## UNIVERSITY OF IDAHO

Extension Division
L. W. FLUHARTY
nIRECTOR


By Ina Scrivner
Payette County Club Leader

COOPERATIVE EXTENSION SERVICE IN AGRICULTURE
AND HOME ECONOMICS OF THE STATE OF IDAHO
UNIVERSITY OF IDAHO EXTENSION
DIVISION AND U. S. DEPARTMENT OF
AGRICULTURE COOPERATING

## FARM BUREAU JUNIOR CLUBS

## Recipes in This Bulletin

Yeast Bread ..... 7
Liquid Yeast ..... 9
Parker House Rolls ..... 9
Cinnamon Rolls ..... 9
Hot Cross Buns ..... 9
Graham Bread ..... 10
Oatmeal Bread ..... 10
Raisin or Nut Bread ..... 10
Coffee Cake ..... 10
Dutch Apple Cake ..... 11
Plain Muffins ..... 11
Graham Muffins ..... 11
Corn Bread ..... 12
Sweet Muffins ..... 12
Drop Cookies ..... 12
Ginger Bread ..... 12
Steamed Brown Bread ..... 12
Baking Powder Biscuit ..... 13
Fruit Rolls ..... 13
Cornmeal Parker House Rolls ..... 13

# BREAD BULLETIN 

First and Second Year Bread Clubs

By INA SCRIVNER<br>Payette County Club Leader<br>CONTENTS

|  |  |  | Page |
| :--- | :--- | :--- | :--- |
|  |  |  | Page |
| Classification of Breads | 4 | Score Card for Bread | 15 |
| Essentials in Bread Making | 4 | Outline for Biscuit Demonstration | 16 |
| Directions for Measuring | 7 | Outline for Yeast Bread Demonstration | 18 |
| Recipes | 7 | Score Card for Demonstration Teams | 19 |
| Experiments with Leavening Agents | 14 | Requirements for Bread Clubs | 20 |
| Arithmetic of the Mixing Bowl | 14 | Surgestive Program of Work | 21 |

THIS BULLETIN is prepared for first and second year bread club members, to be used both as a recipe book and as a manual for their club work. Bread club girls should learn the processes of breadmaking and something concerning the ingredients used in bread. They should learn to measure accurately and to mix deftly. They should learn the nature of leavening agents and the general proportions used in simple bread mixtures. By doing this they will be enabled to change and vary recipes in innumerable ways and thus make a larger variety of products.
They should strive to "make the best better." The score card is a means of judging their products and thus bringing them up to a higher standard of perfection.

Not only should the bread club members be able to make good bread but they should show others how it may be made. The demonstrations outlined in the bulletin offer suggestions for this work.

The requirements for bread clubs on page 20 are the minimum requirements. No doubt every girl will do much more than simply to meet these.
The outline for club meetings on pages 21-25 includes a program for twelve meetings. This program may be adopted or
it may be changed to meet local conditions. The best clubs are those that follow a well arranged program.

Bread is called the "staff of life" because it contains almost all the elements necessary to support life. When butter is added, it is a well-balanced food. The quality of bread does much to determine the health of the family.

## CLASSIFICATION OF BREADS

## I. QUICK BREADS

Quick breads are those that are leavened by other material than yeast. This may be air incorporated by beating the mixture or by adding whites of eggs well beaten. Sour milk and soda is a combination sometimes used. The acid in the milk combines with the soda and produces a gas within the mixture. Baking powder is more commonly used. It contains both an acid and an alkali (soda). When these are moistened with the milk or water, gas is produced.

## II. YEAST BREADS

The rising of yeast bread is due to the gas given off by the yeast plants. These plants grow and multiply very rapidly. They are killed by thoro baking of the bread.

Yeast bread is classified by the time required in making.

1. Short Process Bread is made by using a large amount of yeast. Usually compressed yeast is used. The bread is made stiff at the first mixing.
2. Long Process Bread is made into a sponge at the first mix. ing. This is usually set the night previous to baking.

## ESSENTIALS IN BREAD MAKING

In making bread, the first thing to be considered is good mate rials, without which it is impossible to get the best results. Too often we blame lack of success to luck, while in fact it may be due to poor materials or poor workmanship. The essential ingre dients in bread are good flour, good yeast and moisture. These, with proper temperature, rising and baking, give the desired results.

Flour--Flour is the soil in which the yeast plants grow and multiply. If bread is to be of first quality, the flour must contair starch and an elastic substance called gluten. When a few grains
of wheat are chewed, a gummy material is left in the mouth. This is the gluten of the wheat. The gluten helps to hold the bubbles of gas in the dough and assists in making it light. The best bread flour feels rather sharp, like powdered cement. It falls apart after being pressed between the fingers.

Moisture-The liquid which is used in bread making may be milk or water, and the proportion is four parts of liquid (more or less) to one part of flour. Milk adds to the nutritive value of the bread. Hard wheat requires more liquid than soft wheat, because its larger proportion of gluten requires more moisture to soften it.


YEAST PLANTS
As Viewed Under the Microscope.

Yeast-Yeast is a tiny, onecelled plant, similar to an egg in form, but so small that it can be seen only by using a powerful magnifying glass. In order that the yeast plant may grow, it needs suitable food, moisture and warmth. Unlike most plants, it grows and multiplies by budding and by spores. The spores are to yeast what seeds are to the wheat plant.

People who live in larger towns usually get compressed yeast, because the yeast plants are fresh and moist and just ready to grow when planted. When one lives far from the market it is more convenient to use dry yeast. Dry yeast is made up of yeast plants and some ingredient, such as corn meal, which acts as a binder. Dry yeast can be kept for weeks, or even months, in a tightly covered can or jar, and it is not affected by an uneven temperature. In Idaho many housekeepers use liquid or potato yeast. This is very good if one is careful to keep the jars thoroly clean, emptying and scalding them often.

Sugar, Salt and Shortening-These are added to give the bread a better flavor and to help make a tender crumb. Sugar gives immediate food for the yeast plant. Salt makes bread taste better, but should not be used too freely. Shortening makes bread
more tender but if used too generously will delay the growth of the yeast plants.

Temperatures-Bread will rise at a temperature of from 75 to 95 degrees Fahrenheit. The temperature should be kept uniform; too much heat will kill the yeast plant and too low a temperature stops its growth. Some means should be used to keep the bread at an even temperature thruout the rising process. A fireless cooker or a home-made sponge box is very good for this purpose. Directions for making a sponge box may be had by writing to the Home Economics Department of the Extension Division, Boise, Idaho. In winter it is usually best to mix the bread in the morning, so that the yeast may not become chilled. By heating the flour the rising process may be hastened. Some use potato water, as it makes the yeast grow faster. It also makes the bread moist.

Processes-A sponge is a mixture of dissolved yeast mixed with flour and liquid. Sugar, salt and melted fat may be added to this mixture. With the long process, a sponge is set and a small amount of yeast is used. The short process requires more yeast and the bread is stiffened at once. For hard wheat the long process is usually best, while the short process is satisfactory for soft wheat.

Baking-To test the temperature of the oven, put a piece of white paper into it and if it browns in six minutes, the oven is ready. If the loaf is brushed with water before it is placed in the oven, it does not crust so soon and a better flavor results. In baking, the loaf should continue to rise for the first fifteen minutes, after which it should brown for twenty minutes. The heat should then be reduced until the baking is finished. It generally requires sixty minutes to bake a loaf of the size the recipe mentions. It is very important that bread be thoroly baked, since in baking the starch becomes soluble, the gluten is hardened, the yeast is killed, alcohol and carbon dioxide are driven off and flavors are developed. Careful baking improves the appearance of the bread.

To Test Bread-To determine when bread is baked: (1) The loaf shrinks from the sides of the pan; (2) Remove from pan and press the sides, and if they rebound, it is done.

To Care for Bread-When bread is removed from the oven, it should be placed on wire racks to cool so that the air may pass
all around it. When cold, store in receptacles which have been thoroly washed and scalded. The bread should not be wrapped. To freshen stale bread, put the loaf into a hot oven and the moisture will be driven in, making a moist crumb and a crisp crust.

## DIRECTIONS FOR MEASURING

Correct measurements are essential in getting the proper proportions of ingredients. In case of dry ingredients, "full" means that the measure is level full, and this measurement is obtained by scraping over the top with the flat edge of a knife, thus removing all excess. One-half spoonful is obtained by taking a spoonful and cutting thru lengthwise of the bowl and scraping the extra half away. One-fourth spoonful is obtained by dividing the half. A measure is full of liquid when it will hold no more.

## Table of Equivalents and Abbreviations.

| ns (t.) equal. | lespoon (tb.) |
| :---: | :---: |
| 16 tablespoons (tb.) equal. | 1 cup (c.) |
| 2 cups (c.) equal. | 1 pint (pt.) |
| 2 cups (c.) butter equal. | 1 pound (lb.) |
| 4 cups (c.) flour equal. | 1 pound (lb.) |
| 2 cups (c.) granulated sugar equal. | 1 pound (lb.) |
| 2 tablespoons (tb.) butter equal. | 1 ounce (oz.) |
| 2 tablespoons (tb.) liquid equal. | 1 ounce (oz.) |
| 4 tablespoons (tb.) flour equal. | 1 ounce (oz.) |

## RECIPES

## BREAD

## (For Two Loaves)

2 c . of liquid, milk or water.
$1 / 2$ to 1 yeast cake, or $1 / 2$ to 1 c . liquid yeast.
2 tb. shortening.
1 t. salt.
2 t. sugar.
6 c. flour, more or less.
See directions.

## Directions.

All measurements are level. Soak yeast in warm water; scald milk, if used, and add to it sugar, shortening, cold water and salt. When the milk is lukewarm, add three cups of flour. Beat thoroly to distribute the yeast plants. The more the batter is beaten, the less kneading the dough will require. If the long process is used, the batter or sponge is set to rise, and when it has doubled its bulk it should be stiffened by adding more flour. Knead until it is elastic and does not stick to the fingers. For hard wheat, six cups of flour will probably be too much. For soft wheat this amount will be about right. Let the dough rise at a temperature of from 77 degrees F . to 95 degrees F . When it has doubled its bulk, knead down and let it rise again, or it may be moulded into a loaf. For soft wheat it is usually best to omit the second kneading, forming loaves instead. When the loaf has doubled its size it is ready to bake. With the short process bread, fresh compressed yeast, or liquid yeast, is used, and the sponge stage is omitted. A five-hour period is considered long enough for short process, and twelve hours for long process bread.

Note: It is impossible to state the exact quantity of flour to be used, as the moisture content of the same variety of wheat may vary with the season. The commercial brands of flour which the housekeeper uses are blends of two or more varieties. The miller may change the blend from time to time, thus making it impossible to give exact proportions, or even exact methods of handling. Since the new flour is over-moist and under-cured, the housekeeper having sufficient storage room will do well to purchase the year's supply of flour before the new crop of wheat is sold, as this will insure the same grade of flour and also insure a perfectly cured article. Flour should be stored in a dry place.

If one has trouble with bread, it will be well to consult a neighbor who uses the same kind of flour and learn her proportions and methods of procedure. It may be necessary to try another brand of flour if one cannot overcome the difficulty, or even to change the recipe given in this bulletin.

Souring of Bread-The souring of bread is due to impure yeast or to dough that has been allowed to stand too long in a warm place before baking. Therefore, it is important to keep the yeast clean, and not to let the dough stand too long between kneadings.

## LIQUID YEAST

4 medium sized potatoes (pared)
1 quart boiling water.
2 tb. sugar.
1 t . salt.
1 cake dry yeast, soaked in $1 / 4$ cupful lukewarm water. Grate or grind the potatoes directly into the water, boil until soft, about five minutes, stirring constantly. Add the salt and sweetening and allow the mixture to cool. When lukewarm add the yeast. Keep at ordinary room temperature for twenty-four hours, when it will be light and ready for use. Store in a covered stone jar in a cool, dark place. It will keep a week or two.

## PARKER HOUSE ROLLS

| 2 c. scalded milk | 1 yeast cake dissolved in $1 / 4 \mathrm{c}$. |
| :--- | :--- |
| 3 c. flour | lukewarm water |
| 3 tb. butter | Flour to stiffen sufficiently to |
| 2 tb. sugar | knead. |
| 1 t. salt |  |

Add butter, sugar and salt to milk; when lukewarm add dissolved yeast cake and three cups of flour. Beat thoroly, cover and let rise until light; cut down and add enough flour to knead (it will take about two and one-half cups). Let rise again, toss on slightly floured board, knead, pat and roll out to one-third inch thickness. Shape with a biscuit cutter, first dipped in flour. Dip the handle of a case knife in flour and with it make a crease thru the middle of each piece; brush over one-half of each piece with melted butter, fold and press the edges together. Place in a greased pan one inch apart, cover, let rise and bake in a hot oven twelve or fifteen minutes. As rolls rise they will part slightly and if hastened in rising are likely to lose their shape.

By varying the recipe given for bread, Parker House rolls and many other fancy breads may be made.

## CINNAMON ROLLS

Use the recipe given for bread or Parker House rolls. Roll the dough to one-third of an inch in thickness. Spread generously with butter. Sprinkle with a mixture of cinnamon and sugar. Roll as jelly roll, cut into one-half inch slices. Place in a well-oiled pan, let rise to twice the original size, bake in a quick oven 15 to 20 minutes.

## HOT CROSS BUNS

Use either bread or Parker House roll mixture. Mix into the
sponge one egg, 1 t . cinnamon, $1 / 4 \mathrm{c}$ c. sugar, $1 / 4 \mathrm{c}$. raisins or currants. Shape into large biscuits; place in an oiled pan, rather far apart so they will spread out. Brush over the tops with beaten egg. Score in the shape of a cross just before putting in the oven. A few minutes before removing from the oven, spread with a mixture of three parts sugar to one part milk.

GRAHAM BREAD
Use the recipe given for yeast bread, substituting graham flour for one-half the white flour called for. Whole wheat flour may be used in the same way. When the long process is used, these flours should be used to stiffen the bread-not in making up the sponge. These are especially good with nuts and raisins added.

OATMEAL BREAD
(One Loaf)
$\left.\begin{array}{l}11 / 4 \text { c. milk or water or a mixture } \\ \text { of the two and } \\ 1 / 4 \text { cake compressed yeast }\end{array}\right\}$ or $\left\{\begin{array}{l}1 \text { c. liquid and } \\ 1 / 4 \text { c. liquid yeast. }\end{array}\right.$
1 tb. fat
1 tb. sugar
1 c. rolled oats
$21 / 2$ c. sifted flour (about)
$11 / 2 \mathrm{t}$. salt.
Soften the yeast in one-fourth cup of lukewarm water or use liquid yeast. Scald the remainder of the liquid and pour it over the rolled oats. Cool slowly. Add the yeast and one cup of flour. Cover and allow this sponge to become very light. Add flour to make a stiff dough, cover and let rise until double in bulk. Shape into a loaf, let rise until again double in bulk and bake.

Note: Oat flour or ground rolled oats may be used in above.

## RAISIN BREAD; NUT BREAD

Raisins or nuts may be added to any of the bread recipes given. They may be kneaded in while shaping into the loaves or added to the sponge just before mixing stiff. Usually more sugar is also added.

## COFFEE CAKE

| 1 c. scalded milk | 1 egg |
| :--- | :--- |
| $1-3 \mathrm{c}$ fat | $1-3$ yeast cake dissolved in $1 / 4 \mathrm{c}$. |
| $1 / 4 \mathrm{c}$. sugar | warm milk |
| $1 / 2 \mathrm{t}$. salt | $1 / 2 \mathrm{c}$. raisins |

Add butter, sugar and salt to miik. When lukewarm, add dis-
solved yeast cake, egg well beaten, flour to make stiff batter and raisins; cover and let rise over night; in morning spread in oiled dripping pan, one-half inch thick. Cover, let rise again. Before baking, brush over with beaten egg and cover with the following mixture: Melt three tablespoons butter, add one-third cup sugar and one teaspoonful cinnamon. When sugar is partly melted add three tablespoons flour.

## DUTCH APPLE CAKE

Use same recipe as for coffee cake. Spread in a dripping pan as thinly as possible, brush over with melted butter. Pare, cut in eighths and remove cores from apples. Press sharp edges of apples into the dough in parallel rows lengthwise of pan. Sprinkle with sugar mixed with cinnamon and a few currants if desired. Cover, let rise and bake in a moderate oven thirty minutes. Cut in squares and serve hot with plain or whipped cream, sweetened and flavored.

## QUICK BREADS

Baking powder is the leavening agent used in most of the following recipes. A more uniform product is secured by the use of baking powder and sweet milk than with soda and sour milk. However, soda and sour milk may be substituted in any of the recipes, allowing one-half teaspoon of soda to each cup of sour milk. If the milk is very sour, a little more soda may be used; if only slightly sour, decrease the amount of soda and add baking powder. In most products where soda and sour milk are used, the addition of one teaspoon of baking powder to each cup of flour used will improve the texture of the product.

## PLAIN MUFFINS

| 2 c. flour | 1 egg |
| :--- | :--- |
| 4 t. baking powder | 11 cup milk |
| 1 t. salt | 2 tb. melted fat. |
| 1 tb. sugar |  |

Beat the egg in the mixing bowl, add the milk. Mix the dry ingredients and sift into the liquid. Add the melted fat. Bake in oiled muffin pans in a moderate oven 25 minutes.

## GRAHAM MUFFINS

Substitute graham flour for one-half the flour in plain muffin recipe. For corn muffins substitute cornmeal for one-half the flour.

Cooked cereal can be used in muffins; rice is especially good. Let one cup of cooked cereal take the place of one-half cup of flour. Adjust the amount of liquid required to make of right consistency. Usually about one-half the liquid that is called for in the plain muffin recipe will be needed.

## CORN BREAD

| 1 egg | 1 c. flour |
| :--- | :--- |
| $1 \mathrm{c}$. milk | 5 t. baking powder |
| $1 / 4 \mathrm{c}$. sugar | $3 / 4 \mathrm{t}$ salt |
| 1 c . cornmeal | 2 tb melted fat |

Mix same as muffins. Bake in shallow pan twenty minutes.
SWEET MUFFINS

| $11 / 2$ c. flour | 1 egg |
| :--- | :--- |
| $21 / 2$ t. baking powder | $1 / 2$ c. milk |
| $1 / 2$ t. salt | $1 / 4$ c. melted fat |
| $1 / 2$ c. sugar | 1 t . vanilla |

Mix the same as muffins and bake in muffin pans. This is also very good baked in shallow bread pans and served with a sauce or crushed fruit for a dessert.

## DROP COOKIES

| 1 c. sugar | 2 c . flour |
| :--- | :--- |
| $1 / 2 \mathrm{c}$. melted butter | 4 t . baking powder |
| 2 eggs | 1 c. raisins and nuts |
| $1 / 2 \mathrm{c}$ milk | 1 t . vanilla |

For chocolate cookies add three squares of melted chocolate. Chopped peanuts may be used instead of raisins and walnuts.

Mix same as plain muffins and drop from teaspoon on oiled pans.

> GINGER BREAD

2 well beaten eggs
$1 / 2$ c. sugar
$1 / 2$ c. molasses
1 c. cold coffee, milk or water
$1 / 4$ c. melted fat
$21 / 2$ c. flour
$1 / 4$ t. soda
3 t. baking powder
1 t. cinnamon
1 t. cloves
1 t. ginger

Mix same as plain muffins. Bake in shallow bread pans 30 to 40 minutes. Serve hot.

Served with whipped cream, this makes a delicious refreshment for the club meeting.

## STEAMED BROWN BREAD

| 1 egg | 1 c. white flour |
| :--- | :--- |
| $11 / 2 \mathrm{c}$. sour milk | 1 t. salt |
| $1 / 2 \mathrm{c}$ molasses | 1 t . soda |
| 2 c. graham flour |  |

Mix same as plain muffins. Pour into oiled molds or one pound baking powder cans. Set in a pan of boiling water, cover closely and steam two hours. An ordinary roaster placed in the oven is excellent for steaming bread.

## BAKING POWDER BISCUITS

Beginners will usually have much better success if they will make drop biscuits several times before attempting rolled-out biscuits. Use the following recipe, adding sufficient liquid to make a stiff batter. Avoid too much stirring, after the liquid is added. Drop by spoonfuls into buttered pans and bake the same as cut biscuits.

| 2 cups flour | 4 t. baking powder |
| :--- | :--- |
| 1 t salt | 2 tb. lard. |
| $1 / 2$ to $2-3$ c. milk or water |  |

Mix the dry ingredients; rub the lard in thoroly; then add the milk gradually, stirring with a spoon until a soft dough is formed which can be stirred free from the side of the mixing bowl. Turn out on the board, using flour to prevent sticking. (Avoid using dry flour upon the suface of the biscuits.) Roll to about threequarters of an inch in thickness, cut with rather small cutter. Bake five to eight minutes.
After some proficiency has been gained in handling biscuit dough, try adapting it to various uses such as apple dumplings and short cakes. Fruit rolls will be found to be especially good. These could be made following a demonstration of biscuit making and served with hot cocoa or fruit juice for refreshments.

## FRUIT ROLLS

Make as baking powder biscuits. Roll to one-fourth inch thickness, brush over with melted butter and sprinkle with sugar and cinnamon and chopped fruits. Roll as jelly roll, cut in half-inch slices. Bake as baking powder biscuits. Chopped raisins and citron may be used. Currants are good-also chopped apples or fruit marmalade.

## CORN MEAL PARKER HOUSE ROLLS

| 1 1-3 c. flour | 1 tb. lard |
| :--- | :--- |
| $2-3$ c. corn meal | $3 / 4$ c. milk or water |
| 4 t. baking powder | 1 t . salt |
| 1 tb. butter |  |

Mix same as baking powder biscuits and cut and shape as Parker House rolls.

## EXPERIMENTS WITH LEAVENING AGENTS

I. SODA

1. Add a small amount of soda to vinegar, to sour milk and to molasses. The bubbling indicates the escape of gas. This gas is called carbon-di-oxide. It is this gas that makes bread light. As the bread bakes, the walls around these bubbles harden and this leaves the bread porous.
2. Add soda to sweet milk or water. You will observe that no gas escapes. That is because there is no acid present as in sour milk. You will learn from this that soda should be used for leavening, only when an acid is present.

## II. BAKING POWDER

Add a teaspoonful of baking powder to a half glass of warm water. You will observe there is some bubbling, which indicates that gas is given off. That is because both an acid and an alkali (soda) are present in the baking powder. The acids most commonly used are tartaric acid and cream of tartar, made from grapes in the process of wine making. Set the glass of water with baking powder in it in a pan of warm water. As the water heats, more gas is formed. This is what happens when bread is baking. Some gas is formed as soon as the baking powder is added to the liquid. For that reason it is not added until just before putting into the oven. As it becomes heated, more gas is formed and the bread is made light.

## III. YEAST

The gas formed by the action of yeast can be shown by putting a small amount of yeast into slightly sweetened warm water and setting it in a warm place. In a little while bubbles begin to rise.

## ARITHMETIC OF THE MIXING BOWL

## BATTERS AND DOUGHS

Thin Batter-Equal parts liquid and flour. Example-Popovers, griddle cakes, waffles.

Pour Batter-One-half as much liquid as flour. ExampleMuffins, cake, drop biscuit.

Soft Dough-One-third as much liquid as flour. ExampleCut biscuit.

Stiff Dough-One-fourth as much liquid as flour. ExampleYeast bread.
These proportions will vary somewhat with different kinds of flour. The only way to learn consistency of batters and doughs is by repeated experience. However, it will be found valuable as a general guide in mixing.

## SHORTENING

Muffins-One tablespoonful of fat to a cup of flour.
Biscuit-One to two tablespoons of fat to each cup of flour.
Pastry-Four to six tablespoons of fat to each cup of flour.
Cakes-One-third to one-half as much butter as sugar.

## LEAVENING

Two teaspoons baking powder to each cup of flour.
One-half teaspoon soda to each cup of sour milk or molasses (not syrup).
One teaspoon baking powder to each cup of flour when soda and sour milk are used.
When beaten eggs are used in a mixture the amount of baking powder is usually decreased by one-half teaspoon of baking powder for each egg used.

## SCORE CARD FOR YEAST AND QUICK BREADS

Shape and size $\square_{\square} \square_{\square} \square_{\square}$

Crumb

Flavor ... $a_{\square}$ -
100

## EXPLANATION OF SCORE CARD FOR YEAST BREAD

The shape of the loaf should be symmetrical. Cracks in the loaf may be due to the following conditions: (1) The dough may have been too stiff. (2) The bread may not have been sufficiently light when placed in the oven. (3) Or the oven may have been too hot, causing the bread to crust over before it had finished rising. If possible, the standard bread pan, $23 / 4$ by $41 / 2$ inches by 9 inches, should be used.
The crust should be about one-eighth inch deep, crisp and fairly tender. The color of the crust should be golden brown-an even color all over.

The bread should crumb when pressed between the fingers, and if the crumb is sticky and soggy the bread is underdone. The color of the crumb should be creamy white. Heavy streaks in the bread are due to poor manipulation, or to too high a temperature before the bread is placed in the oven.

The grain should be fine and even. Coarse grain with large holes indicates that the dough was over-light, or that it was not thoroly kneaded. Underdone bread is likely to produce fermentation in the stomach, caused by the growth of the yeast plant. The texture should be soft and velvety, not hard or horny; and cutting clean, not crumbling.

Bread should be sweet and nutty in flavor, not sour or bitter.

## BISCUIT DEMONSTRATION

## for first year bread clubs

The following outline should serve merely as a guide in training demonstration teams. Each team should strive to put as much individuality into the demonstration as possible. The best demonstrations are those where the work and discussion are divided among the three girls on the team.

## I. Introduction.

1. Greeting and introduction of team.
2. Value of good bread in the diet.
3. Importance of learning to make good bread.
4. Essentials in bread making.
a. Cleanliness.
b. Familiarity of recipe.
c. Good materials.
d. Necessary equipment.
II. Process of Making Biscuits.
5. Essential ingredients: flour, leavening, salt, fat, liquid.
6. Amounts being used:

2 c. flour
4 t. baking powder
1 t. salt
2 tb . fat
$3 / 4$ to 1 c. liquid
3. Explanation and demonstration of process of mixing and handling dough.
a. Importance of light and easy manipulation.
b. Toss on lightly floured board.
c. Roll or pat to desired thickness.
d. Cut with small cutter and place in baking tin.
e. Brush tops with melted fat or sweet milk.
f. Bake eight to ten minutes in hot oven. Give tests for proper oven temperature.

## III. Finish up Work While Biscuits Are Baking.

1. Wash utensils; put in proper place.
2. Arrange for serving biscuits.
3. Suggestions for discussion which might be used at this time.
a. Sketch of history of bread making.
b. Kinds of bread used in different countries.
c. Ingredients used in bread.

Flour: Hard wheat, soft wheat, other grains used for flour. Reasons no other grain as satisfactory as wheat.
Liquid: Milk, water. Why milk is preferable.
Fat: Choice of kind. Difference in product when large or small amount is used.
Salt: Small amount essential.
Leavening: Method used in leavening.
Air: Incorporated by beating, popovers; using eggs, angel cake.
Chemicals: Baking powder, amount to use; soda, amount to use.
(See page 14 of the bulletin for experiments which could be used at this time.)

## IV. Conclusion.

1. Review of essential points in biscuit making.
a. Good material.
b. Quick manipulation.
c. Correct even temperature.
2. Appreciation of attention.
3. Pledge or yell.
4. Serve biscuit.

## YEAST BREAD DEMONSTRATION

## FOR SECOND YEAR BREAD CLUBS

This outline for a bread demonstration is arranged for a team of three members. The work and discussion divide themselves readily into three parts: first, the mixing of sponge and stiffening preparatory to the first rising; second, the kneading and shaping into loaves; third, the baking, including the tests for oven temperature and tests for well-baked bread.

In order to carry out this plan without delay, it will be necessary to have bread in its various stages of making: for girl No. 1, ingredients for making the sponge; for girl No. 2, dough that has risen and is ready to be moulded into loaves; for girl No. 3, a loaf that is ready for baking. It is also well to have a loaf previously haked and use it for giving the various tests for good bread.

## I. Introduction:

1. Greeting and introduction of team.
2. Essentials in bread-making.
a. Cleanliness.
b. Good materials.
c. Familiarity of recipe.
d. Necessary equipment.

## II. Process of Making a Sponge and Mixing Stiff.

1. Essential ingredients: Flour, liquid, leavening.
2. Amounts being used:

1 c . liquid.
$1 / 4^{-1 / 2}$ yeast cake.
1 tb. shortening.
1 t . salt.
2 t . sugar.
3 c. flour or more.
3. Explanation and demonstration of process of mixing and handling dough.
a. Importance of correct temperature.
b. Thoro mixing essential.
c. Method of kneading.

Show tests when sufficient flour has been used.
Show tests for sufficient kneading.
d. Put in bowl and set in warm place to rise.

## III. Kneading and Shaping Into Loaves.

1. Test indicating that bread has risen sufficiently.
2. Method of kneading.
3. Shape into loaf and put in well-oiled pan for second rising.
IV. Baking.
4. Test loaf for sufficient rising.
5. Test oven for proper temperature.
6. Time required for baking.
7. Changes in bread during baking.
8. Tests for bread when sufficiently baked.
9. Care of bread when removed from oven and storage.
10. Characteristics of good bread. (See score card.)
V. Conclusion.
11. Summary of processes.
12. Where additional information may be obtained.
13. Pledge or yell by team.
14. May serve bread.

## SCORE CARD FOR DEMONSTRATION TEAMS

## Div. I. Skill-25 Points.

a. Ease in procedure.

1. Skill refers to ease of procedure or whether the members of the team are composed and at ease in doing the work.
b. Workmanship or efficiency of manipulation.
c. Neatness.
2. Neatness or cleanliness in doing work.
d. Speed, system, or dispatch.

## Div. II. Subject Matter-25 Points.

a. Accuracy.

1. The correctness of statements made in oral presentation and proper methods in doing the work.
b. Completeness.
2. Completeness refers to the giving of all steps necesary to a clear understanding of the process.
c. Clearness.
3. Clearness means the definiteness of statements made in simple language easily understood by old and young.
d. Replies to questions.
4. Teams shall respond to any questions asked by judge or spectators.

## Div. III. Team Work-25 Points.

Judgment will be on the work of the team as a whole.
a. Preparation, arrangement, and use of equipment.

1. The team will be responsible for the arrangement and preparation of equipment and for their use.
b. Preparation and handling of materials and results.
2. The team will be judged on their method of preparing and handling the material.
c. Organization of work.
3. Each member in so far as practical to be kept busy with a definite part so that the work and instruction given proceed without delay, but each member of the team must be able to demonstrate the whole process.
d. Appearance and conduct of team.
4. Appearance and conduct include the personal appearance of members and of the team as a whole. They should be business-like, happy and in so far as possible, a unit in action and appearance.

## Div. IV. Product or Result- 25 Points.

The standard Score Card-Average of three members. Total, 100 points.

## REQUIREMENTS FOR BREAD CLUBS

The following bakings are required of the bread club members for the completion of a year's work.

Much more than this should be done in order to gain proficiency. An account of each baking should be entered in the record book in order that the final report may show a complete summary of the year's work.

## FIRST YEAR BREAD CLUBS

Nine bakings of quick bread; three to be scored by local leader and entered in final report. This must include at least three bakings of corn bread and three of biscuit.
Nine bakings of yeast bread; three to be scored by local leader and entered in final report.

## SECOND YEAR BREAD CLUBS

Six bakings of quick bread of at least three varieties; three to be scored by local leader and entered in final report.
Twelve family bakings of yeast bread; three to be scored by local leader and entered in final report.
Six bakings of fancy yeast bread, as cinnamon rolls, Parker House rolls, coffee cake, etc. They may be made at the time the family baking of yeast bread is made, using part of the same dough.

## PROGRAM OF WORK FOR BREAD CLUBS

A definite club program for the year's work should be made out and followed closely in order to make each club meeting interesting and instructive. The following programs are merely suggestive, and should be adapted to meet the local needs. In this outline an attempt has been made to have a demonstration at almost every meeting and also give time for judging the products which the girls bake at home and bring to the meetings.
With some clubs it may be possible to complete the year's program in six lessons but in order to cover the required work thoroly twelve meetings should be planned. These meetings should follow a definite program of work. In the suggestive program which follows, time is given for scoring all the yeast bread at the club meetings.
At some time during the year each girl should be responsible for getting her three varieties of quick bread scored.

## SUGGESTIONS FOR SUCCESSFUL CLUB MEETINGS

Make the meetings so interesting that members will want to attend. Every club meeting should include three well-organized parts.

1. Work period.
2. Business meeting.
3. Social hour.

In the beginning of the first year club program the work period usually will be given to a demonstration by the local leader. As soon as the girls gain confidence from their home experience they should be divided into groups and then give their own demonstrations. Thruout the second year the girls should be required to give their own demonstration, as in no other way do they develop their demonstration team work.

## PROGRAM FOR FIRST YEAR CLUBS

## FIRST MEETING-ORGANIZATION MEETING

The organization for winter clubs should be not later than November.

Plan of Meetings:

1. Take enrollment.
2. Elect officers and appoint committees, including one to make out a year's program of work.
3. Distribute membership cards, record books and bulletins.
4. Instructions as to keeping of record books and explanation of directions in making of quick breads.
5. Demonstration of plain muffins.
6. Judging of finished products.
7. Business meeting.

## SECOND MEETING

1. Demonstration of sweet muffins.
2. Judging of muffins when baked.
3. Lesson on leavening agents. Demonstrate action of leavening agents. (See experiment on page 14).
4. Business meeting.
5. Adoption of year's program of work.
6. Give direction for club uniform. Make uniform during social hour if time permits.

## THIRD MEETING

1. Demonstrate making drop biscuit.
2. Judge finished products.
3. Business meeting.
4. Teach club songs and encourage club to write original songs.

## FOURTH MEETING

1. Demonstrate making cut biscuit.
2. Judge finished products.
3. Business meeting.
4. Outline work of demonstration teams. It will be found a good plan to divide entire club into teams of three members and later have a try-out in the club to determine what team will represent the club in the county contest. (See page 16).

## FIFTH MEETING

1. Leader demonstrates making of yeast and sets sponge for long process of making bread.
2. Study bulletin on making yeast bread and outline steps so clearly that each girl can make bread at home.
3. One group of three girls give practice demonstration on cut biscuit.
4. Business meeting and social hour.

## SIXTH MEETING

1. Leader demonstrates making of yeast bread by quick process, including kneading and shaping into loaves.
2. Special instruction on oven temperature for baking and care of bread after removing from oven.
3. Score yeast bread which girls have baked at home and brot with them.
4. Business meeting and social hour.

## SEVENTH MEETING

1. Judge bread which girls bring.
2. Third group gives trial demonstration in biscuit making.
3. Business meeting.
4. Excursions to flour mill, bakery or some place of interest which provides instruction.

## EIGHTH MEETING

1. This will be a meeting to entertain mothers. No special feature need be planned for this as the aim is to show actual work being done. Refreshments might be served. Sandwiches made from the bread which the girls bring to have scored and tea or fruit punch would be sufficient.
2. Suggestive program:
(a) Judge bread which girls bring.
(b) Fourth group of girls demonstrates baking biscuit. These biscuit with jelly might be served instead of sandwiches.
(c) Business meeting.
(d) Talks from several of the mothers. (Have these previously arranged for.)
(e) Let the club pledge and songs have a large part on this program.

## NINTH MEETING

1. Practice demonstration for club team which will represent club in county contest.
2. Special instruction on preparing exhibits for fair.
3. Business meeting and social hour.
-TENTH MEETING
4. Public demonstration by club team.
5. Public judging of quick breads by a club member.

## ELEVENTH MEETING

Club pienic.
Members of club judge bread in contest.

TWELFTH MEETING

1. Business meeting.
2. Check up record books.
3. Assist with final reports.

## SUGGESTIVE PROGRAM FOR SECOND YEAR CLUBS

The program for this year is planned as a sequence to first year bread club work. The following program is for twelve club meet ings. It is merely suggestive and should be adapted to local conditions.

## FIRST MEETING

1. Organization meeting same as outlined for first year club.

## SECOND MEETING

1. Demonstrate various uses of bread dough. This can be made a most interesting meeting by having the sponge ready and let three or more girls demonstrate. They could make from the same sponge: hot cross buns, cinnamon rolls, Parker House rolls, bread sticks, etc.
2. Business meeting.
3. Adopt club program for the year.
4. Explain demonstration team work for second year clubs Divide the club into groups of three, assign the demonstrations for the rest of club year.

## THIRD MEETING

1. Score quick bread. It will be necessary to begin scoring bread at this meeting in order to get six bakings scored during club year.
2. Demonstrate making graham bread.
3. Business meeting.
4. Teach new club songs and begin work on original song.

FOURTH MEETING

1. Score bread.
2. Demonstrate making oatmeal bread.
3. Business meeting and social hour.

## FIFTH MEETING

1. Score bread.
2. Demonstrate use of leftover bread, such as croutons, brown betty, puddings, and preparation and storage of bread crumbs
3. Business meeting and social hour.

SIXTH MEETING

1. Score bread.
2. Demonstrate Dutch apple cake and coffee cake.
3. Business meeting.
4. Social hour.

SEVENTH MEETING

1. Score bread.
2. Demonstrate ginger bread.
3. Business meeting.
4. Social hour.

EIGHTH MEETING

1. Score bread.
2. Demonstration of steamed brown bread.
3. Business meeting, and social hour.

NINTH MEETING

1. Trip thru bakery, flour mill or some place of educational interest.
2. Business meeting.
3. Social hour.

TENTH MEETING

1. Entertain mothers at this meeting.
2. Have the best group of three girls give a demonstration of some kind of bread.
3. Serve refreshments of girls' products.
4. Business meeting.
5. Have several mothers or state worker give talks to the girls.

ELEVENTH MEETING

1. Public demonstration of making of yeast bread.
2. Score bread in public demonstration.

## TWELFTH MEETING

1. Club picnic. See that record books are completed and each girl understands how to make up the final report.

MANY OF THE RECIPES included in this bulletin are not required of bread club members. However, every member should try to make as large a variety of products as is advisable, since proficiency is gained thru experience.

We are indebted to Miss Jessie Hoover, formerly Director of Home Economics at the University of Idaho, for much of the material on yeast bread contained in this bulletin.

Additional information on breadmaking may be obtained from the University Extension Division, Boise, Idaho, from standard cook books and from agricultural bulletins. "Bread and Bread-making," Farmers' Bulletin 807, is probably the best. It may be obtained by writing directly to the United States Department of Agriculture, Washington, D. C.

## CLUB PLEDGE

I pledge my head to clearer thinking,
My heart to greater loyalty,
My hands to larger service And my health to better luing
For my club, my community and my Country. -With Acknowledgements to Kansas.

