Good Things from The Oven

The How's and Why's of Breads, Cakes, Cookies, Puddings, and Pies

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GOOD RECIPES telling how to bake are available on every hand. This book does not pretend to add anything new in this respect. To insure successful, intelligent baking, however, it is necessary not only to know how to make a product but to understand the reasons why certain ingredients are used and certain methods of mixing and baking followed. It is the purpose of this book to explain why each step is taken in the making of a loaf of bread, a cake, a pudding, a pie, or a batch of cookies. The why's given for each general type of product are not limited to one recipe or to the recipes in this book—they furnish a knowledge of the science of baking which is applicable to all baking. To know the cause of success or failure is to increase greatly the chances of success.

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BEFORE beginning to work assemble in a convenient place all general equipment for baking. Learn to use the minimum for efficient work; too much or too little wastes time and labor. In this manual the equipment necessary for each recipe is listed under that recipe. Following is a list of equipment most often required:

- Measuring cups
- Mixing bowls
- Teaspoons
- Tablespoons
- Set of standardized measuring spoons
- Mixing spoons
- Spatula
- Knife
- Egg beaters
- Baking pans
- Coarse strainer
- Bread board
- Rolling pin

MEASURING INGREDIENTS

Correct measuring is one of the most important factors in making good baked products. Note the directions given below:

1. All measurements given in standard recipes are level unless otherwise stated.
2. To measure a cupful of a dry ingredient, fill the cup and then level it off with the straight side of a knife.
3. To measure either a teaspoonful or a tablespoonful of a dry ingredient, dip the spoon into the material and level off with the straight side of a knife (Fig. 1). Divide the level spoonful lengthwise with a knife for a half spoonful; divide a half crosswise for a quarter.
4. Always sift flour once before measuring.
5. Do not dip measuring cup into flour, sugar, milk, etc. Such practice not only is untidy but wastes the material being measured and may result in inaccurate measurements. Use a tablespoon or a small scoop to fill the cup.
6. An accurate measure of shortening (butter, lard, or other fat) especially if it is hard, can be obtained by packing it down (Fig. 2). Another method, if a fraction of a cupful is to be used, is the water method. From a full cup of water, pour off a fraction equivalent to the amount of fat to be used. Then put in fat until the water reaches the “full” mark. Pour off the water and you have an accurate measure of fat.
EQUIVALENTS AND ABBREVIATIONS

Study the table of equivalents and abbreviations so you will be able to interpret the recipes in this manual.

3 teaspoons (t) = 1 tablespoon (Tb)
16 tablespoons (Tb) = 1 cup (c)
2 cups (c) = 1 pint (pt)
2 cups (c) fat = 1 pound (lb)
2 cups (c) granulated sugar = 1 pound (lb)
4 cups (c) sifted flour = 1 pound (lb)
2 tablespoons (Tb) butter or fat = 1 ounce (oz)
2 tablespoons (Tb) liquid = 1 ounce (oz)
4 tablespoons (Tb) sifted flour = 1 ounce (oz)
16 ounces (oz) = 1 pound (lb)

FIG. 1.—MEASURING A LEVEL SPOONFUL OF FLOUR

FIG. 2.—MEASURING A LEVEL SPOONFUL OF FAT

OVEN TEMPERATURES

Custards—250° F. Very slow
Meringues
Sponge cake 300° F. Slow
Angel cake
Gingerbread—350° F. Moderate
Plain cake
Cookies 375° F. Moderate

Bread
Muffins 410° F. Hot
Popovers—425° F. Hot
Parker House rolls—435° F. Hot
Baking-powder biscuits—450° F. Very hot
Pastry—475° F. Very hot
ESSENTIAL INGREDIENTS

Flour, liquid, and a leavening agent are the necessary ingredients for most kinds of baked products. Certain other ingredients which improve the taste and texture are sometimes used. These will be discussed as they occur in the recipes.

Different Kinds of Flour

Wheat flour is generally used in this country for bread making, both because people in the United States think it has a more desirable flavor and because it will make a lighter loaf of bread than will oat, rye, or corn flour. The reason for the latter fact is that wheat contains more gluten than other flours—a substance which gives light, springy bread. One can find out what gluten is like by chewing some wheat grains for a few minutes; the gummy mass left in the mouth is gluten.

The difference in the gluten content of hard and soft wheat flours may be seen by tying a cupful of each in a cheesecloth bag and washing out the starch by holding the bag under running water or by dipping it in a number of waters until the water is clear. The resulting sticky mass is gluten, and the difference between the two glutens may be seen by rolling each into a ball and then stretching it. It will be found that the gluten from the hard wheat is more elastic, can be more easily stretched, and breaks less easily when stretched; in other words, it is stronger than the soft-wheat gluten. The color of the two also differs; the hard wheat is more yellow, the soft wheat is gray.

In making yeast bread it is desirable to use flour that has gluten of good quality, as it is the gluten which stretches to form a framework for the loaf. For this reason hard-wheat flour is usually preferred for yeast breads. Since a spongy, elastic product is not desirable in making quick breads, cakes, and pastry, soft-wheat flours are preferable. Soft-wheat flour, unless it is too soft or has gluten of poor quality, may be used for yeast bread if properly handled. Millers, recognizing this fact, are producing flours which are labeled "all purpose." They are neither strictly hard wheat nor strictly soft wheat but a blending of the two. A circular on the use of soft-wheat flour for bread may be had from the College of Agriculture, University of Illinois (Circular 317, "Good Bread from Illinois Soft-Wheat Flours").

A person familiar with flours can easily distinguish between the two flours by color and "feel." Soft-wheat flour has a tendency to
be whiter than hard-wheat flour, the latter being of a creamy color. Hard-wheat flour is granular and feels slightly gritty. Soft-wheat flour is soft to the touch, and if a little is squeezed in the hand it will retain the imprint of the fingers.

**Liquids**

Liquids that may be used for baked products are:

- Whole milk
- Skimmed milk
- Dried milk
- Water
- Potato water (yeast breads)
- Molasses and sirup

**Leavening Agents**

Mixtures are made light with a leavening agent, which renders them more palatable and more easily digested. There are four types of such agents:

1. Water expanded into steam, as in popovers
2. Air introduced mechanically: (a) by beating, as in beaten biscuits; (b) by the addition of beaten eggs, as in sponge or angel food cake
3. Carbon dioxide from soda plus acid (sour milk, for example), as in muffins or biscuits
4. Carbon dioxide from yeast, as in bread

**Water Expanded Into Steam.** When water is heated to the boiling point, it expands and changes into steam. This principle is illustrated in the making of popovers. As the water of the milk expands into steam during the baking, it puffs up the mixture, or makes it light.

**Air Introduced Mechanically.** Air also expands when it is heated, and this principle, too, is made use of in making mixtures light. Air may be introduced into a mixture either by long beating or by adding beaten eggs. This air expands, when heated, to several times its size, and in so doing makes the mixture light.

**Action of Soda With an Acid.** When acid and moisture are added to soda, tiny bubbles of gas are formed which try to escape; and in forcing their way to the top, they are caught and baked in the mixture. These bubbles make the finished product light, porous, and larger in bulk. Examples of this are baking powder, which is soda and an acid, and soda used with sour milk or molasses. The gas that is formed in both cases is called carbon dioxide, which is the leavening agent.
Yeast. Yeast is a very small plant that requires warmth, moisture, and food for growth. These requirements are met in making bread: the yeast uses for food the sugar which is added; the milk or water furnishes the moisture; and during the process of making, bread is always kept warm. As the yeast grows it produces a gas (carbon dioxide), which accumulates in small bubbles. The gluten in the dough stretches and confines these bubbles and prevents their escape. This causes the mixture to rise and become light.

There are three kinds of yeast:

1. Compressed Yeast. This is the most convenient and reliable type of yeast if it is fresh. It consists of active yeast plants. Since these plants are already in a vigorous, active state when added to the dough, they begin to grow and multiply immediately, thus shortening the time of the process of bread making. The disadvantages are that compressed yeast keeps only a few days and that it is expensive if large quantities of bread are to be baked.

2. Dry Yeast. Yeast is mixed with corn meal or some other similar ingredient, pressed into cakes, and dried. The drying kills part of the yeast plants, but some live in an inactive state and will grow if given the proper conditions which, as already stated, are moisture, food, and warmth. These yeast cells are not in so vigorous a condition as are those in the compressed cake so the action is slower. The advantages of this kind of yeast are that it will keep for weeks and is cheaper than compressed yeast.

3. Liquid Yeast. This yeast may be made at home if desired, but it requires much care and attention and is not recommended for beginners.

EFFECT OF VARIOUS INGREDIENTS

Sugar. Sugar acts as a liquid, improves the flavor, and makes a finer texture in the baked product. The use of too much sugar results in a heavy, sticky consistency and may be the cause of a cake falling. Cane and beet sugar are chemically the same and may be used interchangeably. The difference in quality sometimes found is due to a variation in the market grades; poor quality may be found in sugars derived from either cane or beets.

Brown sugar is cane sugar which is not highly refined. It contains a small amount of acid, and when a quantity is used in a cake, soda is added to neutralize the acid, usually about \( \frac{1}{4} \) teaspoon to 1 cup of brown sugar.

Pulverized, or confectioner’s, sugar is made by grinding and sifting cane sugar. Cornstarch is sometimes added to prevent lumping. Powdered sugar is made in the same way but is not ground so fine. Both make a very close-grained cake.
Molasses is the "mother liquid" from which sugar has been crystallized. It is frequently used as a substitute for part or all of the sugar called for in a recipe and also serves as a liquid. One cup of molasses is equivalent to $\frac{1}{3}$ cup of sugar and one cup of liquid. Molasses contains some acid, the amount depending upon the way it is manufactured. Canned molasses may contain little or no acid. Sometimes sirups are used for their distinctive flavor, as maple sirup, cane sirup, sorghum, and corn sirup.

Fats. Fats act as a liquid and serve to make products tender. They also prevent the products from drying out quickly. The kinds of fat which may be used in baking are butter and butter substitutes such as lard, oleomargarine, the commercial combinations and preparations of fats, and clarified meat drippings. Butter is only 85 percent pure fat, the rest of the contents being casein, salt, and water. When substituting other fats for butter, therefore, a smaller amount of the substitute should be used and a little salt added. In general, the rule is to use 2 tablespoons less of lard or other pure fat per cup of butter required.

Eggs. White of egg is composed of albumin, which thickens readily as it cooks. This thickening is called coagulation. While eggs may seem to add moisture to the unbaked product, they act as a thickening agent when the batter or dough is baked. As a leavening agent, they affect the texture of the product.

Flavoring. The enjoyment to be had from eating cake or dessert is due largely to flavor. A natural flavor is better than a commercial extract. Chocolate, spices, dried fruits, nuts, and grated orange or lemon peel make the product delicious and also change its texture. Vanilla, lemon, and other commercial flavorings lose some of their flavor thru evaporation when heated.

Other Ingredients. Chocolate contains a hard fat which adds a little richness but which tends to make the cake stiffer as it dries out than it would be without the chocolate. It also contains starch, which thickens the baked product; consequently in adding chocolate to a recipe for white or plain cake, or cookies, one teaspoonful less of flour is needed for each square of chocolate used. Cocoa may be substituted for chocolate. This should be done by weight rather than by measure; approximately 3 tablespoons of cocoa weigh the same as one square of chocolate.

Fruit adds flavor and moisture to baked products. Raisins or other dried fruit chopped fine give a better flavor than when added whole and also help to retain moisture.
Fig. 3.—Cutting edgewise with a spatula into the middle of the mixture.

Fig. 4.—Sliding the spatula under part of the mixture (This part is lifted and folded over toward the center. The spatula is again inserted as in Fig. 3).

The cutting and folding motion illustrated with prune whip.
Fig. 5.—Date Pudding

Fig. 6.—Kisses
GETTING READY TO BAKE

1. Study in detail the foregoing general information.
2. Read the directions in each recipe completely and carefully before starting to mix the ingredients.
3. Make sure that the oven temperature will be right by the time the oven is needed.
4. Wash the hands thoroughly. Should it be necessary to use a handkerchief or handle the hair while working with food, wash the hands again before continuing.
5. Assemble all utensils and ingredients.
6. Be sure the egg beater is dry.
7. Grease the baking pans if they are to be greased.
8. Sift the flour once before measuring.
9. If the sugar is lumpy, sift it also.
10. Remember that all measurements are level unless otherwise stated.
11. Dried fruit which needs to be cleaned may be washed by placing in a sieve and pouring hot water over it. The fruit should be dried on a paper towel or a clean cloth (an excess of water adhering to the fruit may make the product too moist).

PART 2—RECIPES AND DIRECTIONS

PUDDINGS

CUSTARDS

Custards are products made of milk thickened with eggs. There are many varieties, but the same general principles for making them hold true for all methods of cooking. They may be steamed, baked, or cooked in a double boiler.

Baked Custard

Equipment

| 1 mixing bowl | 1 tablespoon |
| 1 egg beater | 1 shallow pan |
| 1 measuring cup | 1 baking dish |
| 1 teaspoon | 1 strainer |
| 1 double boiler |

Materials

| 2 c milk | ½ tsp salt |
| 2 to 3 eggs | ½ tsp vanilla |
| ¼ c sugar |

Amount: 2 or 3 servings
Method

How
Scald milk.
Beat eggs slightly.
Stir in sugar and salt. Pour scalded milk over them gradually. Add flavoring.
Pour thru strainer into baking dish.
Set baking dish in a pan of hot water.
Bake in very slow oven (250°F) until a knife thrust into the custard comes out clean.

Why
Scalding will hasten the baking. If saving time is no object, milk need not be scalded.
A smoother, firmer custard results when eggs are beaten but slightly.
Eggs are less apt to coagulate if mixed with sugar before hot milk is added.
Straining removes cord and any coagulated bits.
Hot water keeps the cooking temperature around the custard even and low enough to prevent toughening of the protein.
Too long cooking at too high temperature will cause the custard to separate.

Prune Whip

Equipment
1 saucepan
1 mixing bowl
1 measuring cup
1 egg whip
1 strainer
1 mixing spoon or spatula
1 tablespoon
1 baking dish

Materials
1/2 lb prunes
1/2 c sugar
1/2 Tb lemon juice
5 egg whites

Amount: 6 or 8 servings

Method

How
Look over prunes carefully and discard any not in good condition. Wash and drain in a strainer. Cook slowly until tender.
Remove stones and rub prunes thru a strainer. Return to sauce pan. Add sugar and cook 5 minutes. Add lemon juice. Cool thoroughly.

Why
By using a strainer it is easier to remove any gritty substances.
Slow cooking permits the absorption of water resulting in a plump, full prune.
Mixture should be smooth and of the consistency of medium-thin marmalade or jam.
A cool product will blend with the egg whites more easily.
How
Beat whites of eggs until stiff.
Carefully cut and fold prune pulp into egg whites.
Slip mixture out of mixing bowl and pile lightly in a buttered baking dish. Do not stir or mix unnecessarily.
Bake 20 minutes in slow oven (300°F.). Serve hot or cold with cooked custard or cream.

Why
Air is incorporated into the mixture in this way.
Folding the prunes into the eggs rather than the eggs into the prunes results in less breaking up of the egg.
Careful handling is necessary to avoid breaking up the air cells.
The large amount of egg requires that the mixture be cooked slowly.

Date Pudding

Equipment
1 measuring cup
1 mixing bowl
1 teaspoon
1 flour sifter
1 baking pan
1 knife or food chopper
1 egg whip

Materials
3 eggs
1 c sugar
2 c dates
1 c pastry flour
1 t baking powder
½ t salt
1 c chopped nuts

Amount: 14 servings

Method
Wash dates and dry on paper or soft cloth. Chop or cut fine with knife. Chop dates and nuts. Sift dry ingredients. Beat yolks until thick; mix with dry ingredients. If mixture seems too stiff, add 1 tablespoon of milk or water. Beat egg whites until stiff, and fold into above mixture.

Bake in large pan 30 minutes in moderate oven (350°F.). Cut into strips for individual servings. Serve with hard sauce or whipped cream.

(Hard Sauce)

Equipment
1 mixing bowl
1 measuring cup
1 wooden spoon
1 teaspoon

Materials
⅓ c butter
1 c powdered sugar
⅓ t lemon extract
⅔ t vanilla

Amount: 1 cup
Method

Cream the butter (butter must be soft and well-worked before it will absorb and hold sugar). Add sugar gradually, working each addition well into the butter before adding more. Add flavorings. When done, hard sauce should resemble medium-soft white butter.

STARCH PUDDINGS

The thickening, or basis, of the following group of puddings is starch, tho many other ingredients may be added. The main principle to consider in their preparation is that of sufficiently swelling and cooking the starch. Long cooking with moist heat is necessary.

Rice Pudding

Equipment

1 double boiler or steamer
1 measuring cup
1 fork
1 teaspoon
1 strainer
1 baking dish

Materials

\( \frac{1}{2} \) c rice
2 c water
2 c milk
\( \frac{1}{2} \) t cinnamon
2 eggs
1 t salt
\( \frac{3}{4} \) c sugar
\( \frac{1}{2} \) c raisins or currants
1 Tb butter
Grated rind 1 lemon

Amount: Enough to fill a large casserole

Method

Carefully wash rice by putting it in a strainer and allowing water to run thru it.

Put water and salt in top of double boiler and place directly over the heat. Bring water to boiling point. Gradually add washed rice, stirring with a fork.

Boil 3 to 5 minutes. Then place over underpart of double boiler, in which there is boiling water. Cook for 30 minutes.

Add milk and stir slightly with fork. Cook for 20 minutes longer, or until rice is very soft.

Why

Unless unpolished rice is used, there is always a talcum powder on the rice, which when cooked causes the grains to stick together and results in a gummy product.

This method prevents the rice from sticking to the pan. A fork does not break the rice grains as does a spoon.

Constant watching to prevent the rice from burning will be unnecessary if a double boiler is used after the rice has started to cook.

Milk is not added until the water is absorbed because salt heated with milk tends to curdle the milk. To
How

Add melted butter. Beat eggs and add with other ingredients, using a fork to stir them into rice. Put in baking dish; cover with cracker or bread crumbs, and bake in moderate oven (350° F.) until custard is done.

Why

have a well-flavored product, the rice must absorb the salt. When water is absorbed, the milk may be added safely.

Cottage Pudding

Equipment

1 mixing bowl
1 measuring cup
1 egg beater
1 1/4 c butter

Materials

1 1/4 c flour
4 t baking powder
1/2 t salt

Amount: 2 dozen small cup puddings

Method

Prepare according to the muffin method for plain cake (see page 35). Serve with lemon or chocolate sauce. This pudding should be eaten as soon as baked, since it is not rich enough to keep it from drying out quickly.

(Pudding Sauce)

Equipment

1 saucepan
1 measuring cup
1 tablespoon

Materials

2 Tb butter
1 1/2 Tb lemon juice or
1/2 t vanilla
Few gratings of nutmeg
Few grains of salt

Amount: 1 1/4 cups
Method
Mix together sugar and cornstarch. Gradually add boiling water, stirring constantly. Boil 10 minutes to cook starch thoroughly. Remove from fire. Add butter and flavoring. Serve hot on puddings or on cakes that serve as puddings.

(Chocolate Sauce)

Equipment

| 1 saucepan | 1 teaspoon |
| 1 measuring cup | 1 tablespoon |

Materials

| \( \frac{1}{2} \) c water | \( \frac{1}{2} \) c cold water |
| \( \frac{1}{2} \) c sugar | Few grains of salt |
| 6 Tb grated chocolate | \( \frac{1}{2} \) t vanilla |
| 1 Tb cornstarch |

Amount: 2 cups

Method

How
Boil water and sugar 5 minutes.
Mix cornstarch with cold water for thickening.
Add grated chocolate to cornstarch and water; then add all to sirup, pouring slowly and stirring constantly.

Why
Chocolate blends better in hot sirup than in water.
Mixing with cold water separates the starch particles and prevents formation of lumps when added to a hot mixture.
Adding the chocolate to the hot sirup at the same time as the thickening results in a smooth consistency because the starch acts as binder when the chocolate melts. If not held in place by a binder, the fat in the chocolate would cause it to float on the surface of the sirup; then when the thickening was added there would be an uneven composition.

Boil 10 minutes. Flavor with vanilla and serve hot on ice cream or pudding.

Fruit Tapioca

Equipment

| 1 measuring cup | 1 mixing spoon |
| 1 saucepan |
Goon THINGS FROM THE OVEN

Materials

1/3 c minute tapioca
1 1/4 c liquid (fruit juice and boiling water)

Amount: 6 servings

Method

Boil the tapioca in the liquid until clear, adding more liquid if necessary. Then add sugar and fruit juice as desired. Cool and serve with cream.

Tapioca Cream

Equipment

1 double boiler
1 measuring cup
1 strainer
1 mixing bowl

Materials

1/4 c pearl or minute tapioca
2 c scalded milk
1 t vanilla

Amount: 4 servings

Method

If pearl tapioca is used, soak in cold water for 1 hour, drain, add to milk and cook in a double boiler until tapioca is transparent. Slightly beat egg yolks and salt. Add half the sugar to the milk and the remainder to the egg yolks. Combine by pouring the hot mixture slowly on the egg mixture. Return to double boiler, and cook until it thickens. Remove from fire, cool slightly, and add stiffly beaten egg whites. Flavor and chill.

Fig Tapioca

Equipment

1 double boiler
1 measuring cup

Materials

1/3 c minute tapioca
3/4 c light brown sugar
1/4 t cinnamon or to taste
1/2 c nuts
1 1/2 c water
1/4 lb dried figs
1/2 t vanilla

Amount: 4 servings
Method
Mix tapioca, sugar, and water. Boil 10 minutes, add figs and cinnamon, then cook in double boiler 1 hour. Add nuts and vanilla. Serve cold with whipped cream.

Caramel Pudding
Equipment
1 saucepan
1 measuring cup

Materials
4 Tb cornstarch
1½ c boiling water
1½ c light brown sugar
½ c nuts

Amount: 3 servings

Method
Mix the cornstarch and sugar. Add the boiling water, stirring constantly. Boil about 20 minutes, or until there is no taste of raw starch, stirring constantly. Add nuts. Chill and serve.

Farina Custard
Equipment
1 baking dish
1 measuring cup
1 fork

Materials
1 c cold farina
2 c milk
2 eggs
½ c sugar
¼ t nutmeg

Amount: 5 or 6 servings

Method
Stir the farina and milk together until they are perfectly smooth, then add slightly beaten eggs, sugar, and nutmeg. Bake in moderate oven (350° F.) until firm. Serve either hot or cold with any desired sauce.

Indian Pudding
Equipment
1 double boiler
1 baking dish
1 measuring cup
1 teaspoon
1 mixing spoon
1 fork
**Goon THINGS FROM THE OvEN**

**Materials**

- 1 qt milk
- ½ c corn meal
- ½ c dates
- ½ t cinnamon
- ½ c brown sugar
- ½ t salt
- ½ t ginger
- 1 egg

**Amount:** 6 or 7 servings

**Method**

Place milk in double boiler and when scalded add the meal moistened with cold water, stirring constantly to avoid lumps. Cook 20 minutes. Turn into baking dish and add remaining ingredients except the egg. Stir well and when the mass has cooled somewhat, stir in the beaten egg. Bake 1 hour in slow oven (300° F.). Serve hot with sauce.

**Fruit Cereal Pudding**

**Equipment**

- 1 saucepan
- 1 measuring cup
- 1 fork
- 1 teaspoon
- 1 knife
- 1 mixing spoon
- 1 baking dish

**Materials**

- 1½ c cereal, before cooked
- 1 t cinnamon
- 1 qt milk
- ½ c coffee cream
- 2 eggs
- ½ c sugar
- 3 large bananas sliced across

**Amount:** 6 or 7 servings

**Method**

The cereal may be any fine wheat preparation, cooked in boiling salted water. While warm, stir in cinnamon. Allow to cool. Add milk. Add slightly beaten eggs to the mixture, stir in sugar, mix well. Pour into greased baking dish; drop in fruit evenly. Bake in moderate oven (350° F.) 25 minutes. Test as for custard. Serve hot or cold.

**WAYS OF USING DRY CAKE**

**Cake Served With Sauce**

Cut the cake in pieces the proper size for one serving. Quickly dip each piece in cold water. Place on baking pan 2 inches apart. Put into hot oven for a few minutes until the cake has freshened,
or put the dry pieces of cake on a plate in a steamer and steam until soft. Serve with lemon or chocolate sauce.

**Pudding Made From Cake**

**Equipment**
- 1 mixing bowl
- 1 saucepan
- 1 measuring cup
- 1 egg beater
- 2 teaspoons
- 1 tablespoon
- 1 baking dish

**Materials**
- 2 c stale cake crumbs
- 1/2 c stale bread crumbs
- 1 qt scalded milk
- 2-4 Tb sugar
- 2 Tb melted butter
- 2 eggs
- 1/2 t salt
- 1 t vanilla
- 1/2 c raisins or currants
- 1/4 c nuts may be added

(The amount of sugar, butter, and flavoring used will depend on kind of cake.)

Amount: 8 large servings

**Method**

**How**
- Scald milk.
- Soak bread and cake crumbs in milk.
- Add sugar, butter, slightly beaten eggs, salt, and flavoring.
- Add raisins and nuts.
- Bake 1 hour in buttered baking dish in slow oven (300° F.).
- Serve with lemon or hard sauce.

**Why**
- Crumbs will absorb hot milk more quickly and thoroughly than cold milk.
- The more thoroughly the crumbs absorb the milk the more perfectly they can be mixed with the other ingredients.
- If plain cake is used, raisins and nuts may be added at the last.
- This pudding requires the same care in baking as does a custard.

**QUICK BREADS**

In making quick breads, different proportions of flour and liquid are used. Typical proportions are illustrated in the following:

**Batters:**
1. Pour batter—1 c liquid to 1 c flour (popovers)
2. Drop batter—1 c liquid to 2 c flour (muffins)

**Doughs:**
1. Soft dough—1 c liquid to 3 c flour (cake)
2. Stiff dough—1 c liquid to 4 c flour (pastry or yeast bread)

Muffins, baking-powder biscuits, griddle cakes, and popovers are representative of the various types of quick breads. In making
them we learn the fundamental principles of making all quick breads. Variations of these recipes emphasize these principles and give some additional processes.

**Muffins**

**Equipment**

- 1 measuring cup
- 1 teaspoon
- 1 tablespoon
- 1 flour sifter
- 1 mixing bowl
- 1 strainer
- Muffin pans

**Materials**

- 2 c flour
- 3½ t baking powder
- ½ t salt
- 2 Tb sugar
- 1 egg
- 1 c milk
- 2 Tb melted shortening

Amount: 12 muffins

**Method**

*How*

Sift dry ingredients together.

*Why*

Sifting the ingredients mixes them evenly.

**Fig. 7.—Utensils for Baking Some of the Quick Breads**
How

Beat egg.

Add milk to egg.

Gradually stir milk and egg into dry ingredients.

Stir until mixture is free from lumps.

Add melted fat and beat about ½ minute.

Fill the greased muffin pans half full of mixture and bake in hot oven (410° F.) about 25 minutes.

If there is not enough of the mixture for all the cups, partially fill empty ones with water.

Why

Beating breaks up the yolk and white so that the egg can be more evenly distributed. Egg is used here for a binding substance.

The small amount of egg can be more evenly mixed if it is put in with the milk.

If the milk and egg are stirred in gradually, the mixture will not lump so easily.

Stirring removes lumps and gives a finer and more even texture to finished product.

Melted fat can be more evenly distributed than cold fat, but care should be taken not to brown the fat in heating.

Filling the cups only half full gives the muffins room to rise.

Water prevents heat from injuring pan.

Variations of Muffins

Corn Meal or Graham Muffins. Use same recipe as for plain muffins, substituting 1 cup of either corn meal or graham flour for 1 cup of white flour.

Sour Milk Muffins. Sour milk or buttermilk may be used in place of sweet milk, with only a slight change of recipe. Follow the above recipe, using 1 cup of sour milk instead of 1 cup of sweet milk. Use 1½ instead of 3½ teaspoons of baking powder, and add ½ teaspoon of soda to neutralize the acid in the sour milk. (In any recipe calling for sweet milk and baking powder, sour milk may be substituted if soda is added. Use ½ teaspoon of soda for each cup of sour milk and subtract 2 teaspoons of baking powder from the amount called for in the recipe for each ½ teaspoon of soda used.)

Dried Fruit Muffins. Add ½ to ¾ cup of currants, chopped raisins, or dates to the batter. Save out a little flour from the amount called for to mix with the fruit. This keeps the fruit from sinking to the bottom of the pan.

Blueberry Muffins. Use only ¾ cup of milk and add 1 cup of blueberries. Save out ¼ cup of flour from the amount called for
to mix with the berries before they are added at the last. Flour is mixed with the berries to keep them from sinking to the bottom of the pan.

**Baking-Powder Biscuits**

**Equipment**

1 mixing bowl  
2 knives or 1 fork  
1 biscuit cutter  
1 teaspoon  
1 measuring cup  
1 tablespoon  
1 flour sifter  
1 bread board  
1 rolling pin  
Baking pans

**Materials**

2 c flour  
4 t baking powder  
½ t salt  
2 Tb shortening  
½ to ¾ c milk

Amount: 15 small biscuits

**Method**

*Sift dry ingredients together into bowl.*

Cut shortening into dry ingredients, using either a fork or 2 knives, until mixture is like coarse meal. One can work in shortening with tips of fingers.

Push flour to one side of bowl; turn in a little milk and toss flour and milk together lightly with a fork until mixture is a soft dough. Continue adding milk gradually until mixture is a soft, spongy dough. Turn on to slightly floured board, knead ½ minute, pat and roll very lightly to ⅛ inch thickness.

Dip biscuit cutter in flour and cut dough into biscuits, wasting as little of dough as possible.

Bake in very hot oven (450° F.) 12 to 15 minutes.

**Why**

The baking powder and salt are thus evenly distributed throughout the flour.

A knife or fork keeps the mixture colder. If the hands are used, only the very tips of the fingers should be used and the mixture should be handled as little, as lightly, and as quickly as possible.

Some flours take up more moisture than others, so entire amount of milk called for may not be needed.

If mixture is handled roughly or rolled hard, the air bubbles are broken and the biscuits will not be light or fluffy. Excessive rolling and mixing develops gluten and so makes biscuits tough.

Flouring cutter prevents dough from sticking to it. Pieces left after cutting are never so tender when worked over a second time.
Variations of Biscuits

Emergency Biscuits. These biscuits are made according to the above recipe except that about ¼ cup more milk is used and the mixture is dropped from a spoon directly upon the oiled baking pan without rolling.

Pin Wheel Biscuits. Use same equipment as for baking-powder biscuits except for addition of knife or food chopper.

Materials

<table>
<thead>
<tr>
<th>Baking-powder biscuit dough</th>
<th>2 Tb sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ c chopped raisins or currants</td>
<td>2 Tb melted butter</td>
</tr>
<tr>
<td>½ t cinnamon</td>
<td></td>
</tr>
</tbody>
</table>

Roll dough about ½ inch thick and spread with melted butter. Mix cinnamon with sugar, and dust on dough. Scatter currants or raisins on the dough and roll it up as for jelly roll. Pinch edges together so fruit will not fall out, and cut in slices about 1 inch thick. Place slices on oiled pan and bake about 15 minutes in hot oven (425° F.). Watch the biscuits carefully, as the sugar makes them burn easily on the bottom.

Roly Poly

Materials

<table>
<thead>
<tr>
<th>Baking-powder biscuit dough</th>
<th>½ t cinnamon</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 large apples, sliced</td>
<td>1 Tb butter</td>
</tr>
<tr>
<td>¼ c sugar</td>
<td></td>
</tr>
</tbody>
</table>

Use recipe for baking-powder biscuits, but use 3 tablespoons of shortening instead of 2 to make product richer and more suitable for dessert. Roll dough into an oblong shape ¼ inch thick; spread first with softened butter and then with sliced apples, keeping apples about ½ inch from edge. Mix cinnamon and sugar, and sprinkle over apples. Roll up like jelly roll. Place roll on greased pan and bake in hot oven (425° F.) about 25 minutes, or until apples are tender. Other fruits may be substituted for the apples. Serve hot with sugar and cream, or pudding sauce.

Fruit Dumplings. Use same recipe as for roly poly, that is, a baking-powder biscuit dough which has had an extra tablespoon of shortening added. Roll ¼ inch thick, and cut in 5 or 6 equal portions, the size being determined by size of fruit to be used. Place in the center the apple or other fruit, pared, cored, either sliced or whole, and sprinkle with sugar and cinnamon. Moisten edges of
dough with cold water and fold neatly together about the fruit. Bake or steam until fruit is tender. If cored apples are used whole, the center may be filled with raisins or nuts, or sugar and cinnamon; or filling may be omitted. Brushing the outside of the dumpling with melted butter and sugar or with a little beaten egg before baking, gives a brown, glazed surface. Serve with pudding sauce, or sugar and cream.

**Dutch Apple Cake.** Use same recipe and materials as for roly poly but roll dough a little thicker—about 1/2 inch—and place flat upon greased pan. Spread melted butter or other shortening on dough, and press sliced apples into dough in rows, with sharp edge of sliced apple downward, until top of dough is covered with apples. Mix cinnamon and sugar and spread over top. Bake in hot oven (425° F.) for about 30 minutes. Peaches or other fruits may be used in place of apples. Serve with sugar and cream, or pudding sauce.

**Shortcake.** Use same recipe as for baking-powder biscuits, but use twice as much shortening to make product richer and more suitable for dessert. This means that 2 tablespoons of shortening are used for each cup of flour. The dough may be cut and baked in biscuit shape, or it may be baked in one large piece. If baked in large piece, it should be split with a fork after baking; cutting the hot product with a knife tends to make it heavy. Spread layers with melted butter and put sweetened fruit between layers and on top. Strawberries are always the favorite fruit, altho raspberries, cherries, stewed dried apricots, oranges, or bananas may be used successfully. The top may be spread with whipped cream if desired.

**Griddle Cakes**

<table>
<thead>
<tr>
<th>Equipment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 spatula or pancake turner</td>
<td>1 tablespoon</td>
</tr>
<tr>
<td>1 measuring cup</td>
<td>1 mixing bowl</td>
</tr>
<tr>
<td>1 teaspoon</td>
<td>1 small bowl</td>
</tr>
<tr>
<td>1 flour sifter</td>
<td>Griddle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 c flour</td>
<td>1 egg</td>
</tr>
<tr>
<td>1/2 t salt</td>
<td>1 1/2 c milk</td>
</tr>
<tr>
<td>3 1/2 t baking powder</td>
<td>2 Tb shortening</td>
</tr>
</tbody>
</table>

Amount: 14 cakes about 4 inches in diameter
**Method**

**How**

Heat griddle.

Sift dry ingredients together into mixing bowl.

Beat egg in small bowl and add milk.

Pour milk and egg gradually on to dry ingredients, beating only until thoroly mixed.

Add melted fat and beat again. Grease griddle lightly.

To bake, pour on hot, greased griddle. When cake is puffed full of bubbles and is brown on underside, turn and brown on other side. Place on hot plate and serve at once.

If large bubbles rise at once to the top of the cake, the griddle is too hot; and if the top of the cake stiffens before the underside is brown, the griddle is not hot enough.

Never turn a cake twice, for that makes it tough.

An aluminum griddle need not be greased.

**Why**

A hot griddle forms a tender crust, searing the cakes and expanding the product before the gas bubbles can escape.

This distributes the baking powder and salt evenly thru the flour.

Mixing the egg with milk distributes it evenly thru the mixture.

Beating gives the mixture a finer texture, but prolonged beating after the baking powder is added makes the cakes heavy and tough.

Melting the butter distributes the fat.

**Variations of Griddle Cakes**

**Sour Milk Griddle Cakes.** Sour milk may be substituted for sweet milk in the above recipe. For proportions of baking powder and soda, see note under “Sour Milk Muffins” (page 22).

**Corn Meal Griddle Cakes.** Use same equipment as for griddle cakes except for addition of double boiler.

**Materials**

| 1/2 c corn meal | 1/2 t salt |
| 2 c scalded milk | 1 1/2 t baking powder |
| 1/2 c flour | 1 Tb sugar |
| 1 egg | 1 Tb shortening |

Amount: 15 cakes about 4 inches in diameter

**Method**

**How**

Pour scalded milk over corn meal, and stir well. Cook for 15 minutes in top of double boiler.

**Why**

Being granular, corn meal needs longer cooking. This makes it more palatable and digestible.
FIG. 9.—BAKING-PowDER BISCUITS

FIG. 8.—GRAHAM MUFFINS

FIG. 10.—PIN Wheel BISCUITS
FIG. 11.—WAFFLES

FIG. 12.—POPOVERS
Mix as for griddle cakes.

Cool slightly before adding beaten egg.

Bake as griddle cakes. Care is required to turn these cakes without breaking.

Waffles. Use same equipment as for griddle cakes, except substitute waffle iron for griddle and pancake turner. A pitcher from which to pour batter is a convenience.

Materials

- 2 c flour
- 2 t baking powder
- ½ t salt
- 2 eggs
- 1½ c milk
- 2 Tb melted shortening

Amount: 4 waffles 8 inches in diameter

Method

Mix according to directions for plain griddle cakes. A lighter product will be obtained if yolks and whites of eggs are beaten separately and the stiffly beaten whites cut and folded in at the last. Beaten eggs act as a leavening agent; hence less baking powder is needed. Thoroly heat the waffle iron. Grease it unless an aluminum or electric iron is used. Pour batter in center and the mixture will spread to fill the iron. Brown waffle on both sides.

Popovers

Equipment

- 1 measuring cup
- 1 flour sifter
- 1 Dover egg beater

- 1 teaspoon
- 1 mixing bowl
- Popover pans

Materials

- 1 egg
- 1 c milk
- 1 c bread flour
- ½ t salt

Amount: 8 popovers

Method

Use heavy earthenware cups, or iron or cast aluminum popover pans; agateware may also be used. Grease cup, using soft paper, cloth, or pastry brush.

A heavy material maintains more uniform temperature and forms better crust. Greasing prevents popovers from sticking to pans.
How

Start heating pans.

Break egg into bowl and beat with Dover egg beater.

Add milk and beat again.

Add sifted flour and salt, and beat thoroughly several minutes.

Pour into hot, greased pans, filling them \( \frac{1}{2} \) to \( \frac{2}{3} \) full.

Bake in hot oven (425° F.) at least 35 to 40 minutes.

Do not open oven door for first 15 minutes.

Why

Pans should be hot enough to form a crust as soon as popovers are put into them.

Egg is used here as a binding substance. A Dover egg beater beats more quickly than a fork or spoon and mixes the white and yolk more thoroughly.

Beating mixes the milk and egg so that the egg will be distributed evenly.

Mixture is beaten well in order to remove lumps, and to make it smooth, thus giving a finer texture to the finished product.

Room must be left in pans so that popovers can rise without running over.

A hot oven is needed to expand liquid quickly into steam and to form a crust which will keep its shape.

If cold air strikes mixture before crust is set, the steam on the inside condenses and popovers will fall.

Cream Puffs

Cream puffs are a variation of popovers.

Equipment

1 measuring cup
1 mixing spoon
1 saucepan

Materials

1 c boiling water
\( \frac{1}{2} \) c butter
3 eggs
1 c flour

Amount: 12 small or 9 large cream puffs

Method

How

Heat the oven.

Why

This mixture should begin baking as soon as it is placed in the oven.
Put butter and water in saucepan and bring to boiling point.

When boiling, add all the flour at once; stir vigorously until smooth.

Remove from fire as soon as mixture leaves sides of pan, and cool slightly.

Add unbeaten eggs one at a time, beating mixture thoroly after each egg is added.

Drop from spoon on to greased sheet, spacing drops 1½ inches apart. Shape with spoon until circular, piling mixture slightly in center.

Bake 30 minutes in moderate oven (375° F.).

Be careful not to remove puffs before they are done. If not sure whether they are done, remove one from the oven and see if it holds its shape.

Make a slit in top of each puff and fill with cream filling.

Fat melted in water tends to prevent lumping when flour is stirred into boiling water.

The motion of rapidly boiling water and melted fat prevents lumping, while the heat cooks the mixture quickly. A stiff mass results that will stir together into a pasty lump.

The mixture is very thick and will burn quickly. It must be cooled slightly before stirring in the eggs to prevent the eggs from coagulating.

It is necessary to beat the mixture to mix it thoroly with the egg.

Air and steam are the only leav­ening agents used.

Shaping the mixture will give it a rounded form rather than a flat one and will make it suitable for filling.

A hot oven would toughen an egg mixture.

Puffs will lose their shape if re­moved from oven before thoroly baked.

(Cream Puff Filling)

**Equipment**

<table>
<thead>
<tr>
<th>1 measuring cup</th>
<th>1 teaspoon</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 tablespoon</td>
<td>1 double boiler</td>
</tr>
<tr>
<td>1 mixing bowl</td>
<td></td>
</tr>
</tbody>
</table>

**Materials**

<table>
<thead>
<tr>
<th>¾ c sugar</th>
<th>2 eggs</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Tb flour</td>
<td>2 c scalded milk</td>
</tr>
<tr>
<td>½ t salt</td>
<td>1 t vanilla</td>
</tr>
</tbody>
</table>

Amount: Enough to fill 12 small or 9 large cream puffs
Method
Scald milk. Mix sugar, flour, and salt; add gradually to hot milk, stirring constantly. Cook in double boiler for 15 minutes, stirring occasionally. Beat eggs slightly. Slowly pour several tablespoons of hot mixture on to beaten egg and stir well. Add egg mixture to thickened milk while stirring. Cook 3 to 5 minutes, or until egg yolk has thickened. Add flavoring at the last.

MISCELLANEOUS QUICK BREADS

Boston Brown Bread

Equipment
1 steamer
2 molds
1 mixing bowl

Materials
1 c corn meal
1 c graham flour
½ t soda
½ c raisins

Amount: 2 small loaves

Method
Mix dry ingredients; add molasses and milk. Stir until well mixed; add raisins and turn into molds or greased baking-powder cans, filling each half full. Place cover on can or tie wax paper over top of can. Steam about 2 hours, or until bread is solid. After removing from kettle, take off lids and brown the bread slightly in moderate oven (350° F.).

One-pound baking-powder tins or coffee cans make good molds.

Gingerbread

Equipment
1 mixing bowl
1 teaspoon
1 measuring cup

Materials
2½ c flour
1 t soda
½ t salt
2 t ginger

Amount: 12 servings
Method
Mix dry ingredients; put sour milk and molasses in mixing bowl and sift in the dry ingredients, stirring constantly. Add melted fat and beat thoroughly. Turn into shallow greased pan and bake about 25 minutes in moderate oven (350° F.).

Be careful about oven temperature, as any mixture containing molasses burns easily.

Nut Bread

Equipment

1 teaspoon
1 mixing spoon
1 measuring cup
1 mixing bowl
1 flour sifter
1 baking pan

Materials

1 egg
1/2 c sugar
1/2 t salt
1 1/3 c flour
2 t baking powder
3/4 c milk
1/2 c chopped nuts

Amount: 12 servings

Method
Sift dry ingredients together; add beaten egg combined with milk. Beat well and add nuts. Place in well-greased pan and let rise 30 minutes. Bake 30 minutes in moderate oven (350° F.).

TYPES OF CAKE

The foundation of all cake products is either the shortened or the unshortened (sponge) cake. There are many variations of these two types of cake. Shortened cakes are those in which the gluten of the flour has been shortened by the incorporation of fat; sponge cakes are those in which egg whites are used as the leavening agent.

SHORTENED CAKES

Ingredients

Shortened cakes contain sugar, fat, liquid (usually in the form of milk), eggs, flavorings, flour, and a leavening agent. Nuts and fruit may be added, and various kinds of liquid and sugar may be used.

Methods of Mixing

A shortened cake may be stirred or beaten, or mixed in any other way providing all the ingredients are thoroughly blended. Care-
less mixing results in a coarse cake; long beating gives a fine but heavy grain, while a small amount of beating makes a light and delicate texture. The general method and the muffin method are described below. The muffin method is recommended for a simple plain cake; the general method should be used for a richer cake.

**General Method**

**How**

Sift flour before measuring.

Measure and sift dry ingredients together into bowl. (Dry ingredients include such articles as flour, soda or baking powder, salt, and spices, but do not include sugar, since sugar forms a liquid as soon as it dissolves.)

Allow fat to stand at room temperature about 5 to 10 minutes before using.

Cream shortening and sugar together, using back of mixing spoon.

Break eggs one at a time into a small bowl.

Beat eggs well and add to creamed sugar and fat.

Sift dry ingredients and add a little to this mixture; stir until smooth. Then add small amounts of liquid and dry ingredients alternately. Stir until smooth. Beat ½ minute. If whites of eggs are beaten separately, fold them in at this time.

Pour into greased baking pan; fill only ½ to ⅔ full. Use spatula or spoon to scrape out bowl.

**Why**

Sifting flour tends to separate the particles. If measured before sifting, the extra amount might make the cake too stiff.

This distributes dry ingredients evenly thru the flour and gives the product a finer texture. If spices are not sifted with flour, they are apt to lump when added to liquid.

If softened and then slightly creamed before sugar is added, butter or shortening can be creamed with sugar more easily and quickly.

Creaming distributes fat more evenly thru batter.

One stale egg would ruin the product. When broken separately, such a loss is avoided.

Beating eggs allows them to be more easily mixed with other ingredients. Since baking powder is the leaven used in shortened cakes, it is not necessary to beat whites and yolks separately, altho this is done when making a lighter cake.

Too much beating would develop gluten and make the product tough.

If pans are only partially filled, the cake can rise without overflowing.
When filling pans, gently press batter into the corners, making center slightly lower than sides.

Bake in moderate oven (375° F.). (Follow general directions given below for baking shortened cakes.)

After removing from oven, allow cake to stand in pan for 5 or 10 minutes.

Remove cake from pan and place it on wire rack or clean white paper to cool, but avoid drafts.

Keep in ventilated tin box.

A more evenly shaped cake results because the cake tends to rise more in the center than on the sides.

A better shape results if the cake is allowed to rise before a crust is formed over the top. Products with sugar in them tend to burn easily.

After steam has caused the cake to loosen from the pan, it can be removed without injuring its shape.

A current of air will dry out the cake.

A tin box will keep cake from drying out. Ventilation is needed, however, to prevent cake from getting moldy.

Muffin Method

A plain cake may be made by the muffin method, which is a time and labor saver. Sift all dry ingredients together; combine liquid, beaten eggs, and melted fat. Mix the two together. Beat about \( \frac{1}{2} \) minute. Egg whites and yolks may be beaten separately and whites added at the last as in the general method.

Baking Shortened Cakes

The baking of the cake might well be said to be the most important part of the entire process, since so much of the success of the cake depends upon it. Be sure that the oven is the right temperature for the type of cake to be baked (refer to Oven Temperatures page 4).

Do not try to bake more than one kind of cake in an oven at the same time, since different types require different treatment. A small cake and a layer cake require a hotter oven than a loaf cake because they must bake quickly before drying out. A large cake or a loaf cake must bake more slowly so that the heat may penetrate to the center before too hard a crust is formed on the outside.

Place the cake as near the center of the oven as possible as this gives a more even distribution of heat and insures more even rising.

The baking of a cake is divided into four quarters. During the
first quarter the cake begins to rise; during the second quarter it continues to rise and begins to brown; during the third quarter it finishes rising and continues to brown; during the fourth quarter it finishes browning and shrinks from the pan. The cake should not be moved while baking, since a jar causes the fragile cell walls to break; the leaven then escapes and the cake is likely to fall. If it is baking unevenly, it may be moved with least danger during the first and last quarters, but should not be moved just after the crust has begun to form. Open and close the oven door very carefully. If the oven is too hot, lower the heat or place a pan of cold water in the oven. If the cake is browning too fast, put a paper over it but be careful that the paper does not stick to the cake.

When done, the cake shrinks from the pan; pressed gently on top with a finger, it springs back and leaves no indentation. If baked too slowly, the cake may rise over the sides of the pan and be of a coarse texture. When put in too hot an oven, the cake forms a brown crust on top before it has risen sufficiently; then rising more, it is likely to break thru the crust and make a badly shaped loaf. The oven temperature should be kept as nearly uniform as possible.

Do not open the oven door frequently to look at a cake. Be sure of the oven temperature before putting the cake in, then open the door only once or twice during the entire baking.

Cakes containing such substances as dried fruits, molasses, or chocolate tend to burn quickly, and must be baked at a slightly lower temperature than a plain cake.

Success or Failure in Cake Making

Recognition of the causes of success or failure in cake making gives one assurance and makes more uniform results possible. A few of the general causes of success or failure are given below. Consider the finished product, judge it, and let your observations be a guide to greater success.

Success Depends Upon:
A well-proportioned recipe
The use of fresh and well-flavored ingredients
Careful measuring and mixing of ingredients
Careful baking with right oven temperature

Failures and Their Causes:
A heavy product or the falling of a cake may be due to:
Too slow an oven
Too much sugar or fat, or both
Too little flour
Moving the cake in the oven or jarring it before it is set

A coarse-grained product may be due to:
Too slow an oven
Too much leaven
Careless mixing of ingredients

"Bready" appearance and cracks on top may be due to:
Too much flour
Too hot an oven at first

Uneven rising of the product may be due to:
Cake being placed near one side of the oven
Oven being too hot on one side
Too much flour

Rough edges may be due to:
Too much sugar
Too much shortening
Too little flour

Plain Loaf Cake

Equipment

| 2 mixing bowls | 1 teaspoon |
| 1 small bowl   | 1 flour sifter |
| 1 measuring cup| 1 egg beater  |
| 1 mixing spoon | 1 loaf pan    |

Materials

| ½ c butter      | 1½ c flour |
| ¾ c sugar       | ¼ t salt   |
| 2 eggs          | 2 t baking powder |
| ½ c milk        |             |

Amount: 1 loaf cake 3 x 3½ x 8½ inches

Method

Use either general or muffin method for mixing shortened cakes. Bake in moderate oven (350° F.) 45 minutes to 1 hour.

Layer Cake

Equipment

Same as above except layer cake pans instead of loaf cake pan.

Materials

Same as for plain cake.

Amount: 3 round layers 9 inches in diameter
Method
Use either general or muffin method for mixing shortened cakes. Bake in moderate oven (375° F.) 25 to 35 minutes.

Standard Cake
(1-2-3-4 Cake)

Equipment
Same as for layer cake.

Materials
1 c butter 1 t flavoring
2 c sugar 3 c flour
1 c milk 4 t baking powder
4 eggs
Amount: 2 loaf cakes 3 x 3 1/2 x 8 1/2 inches, or 4 round layers 9 inches in diameter

Method
Use general method described for mixing cake. Bake loaf cake at 350° F. and layer cake at 375° F.

Jelly Roll

Equipment
1 mixing bowl 1 measuring cup
1 small bowl 1 egg beater
1 mixing spoon Oiled paper or clean
1 tablespoon wrapping paper
1 teaspoon 1 shallow dripping pan
1 flour sifter

Materials
3 eggs 1/4 t salt
1 c sugar 1 Tb melted butter
1/2 Tb milk Jelly stirred or mixed
1 c flour thoroly
1 t baking powder
Amount: 1 jelly roll 12 x 6 1/2 inches

This proportion of eggs to flour makes a tough product which can be rolled without breaking. A larger proportion of shortening and liquid would make the product too tender to roll.
**Method**

**How**

Line bottom of dripping pan with paper. Grease paper and sides of pan.

Beat eggs until light. Gradually add sugar, then milk.

Sift and add dry ingredients. Put in melted butter.

Spread mixture evenly over bottom of pan. A fairly large pan should be used so that cake will be only about ¼ inch thick when baked.

Bake 15 to 20 minutes in slow oven (300° F.). Meanwhile stir jelly to spreading consistency.

Take cake from oven, loosen edges, reverse pan, and allow cake to fall out on a paper sprinkled with powdered sugar.

Quickly remove paper which has lined pan and now adheres to cake.

Cut off a thin strip of cake from sides and ends.

Spread a moderate amount of stirred jelly or jam over cake.

Everything should be ready for rolling when cake leaves the oven, for this entire process must be done quickly.

Roll up cake quickly and fasten paper about it. Be careful not to press or roll too tightly. When cooled slightly, remove paper.

**Why**

Paper makes it possible to remove a thin cake from pan without breaking edges of cake.

Eggs serve as part of liquid to dissolve sugar.

Butter blends better with other ingredients if added last.

A thicker cake is likely to crack when rolled, and a thinner cake dries out before it is sufficiently baked.

Too hot an oven makes the cake hard and crusty. Over-baking dries it out.

The moist underside of the cake is thus placed uppermost, while the seared surface is at the bottom and is covered with sugar. Sugar helps to make the roll stick together and also makes an attractive finish.

Unless removed quickly, paper is likely to stick to cake.

This crusty part would crack if rolled.

If too much jelly is used, it will soak in and make the product soggy.

If cake is allowed to cool, it will dry out somewhat and tend to crack in rolling.

Paper will keep the roll in shape until it has cooled, when it will retain its shape without being held in place.

**Nut Cake**

Prepare plain cake recipe (see page 37), using ¼ cup of butter and ½ cup of walnut or hickory nut meats ground or chopped fine instead of ½ cup butter. The nuts should be added last. If they are in large pieces, it is necessary to flour them and to use 1 tablespoon more of fat.
Golden Spice Cake

Equipment
1 mixing bowl  
1 measuring cup  
1 teaspoon  
1 flour sifter

1 mixing spoon  
1 egg beater  
1 grater  
1 loaf pan

Materials
½ c shortening  
½ c molasses  
1 egg  
2½ c flour  
½ t soda  
1 t cinnamon

½ c brown sugar  
½ c milk  
4 egg yolks  
1 t baking powder  
½ t cloves  
½ t grated lemon rind

Amount: 1 loaf cake 3 x 3½ x 8½ inches

Method
Use general method for mixing cake (see page 34). Bake in moderate oven (350° F.) about 45 minutes.

Apple Sauce Cake

Equipment
Same as for golden spice cake except for addition of sieve.

Materials
1 c sugar  
½ c shortening  
1 c apple sauce (un-sweetened and con-sistency to pour)  
1 t cinnamon

2½ c flour  
1 t soda  
1 t cinnamon  
¼ t cloves  
¼ t nutmeg  
1 c raisins

Amount: 1 loaf cake 8½ x 3½ x 3 inches

Method
Cook apples until very soft; then put them thru a sieve. Do not sweeten. The sauce must be in a smooth, fine condition or a coarse-grained cake will result. Clean raisins. Use either general or muffin method of mixing (see page 33). Apple sauce is added in place of other liquid. Bake in slow oven (325° F.) about an hour. Keep in a covered tin box. This cake, while inexpensive, has the qualities of very rich fruit cake and will keep moist for some time.
Dark Fruit Cake

Equipment

1 mixing bowl 1 mixing spoon
1 measuring cup 1 egg beater
1 teaspoon 1 knife or food chopper
1 flour sifter 1 loaf pan

Materials

$1/2$ c butter  $1/2$ t allspice
$3/4$ c brown sugar  $1/2$ t mace
$1/2$ c molasses  $1/4$ t cloves
$1/2$ c milk  $1/2$ t lemon extract
2 eggs  $3/4$ c raisins
2 c flour  $3/4$ c currants
$1/2$ t soda  $1/2$ c citron thinly sliced
1 t cinnamon and cut in strips

Amount: 1 loaf cake $81/2 \times 31/2 \times 3$ inches

Method

Clean dried fruit. Chop raisins with knife or put them thru a coarse food chopper. Cut citron rather fine. Reserve about 3 tablespoons of flour with which to flour the fruit.

Prepare according to general directions (see page 34). Flour the fruit and add last, stirring the mixture well to be sure that the fruit is well distributed. Put in a deep pan and bake about $11/4$ hours in slow oven ($300^\circ$ F.). Be sure the cake is thoroly done. The more fruit used, the longer the time required for baking. Slow baking avoids burning and allows the fruit flavor to penetrate the entire cake. A cake of this kind will keep a long time and has a better flavor a few days after baking. Since it is very rich, small servings should be given.

Devil's Food Cake

Equipment

1 double boiler 1 egg beater
1 measuring cup 1 mixing bowl
1 teaspoon 1 or 2 loaf pans
1 flour sifter
Materials

(1) \(\frac{1}{2}\) cake bitter chocolate
1 c sugar
\(\frac{3}{4}\) c sweet milk

(2) 1 c sugar
\(\frac{3}{4}\) c butter
\(\frac{3}{4}\) c sour milk
(clabbered)
1 t vanilla

Amount: 1 loaf cake 10 x 6½ x 2 inches, or 2 loaves 8½ x 3½ x 3 inches

Method

How

Melt chocolate in top of double boiler or in dish placed over hot water.

Remove from over hot water and add sugar to melted chocolate. Stir well.

Add milk slowly, stirring constantly.

Allow to stand until Part 2 is prepared. Prepare Part 2 according to general method for mixing cake (see page 34).

When Part 2 is thoroughly mixed, add Part 1 and beat only until the 2 batters are well blended.

Bake as a loaf cake in moderate oven (350° F.) for 40 minutes to 1 hour, depending on shape and size of loaf.

If cocoa is used instead of chocolate, it may be sifted with the flour or mixed with the sugar, the sugar and milk of Part 1 may be added to Part 2, and the amount of flour called for reduced by \(\frac{1}{4}\) cup. Three tablespoons of cocoa is equivalent to 1 square of chocolate.
COOKIES

Cookies are small cakes made thin and baked quickly. They contain practically the same ingredients as do ordinary cakes but in different proportions since the small, flat cake may be made very rich. In addition to wheat flour, oatmeal and various other flours may be used in cookies. The technic of making perfectly shaped, well-flavored cookies is somewhat hard to master. When first learning, it may be necessary to use more flour than is needed later.

Use the general method for mixing cake (see page 34).

The amounts given for each recipe are only approximate. The number of cookies will depend on size of cutter and thickness of dough.

Method of Rolling

**How**

Put small amount of flour on kneading board. On this flour put about 3 heaping tablespoons of cookie dough. Do not take out a large quantity of dough at a time.

Turn dough over so that floured side is on top. If necessary, again sift a small amount of flour on board.

Roll lightly, lifting rolling pin frequently and rolling in a different direction each time until the dough is about \( \frac{1}{4} \) inch thick.

With a cookie cutter, cut cookies as near each other as possible. Try to avoid leaving any large irregular pieces of dough.

With a spatula or flexible knife, lift cookie off board, and without handling it place it on a greased cookie pan.

A little sugar may be sprinkled on top of cookies before putting them into oven.

Gather up trimmings and roll again until all dough is used.

**Why**

A very small amount of flour is sufficient to keep dough from sticking to board. If cookie dough is handled too much and flour is mixed into it, cookies are often stiff and tough.

If pressure is exerted dough is likely to stick to board.

The amount of trimming should be as small as possible for this dough must be rolled a second time. Dough that is worked over is not so light as the first dough and is often too stiff for best results.

Cookie dough is very sticky, and if touched will stick to the fingers and make a badly shaped product. With a little practice, one can easily slide cookies off the spatula without touching them.

The sugar gives cookies a finished appearance when baked.
Method of Baking

**How**
Bake in moderate oven (375° F.) for 5 to 7 minutes.

When baked, remove from pan by slipping a spatula or flexible knife under cookies. Place them on a wire rack to cool before piling in a jar.

**Why**
Cookies should be baked quickly so that they will not dry out, but they should have a medium-brown color.

Cooling before storing helps to keep cookies well shaped and crisp and prevents them from sticking together.

---

**Oatmeal Drop Cookies**

**Equipment**
1 mixing bowl
1 measuring cup
1 teaspoon
1 mixing spoon
1 flour sifter

1 spatula
1 food chopper or chopping bowl
1 mixing knife
Baking pans

**Materials**
1 c sugar
½ c shortening
½ c sour milk
2 eggs
1 t lemon extract
2 c oatmeal
2 c flour

½ t soda
1 t baking powder
1 t cinnamon
¼ t cloves
¼ t nutmeg
1 c raisins and currants
1 c nuts

Amount: 4 or 5 dozen cookies

**Method**
Use general method for mixing cake (see page 34). Combine in order given above. The oatmeal should be added to the liquid ingredients and allowed to become thoroughly moist before flour is added. Chop fruit and nuts, flour well, and add at the last. Stir until well blended. Drop from a spoon on to greased pans. (These cookies will have a better shape if a small spoon is used to push the dough off the stirring spoon.) Bake in moderate oven (375° F.) for 8 or 10 minutes. Keep in a covered stone jar. The flavor is better after cookies have been kept a few days.
FIG. 14.—LAYER CAKE FILLED AND ICED

FIG. 13.—JELLY ROLL

FIG. 15.—DEVIL'S FOOD CAKE
FIG. 16.—OATMEAL DROP COOKIES AND WHITE ROLLED COOKIES

FIG. 17.—ANGEL FOOD CAKE
White Rolled Cookies

Equipment

1 mixing bowl 1 board
1 measuring cup 1 rolling pin
1 teaspoon 1 spatula
1 mixing spoon 1 flour sifter
1 cookie cutter Baking pans

Materials

\[ \frac{1}{2} \text{ c butter} \quad \frac{1}{2} \text{ t lemon extract} \\
1 \text{ c sugar} \quad 2\frac{3}{4} \text{ c flour} \\
\frac{1}{2} \text{ c milk} \quad 2 \text{ t baking powder} \\
2 \text{ eggs} \quad \frac{1}{2} \text{ t grated nutmeg} \]

(Variations may be made by adding chocolate, fruit, or nuts.)
Amount: 4 dozen cookies

Method

Use general method for mixing cake (page 34), and general method for rolling cookies (page 43).

Molasses Cookies

Equipment

Same as for white rolled cookies except for addition of small saucepan.

Materials

\[ \frac{1}{2} \text{ c shortening} \quad 2\frac{1}{2} \text{ c flour} \\
\frac{1}{2} \text{ c molasses} \quad \frac{1}{2} \text{ t soda} \\
\frac{1}{2} \text{ c sugar} \quad \frac{1}{2} \text{ t cinnamon} \\
\frac{1}{4} \text{ c cold water} \quad \frac{1}{2} \text{ t ginger} \\
\frac{1}{2} \text{ t vanilla} \quad \frac{1}{8} \text{ t nutmeg} \\
1 \text{ egg} \]

Amount: 5 dozen cookies

Method

*How*

Place shortening, sugar, and molasses in saucepan. Mix well and bring to boiling point. The mixture must be carefully watched and stirred because it burns easily.

*Why*

Cooking thoroughly blends these ingredients.
CIRCULAR No. 370

How
Remove from fire. Add cold water, stir well, and allow to cool before other ingredients are added.

Why
A warm product requires more flour to prevent stickiness than does a cool product. If mixture is not allowed to cool, there is danger of making cookies too stiff. Mixture must be cool to prevent coagulation of eggs.

Add beaten eggs and vanilla. Sift and add dry ingredients. Stir well.

In rolling follow general directions (see page 43), but remember that molasses cookies should not be rolled as thin as either white cookies or ginger snaps. Bake in moderate oven (350° F.) about 10 minutes; watch closely. Great care is required in baking these cookies because the molasses in them will cause them to burn easily. These cookies will keep moist a long time. A variation of them may be made by adding nuts, in which case less shortening is used.

Ginger Snaps

Equipment
Same as for molasses cookies.

Materials

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 c molasses</td>
<td>½ t soda</td>
</tr>
<tr>
<td>½ c fat</td>
<td>1 Tb ginger</td>
</tr>
<tr>
<td>3¼ c flour</td>
<td>1½ t salt</td>
</tr>
</tbody>
</table>

Amount: 7 dozen cookies

Method

How
Heat molasses to boiling point and pour over shortening.

Why
Boiling molasses even slightly condenses it. Hot molasses melts shortening, and the mixture serves as a liquid into which the other ingredients can be blended.

Add dry ingredients mixed and sifted. Chill thoroly.

Roll as thin as possible. Cut into small cookies. Keep bowl in a cold place during the rolling process.

Bake in moderate oven (350° F.) about 10 minutes. Allow to cool before packing.

Why
Dough is more easily handled and can be rolled thinner when cold. If dough gets warm, it will be sticky; more flour will then be needed and cookies will be stiff rather than crisp.

Ginger snaps lose their crispness if packed while warm.
Ice-Box Butterscotch Cookies

Equipment
1 mixing bowl
1 mixing spoon
1 measuring cup
1 teaspoon
1 sharp, thin-bladed knife
1 flour sifter
Baking pans

Materials
1½ c butter
2 c brown sugar
2½ t baking powder
2 eggs
3 c flour

Amount: 5 or 6 dozen cookies

Method
Cream butter, add sugar, then beaten eggs and mix well. Add flour and baking powder sifted together. Mix and knead slightly. Shape into a roll, then chill thoroughly. Slice ¼ inch thick. Bake on ungreased pan in moderate oven (375° F.) for about 10 minutes. The dough may be kept in a refrigerator for several days, then sliced, and baked as fresh cookies are desired.

UNSHORTENED CAKES

Ingredients
Sponge cake is typical of cakes made without shortening. Since the gluten is not shortened and egg whites are the only leavening agent, special care is needed in combining the ingredients.

The sugar should be fine. Only fresh eggs can be beaten sufficiently to make a light product. Any soft-wheat flour or pastry flour may be used; since the gluten is unshortened, bread flour would make a tough cake.

Method of Mixing
The mixing of a sponge cake requires much more skill and care than the mixing of a shortened cake.

General Method

<table>
<thead>
<tr>
<th>How</th>
<th>Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sift sugar.</td>
<td>Sifting removes lumps and separates grains of sugar so they are easily dissolved in the small amount of liquid used.</td>
</tr>
<tr>
<td>Sift flour 4 or 5 times before measuring, and be careful not to pack it in cup when measuring.</td>
<td>Sifting increases bulk of flour by separating the particles and incorporating air between them.</td>
</tr>
</tbody>
</table>
**How**

Separate whites and yolks of eggs.

Just before they are to be used, beat egg whites with a wire beater until **stiff**, or until they will stay in the bowl when it is inverted. Do **not** beat them until dry. (Lift beater up and out of the egg whites with each stroke.)

Mix other ingredients with beaten egg whites by using cutting and folding motion. To do this put the spoon or spatula edgewise into middle of the dough, slide it under dough and bring it up at the edge of bowl, at the same time folding that part of dough toward the center. Turn bowl each time so that a new portion of dough is folded over. Try not to stir product but let the cutting and folding motion thoroly mix egg whites into dough. (See illustrations on page 9.)

Carefully slide cake mixture out of mixing bowl or platter into an **ungreased** cake pan.

Use a standard angel food cake pan.

**Why**

Also, if the particles of flour are separated they can be mixed more thoroly and easily with egg whites. Ever so little extra flour may make a sponge cake too stiff.

Since air is the only leaven used, it is necessary to beat egg whites separately so that a larger amount of air may be incorporated.

Beaten egg whites quickly lose their lightness on standing. A wire egg beater makes the product lighter than does a Dover beater. If beaten until dry, the albumin walls will have been stretched so far that they will be very fragile and will not stand the strain of further beating or the addition of other ingredients.

Any other method of mixing would break the delicate albumin walls; the leaven would escape and product would be heavy. As an illustration, beaten egg whites may be compared to the honey comb and the incorporated air to honey in the comb. When cutting a comb of honey, very little of the liquid is lost if a knife is used and a straight cut is made down thru comb; but if it is stirred with a spoon, many cells are broken and much honey lost. In the same way the cutting and folding motion used in incorporating beaten eggs into a mixture breaks only a few of the albumin cells.

Sliding the mixture tends to pre­serve air cells of beaten egg white. By leaving pan ungreased a surface is furnished to which cake will cling as it rises, thus helping it both to rise and to keep its shape.

The hollow stem in center makes it possible for heat to penetrate evenly to all parts of cake.
Baking Unshortened Cakes

As already stated, the baking of a cake largely determines its success. The oven should be hot enough at first to expand the air rapidly and start the cake rising, but it should not be so hot as to form a crust or start the browning. Since egg white coagulates at a low temperature, products made of it must be cooked very carefully. However, if baked too slowly, the cake is likely to dry out and not rise sufficiently.

This type of cake should bake in a slow oven (300° F.) 1 to 1½ hours, the exact length of time depending on its size. Do not open oven door for first 20 minutes of baking. Be careful not to jar oven while cake is baking. When done, invert cake pan over a wire rack in a place free from draft and allow cake to hang in pan and cool gradually. If removed from the pan while warm, cake will fall because the delicate albumin walls have not completely set.

For serving cut with a thin-bladed, sharp knife, using a light, quick stroke, or pull apart with two forks.

Sponge Cake

Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 platter or big bowl</td>
<td></td>
</tr>
<tr>
<td>1 teaspoon</td>
<td></td>
</tr>
<tr>
<td>1 egg whip</td>
<td></td>
</tr>
<tr>
<td>1 flour sifter</td>
<td></td>
</tr>
<tr>
<td>1 tablespoon</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mixing bowl</td>
<td></td>
</tr>
<tr>
<td>1 grater</td>
<td></td>
</tr>
<tr>
<td>1 measuring cup</td>
<td></td>
</tr>
<tr>
<td>1 rolling pin</td>
<td></td>
</tr>
<tr>
<td>1 cake pan</td>
<td></td>
</tr>
</tbody>
</table>

Materials

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 egg yolks</td>
<td></td>
</tr>
<tr>
<td>1 c sugar</td>
<td></td>
</tr>
<tr>
<td>½ t grated lemon rind</td>
<td></td>
</tr>
<tr>
<td>1 t lemon juice</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Tb cold water</td>
<td></td>
</tr>
<tr>
<td>¼ t salt</td>
<td></td>
</tr>
<tr>
<td>5 egg whites</td>
<td></td>
</tr>
<tr>
<td>1 c flour</td>
<td></td>
</tr>
</tbody>
</table>

Amount: 1 cake 9 inches in diameter

Method

How

Roll and sift sugar. Sift flour before measuring. Be careful not to pack it in cup when measuring.

Grate lemon rind into sugar.

Why

Rolling sugar makes it finer. Sifting removes lumps and separates grains of sugar so they are easily dissolved in the small amount of liquid used.

Sugar separates the moist particles of lemon rind and quickly absorbs lemon flavor.
Separate whites and yolks of eggs. Beat yolks until thick, being careful to scrape down any yolks that may stick to sides of bowl. Gradually beat in sugar and grated rind; then add lemon juice and water. Beat egg whites with a wire beater until stiff, or until they will stay in the bowl when inverted. Do not beat them until dry. Lift beater up and out of the egg whites with each stroke. Cut and fold part of whites into yolks and sugar. Then gradually cut and fold in the flour. Cut and fold in rest of egg whites. Do not stir or beat. Put in ungreased pan. Bake immediately in slow oven (300° F.) for 1 to 1½ hours. (See general directions for baking unshortened cakes, page 51.)

Why

Particles of egg yolk will stick to the bowl and dry on it; these may make yellow flakes in cake.

Acid makes egg whites more tender after baking, and a better texture results.

Beaten egg whites quickly lose their lightness on standing. A wire egg beater makes product lighter than does a Dover beater. If beaten until dry, the albumin walls will be very fragile and will not stand the strain of further beating or the addition of other ingredients. There is not enough liquid in yolk mixture to make a batter of flour; consequently a part of egg whites must be added before any flour is added.

By adding a part of egg whites at the last, greater lightness of product is insured.

By leaving pan ungreased a surface is furnished to which cake will cling as it rises, thus helping it both to rise and to keep its shape.

Angel Food Cake

Equipment

1 platter or large bowl
1 cup
1 teaspoon
1 rolling pin

Materials

1 c or 9 egg whites
½ t salt
¾ t cream of tartar
¾ c sugar

1 flour sifter
1 egg whip
1 tablespoon
1 angel food cake pan

½ t vanilla
¾ c flour

Amount: 1 cake 9 inches in diameter
Method

Roll, sift and measure sugar. Sift flour and measure lightly, being careful not to pack. Sift again 4 or 5 times.

Pour egg whites on a large platter or bowl, add salt, and beat with a flat wire egg beater until foamy. Add cream of tartar and continue beating until eggs are stiff but not dry.

Gradually fold in sugar, add flavoring, then gradually fold in flour. Use as few motions as possible by making each one count.

Pour in ungreased pan and bake in slow oven (300°F.) 1 to 1½ hours.

Kisses

Equipment

1 mixing bowl
1 egg whip
Baking pan or board

Materials

2 egg whites
⅛ t vanilla
Amount: 2 dozen 1½ inches in diameter

Method

Beat egg whites until stiff but not dry.
Add half the sugar and beat.

Beat until mixture will hold its shape.

Why

(See General Method, page 49.)

A flat wire egg beater will incorporate more air in egg whites than will a Dover egg beater.

Cream of tartar seems to make cake whiter and prevents its shrinking while baking.

Too many motions may remove most of air from cake; if not enough motions are made, cake may be coarse-grained.

The albumin walls are not strong enough to hold the entire amount of sugar at once. The water in the egg whites tends to dissolve the sugar as the eggs are beaten. If all the sugar were added at once, a sirup would form and product would be sticky rather than light.

The dissolved sugar must be thoroughly blended with egg whites.
How
Cut and fold in remaining sugar and add flavoring.
Shape with spoon or pastry bag on wet board covered with oiled paper. If board is not available, use bottom of baking pan covered with oiled paper. Bake in slow oven (300° F.) 15 to 20 minutes.

Why
By folding in half the sugar at the last, the sugar does not have a chance to dissolve before product is baked.
Because the albumin of egg white cooks very easily, it is necessary to protect this product from too much heat. A board does not hold heat as does a tin mold; and if wet, will not become scorched or burned in the oven.

FROSTINGS AND FILLINGS
The simplest frosting is made by sprinkling sugar over the unbaked cake. While baking, the sugar forms a glaze which serves as a finish.
Frostings which are used to spread over the surface of the cake and as fillings are made of sugar and a liquid. They may be either cooked or uncooked. A frosting should be neither hard enough to crack and crumble nor soft enough to be sticky. It should be well-flavored but not too highly flavored.
It is a bit difficult to acquire the technic of securing a smooth surface over the whole area of a cake, but skill can be acquired with practice and care. The less the frosting is touched with a knife or spatula, the smoother the surface will be.

UNCOOKED FROSTINGS
Uncooked frostings may be made of whipped cream, jelly, jam, or confectioner's sugar and a liquid. A confectioner's sugar rather than cane sugar must be used for this purpose, since the frosting must have a smooth, well-blended consistency. Ordinary cane sugar would dissolve so readily that a sirup would be formed. The filler in confectioner's sugar tends to prevent the formation of a sirup.

Confectioner's Frosting

Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 measuring cup</td>
<td></td>
</tr>
<tr>
<td>1 mixing bowl</td>
<td></td>
</tr>
<tr>
<td>1 rolling pin</td>
<td></td>
</tr>
<tr>
<td>1 sifter</td>
<td></td>
</tr>
<tr>
<td>1 tablespoon</td>
<td></td>
</tr>
<tr>
<td>1 teaspoon</td>
<td></td>
</tr>
<tr>
<td>1 spatula or knife</td>
<td></td>
</tr>
</tbody>
</table>
Materials
2 Tb boiling water, cream, \( \frac{1}{4} \) t flavoring extract or fruit juice \( \frac{3}{4} \) c confectioner's sugar
Amount: Enough to cover 1 loaf cake 3 x 3\( \frac{1}{2} \) x 8\( \frac{1}{2} \) inches

Method
Roll and sift sugar to remove lumps. Gradually add sugar to liquid until mixture is of the right consistency to spread. After each addition of sugar, the mixture should be well stirred. Add flavoring. Spread on cake by using spatula or knife dipped in hot water.

Whipped Cream and Fruit Filling

Equipment
1 bowl 1 sharp knife
1 Dover egg beater

Materials
2 Tb sugar \( \frac{3}{4} \) pt whipping cream
3 oranges or 3 bananas \( \frac{1}{2} \) c walnuts, pecans, or
or 1 small can pineapple hickory nuts
Amount: Enough for a 3-layer cake 9 inches in diameter

Method
How
Chill bowl, beater, and cream.
Beat cream with Dover egg beater. When stiff and of smooth appearance, add sugar.

Why
Cream that is not chilled may form butter before it can be made stiff. Cream should not be beaten beyond smooth, stiff stage. If beaten longer it becomes granular; this is condition of the cream just before butter forms.

Spread whipped cream on a layer of cake. Lay slices of fruit on top of cream and sprinkle on some nuts. On top layer put only whipped cream or add some decorations of citron or whole nut meats. This filling makes a very rich cake which should be eaten the same day it is prepared and should be kept in the ice box or other cold place until used. The cream will sour if the cake is not used within a few hours.

COOKED FROSTINGS
Sugar and a liquid are the ingredients used in cooked frostings. During the process of cooking, the sugar solution is condensed. By
beating the cooled product, air is incorporated and any large groups of crystals that may have formed are broken up.

Boiled Frosting

**Equipment**

- 1 saucepan
- 1 tablespoon
- 1 teaspoon
- 1 measuring cup
- 1 Dover egg beater
- 1 large bowl

**Materials**

- 1 c sugar
- ½ c water
- ½ tsp cream of tartar
- 1 egg white
- 1 tsp vanilla or ½ tsp lemon juice

Amount: Enough to frost 2 loaf cakes 3 x 3½ x 8½ inches

**Method**

*How*

Put sugar, cream of tartar, and water in saucepan over heat.

Stir mixture until sugar has dissolved.

Cover pan for first 3 minutes the solution is boiling.

Remove cover from saucepan.

Do not stir sirup after it begins boiling.

Allow sirup to boil until it forms a thread or “hairs” when dropped from tines of fork. If a thermometer is used, the reading at this stage will be 238° F. On a rainy day the mixture should be cooked longer, or to 244° F.

When cooked, remove sirup from fire. While sirup cools, beat egg white until stiff but not dry.

*Why*

Cream of tartar is an acid. When cane sugar is boiled with an acid a smoother consistency results.

Stirring prevents sugar from sticking to saucepan. It also aids in dissolving sugar crystals.

Steam collects on sides of pan and prevents formation of large crystals, which would fall back into the sirup and make the frosting granular.

Evaporation must take place before the sirup can condense.

Stirring beyond this point tends to make frosting granular because it washes back into the sirup any crystals that may have formed on the sides.

In rainy weather, moisture in the atmosphere prevents the sirup from hardening unless it is condensed sufficiently to allow for this. It is better to overcook the sirup than not to cook it long enough.

Beating of the egg is left until this time because egg white does not retain its lightness if it stands long after beating. However, the
How
Slowly pour sirup on beaten egg white; beat continuously with Dover egg beater while pouring. (If Dover beater is used, the person making the frosting will need assistance.) Continue beating until mixture is of such consistency that it will spread readily on the cake and yet remain in place. Add flavoring.

Why
beating cannot be delayed too long, for sirup will require close attention at the very last. If sirup is not cooled slightly, the egg will coagulate too quickly and leave lumps.
A Dover egg beater gives the frosting a fine texture.

If beaten too short a time, the frosting will “run”; if too long a time, it will not be smooth. A little experience will make it easy to determine the right consistency.

Put frosting on cake with as few motions as possible. Slowly pour it on center of cake and allow it to run down sides. Smooth it around sides with a few well-directed strokes of the spatula. Allow frosting to become firm before cutting cake.

Milk Frosting

Equipment
1 measuring cup 1 mixing spoon
1 teaspoon 1 saucepan

Materials
1½ c sugar 1 t butter
½ c milk ½ t vanilla

Amount: Enough to frost 1 loaf cake 3 x 3½ x 8½ inches

Method
Put milk and sugar in saucepan and stir until sugar is dissolved. Boil without stirring for 12 to 15 minutes, or until sirup will form a soft ball when dropped into cold water. Remove from fire. Add butter. Allow to cool. (If butter is added at the last it does not lose any of its flavor. It also tends to form an oily film over the top of the sirup, which prevents many crystals from forming.)

Beat until the right consistency to spread. Add flavoring. When beating, do not scrape down any crystals or any sirup that collects on the sides of pan. Pour frosting over cake, spreading evenly with spatula or back of stirring spoon.

Chocolate Frosting

Follow directions given for milk frosting, but as soon as the boiling point is reached add 1 or 1 1/2 squares of grated chocolate. (If chocolate is added at first, it does not blend well and is likely to cause the milk to curdle.)

Brown Sugar Frosting

Equipment

Same as for milk frosting.

Materials

1 1/2 c brown sugar 1/3 to 1/2 c cream
1 Tb butter

Amount: Enough to frost 1 loaf cake 3 x 3 1/2 x 8 1/2 inches; use double the recipe for a three-layer cake 9 inches in diameter

Method

Same as for milk frosting except that it is well to scald the milk before adding the brown sugar. (Brown sugar contains a small amount of acid. Scalding the milk before adding the brown sugar will tend to prevent the acid from curdling the milk.)

PAstry

PLAIN PASTRY

Pastry is a combination of flour, fat, salt, and cold water. The proportion of fat to flour determines the richness of the product and to some extent the method of handling. In plain pastry the usual proportion is 1/4 cup of fat to 1 cup of flour.

Equipment

1 measuring cup 1 tablespoon
1 mixing bowl 1 flour sifter
1 teaspoon 1 rolling pin
1 fork 1 molding board
2 knives 1 pie pan

Materials

1 1/2 c flour 6 Tb fat
1 t salt Cold water

Amount: 2 crusts
Method

How
Have all ingredients cold.

Sift flour and salt together.

Cut cold fat into flour, using two knives, or a fork.
Use only enough water to hold ingredients together. Add slowly and toss mixture with a knife or fork. Do not stir.

Slightly flour board, using as little flour as possible. Toss pastry on to flour. Clean out bowl with a spatula. Using a quick motion, pat rough edges together, at same time forming dough into a circular shape.

If 2 crusts are to be made, cut dough into 2 pieces. The one for the lower crust should be slightly larger than the one for the upper.

Turn over piece of dough so that both sides are floured. Quickly shape it into a round flat surface. Roll with rolling pin from center to outer edge, using a light, quick motion and pressing on a different part of the dough each time. Occasionally lift crust from board. (When using molding board, be as neat and economical as possible. Practically no flour should be left on board when the product is finished.)

When large enough for the pie, fold crust in half, lift it up, place on pan, and unfold into place.

Press out all air bubbles from underneath the crust, beginning to press at center of pan and working toward edge.

Why
A flakier pie crust results from cold ingredients because more air can be incorporated around stiff pieces of fat than around soft ones, and also because the colder the air the greater its expansion during baking.

This insures thorough distribution of salt.

Handling pastry with fingers warms the materials.

Since any stirring or kneading develops gluten, great care must be exercised in handling pie crust, if it is to be tender and flaky.

The less flour incorporated in pastry, and the less pastry is handled, the more tender it will be.

This avoids having to roll the second crust twice.

It may be necessary to lift dough from board or to turn it slightly to prevent it from sticking, but this should be done without stretching dough.

Crust is more easily handled in this way, and stretching of dough is prevented.

Air bubbles under crust make an uneven surface after baking, as a result of the expansion of air by heat. This is especially true of crust baked before filling is added.
How

Roll out upper crust and cut small holes in center. Holes should be larger for a berry pie than for an apple pie.

When a juicy fruit (berries) or a fruit which darkens easily (apples), is used it is better to make both crusts before filling is added.

Fold upper crust in half.

With tips of fingers dipped in cold water moisten edges of lower crust. Place upper crust upon pie, unfold, and press edges of upper and lower crusts together. An attractive finish is made by using a fork. Cut around with a knife to make edges even.

Place on lower grate and bake in hot oven (400° F.) about 40 minutes or until light brown.

Why

Holes are to allow for escape of steam and to prevent pie from running over.

If filling is added before upper crust is made, berry juice will soak into lower crust, making it soggy. Apples will become dark.

The moistened surface causes the 2 crusts to stick together.

Pie crusts should be well-baked to make them digestive, but should never be over-browned or burned.

PIE WITH PREVIOUSLY COOKED FILLING

Method

Prepare plain pastry, using 1/2 of the above recipe. Invert pie plate and cover outside with pastry. Press with finger tips, working from center. Press crust well to plate, making sure that edge of pastry fits edge of plate. A very little air left under the pastry will expand and make a large bubble in baked crust. Trim edges to make them even. Prick crust in several places with a fork to allow steam and air to escape from under the crust. Place on baking sheet or large pan in oven, so that edge of crust will not come in contact with floor of oven. Bake for 15 minutes in hot oven (400°-425° F.) but be careful not to over-brown. Cool and fill with prepared filling.

Lemon Pie

Equipment

1 double boiler
1 measuring cup
1 tablespoon
1 teaspoon

1 mixing bowl
1 egg beater
1 grater
1 lemon squeezer
Materials

\[ \frac{3}{4} \text{ c sugar} \quad 2 \text{ egg yolks} \\
5 \text{ Tb flour or } 3 \text{ Tb cornstarch} \quad 1 \text{ t butter} \\
\frac{3}{4} \text{ c boiling water} \quad 3 \text{ Tb lemon juice} \quad \text{Grated rind 1 lemon} \]

Amount: Filling for 1 pie crust

Method

How

Mix cornstarch or flour, and sugar together.

Place top of double boiler directly over heat and allow water to boil rapidly.

Slowly add the above mixture and continue to boil 3 minutes, stirring constantly.

Place the 2 parts of double boiler together. Cook for 20 minutes over boiling water. Add butter.

Remove from fire and cool slightly; beat egg yolks and add the mixture to them. (The egg whites will be used for the meringue.) Return to fire and heat only until eggs thicken slightly.

Remove from fire. Add lemon juice and grated rind. Stir and beat well.

Pour filling into prepared pie crust, cover with meringue, and place in slow oven (300° F.). Remove when meringue is a delicate brown.

Why

Sugar separates the starch grains and prevents starch from lumping when added to water.

Much time will be saved by starting the cooking directly over the heat.

Adding mixture slowly prevents lumping. Product burns easily and should not be allowed to remain directly over heat for more than 2 or 3 minutes.

Thorough cooking is necessary to overcome the raw taste of starch.

If eggs are added to mixture they will be cooked too hard and will form lumps.

If acid were added at first, mixture would not thicken well.

Meringue

Equipment

1 platter or large bowl
1 egg whip
1 tablespoon
1 teaspoon

Materials

2 egg whites
2 Tb powdered sugar
1/2 Tb lemon juice or 1/4 t vanilla

Amount: Enough to cover 1 pie
Method

Beat egg whites until stiff. Add sugar gradually and continue beating. Then add flavoring. Pile on the pie lightly, taking care to cover only the filling. The finished product should not look flat and uniform; it is more attractive if uneven. Brown in slow oven (300° F.)

Pumpkin Pie

Equipment

1 mixing bowl
1 measuring cup
1 teaspoon

1 egg beater
1 stirring spoon
1 strainer

Materials

1½ c steamed and strained pumpkin
⅔ c brown sugar
1 t cinnamon
½ t ginger

½ t salt
2 eggs
1½ c milk
½ c cream
or 2 c milk

Amount: Enough for 1 large pie

Method

Carefully strain cooked pumpkin. Mix sugar and spices together and add to pumpkin. Beat eggs until whites and yolks are thoroughly mixed but not frothy. Add other ingredients and stir until thoroughly blended. Taste the mixture, using a clean teaspoon. Make any necessary additions according to taste.

Prepare a crust of plain pastry, and line a pan with it. The crust may be made deeper by making a fluted edge. Instead of cutting off uneven edges, fold them back and under slightly; pinch dough together by using thumb and forefinger of each hand, pressing hands toward each other. Pour in pumpkin mixture.

Bake at once in hot oven (425° F.) for 20 minutes. Reduce temperature to 250° F. and bake about 30 to 40 minutes more.

Berry Pie

Prepare two crusts. Wash and carefully drain the berries. When filling the pie with berries or any other juicy fruit, it is necessary to mix flour with the sugar before sweetening the pie. Use 1 tablespoon of flour or minute tapioca to ½ cup of sugar. The flour or tapioca thickens the juice and prevents it from soaking into the
FIG. 18.—LEMON MERINGUE, BERRY, AND PUMPKIN PIES

FIG. 19.—CINNAMON ROLLS AND YEAST BREAD
Fig. 20.—4H Clover-Leaf Rolls

Fig. 21.—Parker House Rolls
crust. The amount of sugar needed in a pie will depend upon the tartness of the fruit used.

Insert a paper funnel in one of the openings in the upper crust. The funnel acts as a chimney, allowing the steam to escape and preventing the pie from running over.

Bake in moderate oven (about 350° F.) until the crust is a light brown and the juice bubbles up in the opening of the top crust.

**Apple Pie**

**Materials**

- Pastry for 2 crusts
- 2 or 3 sour apples, or enough to fill the pie
- 1 t cinnamon or \( \frac{1}{2} \) t nutmeg
- \( \frac{1}{2} \) to 1 c sugar

Amount: 1 pie

**Method**

Prepare the crusts before paring the apples, for apples turn dark very quickly after paring. Pare apples and cut them in small pieces. Put them in the crust, filling it very full. (An apple pie can have more filling than a berry pie or one with much juice.) Mix the spice and sugar together, using \( \frac{1}{2} \) to 1 cup of sugar to 1 apple pie, the exact amount depending upon the tartness of the apples, and 1 teaspoon of cinnamon. Sprinkle the sugar and cinnamon evenly over the apples. Put on the upper crust, following general directions for plain pastry (see page 58).

Bake in hot oven (425° F.) for about 10 minutes; reduce temperature to 350° F. and bake until the apples are soft. Test with a clean toothpick inserted thru one of the holes in the upper crust.

**RICH PASTRY**

A rich pastry can be made by using \( \frac{1}{3} \) cup of fat to 1 cup of flour. Butter makes a tougher but a flakier pastry than does lard and also gives a better flavor. Part butter and part lard is a good combination for a rich pastry. When substituting butter for lard in pastry, remember that butter is not 100 percent fat and so more butter must be used than is stated in the recipe. In general, two tablespoons of butter should be added for each cup of pure fat required. Care must be taken to keep the ingredients cold during the mixing process. The baking must be done carefully to prevent scorching the fat.
YEAST BREADS
Processes of Making

Bread may be made by either of two processes, depending upon the time allowed. They are commonly called the short process, or straight dough method, and the long process, or overnight sponge.

Short Process, or Straight Dough Method. All the flour is added at the time of mixing. A stiff dough is kneaded, is permitted to double its size, is made into loaves, and is again permitted to double its size. Either compressed or liquid yeast is used in order to hasten the process, as this yeast is already in an active state. This process may be completed in 3 to 5 hours, depending on the amount of yeast used and the temperature at which it is kept.

Long Process, or Overnight Sponge. Dried yeast is used for this process. As the yeast plants in dried yeast are in less active form, they must be given more time to develop and their food must be easily available. As the yeast plants do not grow so readily in a stiffer dough, a thinner sponge is made by adding only part of the flour. The sponge usually is allowed to stand overnight. Then the remainder of the flour is added and the rest of the process is the same as for the short method.

Ingredients Used

Flour, liquid, and yeast are essential ingredients in making yeast breads. Besides these, salt and sugar are usually used. Salt improves the flavor of bread, but if used in larger proportions than 1 teaspoonful to each loaf the action of the yeast is retarded. Sugar hastens the growth of the yeast, but too much sugar toughens both the crust and the crumb. Results show that 2 teaspoonfuls of sugar per loaf is the best amount to use.

Kneading

In kneading, use the lower part of the palm near the wrist; curve the fingers to keep the dough from flattening out too much. With every push, turn the dough one-quarter way round and fold over. When bread is kneaded enough, it is quite smooth and elastic, bubbles appear beneath the surface, and it is spongy to the touch. In making the loaf, shape the dough in the hands, working it very
lightly and stretching the underside, which will form the top of the loaf. Shape into an oblong piece and place in baking pan. The main point to watch in shaping the loaf is the smoothness of the surface; the corners will fill out in rising.

**Points in Baking Yeast Breads**

Baking bread in single-loaf pans has been found more satisfactory than baking several loaves in one large pan. Standard size bread pans are 8½ inches long, 3½ inches wide, and 3 inches deep; they hold a one-pound loaf. This size allows the air to circulate evenly and insures a well-shaped loaf. If the loaves touch each other, the heat cannot penetrate between the loaves readily and the side exposed to the heat will rise more rapidly than the unexposed side, resulting in a misshapen loaf. If a large number of loaves are baked at the same time so that the oven is crowded, it is well to change the position of the pans occasionally so that all the loaves may bake evenly. Covering the loaves for the first 10 minutes of the baking period with a bread pan will insure a more uniform shape. The edges of the inverted pan should be greased to avoid sticking.

Loaves of bread made with the proportions given should bake for 45 minutes. The bread should begin to brown in 15 minutes, after which time the temperature should be reduced gradually. Bread should be baked in a hot oven (about 410° F.) for 1 hour. In the absence of a thermometer, one of the following tests may be made: Place a piece of unglazed white paper of medium weight in the oven; if it becomes golden brown in 5 minutes, the oven is about right for the bread. Or, sprinkle ½ teaspoon of flour on a small tin in a layer ¼ inch thick; if it becomes a golden brown in 5 minutes, the temperature is probably about right. These tests are not accurate, but may be of some assistance to the beginner.

Bread is done when it shrinks from the sides of the pan and has a hollow sound when tapped.

The amounts in the recipes given below should be increased in proportion to the number of loaves desired. An exception is yeast, 1 yeast cake being sufficient for 4 loaves of bread. The following proportions are used for 4 loaves.

| 4 c liquid  | 4 t shortening |
| 8 t sugar   | 1 cake yeast |
| 4 t salt    | 3 to 4 qts flour |
Short Process Yeast Bread

**Equipment**

- Molding board
- 1 measuring cup
- 1 teaspoon
- 1 saucepan
- 1 flour sifter
- 1 mixing spoon
- 1 mixing bowl
- 1 bread pan

**Materials**

- 1 c liquid
  - (skimmed milk, water and whole milk or water)
- 2 t sugar
- 1 t salt
- 1 t shortening
- ½ cake compressed yeast
- 3 to 4 c flour

Amount: 1 loaf

**Method**

*How*

Scald milk or boil water.

Put sugar, salt, and shortening in mixing bowl and pour scalded liquid over them.

Allow mixture to become lukewarm (80°F).

Soften yeast in a little of lukewarm liquid and add to rest of ingredients.

Add flour gradually and beat until dough is stiff enough to be handled on a board.

Sift small amount of flour on to dry, clean board.

Turn dough on to board and knead until it is elastic and does not stick to board or hands. If dough sticks, clean board by scraping with a knife. Grease board slightly, then continue kneading.

*Why*

This kills any bacteria present that might impair flavor or texture of bread.

This is an easy way of melting shortening and dissolving sugar and salt.

A boiling temperature would kill yeast plants.

Blending yeast in liquid insures its being more evenly mixed.

It will probably take some practice to find the exact amount of flour needed. Since different kinds of flour absorb different amounts of liquid, no exact proportions can be stated.

This prevents sticking, but too much flour will make bread heavy.

At least 10 minutes will be required to knead dough so that all yeast plants may be scattered throughout mixture and all ingredients thoroughly mixed. Proper kneading is necessary if bread is to have a smooth texture with evenly distributed holes throughout. Kneading also makes the gluten more elastic.

Better bread can be made from too soft rather than from too stiff dough.
How
Place dough in greased bowl and oil top of dough to prevent formation of crust. Cover with clean towel. Leave in warm place until dough has doubled in bulk.
Turn on to board, knead lightly, and shape into loaf. Place loaf in greased bread pan and set in warm moist place until it has again doubled in bulk. Moisture may be obtained by placing pan of boiling water near loaves.
Bake in hot oven (410° F.) from 45 minutes to 1 hour. Remove from pan and place on rack to cool.

Why
A temperature of 80° F. is favorable for growth of yeast plants.
A lighter loaf is made by giving yeast plants plenty of chance to develop. A gas (carbon dioxid) is freed as yeast develops. This gas, in trying to force its way to top, causes mixture to rise.
Placing loaf on a rack allows air to circulate freely on all sides so that bread will not become steamed.

Long Process Yeast Bread

Equipment
Same as for short process.

Materials

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Materials

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<th>1 c liquid</th>
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<td>1 t shortening</td>
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<td>2 t sugar</td>
<td>3 to 4 c flour</td>
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Amount: 1 loaf

Method

How
Soak yeast for about 20 minutes in ¼ cup warm liquid to which ¼ t sugar has been added.
Scald rest of liquid and add to sugar, salt, and shortening, and cool until lukewarm. When lukewarm, add softened yeast.
Add about half the flour, or enough to make a batter that can be beaten easily.
Beat thoroly for several minutes.
Cover well and let stand over night in warm place. (Temperature should not exceed 75° F.). In morning add rest of flour and knead well.

Why
Dry yeast is not in an active state and the growth of cells must be started.
This is an easy way to melt shortening and dissolve salt and sugar.
Too great heat destroys yeast cells.
Yeast plants grow more readily in a thin than in a stiff dough.
Beating incorporates air, which assists in growth of yeast cells.
Standing over night gives inactive yeast cells time for growth. From here on, method is the same as in short process.
How
Let rise to double in bulk. Shape into loaves and again allow to double in bulk. Bake in hot oven (410° F.) from 45 minutes to 1 hour. Remove from pan and place on rack to cool.

Why
A lighter loaf is made by giving yeast plants plenty of chance to develop. A gas (carbon dioxide) is freed as yeast develops. This gas, in trying to force its way to top, causes mixture to rise.

Variations of Yeast Bread

Entire Wheat or Graham Bread. Equipment is same as for short process except for addition of tablespoon.

Materials

1 c liquid 1 t salt
2 Tb molasses 2 c graham flour
⅛ to ½ yeast cake 1 c flour or more

Amount: 1 loaf

Method

Either the long or short process may be followed, the smaller amount of yeast being used for the long process and the larger amount for the short process. In the long process the white flour should be used to make the sponge. Graham bread should not be allowed any longer time to rise than white bread, for it will never rise as much as bread made of white flour.

Raisin, Currant, or Nut Bread. One-half to ⅓ cup of raisins, currants, or nuts may be added to the bread just before the first kneading.

Raisin Biscuits. Part or all the bread dough may be made into biscuits. Proceed the same up to time of shaping loaves; then add raisins. Cut or pull small pieces of uniform size from dough and shape in same way as for loaves. Place in baking pan and spread with melted butter. Allow to rise until 3 times the original size, and bake in hot oven (410° F.) 20 to 25 minutes depending on the size of biscuits.

Clover-Leaf Rolls or Biscuits. Ingredients are used in the same amounts as for bread, except that the amounts of fat and sugar are doubled. Take small portions of dough and roll with hands into balls about ⅜ to 1 inch in diameter. Place in well-greased muffin rings, using 3 or 4 pieces to each ring, to make either a 3- or 4-leaf
clover. Brush rolls with melted butter and allow to rise until 3 times the original size, or very light. Bake in hot oven (410° F.) about 20 minutes.

**Cinnamon Rolls.** Use same dough as for clover-leaf rolls. Roll a portion into an oblong piece about ¼ to ⅛ inch thick. Spread with melted butter and sprinkle with cinnamon and sugar that has been mixed together in the proportion of ½ teaspoon of cinnamon to 2 teaspoons of sugar. Currants or raisins may be added. Roll like a jelly roll and press edges firmly together. Cut in slices ¾ inch thick and place on greased pan. Let rise until 3 times original size. Bake in hot oven (410° F.) about 25 minutes.

**Parker House Rolls.** Use same dough as for clover-leaf rolls. When ready to shape, roll dough about ½ to ¾ inch thick on lightly floured board, and cut with biscuit cutter. Dip handle of case knife in flour, and with it make a crease thru middle of each piece. Brush half of each roll with melted butter, fold, and press edges together. Place rolls in greased pan, about an inch apart. Cover with clean cloth and let rise again. Bake in hot oven (410° F.) about 15 minutes.
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