

371.42

On 3/16/20

M-3

63

DOCUMENT

COLLECTION

OREGON

COLLECTION

OREGON STATE LIBRARY

APR 24 1920

Oregon Agricultural College Extension Service

O. D. CENTER

Director

BOYS' AND GIRLS' CLUBS

Oregon Agricultural College, United States Department of Agriculture, and
State Department of Education, Cooperating

Printed and distributed in furtherance of the Act of Congress of May 4, 1914

Club Series M-3

Corvallis, Oregon

COOKERY CLUB PROJECT

Your enrollment for the Cookery Club Project has been received. Enclosed you will find all of the instructions required for the completion of the ten lessons in cooking, your Final Project Report book, and ten report cards.

1. Rules. Standard Club Members. As soon as you have completed Lesson 1 and recorded the work done in your Final Report book, fill out the report card and give it to your local Club leader, who will mail all reports for the Club to the State Club Leader.

Non-Standard Club Members. As soon as you have completed Lesson 1 and recorded the work done in your Final Report book, fill out your report card and mail it to the State Club Leader at Corvallis, Oregon.

2. Report Cards. There will be ten report cards and the Final Report blank to be filled out by each Cookery Club Project member during the year. Since you have all of the instructions in this bulletin you need not delay at all in commencing a new lesson as soon as you have sent in a report card.

3. Final Project Report. Your Final Report book is included in this mailing, and as you complete a lesson you should fill in the spaces required for that lesson. This final report is to be sent to the State Club Leader as soon as you have completed all ten lessons.

DISCARD

4. **Cookery Club Project.** Each Cookery Club member shall prepare the various foods according to the instructions given in this bulletin and is required to complete all ten lessons, make a report on each lesson, make a Final Project Report, and make an exhibit.

5. **What to Do.**

- (a) Carefully study all instructions sent you.
- (b) Work out Lesson 1 **first** and Lesson 10 **last**. The other eight lessons may be done whenever you have the materials required or when they are seasonable and therefore cheapest.
- (c) Consult your mother as to what will be best to try each time, so that you will be a help to her.
- (d) Be sure to clean up after yourself each time.

6. **Exhibit.** An exhibit of one loaf of bread, baked by the Club member, will be required in all local, county, and State Club contests.

7. **Basis of Awards.** The awards in all Cookery Club contests will be as follows:

(a) Exhibit—		
Bread	50	50
(b) Report—		
Amount of work done	35	
Completeness and accuracy of report	15	50
Possible score		100

8. **Prizes.** The prizes will include those regularly offered by the State Board of Fair Directors; the trip to the Oregon Agricultural College Summer School, offered by business men of Portland, through the efforts of the State Superintendent of Public Instruction; and those offered by different counties, parent-teacher associations, and other organizations, together with many cash and commodity prizes given at local, county, and State fairs.

9. **Persons in Charge of Work.** The county school superintendent is in charge of all Club work undertaken in his county. He is assisted by the county agricultural and home demonstration agents (in counties employing them), by rural school supervisors, teachers, local Club leaders, county Club leader, and the county farm bureau.

For special information pertaining to any phase of your Cookery Club work, write to

H. C. SEYMOUR,
State Club Leader,
Extension Service, Oregon Agricultural College,
Corvallis, Oregon.

COOKERY CLUB PROJECT

Reason for So Many Recipes. You will find a variety of recipes in each lesson from which you may choose the one you wish to learn. The large variety is given in order that every girl in the work may find in each lesson something for which she has the necessary materials. No Club member should be satisfied to make any dish just once but should try it at least a second time in order that she may be certain that she has mastered the lesson.

In Case You Have Not the Necessary Materials. Should you find it impossible to procure any of the materials needed in some lesson, write to the Assistant State Club Leader, Corvallis, Oregon, for further instructions.

Simple Food Best. Always remember that the simplest food when well prepared is more appetizing than an elaborate dish poorly cooked. There is a right and a wrong way to do the most ordinary task. Acquire the habit of doing things right. Let your head help you solve your problems. "I can" will tide you over many a hard place. "I can't" would make anyone fail. Choose "I can" for your companion.

Cleanliness. One of the most important lessons you will learn from this project is that of cleanliness.

Personal Cleanliness. Wear a clean apron. Wash your hands before commencing to work. Clean your finger nails. Comb your hair neatly. Keep a hand towel in the kitchen to use while cooking; do not wipe your hands on your tea towel or apron.

Kitchen Cleanliness. Before commencing to cook, see that the table, sink, and floor are clean. Never leave garbage in the house. It should be kept on the porch in a tightly covered metal pail, which should be emptied daily, washed with soap and hot water, and then scalded. A dirty garbage pail is a breeding place for flies. As you use cooking utensils either wash them and put them away or fill them with cold water so that they may be easily washed later. Be careful not to

drop food or water on the floor. Should you happen to do so, clean it up immediately. Do not set a vessel directly over the fire. It does not heat any more rapidly and becomes difficult to clean. Special pans are wholly unnecessary. Many a good batch of biscuits has been mixed in a lard pail.

Saving. Read over the recipe carefully to see what utensils and materials you will require. Make your head save your heels. Make one trip to the cupboard, ice box, or pantry do. Get all your utensils and materials ready before commencing to work.

Waste. Try to prepare just enough food so that none need be wasted. Scraps from the table are expensive hog and chicken feed. When cooking, scrape out all of the food in the mixing bowl. When dishing up the food, take care not to leave any of it in the cooking utensil. Burning food is another source of great waste.

LESSON 1

Before we can combine two or more food materials and get a pleasing finished product, we must know how to measure accurately and often how to double or divide a recipe. In order that you may be able to measure accurately you should study this lesson carefully. The following table of weights and measures will make it possible for you to decide quickly whether you need to use a teaspoon, tablespoon, or cup to measure. Learn it well so that you will not need constantly to refer to it.

Table of Weights and Measures—

- 3 teaspoons equal 1 tablespoon.
- 16 tablespoons of dry material equal 1 cup.
- 16 tablespoons of butter or other solid fat equal 1 cup.
- 12 tablespoons of liquid equal 1 cup.
- 2 cups equal 1 pint.
- 2 pints equal 1 quart.
- 2 cups of fat weigh 1 pound.
- 2 cups of sugar weigh 1 pound.
- 4 cups of rolled oats weigh 1 pound.
- 3 cups of flour (white) weigh 1 pound.
- 2 cups of butter weigh 1 pound.

In order to make recipe writing take less space the following abbreviations are used:

Table of Abbreviations—

- t stands for teaspoon.
- T stands for tablespoon.
- c stands for cup.
- lb. stands for pound.
- oz. stands for ounce.
- pt. stands for pint.
- qt. stands for quart.

Rewrite the table of weights and measures using the above abbreviations.

To Measure Accurately. Dip the teaspoon, or tablespoon, into the substance to be measured (flour, sugar, etc.) It should be heaping. Then take a knife and scrape off all that is above the edge of the spoon. If the recipe calls for a half spoonful, scrape out all that is in one half of the spoon, cutting it in half from the handle to the tip of the spoon. For one-fourth spoonful cut out and scrape off one-half of the remaining half cutting across the spoon.

Never Guess at Measures. Dip a cup into the flour bin and fill it, scraping off all that is above the top of the cup. Put this cupful into the sifter and sift it into a pan. Now by using a spoon fill the cup with flour from the pan. Do not press it in or leave air holes. Then scrape off all of the flour that is above the top of the cup. With a tablespoon measure what is left in the pan. Record the number of tablespoonfuls in your report book. This exercise will show you why we always sift flour before measuring. While you have the flour out, test out the teaspoon, tablespoon, and cup to prove that the statements made about them in the table are true.

PROBLEMS TO BE WORKED

Here are a few problems to help you find the cost of any recipe:

1. If there are 3 t's in 1 T, how many t's in 8 T's?
2. I have 8 T's of sugar, what part of a cup of sugar have I?
3. If sugar costs 10 cents a lb., how much will 1 c of sugar cost?
- $\frac{1}{2}$ c? 5 c?
4. How many t's of flour are there in $\frac{1}{4}$ c?
5. How many T's of butter are there in $\frac{3}{4}$ c?
6. If butter is 60 cents a lb., how much will $\frac{3}{4}$ c of it cost?
7. If 2 T of flour will thicken 1 c of milk sufficiently for creaming vegetables, how much flour will be required to make 2 c of milk equally thick? $1\frac{1}{2}$ c? $\frac{1}{2}$ c?
8. How much will the white sauce made by the following recipe cost at the prices given?

White Sauce—

1 c milk

2 T butter

2 T flour (you need not figure the cost of the flour for this small quantity)

1 t salt

Butter costs 64 cents a pound.

Milk is 12 cents a quart.

Ask your teacher to correct your lesson before you put the answers in your report book. Perhaps she will give these problems to your Club for their arithmetic lesson some day.

White sauce is used in so many different recipes that many people consider it the foundation recipe. So learn to make it well. Ask mother to plan to serve some vegetable such as canned peas or beans, or boiled carrots or turnips, and to let you prepare the white sauce for it. She can tell you how much milk you are to use and then you can easily determine how much flour and fat you will require.

There are four kinds of white sauce.

1. Used for soups.
2. Used for vegetables.
3. Used for baked dishes.
4. Used for souffles and croquettes.

You will have use for each kind some time during the ten lessons.

WHITE SAUCE

Utensils	Materials	Amount			
		1	2	3	4
Double boiler	Milk	1 c	1 c	1 c	1 c
Tablespoon	Flour	1 T	2 T	3 T	4 T
Measuring cup	Butter or other fat	1 T	2 T	3 T	3-4 T
Case knife					
Teaspoon	Salt	$\frac{1}{2}$ t	$\frac{1}{2}$ t	$\frac{1}{2}$ t	$\frac{1}{2}$ t

Method. Heat the milk in the double boiler. Mix fat and flour together. When the surface of the milk is covered with small bubbles, gather the fat and flour mixture on the spoon and stir it into the milk. Add salt. Stir until the sauce is smooth. Cover and let cook 20 minutes.

Reports. When you have made white sauce once and solved the eight problems, answer the questions in your report book relating to Lesson 1. If you are a Standard Club member, report to your local Club leader. If you are not a Standard Club member, fill in the report card and mail it to the State Club Leader at Corvallis, Oregon. Be sure to write your name and address plainly.

LESSON 2—SOME WAYS TO PREPARE POTATOES

Most Americans use potatoes for at least one meal a day. Here are some ways of using them.

Boiled Potatoes. Select enough potatoes of uniform size to serve the family. Scrub well. If desired, the potatoes may be pared. Care should be taken to have the parings very thin. Put in a cooking vessel, add 1 teaspoon salt to every 12 potatoes. Cover with boiling water; cook until tender; drain, saving the water for soup if the potatoes were pared. Put the pan back on the stove just long enough to dry the potatoes. Serve immediately in a hot service dish. You may serve them mashed if you wish.

Mashed Potatoes. Peel the potatoes cooked with their jackets on. Mash thoroughly with either a wire or wooden potato masher. Add enough hot milk to make them fluffy and 1 tablespoon butter to each quart of potato. Salt to taste. It is better to add pepper at the table as the black specks are not attractive. Reheat, taking care not to scorch. Serve immediately in a hot dish.

Potato Soup. Left-over mashed potatoes and the potato water can be used in making a delicious soup, after this recipe:

- 1 c potato water
- 1 c No. 1 white sauce (See Lesson 1)
- 1 c mashed potatoes
- 2 slices onion
- Salt and pepper to taste

Cook the onion in the potato water until tender. Add the potato water slowly to the mashed potato, stirring constantly to get out all lumps. Strain and add this mixture to the white sauce in the double boiler. Add seasoning to taste and serve immediately. This amount will serve four or five persons. If soup is thinner than desired add a little flour. If too thick, add a little milk. Tastes differ. One teaspoon chopped parsley and a little celery salt may be used if desired; they should be sprinkled over the soup after it is in the dish.

OTHER USES FOR MASHED POTATOES

Potato Cakes. To each cup of mashed potato, add 1 tablespoon flour. Mix thoroughly; shape into small flat cakes; brown in a little fat. Serve for lunch or supper.

Potato Puff. Add beaten whites of eggs to well-seasoned mashed potato. (2 eggs to 1 quart of potato.) Pile the mixture lightly in a baking dish and bake it until it puffs and browns.

The yolks of the eggs and $\frac{1}{4}$ cup of grated cheese may also be added. This dish, with a green salad, some fruit, and a beverage, would make an excellent lunch.

USES FOR COLD BOILED POTATOES

Creamed Potatoes. To each cup of sliced potatoes use $\frac{1}{2}$ cup of No. 2 white sauce (see Lesson 1). Heat thoroughly and serve in a hot service dish.

Sauted Potato. (Sautéd is pronounced so tayed, and means to brown or cook in a little fat.) Slice cold boiled potatoes in thin slices and brown in beef drippings, bacon fat, or any other cooking fat. Use only enough fat to brown them nicely.

BAKED POTATOES

Select medium-sized, smooth-skinned potatoes. Scrub well, dry; cut off a thin slice on each end; bake in a moderate oven for about 45 minutes. Be sure to allow plenty of time so they will not bake too rapidly and form a thick hard skin. Serve as soon as baked. To tell when a potato is baked, press it between thumb and finger and if it is soft it is baked.

Either boil or bake raw potatoes once and prepare one dish of warmed-over potatoes, then fill out your report for this lesson and copy the answers from it on the part of your Final Report for Lesson 2. If you are a Standard Club member, give your report card to your local Club leader, but if you are not a Standard Club member, send it to the State Club Leader at Corvallis, Oregon. Be sure to write your name and address plainly.

Note: If you have a surplus of little potatoes, or raised more potatoes than you can use or sell, write to the State Club Leader at Corvallis, Oregon, asking for a bulletin telling how to use the surplus.

LESSON 3—VEGETABLE COOKERY

All fresh vegetables that are to be cooked may be boiled or steamed. Such vegetables as beets and squash may also be baked. After cooking they may be used in soup, in creamed dishes, in escalloped dishes, in salads, or simply served with a little melted butter.

For boiling any vegetable (green beans, green peas, carrots, parsnips, cabbage, turnips, etc.), after preparing them by washing, stringing, shelling, or peeling, follow the directions given in Lesson 2 for boiling potatoes. Always have the water

boiling when the vegetables are put in. The water from any vegetables may be saved and added to soup stock or milk in the preparation of soups.

Vegetable Cream Soups. When combined with No. 1 white sauce, vegetables make very nourishing food and may be served as the principal dish for lunch or supper. They are excellent to serve at school also. Perhaps when you have tried a vegetable cream soup at home and can make it well, your teacher will let you make it for the pupils' lunch. You might ask her. There are just two things necessary in the making of vegetable cream soups: (1) Some cooked vegetables. (2) No. 1 white sauce.

Kinds of vegetables that may be used: carrots, celery, potatoes, onions, lima beans, asparagus, peas, corn, tomatoes. They may be left whole or sliced or rubbed through a sieve. The last way really makes the best soup.

Use 1 cup No. 1 white sauce (see Lesson 1) to 1 cup of vegetable pulp. The soup should be about as thick as good cream. If the soup is a little too thick, add a little milk, or water, or water in which the vegetable was cooked. If milk is scarce you may use $\frac{1}{2}$ cup milk and $\frac{1}{2}$ cup of the water in which the vegetable was cooked to make the white sauce, but use milk if you have it as it adds not only to the flavor but to the nutriment as well.

When making tomato soup, add $\frac{1}{4}$ teaspoon of soda to each cup of tomato before adding the tomato to the white sauce. Have the tomato hot before adding it to the white sauce and serve immediately.

Creamed Vegetables. Prepare the same as creamed potatoes in Lesson 2. Either fresh or canned vegetables may be used in soup or creamed. Add $\frac{1}{2}$ cup of No. 2 white sauce to each cup of vegetables.

Cream dishes may be varied by escalloping. To prepare an escalloped dish, put the creamed vegetable into a baking dish, sprinkle buttered crumbs over the top, and brown in the oven. If desired, a little grated cheese may be added to escalloped cauliflower, cabbage, potatoes, brussels sprouts, and even turnips. Use 3 to 4 tablespoons of grated cheese to each cup of vegetable.

One excellent way to use left-over food, particularly vegetables and fruits, is for salads.

There are three types of salad dressing: French, boiled, and mayonnaise. Any one may be used with any salad combination.

French Dressing. 3 T salad oil to 1 T vinegar or lemon juice, salt, sugar, and paprika to taste. This dressing should be beaten or shaken to mix the oil and acid, and served immediately.

BOILED DRESSING

Utensils	Materials	Quantity
Double boiler	Egg	1
Tablespoon	Flour	2 T
Teaspoon	Butter or oil	2 T
Measuring cup	Vinegar (fairly strong)	$\frac{1}{4}$ c
Dover beater	Milk	$\frac{3}{4}$ c
	Salt	$\frac{1}{2}$ t
	Pepper and paprika	to taste
	Sugar (if desired)	1 T
	Mustard (if desired)	$\frac{1}{4}$ t

Method. Heat milk in double boiler. Beat the egg slightly. Combine flour with small portion of cold milk. Add flour to milk. Heat vinegar. Beat hot vinegar into egg, pouring slowly. Combine milk and vinegar mixtures, add fat and seasonings. Return to double boiler long enough to cook the egg (about 2 minutes). Beat with Dover beater. This dressing is especially good when combined with an equal quantity of cream or canned milk.

Mayonnaise. To one egg yolk add gradually, drop by drop, one cup of salad oil. When the dressing thickens, add a few drops of lemon juice, then more oil. When the danger of the oil and egg separating is passed, the oil may be added more rapidly. Salt and other seasonings should be added last.

If the oil and egg yolk fail to emulsify (thicken), adding the unbeaten egg white and continuing the beating will sometimes have the desired effect.

Salad Combinations—

1. Plain boiled potatoes, onion, lettuce. Boiled dressing.
2. Potato, cucumber, green peas, lettuce. Boiled or mayonnaise dressing.
3. String beans, lettuce. French, boiled, or mayonnaise dressing.
4. String beans, potato. French, boiled, or mayonnaise dressing.
5. Cucumber, tomato, lettuce. French, or mayonnaise dressing.
6. Cabbage. Boiled dressing.
7. Cabbage, peanuts. Boiled dressing.
8. Cabbage, cold fish. Boiled dressing.
9. Any combination of vegetables, attractively combined and served with a dressing, is delicious.

When you have prepared vegetables in any two of the above ways and made salad once, fill out your report for this lesson and copy the answers from it on the part of your Final Report for Lesson 3. If you are a Standard Club member, give your report card to your local Club leader, but if you are not a Standard Club member, send it to the State Club Leader at Corvallis, Oregon. **Be sure** to write your **name** and **address** plainly.

LESSON 4—CEREALS

Cereals are the seeds of grasses and include wheat, corn, barley, rice, oats, and rye. Wheat is the most commonly used of the grains. Cereals contain enough protein so that they take the place of meat, eggs, and fish, especially if they are prepared or served with milk. One pound of bread or twelve ounces of flour, corn meal, or oatmeal is equal in fuel value to five or six ounces of butter or bacon fat, one to two pounds of steak, two to three pounds of halibut or other lean fish.

Cereals require long, slow cooking to prepare them for use as human food, because they are surrounded by a woody substance called cellulose, which must be softened by cooking.

The following time table for cooking cereals will be a help:

Cereal	Amount	Water	Salt	Time
Corn meal	1 c	3 c	1 t	1 or more hours
Cream of wheat	1 c	5 c	1 t	½ hour or more
Rice	1 c	3½ c	1 t	½ hour
Oatmeal	1 c	3¼ c	1 t	3 or more hours

Cereals cooked in skimmed milk have higher food value than those cooked in water. Any left-over cereal may be put into a cup or straight-sided bowl and when cool turned out, cut into slices, and sautéd for breakfast or supper instead of meat or eggs. When cereals are served in this way do not serve them in any other form.

Rice may be served as a vegetable, a breakfast food, or a dessert. As a breakfast food it is simply cooked in a double boiler, using 1 cup of rice to 4 cups of water. Rice should not be stirred while cooking as that will break the kernels. Serve with thin cream and a little sugar. Any rice that is left over may be packed into ramekins or cups, which have been rinsed in cold water, and served at another meal the following day

with some canned berries, or peaches, over them. This makes an excellent dessert. Left-over rice may also be prepared as a Spanish dish, or escalloped with cheese and served for lunch or supper.

RECIPE FOR SPANISH RICE

Utensils	Materials	Quantity
Measuring cup	Cooked rice	2 c.
Baking dish	Onion	1 small
Stew pan	Pimienta or sweet	
Meat grinder	green pepper	1
Knife	Cooked tomatoes	1 c
Tablespoon	Salt and pepper	to taste

Method. Run the onion and pimienta through a meat grinder or chop fine. Cook them in the tomato. Add this hot mixture to the rice. Put into greased baking dish and bake slowly one hour.

Recipe for Escalloped Rice with Cheese. Put a layer of cooked rice in a buttered baking dish. Sprinkle with grated or finely cut cheese. Alternate layers of rice and cheese until the desired amount of rice has been used. Pour enough milk over the whole to come up to the top of the rice. Sprinkle buttered crumbs over the top and bake until the crumbs are browned.

CREAMED RICE

Utensils	Materials	Quantity
Measuring cup	Rice (raw)	1 c
Baking dish	Milk	1 qt.
Tablespoon	Sugar	½ c
Teaspoon	Cinnamon or nutmeg (if desired)	about ¼ t

Method. Wash rice thoroughly. Put all ingredients into a baking dish and put into oven. Stir every five minutes for the first half hour. Bake one hour. Serve either hot or cold.

When you have tried any one of these recipes once, fill out your report card for this lesson and copy the answers from it on the part of your Final Report for Lesson 4. If you are a Standard Club member, give your report card to your local Club leader, but if you are not a Standard Club member, send it to the State Club Leader at Corvallis, Oregon. Be sure to write your name and address plainly.

LESSON 5—QUICK BREADS

All breads come under the two heads of quick breads and yeast breads. **Quick breads** are so called because they are baked as soon as they are mixed. They are raised by the action of baking powder, or sour milk and soda. **Yeast breads** must rise at least twice and often three times before the dough is put into the oven.

In Lesson 1 you learned that the only difference in white sauce used for different purposes is the quantity of flour used. In this lesson you will learn that all kinds of quick breads also differ chiefly in the quantity of flour used. This series of recipes is called the dough-and-batter series.

DOUGH-AND-BATTER SERIES

Utensils	Materials	Pop-overs	Griddle Cakes	Muffins	Biscuits
Cup	Liquid (milk or water)	1 c	1 c	1 c	1 c
Teaspoon					
Tablespoon	Flour	1 c	1½ c	2 c	2½-3 c
Mixing bowl	Shortening	....	1 T	2 T	2 T
Egg beater	Eggs	1-2	1	1-2	.....
Rolling pin and board for dough	Baking powder	....	3-4 t	3 t	4 t
	Sugar	....	2 T	1-3 T	.....
Cutter	Salt	½ t	½ t	½ t	½ t

Method for Batters. Mix and sift together all dry ingredients. Beat eggs; add milk. Then combine dry and liquid mixtures. Melt fat and add last.

Method for Doughs. Mix and sift dry ingredients; cut in the shortening; add liquid, stirring enough to mix thoroughly. Put on a slightly floured board, roll, and cut.

Popovers and griddle cakes are pour batters. Muffins are a drop batter. Biscuits are a soft dough. Popovers are best when baked in iron muffin rings but can be baked in any kind of muffin or gem pans. Be sure to have the rings well greased and very hot. Popovers require baking in a moderate oven for 30 to 40 minutes. If the batter for griddle cakes is put into a pitcher and poured onto the griddle much dropping and spilling will be avoided. Muffin batter should drop from the spoon in lumps and not pour. Biscuit dough should be as soft as it can be handled on the board without sticking.

VARIATIONS OF MUFFINS

Twin Mountain Muffins. Add 2 tablespoons shortening and 4 tablespoons sugar to muffin recipe. Leave out $\frac{1}{4}$ cup milk. When more sugar and shortening are used less liquid is required.

Corn Bread. Use 1 cup of corn meal in place of 1 cup white flour in muffin recipe. Use sour milk for the liquid and $\frac{1}{2}$ teaspoon soda and 1 to 2 eggs. Omit the baking powder. If eggs are scarce, they may be omitted; if they are omitted, add 1 teaspoon baking powder. Bake in a shallow pan for 20 to 25 minutes.

When you have tried any one of these recipes once, fill out your report card for this lesson and copy the answers from it on the part of your Final Report for Lesson 5. If you are a Standard Club member give your report card to your local Club leader, but if you are not a Standard Club member send it to the State Club Leader at Corvallis, Oregon. Be sure to write your name and address plainly.

LESSON 6—LIGHT BREAD

Probably there is not a table in the United States at which bread, made chiefly from wheat flour, is not served at least twice daily. Since it is so generally used, every girl should know how to make good bread. Cooking in its various forms is one of the most important things for girls to learn to do well, and baking is an important part of cooking. In the United States, as in a number of other countries, wheat bread is more generally used than any other kind. It is made of wheat flour, liquid, and yeast. Salt, sugar, and sometimes a fat are added for flavoring, but they are not essential.

Flour is finely ground grain. Wheat and rye flour are best suited to bread making, because they contain a substance called gluten, which makes the dough elastic and the walls of the cells strong enough to keep in the gas. Wheat flour contains more gluten than rye flour and is therefore more generally used. There are two kinds of wheat flour, hard and soft. The hard wheat has more gluten in it than the soft wheat and the gluten is of a better quality for bread-making purposes. We also speak of wheat as being winter or spring wheat, depending on whether it was sown in the fall or spring. Both hard and soft wheats are sown at either time. Usually the hard wheats are grown in the colder sections of the country. When the outer portion of the wheat kernel is left

in the flour, the flour is called graham flour. When the rougher coat is removed and the rest ground, the flour is known as whole wheat. In white flour, all of the outer coverings have been removed. When using hard wheat flour, the dough should be made into a soft dough, while soft wheat flour needs to be made into a stiff dough. As flour is easily spoiled, it should be kept in a clean, warm, dry place, if best results are to be obtained.

Yeast. Yeast is a tiny plant, so tiny in fact, that it can not be seen except with a microscope. It is round in shape and grows by dividing. It must have food and moisture to grow on so we plant it in our dough, and as it grows it forms a gas which tries to get out of the dough, but because the gluten in the flour has made the dough elastic, it can only push the dough up and make it full of holes.

One kind of yeast that is used in bread making is called dry yeast. This is made by mixing the yeast plants with corn meal and drying them. This kind of yeast is not always free from micro-organisms, which cause the dough to sour; so it is not very often used in setting the bread itself but is used to make the liquid yeast. Liquid yeast is made from potatoes and either dry or compressed yeast. A recipe will be given later.

A third kind of yeast which is very often used is called compressed yeast. In this the yeast plants are mixed with starch and pressed into cakes. These cakes are still a little moist when the tin foil in which they are wrapped is removed. Most of the yeast plants in compressed yeast are alive, so that the dough is quickly raised. Compressed yeast can not be kept very long, so most people living away from cities and towns find it more convenient to use liquid yeast.

Liquids Used in Making Bread. Milk, milk and water, water, whey, buttermilk, and potato water, may all be used. Water adds nothing to the food value of the bread but will make good bread. Any milk that is used should be scalded and then cooled to lukewarm before making the dough.

LIQUID YEAST

Utensils	Materials	Quantity
Large kettle	Potatoes	4 medium-sized
Measuring cup	Water (boiling)	1 qt.
Teaspoon	Sugar	¼ c
Tablespoon	Salt	1 t
Grater	Yeast	1 cake
	Water (lukewarm)	¼ c

Method. Wash and pare potatoes, soak yeast cake (either dry or compressed) in $\frac{1}{4}$ cup lukewarm water. Have water boiling in kettle. Grate the potatoes into the boiling water and boil five minutes. Add the sugar and salt and cool to lukewarm. When lukewarm, add the yeast. Put into a jar large enough to allow for fermentation. Let stand for twenty-four hours. One cupful is enough for four loaves of bread. The rest can be kept for other bakings, if kept covered and in a cool place. The last cupful may be used in place of a cake of yeast in starting more yeast. If your mother has another way of making yeast which you prefer, you may use her recipe. This is only one of a number of excellent ones.

LIGHT BREAD

Utensils	Materials	Quantity
Large bowl	Liquid*	4 c
Measuring cup	Sugar	$\frac{1}{4}$ c
Teaspoon	Yeast	1 cake or 1 c
Tablespoon		liquid yeast
Moulding board	Fat (if desired)	4 T
	Flour	about 12 c
	Salt	1 T

*Liquid may be milk (scalded and cooled to lukewarm), part milk and part water, water, whey, buttermilk, or potato water.

Sponge Method. Add the yeast to the lukewarm liquid. Sift in about $\frac{1}{2}$ of the flour. Stir and beat until smooth and bubbly. Set aside to rise until the sponge has doubled in bulk. While rising the sponge should be kept warm but not hot.

When light, add the sugar, salt, and shortening to the sponge, then add more flour until the dough is too stiff to handle with a spoon. Turn out onto a floured board. Sprinkle a little flour over the dough. Flour the hands and knead the dough, drawing the edge farthest from you up over the rest. Press the dough down and away from you with the palms of your hands; turn the dough half way around and repeat. Continue kneading until the dough is smooth and velvety to the touch and will keep its shape.

Place in a greased bowl, cover with a clean cloth, and set the bowl in a warm place for the dough to rise.

Quick Method. Instead of setting the sponge, many people prefer to make the dough up at first and knead it then. After letting it double in bulk, form it into loaves immediately, the same as in the sponge method, working it just enough to get

out the large gas bubbles. Put into well-greased pans, preferably individual pans. Use lard, or other cooking fat. Do not use butter to grease the pans, as butter burns easily.

Again put in a warm place and let rise until double in bulk.

Put the bread into the oven. At the end of fifteen minutes it should be a light golden brown. It must bake for one hour. The oven should be hot enough to turn a piece of white paper a golden brown in five minutes.

Faults. If your bread has little burned blisters on top your oven was too hot at first.

If it is golden brown in some places, as it should be all over, but is too brown or too white in other places, you have a poor oven and you must change your loaves around in the oven about once every 10 minutes.

If your loaves run over at the sides, either your dough was too soft or your oven not hot enough. Try to correct this fault the next time you bake.

If your loaves crack and one side rises much higher than the other, your dough was too stiff, or your oven has uneven heat from the top and sides. Watch next time and see which causes your trouble.

If the bread is sour, one of several things may be the trouble. Was it too warm while rising? Did it stand too long before baking? Did you have poor yeast?

Coarse holes may be caused by the dough rising too long or by its not being stiff enough or by the oven being not hot enough and the dough rising too much while it is in the oven. Of course good bread must be thoroughly done.

Suggestions. Always read your recipe carefully before beginning to work. Then collect your utensils and materials. Try to bring everything from the pantry in as few trips as possible. If you wish, you and mother may bake together. One time you might set the sponge at night and knead the dough before going to school next morning. Then mother could bake it while you are in school. Next time she might start it and let you bake it. Or, if you are one of our younger members, she might let you set the sponge for all the bread and then when the dough is ready to knead, you might knead one loaf and she the rest.

Waste. "A single slice of bread seems an unimportant thing. In many households one or more slices of bread daily

are thrown away and not used for human food. Sometimes stale quarter, or even half, loaves are thrown out. Yet one good-sized slice of bread, such as a child likes to cut, weighs an ounce. It contains almost three-fourths of an ounce of flour. If everyone of the country's 20,000,000 homes wastes on the average only one such slice of bread a day, the country is throwing away enough flour for over a million one-pound loaves a day."—Government circular.

Any waste of bread is inexcusable when there are so many ways of using stale bread to make delicious dishes.

THREE WAYS TO USE STALE BREAD

1. Toast.
2. Crumbs for griddle cakes, for breading croquettes, etc.
3. Puddings.

When you have baked light bread four times, using all white flour, fill out your report card for this lesson and copy the answers from it on the part of your Final Report for Lesson 6. If you are a Standard Club member, give your report card to your local Club leader, but if you are not a Standard Club member, send it to the State Club Leader at Corvallis, Oregon. Be sure to write your name and address plainly.

LESSON 7—CAKES

All cakes may be classified under two general heads: (1) Cake made with shortening. (2) Cake made without shortening. The first kind is usually called butter cake; the second, sponge cake.

Although the ingredients used in cake should be good, butter substitutes and packed eggs may be used, providing both are good flavored and will not impart a disagreeable taste or smell to the finished product.

REQUIREMENTS OF A GOOD CAKE

1. Uniform thickness. Unevenness indicates either too much flour or carelessness in baking.
2. Golden brown in color.
3. Thin crust.
4. Light and tender. Heaviness is due to too hot or too cool an oven, too much sugar, too little flour.
5. Well baked, neither too moist nor too dry.

To Test the Oven. If a piece of white paper turns light brown in five minutes the oven is the right temperature.

To Test Cake to See If It Is Sufficiently Baked—

1. When thoroughly baked, cake will shrink from the sides of the pan.

2. Insert a toothpick or clean broom straw in the center of the cake. If it comes out clean and dry the cake is done.

Sponge Cake. Sponge cakes depend for their lightness on the amount of air enclosed in the beaten eggs, as no baking powder is used. It is, therefore, necessary to beat the eggs carefully. Sponge cakes contain no shortening.

SPONGE CAKE

Utensils	Materials	Quantity
Measuring cup	Eggs	3
Bowl	Sugar	1 c
Plate	Lemon juice	1 T
Tablespoon	Salt	$\frac{1}{4}$ t
Teaspoon	Flour	1 c
Egg whip		
Sifter		
Baking pan		

Method. Separate the eggs. Beat the yolks until thick. Add sugar and lemon juice. Try to avoid a sirupy mass. Mix in the flour. Beat the whites until stiff and dry.

Fold in the stiffly beaten whites as carefully as possible to avoid breaking air cells in the whites, because this enclosed air is the only leaven used.

Bake in a paper-lined pan in a moderately hot oven until firm and a golden brown.

Jelly Roll. Sponge cake batter may be baked in a thin sheet for jelly roll.

Bake in a dripping pan.

Turn out on a clean paper on which you have sprinkled a little granulated sugar.

Spread with jelly. Work rapidly. Roll immediately.

PLAIN BUTTER CAKE

Utensils	Materials	Quantity
Bowl	Butter	$\frac{1}{2}$ c
Tablespoon	Sugar	1 c
Egg whip	Eggs	2
Measuring cup	Milk	$\frac{1}{2}$ c
Teaspoon	Flour	2 c
Baking pan	Baking powder	2 $\frac{1}{2}$ t
	Flavoring extract	$\frac{1}{2}$ t

Method of Mixing, No. 1. Cream butter and sugar. Add egg yolks, slightly beaten.

Reserve $\frac{1}{4}$ c of flour to mix with baking powder.

Add a little flour to the sugar, butter, and egg mixture; then add a little milk.

Continue adding flour and milk alternately until all of both is in.

Add the flavoring. Beat thoroughly.

Beat the whites of the eggs stiff and fold them into the mixture.

Lastly, fold in carefully the $\frac{1}{4}$ c of flour mixed with the baking powder.

Method of Mixing, No. 2. Place measuring cup containing butter into a pan of hot water until the butter is soft but not oily.

While the butter is softening, sift the dry ingredients together (sugar, flour, and baking powder) and slightly beat the eggs, yolks and whites together.

Make a hole in the center of the dry ingredients, pour in the eggs, milk, and butter, add the flavoring, and beat thoroughly.

The recipe given for butter cakes is a standard one from which you can make any number of different kinds of cakes.

Bake in a loaf, two layers, or gem pans. If baked in a loaf, have the oven moderately hot, so that white paper will turn a light brown in five minutes. Layer or small cakes require greater heat, so that white paper will turn a deeper golden brown in five minutes.

If the oven bakes unevenly, turn the pan after the cake has crusted over.

If the oven is too hot, place a pan of cold water in the oven. Try to have the oven just right, because you can not obtain a good finished product if you are careless about the baking.

Grease your pan before you begin combining ingredients. For a loaf cake line the pan with white paper and grease the paper.

Always sift your flour before measuring it.

SOME WAYS IN WHICH THE PLAIN CAKE MAY BE CHANGED

Chocolate Cake. Add 2 tablespoons of cocoa to the sugar and butter mixture or mix it with the flour (3 tablespoons of cocoa may be used if you like a dark cake). This cake may be flavored with vanilla, or with $\frac{1}{2}$ teaspoon of cinnamon.

Nut Cake. Add $\frac{1}{2}$ cup of chopped walnuts to the plain cake dough.

White Cake. Omit the egg yolks and use three, or, if eggs are cheap, four egg whites. Flavor with $\frac{1}{2}$ teaspoon almond extract.

Spice Cake. Add 1 teaspoon of cinnamon, $\frac{1}{2}$ teaspoon of ginger, and $\frac{1}{4}$ teaspoon of cloves to the plain cake recipe, omitting the vanilla.

Honey Cake. Use 1 cup of honey instead of sugar. Cream it with the butter and add $\frac{1}{4}$ teaspoon of soda.

Save out 2 tablespoons of milk until the last and then add it or any part of it that is required to make the dough of the same consistency that it would have been had you used sugar.

Light Fruit Cake. Add $\frac{1}{2}$ cup washed and seeded raisins and $\frac{1}{4}$ cup finely cut citron.

Caramel Cake. Take $1\frac{1}{4}$ cup of sugar and use only $\frac{1}{3}$ cup of milk. You may find that even less milk will be better. Caramelize $\frac{1}{2}$ cup of the sugar. To caramelize sugar, put it into a small pan, preferably a tiny frying pan, with 2 tablespoons of water. Let cook until it becomes a good golden brown, then carefully add $\frac{1}{2}$ cup of boiling water. Be very careful about this or you will burn yourself. Let this sirup cook a few minutes. There should be a little less than half a cupful when it is taken off the fire. Cool before using. Add this sirup to the sugar and butter mixture and continue to mix as for the plain cake.

Conservation Cake. The following recipe has been used in all parts of the country for so long that it is impossible now to say who first tried it. Probably a housewife had company come unexpectedly and found that she had no eggs, no butter, and no milk in the house. She must have a cake, so she ventured to make a cake without those very important ingredients and it turned out to be good, so she passed it on for others. Here it is now for you:

EGGLESS, BUTTERLESS, MILKLESS CAKE

Utensils	Materials	Quantity
Mixing bowl	Sugar (brown)	2 c
Measuring cup	Hot water	2 c
Teaspoon	Shortening (lard or other fat)	2 T
Tablespoon	Raisins or dried prunes or apricots	2 c
Kettle for cooking	Salt	1 t
2 loaf pans	Cinnamon	1 t
	Cloves	1 t
	Flour (may be part substitute)	4 c
	Soda	1 t

Method. Cook everything but the flour and soda together for five minutes after they begin to bubble. Cool. Then add flour and soda sifted together. Bake in two loaves for 45 minutes. This cake is best after standing a week.

Note: Two cups of honey may be used instead of sugar and 2 tablespoons of chocolate may be added if desired.

When you have baked cake twice, fill out your report card for this lesson and copy the answers from it on the part of your Final Report for Lesson 7. If you are a Standard Club member, give your report card to your local Club leader, but if you are not a Standard Club member, send it to the State Club Leader at Corvallis, Oregon. Be sure to write your name and address plainly.

LESSON 8—IN PLACE OF MEAT

Sources of Proteins. Protein or body-building food is very necessary in every person's diet, but it is not necessary that all of it come from meat. Fish, milk, eggs, cheese, nuts, peas, beans, and vetch may be used with good results in place of meat. You have already learned the value of cereals.

Legumes. Peas, beans, soy beans, and vetch are legumes. If you were to examine the roots of any of these plants you would find a great many small lumps called nodules, which have the power of drawing nitrogen out of the air and storing it for the use of the plant. It is the nitrogen of these plants which makes them especially valuable to us, although they contain also a great deal of starch, which furnishes heat and energy to the body. The part of the plant which people eat is the seed. These seeds are enclosed in a pod which is usually removed. Peas and some varieties of beans are often eaten while still green. Peas are usually shelled, but green beans, such as wax and string beans, are eaten pod and all. Many

kinds of beans, vetch, soy beans, and some peas, are used after they are fully ripe. They are then shelled and only the seed used. In the following recipes only the dried legumes are used.

BAKED BEANS

Utensils	Materials	Quantity
Tablespoon	Beans	1 quart
Teaspoon	Salt	1 T
Measuring cup	Molasses or sugar	2 T
Pan for soaking and boiling beans	Salt pork	$\frac{1}{4}$ - $\frac{1}{2}$ lb.
Knife	Soda	$\frac{1}{2}$ t
Bean pot or baking pan	Water	to cover

Method. Pick over the beans; wash thoroughly; soak over night in cold water. In the morning drain off this water; add enough fresh, cold water to cover the beans and $\frac{1}{4}$ teaspoon soda. Cook slowly until the skins crack. Drain again. Put the beans into a bean jar, preferably a stone jar, although any pan may be used. Cut the salt pork into strips and put it in with the beans. Mix the molasses or sugar and salt with some hot water. Pour this over the beans. Add enough water to cover the beans. Cover the bean pot. Bake slowly for at least six hours. Eight hours is none too long. During the last hour uncover so that the beans may brown. Watch them carefully to prevent them from drying out. Add water when necessary.

Baked beans, Boston brown bread and butter, and some kind of canned fruit will make an excellent lunch. Baked beans should take the place of meat and should never be served at the same meal with meat.

Vetch may also be prepared the same as baked beans. After cooking vetch in soda water until tender, rub through the hands to remove hulls.

CHEESE

Home-made. All cheese is made from milk. Some kinds are made from sour milk. Cottage cheese is an example of this kind, but most kinds are made from sweet milk which is thickened or clotted by rennet. The whey or liquid is then pressed out, some coloring matter is added and the cheeses are molded and pressed into shape. They are then put away to ripen, a process which develops the flavor desired.

Concentrated Food. Cheese is a very concentrated form of protein food. One pound of it has as much nutriment as two pounds of meat. When properly cooked, it is not difficult to digest. Since it is a protein food, it should never be cooked at a high temperature, as that will make it leathery and more difficult to digest.

How to Keep Cheese. If kept in a warm place, without any ventilation, cheese will readily mold. Hence it is best to keep it in a cool place in a dish or jar covered with a cloth. Cheese that has been cut may be wrapped in paraffine paper, then in a slightly damp cloth, and then in paper. It will keep this way for a number of days. It should be watched, however, as mold will often grow on the cloth.

COTTAGE CHEESE

Utensils	Materials	Quantity
Large kettle	Sour milk (well clotted)	1 quart
Cheesecloth	Cream or butter	to mix well
Teaspoon	Salt	$\frac{1}{4}$ t
	Pepper	to taste

Method. Pour two quarts of boiling water into the sour milk. Allow it to stand until the curd separates from the whey. Strain through a cloth (two thicknesses of cheesecloth are good for this purpose). Either press out the whey, or allow it to drip for several hours. Put the curd into a bowl; add the salt and a little cream or melted butter, and mix thoroughly. Serve with bread and butter, a green salad, a fruit dessert, and a beverage, for lunch or supper.

A little chopped pickle or pimienta may be added for flavor if desired.

MACARONI AND CHEESE

Utensils	Materials	Quantity
Kettle	Macaroni	1 c
Baking dish	Milk	2 c
Tablespoon	Cheese	6 T
Cup	Salt	to taste
Knife	Pepper	to taste
Grater	Bread or cracker crumbs	

Method. Break the macaroni into small pieces. Cook in slightly salted water until tender. Take care not to let it stick to the pan or boil over. When tender, put into a colander and

pour cold water over it to remove the stickiness. Put a layer of macaroni into a baking dish. Sprinkle a little of the grated cheese over it. Add another layer of the macaroni and more cheese. Continue until all of the macaroni has been used. Have a thick layer of cheese on top and put buttered crumbs on top of the last layer of cheese. Sprinkle with salt and pepper. Pour in the milk and bake until the top is a rich golden brown. Serve with whole wheat, graham, or Boston brown bread, some vegetable like cabbage, cauliflower, tomatoes, green peas, green beans, or parsnips, and a fruit or gelatine dessert.

WELSH RAREBIT

Utensils	Materials	Quantity
Double boiler	Milk or tomato juice	1 c
Measuring cup	Butter	1 T
Tablespoon	Cheese	½ c
Teaspoon	Cornstarch	1 T
Knife	Mustard	¼ t
Grater	Salt	to taste
	Paprika	
	Pepper	

Method. Make a sauce of the butter, milk, and cornstarch. Add cheese and stir until the cheese is melted. Add seasonings and serve on toast.

EGGS

Eggs. Eggs belong to the large class of protein foods, and as they are very nourishing they should be used when the price will permit. An egg is composed of shell, membrane, white, yolk, and the embryo from which the baby chick grows. Fresh eggs have a rough, dull-looking shell, while old eggs have smooth, shiny shells.

How to Preserve. Eggs may be preserved by packing in sawdust, or in water glass, and will then keep for many months. Water glass is the better material to use. Be sure that the eggs are fresh and infertile. Do not wash them. Pack in a stone jar, cover with water glass, using one part of water glass to 10 parts of water that has first been boiled and then cooled. Put a lid or board on the jar. When the eggs are needed, take them out and wash. Do not take out more than you require. These eggs can not be cooked in the shell unless the shell is pierced, as the water glass has filled up all of the pores in the shell, which, when the egg is heated, will not allow the steam

to escape. Eggs so preserved may be scrambled, fried, baked, or used in cakes, custards, and puddings.

How to Cook. Because eggs contain protein, it is best to cook them at a temperature below boiling. For a long time it was believed that they were indigestible when boiled, but recent experiments seem to show that they are digested, but that digestion will take longer than when the egg is cooked below the boiling point. At the lower temperature, however, they are also much more evenly cooked throughout.

Soft-cooked Eggs. Place eggs in enough boiling water to cover. Remove the pan to the back of the stove, cover, and allow to stand for from five to eight minutes. The length of time required will vary, depending upon the temperature of the eggs, the proportion of water to eggs and the place on the stove. A little practice will enable you to cook them exactly as the family prefer them.

Hard-cooked Eggs. If hard-cooked eggs are desired, proceed as for soft-cooked eggs, but leave them in the water for forty minutes or a little longer. They may also be put in boiling water in the top of a double boiler, putting boiling water in the lower part also, and setting the vessel where the water will remain hot. Cook for forty minutes.

GOLDENROD EGGS

Utensils	Materials	Quantity
Double boiler	No. 2 white sauce (see Lesson 1)	1 c
Cup	Toast	6 slices
Teaspoon	Hard-cooked eggs	4
Tablespoon		
Knife		
Bowl		
Sieve or wire strainer		

Method. Shell the eggs and separate the yolks and whites. Chop the whites. Make a white sauce of the flour, milk, butter, salt, and pepper.

Add the chopped whites. While the white sauce is cooking, rub the egg yolks through a sieve. Pour the white sauce over the toast. Sprinkle the egg yolks over the top. Garnish with a sprig of parsley. This recipe makes enough for six people and is a good way to serve eggs when they are somewhat expensive.

FRENCH OMELET (One Person)

Utensils	Materials	Quantity
Bowl	Egg	1
Egg whip or fork	Milk or water	1 T
Tablespoon	Butter	1 t
Teaspoon	Salt	1/8 t

Method. Beat the eggs slightly, add the liquid. Melt the butter in a frying pan or omelet pan. Pour in the egg mixture. As the egg thickens, lift it from the pan with a fork until the whole is of a creamy consistency. Place the pan on a warmer part of the stove and let the omelet brown on the bottom. Roll out onto a hot platter.

Puffy Omelet. The same proportions of the same ingredients are used as for French omelet, but the eggs are separated. The yolks are beaten until thick and lighter in color and the whites are beaten with a fork or egg whip until stiff. Add the seasonings and liquid to the yolks; then carefully fold this mixture into the egg whites, taking care not to break down the air cells in the whites. Pour into the pan, which has been heated and which contains the butter. Cook slowly until the omelet is set. Put the pan into the oven and continue cooking until when touched the top does not feel sticky. Fold onto a hot platter and serve immediately.

MILK AND EGGS

When a milk-and-egg dish is served as a dessert, it will take the place of at least a part of the meat.

BLANC MANGE (Bla Manzh)

Utensils	Materials	Quantity
Double boiler	Milk	1 c
Measuring cup	Cornstarch	4 T
Tablespoon	Sugar	4-6 T
Teaspoon	Vanilla	1/2 to 1 t
	Salt	1/8 t
	Nutmeg	if desired

Method. Scald the milk in a double boiler. Mix the sugar and cornstarch. Add the hot milk slowly to the sugar and cornstarch mixture. Return to double boiler and stir until the mixture thickens. Add salt. Cook for 30 minutes and just before turning into a mold, add the vanilla. Turn into

a mold which has been wet with cold water. The mold is dipped in cold water to make the blanc mange unmold easily. The mold may be a pan or serving dish.

The cornstarch could be mixed with a little cold milk instead of the sugar but the cold liquid would cool the hot milk more than the dry materials. Sugar, liquid, or fat mixed with cornstarch or flour separates the starch grains so that the hot liquid reaches all of them at the same time and prevents the mixture from lumping.

VARIATIONS OF BLANC MANGE

Chocolate Blanc Mange. Add 1 square of unsweetened chocolate, melted, or two tablespoons of cocoa to the blanc mange. If unsweetened chocolate is used add two tablespoons of sugar.

Fruit Blanc Mange. Add $\frac{1}{2}$ cup of dates, prunes, apricots, or figs to the plain blanc mange.

Serve any blanc mange with thin cream or a sauce made from fruit juice, sweetened, and thickened slightly with cornstarch.

CUSTARD

Utensils	Materials	Quantity
Double boiler	Milk	1 c
Measuring cup	Egg	2
Tablespoon	Sugar	2-3 T
Teaspoon	Vanilla	$\frac{1}{2}$ t

Method. Heat milk in double boiler. Beat eggs and sugar together. Slowly pour hot milk on eggs, stirring constantly. Return mixture to double boiler and heat until custard coats the spoon. Add vanilla and pour immediately into a bowl.

When you have tried any two recipes of this lesson fill out your report card for this lesson and copy the answers from it on the part of your Final Report for Lesson 8. If you are a Standard Club member give your report card to your local Club leader, but if you are not a Standard Club member send it to the State Club Leader at Corvallis, Oregon. **Be sure to write your name and address plainly.**

LESSON 9—MEAT

Meat is one of the most expensive foods we have. Therefore it is necessary for us to know how to get the most value out of every pound of it that we use.

When purchasing meat, take the bones and fat home with you. Trim off all excess fat from the meat before cooking it. Save it carefully and prepare it for use.

When preparing steak for cooking, cut off the tougher portion and save it for a casserole dish or for a stew. Steaks, chops, and roasts should be used less frequently now, and stews, boiled meat, casserole dishes flavored with meat, and meat pies used in their place in order to make a little meat flavor go a long way. All fat trimmings should be ground up or cut into small pieces and melted over boiling water. When melted, strain the fat into a jar or pail, when it is ready for use. These fats may all be used in place of lard or any of the commercially prepared fats in cooking. Beef suet can be made into cooking fat that is an excellent substitute for butter or lard in cooking by the following method:

Butter or Lard Substitute—

3 lbs. beef suet
1 pt. cooking oil (either cotton-seed or corn oil)

Put the suet through a food chopper. Put this and the oil in the upper part of a double boiler and cook until clear. Strain into a five-pound lard pail. This will make about 3½ or 4 pounds of excellent cooking fat at a lower cost than lard or crisco.

After cooking meat, if the fat in the pan is not used for gravy and it is too brown for further cooking purposes, save it for soap making. Not a tablespoon of fat should be thrown away as the world supply is limited.

Beef or Mutton Stew. One pound beef or mutton (trimmings from steak or chops, meat from the neck or shank, in fact any of the tougher portions of the animal, or left-over cooked meat may be used).

Utensils	Materials	Quantity
Stew pan	Beef or mutton	1 lb.
Measuring cup	Onion	1
Tablespoon	Salt	} to taste
Knife	Pepper	
	Carrot	1
	Any left-over vegetables	
	Fat or a small piece of fat	
	taken from the meat	2 T
	Flour	2 T

Cut the meat and vegetables into small pieces. Fry the onion, carrot, and meat in the fat until a rich brown. Put in the flour and brown it. Add one cup of cold water. Stir until it begins to boil. Put in any other vegetables you have on hand; for example, half a cup of peas, a few string beans or baked beans, a little cauliflower, cabbage, or tomatoes.

Put the stew into the casserole or other pan that may go into the oven and add enough water to cover the meat and vegetables. Celery leaves, celery salt, paprika, or curry powder may also be used as flavoring at various times to lend variety. Cook slowly for four or five hours. Watch carefully and add more liquid, as it evaporates. This stew may be served with boiled potatoes or a crust may be made to cover it, thus making a meat pie.

MEAT PIE CRUST

Utensils	Materials	Quantity
Mixing bowl	Flour	1 c
Tablespoon	Baking powder	2 t
Teaspoon	Salt	½ t
Measuring cup	Shortening	1 T
	Milk or water	about ½

Method. Sift dry ingredients together, cut in the shortening, add liquid to form a soft dough, spread this dough on top of the stew in a baking dish, and bake until a golden brown.

Beef Stew With Dumplings. Two pounds of beef from the neck, shank, or round, cut into medium small pieces, or one jar of canned meat. Brown in a little fat. Add two quarts of water and simmer until tender. Season with salt and pepper. Follow the recipe given under meat pie for crust, making the dough a trifle less stiff and dropping it in on top of the stew by spoonfuls. Cover the kettle tightly, putting a weight on top to keep the lid down. Cook thirteen minutes. Care must be taken to leave plenty of liquid in the stew as the dumplings take up a good deal. When cooked, remove from the kettle and thicken the stew with a little flour, using 1½ tablespoons of flour to each cup of liquid.

If any of the stew is left over, it can be served with rice the following day. Season the stew with tomato or curry powder. Put a border of rice around the edge of the platter and pour the stew in the center. The following day, should some of the rice and stew be left over, mix the two, put into

a baking dish, cover the top with bread crumbs and grated cheese and bake until the top is well browned. A very little meat and quite a large proportion of rice and gravy may be used for this dish. Of course, canned meat may be used in any of these ways.

In the farm home, pork is more generally used than beef, especially when cured, as it can best be kept in this way. It is not necessary, however, always to cook it in the same way.

Pan-broiled Ham. Cut the ham in inch-thick slices. Trim off the extra fat, leaving about a half-inch rim of fat on the slice. Have the skillet smoking hot. Rub over the pan a piece of the fat trimmed from the meat. Put the meat in the skillet. Brown quickly on one side; turn and brown on the other side. When browned on both sides, move the pan to a cooler part of the stove, cover it and let the meat cook slowly until thoroughly done. Usually 15 to 20 minutes is long enough. When cooked, place on a hot platter and make gravy. The meat should be tender and juicy.

Ham Gravy. For each two spoonfuls of fat in the pan, use two tablespoons of flour and one cup of milk. Put the flour into the fat and brown, stirring constantly to avoid scorching. Pour in the milk and stir until smooth and the mixture boils. Season to taste with salt and pepper.

Left-over Ham. Left-over ham may be ground or chopped and used for sandwiches for school. An equal quantity of hard-cooked eggs chopped fine may be mixed with the ground ham and thus make a little go twice as far for sandwiches.

Creamed Ham on Toast. Grind the left-over ham (especially when broiled or boiled); add an equal quantity of No. 2 white sauce (see recipe in Lesson 1) and serve on toast.

Ham Omelet. Sprinkle two or three tablespoons of ground ham on top of either a French or puffy omelet just as it is ready to be turned onto the platter. The ham should be put into the oven long enough to warm it.

Another good way to use left-over meat of any kind is to grind it and mix it with an equal quantity of boiled rice or No. 4 white sauce (see Lesson 1), shape into little cakes, and brown in a small amount of fat. Salmon may also be prepared in this way.

When you have tried any two of the above recipes once, fill out your report card for this lesson and copy the answers from it on the part of your Final Report for Lesson 9. If you are a Standard Club member, give your report card to your local Club leader, but if you are not a Standard Club member, send it to the State Club Leader at Corvallis, Oregon. **Be sure to write your name and address plainly.**

LESSON 10—PREPARATION OF A MEAL

This Lesson Must Be the Last One Done. In some of the first lessons in this course you learned that all foods are classified according to their use in the body. In planning meals it is necessary to know in what group each of the various foods belongs and then to choose something from each group.

In the protein or body-building group belong lean meat, eggs, cheese, milk, and dried peas.

In the carbohydrate or heat- and energy-producing group belong sugar, wheat, potatoes, rice, beans, peas, corn, oats, barley, and rye.

In the fat-producing group belong butter, lard, suet, mutton-fat, cooking and salad oils, and fat meat.

Mineral matter is found in all kinds of food, but green vegetables and fruits contain mineral substances which are especially needed in the body. They also furnish certain acids and give bulk to the food. Bulk is needed to help in the process of digestion.

Water is found in all food, but the human system requires more than is supplied in this way; therefore everyone should drink several glasses of water a day.

A menu should include something from each group of foods, and care should be taken to serve things together that make a pleasing combination and contrast. Never serve the same food in two ways at the same meal; for example, do not serve tomato soup and tomato salad at the same meal. Do not serve two foods from the same group at the same meal; for example, baked beans and beef steak, or potatoes and rice. A green vegetable and a fruit, however, may be served at the same meal.

Serve foods of contrasting flavor together, a mild-flavored one like potatoes with something of more decided flavor such as meat or fish.

Remember that a simple meal, in which the different foods belong to the various food groups, will be far more satisfying than a meal in which a great many different foods are combined with no regard for the needs of the body.

When you have planned your meal, decide on the order in which you will need to prepare the various foods so that all may be ready to serve at the proper time. When preparing your first meal, plan to serve only such foods as you have prepared separately before. Use canned or fresh fruit for dessert.

Careful seasoning, attractive serving, the proper amount of cooking, all help in the preparation of palatable and pleasing meals. Serve food that is intended to be hot, hot, and on warm dishes. Have cold food cold, and serve it on cold dishes.

Another essential in meal preparation and serving is the proper setting of the table. A thick, soft cloth, called a "silence cloth," is frequently put on under the tablecloth to lessen the noise made in placing dishes on the table. The tablecloth is spread over the "silence cloth," and should be put on smoothly and so that it hangs evenly. A white cloth is to be preferred, but many times a busy housewife on the farm must use a colored cloth.

The term "cover" is used to include the china, silver, and glassware used by each person. The plate is placed directly in front of the person. The knife, teaspoon, and soup spoon (when required) are placed at the right of the plate, and the fork at the left of the plate. The water glass is placed above the point of the knife. The knife is placed with sharp edge toward the plate. The tines of the fork and the bowl of the spoon are turned up. The napkin is placed at the left of the fork. The butter pat or bread and butter plate is placed above the fork.

Salt, pepper, sugar, bread, butter, relish, or jelly should be placed where they will be most convenient.

SUGGESTIVE MENUS

Breakfast. (Choose one from each group.)

1. Fruit (baked apple, apple sauce, stewed prunes, etc.)
2. Cereal (rolled oats, corn-meal mush, etc.)
3. Eggs, hash, or salt fish, if desired.
4. Bread and butter (muffins, gems, toast, biscuit.)
5. Coffee for grown-ups, milk for children.

Lunch or Supper.

A hot dish such as cream soup, beans in some form, or other meat substitute, or meat.

A starchy vegetable if desired and a green vegetable such as peas, turnips, cabbage, etc. The green vegetable may be served in the form of a salad.

Bread and butter.

Some kind of a dessert, which may be canned fruit, a fruit gelatine, a custard or blanc mange, or any simple pudding. Often a dessert is omitted if a salad is served.

Tea for grown-ups if desired. Milk for children.

Dinner.

Clear soup if desired.

Meat or a substitute.

A starchy vegetable and a green vegetable.

Bread and butter.

Jelly or preserves if desired.

Some kind of dessert (this may be only canned fruit).

A beverage (either tea or coffee for grown-ups), if desired, and milk or cocoa for children.

Plan one meal, using the outlines given, prepare and serve it, then fill out your report card for this lesson and copy the answers from it on the part of your Final Report for Lesson 10. If you are a Standard Club member give your report card to your local Club leader, but if you are not a Standard Club member send it to the State Club Leader at Corvallis, Oregon. **Be sure to write your name and address plainly.**

THE EXHIBIT AND HOW TO PREPARE IT

One Loaf of White Bread. The bread should be baked in an individual loaf pan so that there will be crust on all sides.

Wrap the loaf carefully in tissue or paraffin paper, enclosing a card upon which your name and address are plainly written in ink.

Wrap in heavy brown paper or put in a pasteboard box; then wrap in paper.

Write to your county school superintendent for a county fair premium list and for information as to when and where to send your exhibit.

STANDARD COOKING CLUB DEMONSTRATIONS

Value of Demonstration. Demonstrating is merely showing others how to do the things one has previously learned how to do. It includes doing the work and explaining it. Demonstrating also helps to fix facts in the demonstrator's mind.

Personal Appearance of a Demonstrator.

1. White apron and cap (white dress may be worn).
2. Neatly brushed hair.
3. Clean hands and finger nails.
4. Clean shoes.

Where to Give Demonstrations. These demonstrations may be given in the school house, if proper equipment is available there, or they may be given in the home kitchen of one of the Club members or the Club leader.

Number in Team. Each team shall have three members.

How Many Demonstrations. Select at least one of the demonstration subjects given here. When once your members are interested, the work will prove to be so absorbing that probably many clubs will wish to give all the demonstrations suggested and will doubtless be planning other demonstrations of equal value and interest.

Equipment. The table used should be covered with white oilcloth or paper unless it is a regular kitchen table. In that case any covering already on the table will be satisfactory. Have all the utensils and materials on the table so arranged that each thing can be reached as required. Have the fire (if required) burning well, flour sifted (if used) but not measured, as all measuring should be done as a part of the demonstration. If boiling water is required at the beginning of the demonstration, have it hot before commencing work.

The Demonstration. Have one member of the team for captain and speaker. Let the other two do the work as she describes it. Plan ahead so that each one has something to do all of the time and so that there need be no confusion.

The speaker should arrange her talk so that it will occupy about the same length of time as the work done. Each member of the team should be given opportunity to talk at some time during the year, and all should be able to answer any questions asked during the demonstration.

Demonstration Subjects Without Cooking.

1. Measuring materials, both dry and liquid.
Teaspoon, $\frac{1}{2}$ and $\frac{1}{4}$ teaspoon; sifting flour before measuring; measuring flour before and after sifting; amounts of substitute flours to use.
2. Obtaining gluten from flour.
3. Scoring any food preparation for which directions have been given.

4. Placing or judging bread, cake, or quick bread.
5. Table setting and serving a meal.
6. Planning of meals.
7. How to find cost of a prepared dish.

Demonstrations Requiring Cooking.

1. Making of quick bread.
2. Making a simple cake.
3. Making a white sauce.
4. Light bread.
5. Potato cookery.
6. In fact, any of the lessons will make good demonstrations.

How to Prepare for a Demonstration. Decide on what to demonstrate. Read over the lesson on that subject; if possible read some other authority on the subject. The list of bulletins given here will help you. You will find a great deal in any encyclopedia about the various foods, how they grow, how they are prepared for use, and where they grow.

After you have planned the demonstration, decide on what each member of the team is to do and practice in private until you can give an intelligent public demonstration.

Outline for a Demonstration on Potato Cooking—

Select potatoes; wash; pare; put on to cook.
 Have some (4 or 5) potatoes nearly cooked at beginning of demonstration. Drain, dry.
 Serve in service dish as plain boiled.
 Run through a ricer.
 Serve as riced potatoes.
 Add hot milk and seasoning.
 Serve as mashed potatoes.
 Potato soup, potato salad, fried potatoes (cold boiled) are all possible in such a demonstration.

STANDARD COOKING CLUB JUDGING

Since one of the requirements of a Standard Club is that there shall be a team for judging, it is necessary for that team to have instructions in how to judge. Before we can pass judgment on a piece of work of any kind it is necessary for us to have a standard with which to compare the article. It is possible to judge a piece of work quite accurately by comparing with a standard.

When we wish to know how many yards there are in a certain piece of cloth, we use a tapeline or yardstick the length of which we know. Your tapeline, if it is a true one, is exactly the same length as mine or your neighbor's. We call such a

tapeline a standard measure of length. There is also a standard measure of weight. Both of these are standard measures of **quantity**. A score card is a measure used to determine **quality** of a product instead of the **quantity** of it.

The following score card is one of the very simplest and will help you to decide how near the standard product yours is. In order to use this score card on your products you will have to study the following paragraphs which tell you how the various products should look and taste, then decide how nearly yours comes up to the standard.

SCORE CARD

General appearance	20
Texture	35
Flavor	45
	100
White Sauce:	
General appearance	20
(Good milk color.)	
Texture	35
(Smooth, free from lumps.)	
No. 1. About as thick as thin cream.	
No. 2. About as thick as thick cream.	
No. 3. About as thick as corn sirup.	
No. 4. Thick enough to cut when cold.	
Flavor	45
Well seasoned.	
Not scorched.	
Vegetables:	
General appearance	20
(Retain natural color, unless sauted, when they should be golden brown.)	
Pieces uniform in size and shape.	
Attractive in appearance.	
Texture	35
Firm.	
Not watery.	
Flavor	45
Well seasoned.	
Characteristic flavor.	
Texture	35
Firm, not cooked to pieces.	
Tender.	
Free from water.	
Flavor	45
Characteristic flavor.	
Well seasoned.	
Not scorched.	
Quick Breads:	
General appearance	20
Golden brown.	
Uniform shape and size.	
Texture	35
Fine grained.	
Flaky.	
Well baked throughout.	
Light.	
No large holes (except popovers).	
Crisp crust.	
Flavor	45
Sweet, nutty flavor.	
Not scorched.	
Palatable.	

Light Bread:

(From United States Department Agriculture Circular.)	
General appearance	20
Evenly shaped with well-rounded top.	
Uniformly browned crust.	
Relatively large for weight.	
Not burnt.	
Texture	35
Creamy-white crumb.	
Fine, soft, pliable, springy, of uniform grain.	
Flavor	45
Sweet, nutty flavor of wheat grain.	
Pleasing odor.	

Cakes:

General appearance	20
Evenly shaped.	
Evenly browned.	
Texture	35
Fine grained.	
Tender.	
No large holes.	
Flavor	45
Characteristic of the flavoring element.	
Not strong.	
No taste of rancid fat.	

Legumes:

General appearance	20
Attractive in appearance.	
Texture	35
Whole but tender.	
Moist but not swimming in liquid.	
Flavor	45
Well seasoned.	

Cheese Dishes:

General appearance	20
Attractive.	
If baked—well browned.	
Texture	35
Not stringy.	
Tender.	
Flavor	45
Well seasoned.	
Flavor characteristic of kind of cheese used.	
Not scorched.	

Egg Dishes:

General appearance	20
Not mussy.	
Attractive.	
Omelets.	
Well browned.	
Light.	
Custards.	
Attractive.	
Texture	35
Tender.	
Evenly cooked throughout.	
Omelets.	
Light, puffy.	
Custards.	
Smooth.	
Not watery.	
Flavor	45
Not stale or strong.	
Omelets.	
Well seasoned.	
Custards.	
Rich and velvety.	

Meats:

General appearance	20
Attractive	
Well browned (if fried or broiled).	
Texture	35
Tender.	
Juicy.	
Not cooked until hard throughout.	
Flavor	45
Not scorched	
Well seasoned.	

The following bulletins may be obtained by writing to the Department of Agriculture, Washington, D. C., giving the name of the bulletin and its number:

- Farmers' Bulletin 363—The Use of Milk as Food.
- Farmers' Bulletin 34—Meats: Composition and Cooking.
- Farmers' Bulletin 391—Economical Use of Meat in the Home.
- Farmers' Bulletin 121—Beans, Peas and Other Legumes as Food.
- Farmers' Bulletin 128—Eggs and Their Uses as Food.
- Farmers' Bulletin 653—Honey and Its Uses in the Home.
- Farmers' Bulletin 712—School Lunches.
- Farmers' Bulletin 256—Preparation of Vegetables for the Table.
- Farmers' Bulletin 295—Potatoes and Other Root Crops as Foods.
- Farmers' Bulletin 375—Care of Food in the Home.
- Farmers' Bulletin 469—Fats and Their Economical Use in the Home.

One excellent bulletin, Number 47, called "The Preparation and the Preservation of Vegetables," is published by the Department of the Interior, Bureau of Education, Washington, D. C.

Two bulletins, published by the Oregon Agricultural College, may be had by writing to the College Exchange. They are: Extension Bulletin 216, "Substitutes for Meats," and Extension Bulletin 202, "Food for the Family."

Note: It would be well for the secretary of the Cookery Club to write for one copy each of any of the above bulletins that the members decide would assist them in their work. They may be obtained free of charge.