onions in sufficient water to cover them and without a lid. This method will produce a product sweet and tender; it will also prevent that objectionable odor from lingering in the far corners of the house. These vegetables are also delicious and attractive when cooked in milk.
9. All other vegetables are cooked in a covered pan in just enough water to prevent scorching.
10. When cooking water is left from vegetables use it for gravies, sauces, or soups.

BOILED VEGETABLES PLAIN OR CREAMED

When vegetables are boiled, they are good seasoned with a little pepper, butter, or meat drippings. If your family likes creamed dishes, the vegetables may be combined with a white sauce, using two cups of vegetables to one of white sauce. This is a good way to serve left-over vegetables.

Five-minute Cabbage

<i>Ingredients</i>	<i>Utensils</i>
3 cups milk	Saucepan
2 quarts shredded cabbage	Measuring cup
3 tablespoons flour	Measuring spoons
3 tablespoons melted fat	Quart measure
Salt and pepper to taste	Small saucepan

1. Heat the milk; add the shredded cabbage and simmer for about two minutes.
2. Mix 3 tablespoons of flour with 3 tablespoons of melted fat.
3. Add a little of the hot milk to this blended flour and fat. Stir the mixture into the cabbage and cook for three or four minutes, stirring all the time.
4. Season with salt and pepper to taste and serve at once.

Succotash

<i>Ingredients</i>	<i>Utensils</i>
2 cups cooked green beans	Measuring cup
2 cups fresh cooked corn	Measuring spoon
2 tablespoons butter, salt, pepper to taste	Mixing spoon
	Saucepan

1. Combine vegetables and seasonings.
 2. Heat them thoroughly and serve at once.
- Note: Canned or dehydrated vegetables may be used instead of the fresh ones.

Baked Tomatoes

<i>Ingredients</i>	<i>Utensils</i>
6 tomatoes	Measuring cup
½ cup dry bread crumbs	Measuring spoons
2 tablespoons melted butter	Paring knife
½ teaspoon salt	Shallow pan

1. Select firm tomatoes of uniform size; wash them but do not remove the skins.

2. Cut a thin slice from the top and sprinkle over the cut tomato the crumbs, buttered.
3. Bake in a shallow pan in a moderate oven at 350 degrees, until the crumbs are brown.

ROOT VEGETABLES

Your 4-H vegetable garden will of course have root vegetables other than potatoes. The most popular one in Arizona is the carrot. Others which add pleasing variety to meals are beets, onions, turnips, rutabagas, and parsnips. These vegetables add body-building as well as body-regulating materials to your daily meals.

Some of these vegetables are frequently served raw. What about tender young onions with fresh homemade bread and butter? Could anything be better for a hungry 4-H-er after school? Carrots cut in strips for a relish or shredded with cabbage or diced apple in a salad are ways of serving raw carrots. Both rutabagas and turnips cut in thin sticks add variety to the relish dish.

Harvard Beets (6 servings)

Ingredients

- 1 tablespoon cornstarch
or 2 tablespoons flour
- 2 to 4 tablespoons sugar
- $\frac{1}{2}$ teaspoon salt
- $\frac{1}{4}$ cup vinegar
- $\frac{1}{4}$ cup water
- 2 tablespoons fat
- 3 cups cooked beets sliced
or diced

Utensils

- Saucepan
- Measuring cup
- Measuring spoons
- Paring knife
- Mixing spoon

1. Mix the cornstarch or flour, sugar, and salt.
2. Add the vinegar and water and boil five minutes, stirring constantly.
3. Add the fat and beets.
4. Let them stand four or five hours. Reheat them and serve at once.

Carrot Scallop (6 servings)

Ingredients

- 1 egg
- 1 cup milk
- 3 cups raw carrots, cut fine
- 1 tablespoon melted fat

Utensils

- Mixing bowl
- Egg beater
- Measuring cup
- Measuring spoons
- Paring knife
- Baking dish

1. Beat the egg slightly.
2. Add the milk, the grated, ground, or finely chopped carrots, the fat, and salt and pepper.
3. Pour the mixture into a greased baking dish and place the dish in a pan of hot water.
4. Bake in a moderate oven at 350 degrees until firm—about one hour.

Scalloped Onions and Peanuts

Ingredients

- 3 cups cooked onions
- 1 cup ground roasted peanuts
- 1 cup thin white sauce
- 1 cup bread crumbs
- 2 tablespoons melted fat

Utensils

- Food grinder
- Measuring cup
- Measuring spoons
- Saucepan
- Mixing spoon
- Baking dish

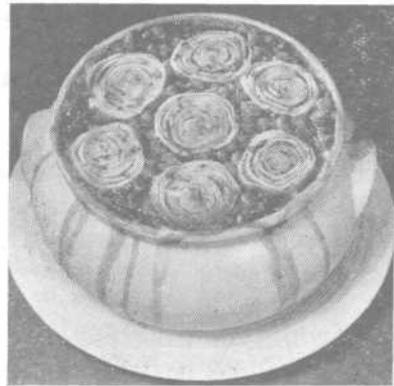
1. Cook the onions in boiling salted water until they are tender.
2. Make white sauce according to instructions on page 25 in *Arizona Meals the 4-H Way—Second Year*.
3. Grind the nuts.
4. In a baking dish place alternate layers of onions, peanuts, and sauce.
5. Cover the top with bread crumbs which were blended with the melted fat.
6. Bake in a moderate oven at 350 degrees until the crumbs are golden brown.

DRY BEANS, PEAS, AND SOYBEANS

In addition to the fresh vegetables, dry beans are important foods in our meals. They are so important as

- 1 teaspoon chili powder
- $\frac{3}{4}$ cup canned strained tomato
- 3 or 4 slices bacon or $\frac{1}{4}$ cup diced salt pork

1. Wash the beans; cover them with water and soak them overnight.
2. Heat to the boiling point the water in which the beans soaked; add the beans, garlic, and salt; simmer one hour.
3. Drain the beans, reserving the liquor.
4. Place the beans and whole onions in a pot or casserole.
5. Sprinkle the beans with sugar or molasses and chili powder. Cover them with the tomato and 1 cup of the reserved bean liquor.
6. Arrange bacon or onion slices on top. Cover.
7. Bake in a slow oven 300 degrees F. for five hours. If necessary, add more bean liquor.



Courtesy H. J. Heinz Co

Plate XIX.—Western baked beans.

Chili Con Carne (6-8 servings)

Ingredients

- $1\frac{1}{2}$ cups dry pinto or pink beans
- $\frac{1}{2}$ cup diced salt pork
- $\frac{1}{2}$ cup chopped onion
- 1 clove minced garlic
- $\frac{1}{2}$ pound ground lean meat
- 2 to 4 teaspoons chili powder
- 3 cups canned tomatoes
- Salt and pepper to taste

Utensils

- Saucepan
- Small frying pan
- Measuring cup
- Measuring spoons
- Paring knife

body-building foods that they have been included in Group Five of the Daily Food Groups.

The protein provided by dry beans will be better building material if an extra glass of milk is included with the meal. As does meat, these dry beans supply us with iron and the B vitamins.

PREPARATION

1. Pick over the beans or peas and throw out all bad ones.
2. Wash in cold water often enough to get out all grit.
3. Give dried beans and peas plenty of time to soak—overnight or until they double in size.
4. Use soft water, if you can, when you soak and cook beans. Hard water toughens the skins. Soda is not recommended.
5. Cook them in the water in which they are soaked to save the vitamins and minerals. Bring this water to a boil before you add the beans.
6. Keep the heat low as you cook beans and peas, simmer them gently for about three hours instead of boiling them. Watch the pot, too! Add boiling water from time to time.
7. To shorten the cooking time, dried beans may be cooked in a pressure cooker. Soak the beans as for boiling. Approximately thirty minutes at 15 pounds pressure in the pressure cooker will make the beans tender. Continued cooking for a few minutes in an open kettle will remove the pressure-cooker flavor, which some people find objectionable.

Note: Do not use a pressure cooker except under your mother's direction!

Western Baked Beans (8 to 10 servings)

<i>Ingredients</i>	<i>Utensils</i>
3 cups pinto beans	Saucepan
1 clove garlic, minced	Measuring cup
1 or 1½ teaspoons salt	Measuring spoons
2 small onions	Paring knife
½ cup brown sugar or sorghum molasses	Bean pot or Baking dish

1. Soak and cook the dry pinto or pink beans.
2. In another pan, fry (sauté) $\frac{1}{2}$ cup of diced salt pork until it is crisp.
3. Brown the chopped onion and minced garlic in the pork fat.
4. Add the ground lean meat, stir, and cook slowly for five minutes.
5. Add 2 to 4 teaspoons of chili powder.
6. Combine the meat, onion, salt pork, and tomatoes with the cooked beans.
7. Add salt and pepper to taste and simmer until the meat is tender and the flavors are well blended. Serve at once.

Kidney Bean Stew
(6 to 8 servings)

Ingredients

- 1 cup dried kidney beans
- 2 onions
- 2 potatoes
- 4 slices bacon or
 $\frac{1}{8}$ pound salt pork
- 2 cups canned tomatoes
- Salt and pepper to taste

Utensils

- Saucepan
- Small frying pan
- Measuring cup
- Paring knife

1. Soak the beans and cook them until they are nearly done.
2. Peel and slice the onions.
3. Cut the bacon or salt pork into small pieces and fry (sauté) it with the onions until they are light brown.
4. Peel and dice the potatoes.
5. Combine all the ingredients except the tomatoes; cook until tender.
6. Add the tomatoes and continue cooking until they are thoroughly heated. Serve at once.

Soybean Casserole
(6 to 8 servings)

<i>Ingredients</i>	<i>Utensils</i>
2 cups cooked soybeans	Measuring cup
1/3 cup diced salt pork or bacon	Measuring spoons
2 cups chopped celery; or 1 teaspoon celery seasoning	Saucepan
2 tablespoons minced onion	Frying pan
2 tablespoons minced green pepper	Mixing spoon
6 tablespoons enriched flour	Baking dish
2 teaspoons salt	
2 cups milk	
1/2 cup soft bread crumbs	

1. Cook soybeans the same as any dry beans. They are not as soft as other beans when they are done.
2. Brown the salt pork, add the celery, onion, and green pepper, and fry (sauté) until lightly browned.
3. Add thickening (made by mixing flour, salt, and milk), stirring it until it boils.
4. Add the cooked soybeans and continue stirring until the mixture thickens. Pour it into an oiled casserole.
5. Mix the bread crumbs and sprinkle them over the top of the soybeans.
6. Bake in moderate oven 350 degrees F. for thirty minutes.

(See score card on following page.)

Assignment:

1. *Plan with your mother three family meals. Prepare for these meals at least three different vegetables, including one dish of root vegetables other than potatoes and one dish of dry beans, peas, or soybeans.*

You may wish to refer to the directions for cooking vegetables appearing in Arizona Meals the 4-H Way—Second Year.

2. Record the meals in the space provided. Record in your Home Economics Record Book the vegetables which you prepared.
3. Check your meals to be sure all the food groups have been included.

Score the vegetables cooked at your club and the ones you cook at home by the score card below:

SCORE CARD FOR JUDGING COOKED VEGETABLES

Name of vegetable...				
	Yes or no	Yes or no	Yes or no	Yes or no
Appearance: Is the color natural?.....				
Texture: Is the vegetable tender? Has it retained its shape?				
Flavor: Has a good flavor been preserved?				
Is there just enough salt to bring out the flavor?				

What will you do the next time you prepare vegetables to improve them? _____

FAMILY MEALS PLANNED WITH MOTHER
(Vegetables to be prepared by club member)

Example	Food Group	Date.....	Food Group
Breakfast			
Fruit	2		
Cereal	6		
Bread	6		
Milk	4		
Dinner:			
Meat or substitute	5		
Potatoes*	3		
Leafy green or yellow vegetables*	1		
Raw vegetable or salad*	2		
Butter	7		
Bread	6		
Dessert	3		
Milk	4		
Supper or lunch:			
Main dish.....	4&5		
Vegetable*	1		
Bread and butter...	7		
Dessert		
Milk or milk drink	4		

*Underline the vegetables you prepare.

Date.....	Food Group	Date.....	Food Group

CAKES

Cake—for dessert, for birthdays, for parties, for picnics. Cakes are such fun to make, especially if you can do it as a surprise for your family. Of course you'll have to let mother in on the secret, but you can surprise the rest of the family.

Before we make any cakes shall we look at the recipe below to see what food materials cake will supply to our bodies? Shall we look for energy food first? We see butter, then sugar, and enriched flour. Next we shall check the body-building foods, eggs, enriched flour, and milk and last but not least, the body-regulating foods, butter, eggs, enriched flour, and milk. Then if an icing is made with sugar and butter, much energy material will be added. Consequently, when you are planning to have cake for dessert the other foods in the meal should not supply large quantities of energy material. It would be well to have leafy green vegetables, fruit and lean meat, or cheese or egg dishes if the meal is the main one.

VARIATIONS FOR ALTITUDE

In high altitudes successful cake baking is difficult for the reason that the recipes for most of the rich and tender cakes are planned for families living at sea level. Recipes may be adjusted for changes in altitude. Improvement may result from a slight increase in flour or eggs, or decrease in fat, sugar, and baking powder, together with a slight increase in the baking temperature.

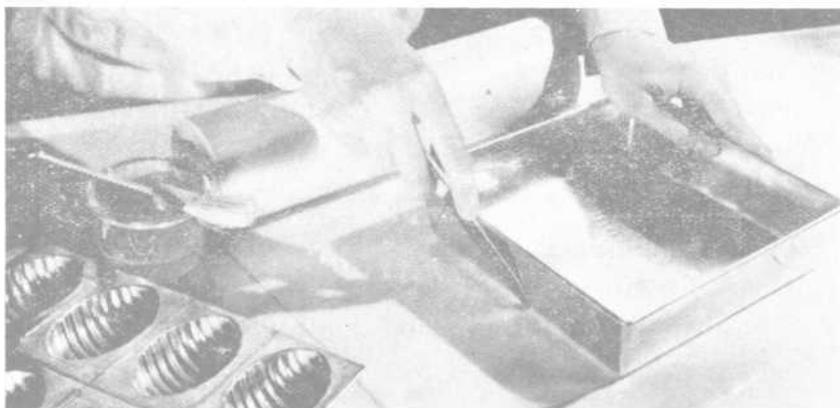
In the foundation butter cake, the baking powder may be reduced $\frac{3}{16}$ teaspoon for each increase of 1,000 feet in elevation; the fat may be decreased $\frac{1}{4}$ teaspoon and sugar 1 teaspoon for the same increase.

Butter Cake

<i>Ingredients</i>	<i>Utensils</i>
$\frac{1}{2}$ cup butter or margarine	Mixing bowl
1 cup sugar	Mixing spoon
2 eggs	Measuring spoons
2 cups enriched flour	Measuring cup

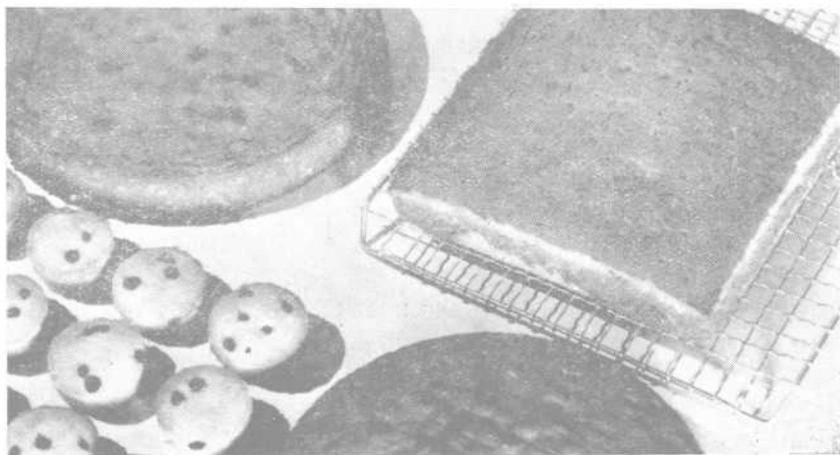
2 $\frac{1}{2}$ teaspoons baking powder	Flour sifter
$\frac{1}{2}$ teaspoon salt	Egg beater
$\frac{2}{3}$ cup milk	2 shallow 8-inch-square cake tins
1 teaspoon vanilla	

1. The cake will be better if you have all the ingredients at room temperature when you mix it.
2. Cream the butter with a wooden mixing spoon.
3. Add 2 tablespoons of sugar at a time, mixing well after each addition.
4. Beat the eggs in a separate bowl and add them to the sugar and butter, mixing thoroughly.
5. Measure the flour after it has been sifted.
6. Sift together the measured flour, baking powder, and salt.
7. Measure the vanilla into the milk.
8. Add the flour and milk alternately to the butter-sugar-egg mixture; that is, add a little flour, then stir it in; next add a little milk and stir it in. Continue to do this until both are used up. The last addition should be flour.
9. Pour the batter into shallow cake tins which may be either round or square. The tins should be lined with waxed paper and greased with butter. Bake in an oven preheated to 350 degrees F. until the cake shrinks from the edge of the tin—about thirty minutes. If you prefer cup cakes, put the batter in buttered muffin tins. They will bake in 20 to 30 minutes.
10. Allow the cake to stand in the tin about fifteen minutes, then turn it out on a rack to cool.
11. When the cake is cold it may be iced with one of the icings below, or you may serve it with a chocolate sauce.



Courtesy of General Foods

Plate XX.—Fix the pan so your cake can't stick! 1. Grease it well. 2. Cut paper for bottom and fit in pan. 3. Grease again.



Courtesy of General Foods

Plate XXI.—A good basic cake can appear in different shapes for different uses.

Busy-Day Cake

Ingredients

1 $\frac{2}{3}$ cups all-purpose
enriched flour
1 cup sugar
 $\frac{1}{2}$ teaspoon salt
1 egg

Utensils

Mixing bowl
Mixing spoon
Measuring spoons
Measuring cup
Flour sifter

2½ teaspoons baking powder	Sturdy egg beater
⅓ cup butter or margarine	1 cake tin 8 inches square by 2 inches deep
⅔ cup milk	
1 teaspoon vanilla	

1. All ingredients must be at room temperature to make this cake as directed.
2. Sift flour once before measuring.
3. Sift together in a mixing bowl the flour, sugar, salt, and baking powder.
4. To the dry ingredients add the butter or margarine, unbeaten egg, milk, and vanilla.
5. Thoroughly beat all ingredients together with a rotary egg beater for two minutes.
6. Pour batter into a pan 8 inches square by 2 inches deep or a round 9-inch pan 1½ inches deep. Line the pan with waxed paper and grease with butter.
7. Bake in a moderate oven 350 degrees F. until the cake shrinks from the edge of the pan—about thirty minutes.
8. Let the cake "set" fifteen minutes, then turn it onto a cake rack.
9. Have Jiffy Icing ready and spread it on the cake while it is still hot. See further instruction under Jiffy icing.

GINGERBREAD

Although gingerbread is sometimes considered a hot bread, it is more often used as a dessert. It is delicious served with whipped cream.

Gingerbread

<i>Ingredients</i>	<i>Utensils</i>
¾ cup hot water	Mixing bowl
½ teaspoon soda	Measuring cup
¾ cup sorghum molasses	Measuring spoons
1 egg	Mixing spoons

$\frac{1}{2}$ cup liquid or melted fat	Rotary or Dover egg
$\frac{1}{2}$ cup sugar	beater
$2\frac{1}{2}$ cups flour	Cake tin 8 inches square
$2\frac{1}{2}$ teaspoons baking powder	by 2 inches deep
$\frac{3}{4}$ teaspoon ginger	
$\frac{1}{2}$ teaspoon cloves	
$\frac{1}{2}$ teaspoon salt	
$\frac{3}{4}$ teaspoon cinnamon	

1. Choose a bowl large enough to hold the entire mixture.
2. Dissolve the soda in the hot water; add the molasses and stir until the foaming stops.
3. Add in the order listed, without stirring, the unbeaten egg, the fat, and the dry ingredients.
4. Beat the entire mixture 300 revolutions (three or four minutes).
5. Bake it in a medium-low oven at 325 degrees F. for fifty minutes.
6. Serve it hot with whipped cream.

TESTS FOR TEMPERATURE

If an oven thermometer be lacking, sprinkle $\frac{1}{2}$ teaspoon of flour $\frac{1}{4}$ to $\frac{1}{8}$ inch thick on a tin and put it in the oven, or use a piece of unglazed or tissue paper, and as it browns judge the temperature as follows:

Slow oven	250-350° F.	Delicate brown color in five minutes
Moderate oven	350-400° F.	Medium gold brown color in five minutes
Hot oven	400-450° F.	Dark brown color in five minutes
Very hot oven	450-500° F.	Dark brown color in five minutes

TESTS FOR BAKING

The cake will shrink from the sides of the pan when baked. It will spring back quickly when pressed with the finger. A bristle or clean toothpick, if inserted into the center, will come out clean if the cake is done.

ICINGS

Marvelous Chocolate Icing*Ingredients*

- 1 cup powdered sugar
- 2 egg yolks
- $\frac{1}{4}$ cup milk
- $\frac{1}{2}$ teaspoon vanilla
- 2 squares unsweetened
chocolate, melted
- 1 tablespoon butter

Utensils

- Mixing bowl
- Mixing spoon
- Measuring cup
- Measuring spoons
- Paring knife
- Egg beater
- Small saucepan

1. Melt the chocolate in a pan over hot water.
2. Add sugar, milk, and butter. Heat the mixture over hot water for five minutes.
3. Add the beaten egg yolks and vanilla.
4. Place the bowl in a pan of cracked ice or ice water and continue beating until the mixture is just right to spread (about three minutes).

Easy Icing*Ingredients*

- 2 tablespoons cream
- 1 teaspoon butter
- Confectioner's sugar
- Flavoring

Utensils

- Small saucepans
- Bowl
- Measuring spoons
- Mixing spoon
- Spatula

1. Heat the cream.
2. Add the butter.
3. Stir in the sugar until the icing will spread easily.
4. Add the flavoring.
5. If a colored icing is desired, add a few drops of coloring at this time.

Broiled Jiffy Icing*Ingredients*

- 3 tablespoons melted butter
- 5 tablespoons brown sugar
- 2 teaspoons cream or top
milk
- $\frac{1}{2}$ cup shredded coconut

Utensils

- Mixing bowl
- Measuring cup
- Measuring spoons
- Mixing spoon
- Small saucepan

1. Mix together the above ingredients.
2. Spread the mixture on the cake while it is still warm.

3. Place it very low under the broiler or on the top shelf in the oven without the broiler.
4. Broil until it bubbles all over the surface and becomes brown but *does not burn*.

When you bake cakes at home or judge them at club meetings, score them on the score card below:

SCORE CARD FOR JUDGING CAKE

Kind of cake.....				
	Yes or no	Yes or no	Yes or no	Yes or no
Appearance: Top only slightly rounded..... Smooth, fine-grained surface..... Cracked or sugar top.... Too thin for size of cake Color characteristic of kind of cake.....				
Texture: Small, even holes; velvety light..... Dry or soggy..... Crumby..... Slightly moist..... Coarse.....				
Flavor: Delicate and characteristic of kind of cake.... Bitter or unpleasant.....				

What should you do the next time you bake a cake to improve it? _____

Assignment:

1. Plan with your mother at least three family meals in which cake is served. Prepare at least three kinds of cake.

2. *Record the meals in the space provided on pages 50 and 51 and record the cakes in your Home Economics Record Book.*
3. *Take a portion of cake to the club meeting to be judged.*

WORK SHEET

FAMILY MEALS PLANNED WITH MOTHER
(Cakes to be prepared by club member)

Example	Food Group	Date.....	Food Group
Breakfast			
Fruit	2		
Cereal	6		
Bread	6		
Milk	4		
Dinner:			
Meat or substitute	5		
Potatoes	3		
Leafy green or yellow vegetables.....	1		
Raw vegetable or salad	2		
Butter	7		
Bread	6		
Dessert*		
Milk	4		
Supper or lunch:			
Main dish.....	4&5		
Vegetable	1		
Bread and butter...	7		
Dessert*		
Milk or milk drink	4		

*Underline the cakes you prepare.

Date.....	Food Group	Date.....	Food Group

YEAST ROLLS

The fragrance of bread baking is the fragrance of hearth and home, of family life, of hospitality, of contentment. This delicious aroma as much as the eating of the bread itself makes a woman enjoy baking bread and rolls, for baking yields satisfaction out of all proportion to the small effort it requires!

—Clara Gebhard Snyder.

Of all the various foods you 4-H Club girls will prepare, yeast rolls are just about the most fun. When you make plain rolls, cinnamon or pecan rolls, bowknots, crescents, butterflies, or clover-leaf rolls, you will find any of them popular with your family, especially Father and the boys.

Since ancient times bread has been called the staff of life. This is because the starch in the flour supplies energy material; the protein and minerals in the flour help build muscle, bone, and other tissues; the minerals and vitamins help regulate the body-processes. The building and regulating materials are present in much larger quantities when whole-grain flour is used or when highly refined flour has been enriched; that is, when minerals and vitamins have been added to the refined flour. Many of your mothers use flour which is made from wheat grown in Arizona. The instructions which you will follow in this bulletin have been prepared especially for use in the making of bread and rolls with Arizona milled flours.

PREPARATIONS BEFORE BEGINNING THE ROLLS

1. Cleanliness is the first requirement. This means:
 - a. Wash your hands thoroughly, clean your fingernails, and arrange your hair neatly before you handle any ingredients or utensils used in making the rolls.
 - b. Wear a clean wash dress or cover your dress with an apron.
 - c. Have clean dishcloths and tea towels at hand.
 - d. Rings and other jewelry are out of place.
2. Get together the utensils you will use. See the list below.

3. Assemble all the ingredients for the rolls. See the recipe below.

Rolls, Using Standard Bread Recipe
(3 or 4 loaves)

<i>Ingredients</i>	<i>Utensils</i>
1½ to 2 cakes of yeast foam or compressed or granular yeast	Breadboard
1 cup lukewarm water	Measuring spoons
1 tablespoon sugar	Knife or spatula
3 cups liquid: 1 cup water and 2 cups milk scalded and cooled.	Mixing bowl
4 teaspoons salt	Mixing spoon
4 tablespoons sugar	Flour sifter (quart)
About 12 or 13 cups sifted enriched flour	Quart measure
4 tablespoons melted shortening	Thermometer (dairy)
	Muffin tins for clover- leaf, cinnamon, or pecan rolls
	Cookie tin or shallow pan for other rolls
	2 bowls for flour (sifting)
	1 saucepan for scalding milk
	1 pan for melting fat

PLAIN YEAST ROLLS

1. Have all ingredients at room temperature.
2. Scald the liquid and cool it.
3. Put the yeast into lukewarm water (98 degrees F. on dairy thermometer), no warmer and no colder than your body, and stir in 1 tablespoon of sugar.
4. Let it stand five minutes if compressed or granular yeast is used; twenty minutes if yeast foam is used.
5. Put 3 cups of scalded milk, water, or a mixture of these into a bowl and add the salt and remaining sugar.
6. When it becomes lukewarm, add to it the softened yeast and about half the flour. Beat until smooth.

7. Add fat
 - a. To prevent streaks in the rolls.
 - b. To make the rolls moist.
8. Add enough more flour to knead the dough. Add whole-wheat flour, if used, before white flour.
9. Sprinkle the board very lightly with flour. Turn the dough onto the board.
10. Let the dough stand ten minutes to tighten.
11. Grease a mixing bowl very lightly while waiting.
12. To knead, push the dough with the heels of the palms of the hands. With every push, turn the dough one fourth way 'round, fold over toward you, then press with the lower part of the hand. (See Plate XXII.) Curve the fingers over the dough to keep it from flattening too much. Knead quickly and lightly until the dough is smooth and springs back when pressed with the finger (about five or ten minutes). Dough from soft wheat flour tends to be slightly sticky. Too hard or too long kneading injures the gluten, and a poor loaf of bread will be the result. This is especially important when soft wheat flour is used.
13. Turn the dough over in the greased bowl several times until the outside is covered with a thin coating of fat.
14. Insert the dairy thermometer in the dough (82 to 86 degrees F. is best).
15. Cover the bowl with damp towels if it is summer. It may also be necessary to place the bowl in a pan of cold water to maintain the temperature at 82 to 86 degrees.
16. If the weather is cool, cover the bowl with dry towels and place it where it will be at a uniform temperature, 82 to 86 degrees. Allow the dough to double in bulk or to stand until blisters or gas sacs begin to appear on the top, at which stage the impression remains when the dough is pressed with the fingers.
17. Punch the dough down in the center with the fist.
18. Fold the dough over from four sides to the center and punch down.
19. Turn the dough onto a lightly floured board.

20. Divide the dough into 4 or 5 equal portions. Round each portion into a ball to seal open pores made by cutting.
21. Cover with a towel. Let stand ten minutes.
22. Grease the baking pans while you are waiting.
23. See illustrations and instructions on the following pages for making various kinds of rolls.
24. While rolls are rising, regulate the oven at 375 to 400 degrees F.
25. Rolls are ready for the oven when little blisters appear on the surface.
26. Bake twenty-five to thirty minutes.
27. Remove them from the pan immediately. Place them on a cooling rack away from flies and dust, or if it is mealtime you may wish to serve them immediately.

CHARACTERISTICS OF A STANDARD YEAST ROLL

1. Crust, uniform golden brown.
2. Light in weight in proportion to size.
3. Tender, elastic crumb, free from dryness or doughiness.
4. Fine holes evenly distributed.
5. Color, characteristic of ingredients used; no dark streaks.
6. Flavor, sweet and nutty; no sourness or bitterness.

MAKING BREAD

Plate XXII.—Kneading the dough by pushing it with the heels of the palms of the hands.



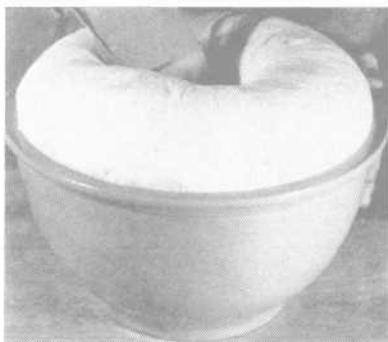
Plate XXIII.—Inserting thermometer to control temperature at which dough rises.



Plate XXIV.—Testing to see if dough has risen enough.



Plate XXV.—Punching dough down in center with the fist.



Courtesy of Wheat Flour Institute

ROLLS

Plate XXVI.—Cloverleaf rolls: Form dough into small balls. Dip each into melted butter and place three balls in each section of a greased muffin pan.

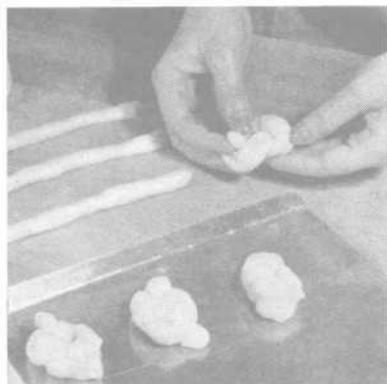


Plate XXVII.—Bow knots: Roll dough under hand to $\frac{1}{2}$ -inch thickness. Cut in pieces about 6 inches long. Tie in knots. Place on greased baking sheet.

Plate XXVIII.—Fan-tans: Roll dough into very thin rectangular sheet. Brush with melted butter. Cut in strips about 1 inch wide. Pile 6 or 7 strips together. Cut pieces $1\frac{1}{2}$ inches long and place on end in greased muffin pans.



ROLLS



Plate XXIX.—Crescents: Roll ball of dough into circular shape about $\frac{1}{4}$ inch thick. Cut in pie-shaped pieces. Brush with melted butter and roll up, beginning at the wide end. Curve into crescents on greased baking sheet.

Plate XXX.—Butterflies: Roll dough into rectangular sheet $\frac{1}{4}$ inch thick and 6 inches wide. Brush with melted butter. Roll up jelly-roll fashion. Cut into pieces 2 inches long. Press across center of each piece with knife handle or small rolling pin.

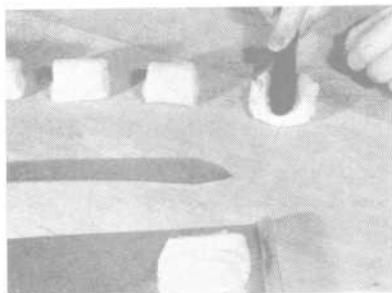


Plate XXXI.—Rosettes: Follow directions for bow knots. After tying, bring one end through center and the other over the side.

When you make rolls at home or take them to a club meeting for exhibit, score them, using the score card below:

SCORE CARD FOR JUDGING YEAST ROLLS

Kind of rolls				
	Yes or no	Yes or no	Yes or no	Yes or no
Appearance: Golden brown..... Dark brown or pale..... Inside color, character- istic of flour used.....				
Texture: Uniform holes..... Slightly moist..... Elastic, when pressed lightly				
Crumbles				
Light				
Heavy				
Flavor: Sour				
Pleasant				
Characteristic of flour used				

If rolls are not as good as they should be, how can you improve them? _____

Assignment:

1. Plan with your mother at least three family meals in which yeast rolls are served. Prepare yeast rolls at least three times at home.
2. Write down questions that arise while you are making the rolls. Take them to the next club meeting.
3. Record the meals in the space provided on pages 60 and 61 and record the rolls in your Home Economics Record Book.

FAMILY MEALS PLANNED WITH MOTHER
(Yeast rolls to be prepared by club member)

Example	Food Group	Date.....	Food Group
Breakfast			
Fruit	2		
Cereal	6		
Bread*	6		
Milk	4		
Dinner:			
Meat or substitute	5		
Potatoes	3		
Leafy green or yellow vegetables.....	1		
Raw vegetable or salad	2		
Butter	7		
Bread*	6		
Dessert	3		
Milk	4		
Supper or lunch:			
Main dish.....	4&5		
Vegetable	1		
Bread and butter*	7		
Dessert		
Milk or milk drink	4		

*Underline the yeast rolls you prepare.

Date.....	Food Group	Date.....	Food Group

FAMILY MEALS PLANNED BY CLUB MEMBER

For two years you have been preparing fruits, cereals, eggs, beverages, meats, vegetables, cakes, yeast rolls, and cakes. By this time you should be able to prepare meals for a day without the help of your mother. We are sure you know how to do this.

Assignment:

1. *Plan, prepare, and serve the meals for two days for your family. Record the menus on pages 64 and 65.*
2. *It is time for the second check on the foods you are eating. Keep a record of all the foods you eat for one day and check these foods on the Daily Food Guide, which you will find on page 10. Did you score 100?*

WORK SHEET

WORK SHEET

MEALS PLANNED, PREPARED, AND SERVED
BY THE CLUB MEMBER

Example	Food Group	Date.....	Food Group
Breakfast			
Fruit	2		
Cereal	6		
Bread	6		
Milk	4		
Dinner:			
Meat or substitute	5		
Potatoes	3		
Leafy green or yellow vegetables.....	1		
Raw vegetable or salad	2		
Butter	7		
Bread	6		
Dessert	3		
Milk	4		
Supper or lunch:			
Main dish.....	4&5		
Vegetable	1		
Bread and butter..	7		
Dessert		
Milk or milk drink	4		

Date.....	Food Group	Date.....	Food Group

JUST FOR FUN

To add to your 4-H meetings this year you may enjoy playing some of the games, singing the songs, or making taffy, as shown below:

Molasses Taffy

1 cup granulated sugar	$\frac{3}{4}$ cup water
1 cup brown sugar	$\frac{1}{4}$ cup butter
2 cups light molasses or sorghum	$\frac{1}{8}$ teaspoon soda
	$\frac{1}{8}$ teaspoon salt

1. Put the sugars, molasses, and water into a saucepan and cook until the syrup forms hard threads. It will be necessary to cook the candy slowly and to stir it during the latter part of the cooking in order to prevent burning.
2. Remove it from the fire and add the butter, soda, and salt. Stir it just enough to mix it well. In adding the soda, be sure it is free from lumps.
3. Turn the candy into a greased pan and allow it to stand until it is cool enough to handle.
4. Gather it into a ball and pull it until it is rather firm and a light yellow in color. Stretch it out in a long rope. Cut it into pieces.

Going to Jerusalem

This game requires music. Chairs are placed in a row, alternately facing in opposite directions. There should be one chair fewer than there are players. As the music begins, the guests start to march around the chairs, continuing until the music stops, when all must sit down. The one who does not succeed in getting a chair drops out of the game. An end chair is then removed and the march is resumed. The game continues until only one person is left.

Cities

The first player names a city and the next player must name one beginning with the last letter of the city just

given. For example, the first player calls Washington, the second Nogales, the third Safford, the fourth Denver, and so forth.

Each player must name his city before a count of ten. Those who fail are eliminated. The one wins who stays in the game longest.

Clothespin Drop

Place a quart milk bottle behind a straight-backed chair. The players stand in front of the chair, reach over, and attempt to drop clothespins into the bottle. Each pin dropped in scores one point.

Acting Song Titles

Divide the players into two or more teams of ten or twelve each. One group does the acting while the others comprise the audience. The actors leave the room and select the title of a well-known song. They then return and enact the title, as in charades, while the others try to guess the song. The next group then has its turn in acting.

Spelldown

This time-honored event needs no description. It may be conducted either on an individual or on a team basis. On the individual basis, a player who misspells a word goes to the foot of the line. On the team basis, the two teams are lined up facing each other, and each player spelling a word correctly scores one point for his team. The scores should be kept on a blackboard.

WE'VE GOT A BUNCH

(Tune "Liza Jane")

We've got a bunch in this grand State,
 Club girls and boys;
 You must run to follow our gait,
 Club girls and boys.
 (Chorus)

We are a team with lots of pep,
 Club girls and boys;
 "Make the best better" step by step,
 Club girls and boys.
 (Chorus)

Oh, we'll work hard and try to win,
 Club girls and boys,
 Uncle Sam's Achievement Pin,
 Club girls and boys.

Chorus: Oh, Arizona,
 Let's make a noise;
 Oh, Arizona
 Club girls and boys.

DRINK, DRINK, DRINK SOME MILK

(Tune "Row, Row, Row Your Boat")

Drink, drink, drink some milk,
 Drink some every day.
 Father, mother, sister, brother,
 Every, every day.

CARRY ME BACK TO OLD VIRGINNY

Carry me back to old Virginny,
 There's where the cotton and the corn and 'taters grow
 There's where the birds warble sweet in the springtime
 There's where this old darky's heart has long'd to go.
 There's where I labored so hard for old massa
 Day after day in the fields of yellow corn.
 No place on earth do I love more sincerely
 Than old Virginny, the place where I was born.
 Chorus: Repeat first four lines.

OH, SUSANNA

I came from Alabama with my banjo on my knee,
 I'm going to Louisiana, my true love for to see.
 It rained all night the day I left the weather it was dry;
 The sun so hot I frose myself; Susanna, don't you cry.

(Chorus)

I had a dream the other night when ev'rything was still—
 I thought I saw Susanna come a-sauntering down the
 hill.
 The red, red rose was in her hand, the tear was in her eye,
 I said, "I come from Dixie-land, Susanna, don't you
 cry."

Chorus: Oh, Susanna, Oh, don't you cry for me,
 For I'm goin' to Louisiana with my banjo on my
 knee.

DREAMING

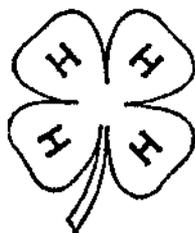
My home must have high trees above its open gate;
 My home must have a garden, where little dreamings
 wait;
 My home must have a wide view of field and meadow fair,
 Of distant hill, of open sky, with sunlight everywhere.

My home must have a friendship with every happy thing;
 My home must offer comfort for any sorrowing;
 And every heart that enters shall hear its music there
 And find some simple beauty that every life may share.

My home must have its mother—may I grow sweet and
 wise;
 My home must have its father, with honor in his eyes;
 My home must have its children—God grant the parents
 grace
 To keep our home through all the years a kindly, happy
 place.

4-H CLUB MOTTO—"To Make the Best Better"

4-H CLUB



EMBLEM

4-H CLUB COLORS—Green and White

4-H CLUB PLEDGE

"I pledge

My head to clearer thinking,
My heart to greater loyalty,
My hands to larger service, and
My health to better living
For

My Club
My Community, and
My Country."

"I pledge allegiance to the Flag of the United States of America and to the Republic for which it stands, one Nation, indivisible, with liberty and justice for all."

Name.....

Name of Club.....