

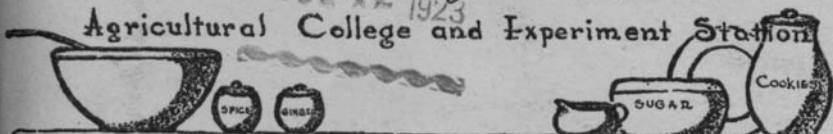
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Baking Club Manual.

• By Bonnie E. Scholes and Harriet M. Phillips •

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SUMMARY OF BAKING CLUB REQUIREMENTS

1. Members should be between 12 and 20 years of age and should have successfully completed the minimum requirements of the bread project.
2. A club should consist of not less than five members. Where it is impossible to organize a local club, individual enrollments in the state club will be received.
3. Each club should arrange for—
 - a. An adult leader
 - b. A corps of officers
 - c. Regular meetings
 - d. A club picnic or party
 - e. A demonstration team
 - f. A club exhibit
 - g. An annual report to the State Leader of Home Advisers
4. Each club member should do the following:
 - a. (*Juniors 12 to 15 years*) Bake 10 cakes, including 4 kinds; bake 4 batches of cookies, including 2 kinds; bake 4 pies, including 2 kinds; make 2 puddings
(*Seniors 16 to 20 years*) In addition to the minimum requirements for juniors, the senior clubs will continue the study of the food groups begun in the bread clubs. If the club so desires, the minimum requirements may be increased
 - b. Keep records of the kinds and amounts of products baked
 - c. Make an exhibit of baked products
 - d. Hand in a final report to the local or county leader

For more detailed information regarding the organization and direction of baking clubs, address the Home Economics Extension Service, Woman's Building, Urbana, Illinois.

BAKING CLUB MANUAL

PREPARED BY BONNIE ELIZABETH SCHOLLES, FOOD SPECIALIST, HOME ECONOMICS EXTENSION SERVICE, AND HARRIET M. PHILLIPS, ASSISTANT STATE LEADER IN JUNIOR EXTENSION

PURPOSE OF BAKING CLUBS

The purpose of baking clubs is to teach club members to make light, wholesome, and digestible products. Altho the dessert is usually the most popular part of the meal, it is often not well prepared. The mastery of this part of cookery will aid in preventing some of the more or less common digestive disturbances. It is a delightful thing for the young daughter to assume some definite responsibilities in the home, and the preparation of the dessert is a responsibility that might be a pleasure.

This manual will be used by club members who have successfully accomplished the tasks presented in the Bread Club Manual. The baked products considered in this manual include both types of cakes (shortened and unshortened), cookies, pies, and puddings. The small recipe is given to enable the beginner to make a small amount by an accurate recipe; the large recipe is the normal size of recipe for family use.

INGREDIENTS USED IN BAKED PRODUCTS

TYPES OF FLOUR

Gluten, the sticky, elastic substance that holds the leaven in baked products, is found largely in wheat flour. It is therefore important that flour made from wheat should be used in lightened baked products. For breadmaking, it is necessary to use a flour which contains much gluten. For baked products in which a more delicate texture is desired, a flour with more starch and less gluten will give the best results. Because winter wheat has these qualities, it makes a softer and more suitable flour for cake making, etc., than spring wheat, which contains less starch and more gluten.

Pastry flour may be made by substituting two tablespoons of corn-starch for two tablespoons of flour in each cup of flour called for. The commercial cake flours have been especially prepared by removing some of the gluten from the wheat and sifting the flour thru many meshes of fine silk. This very "soft" flour makes a delicate, close-textured cake, but is not essential to good cake making. It does not have the same thickening power as ordinary soft flour, and so when using it in a general recipe the amount of flour called for should be increased by two tablespoons per cup. This, of course, does not hold true if the recipe calls for a prepared flour.

By kneading dough, gluten may be developed so that it can be pulled into lengths like strong rubber bands or be expanded like a balloon. These lengths of gluten are broken up, or "shortened," by the introduction of fat into the product. An illustration of the unshortened product is bread, and of the shortened product, biscuits and cakes.

LEAVENING AGENTS

In shortened products it is necessary to use a quick-acting leavening agent, such as baking powder, or soda and an acid. If yeast were used, much gas would be lost because the gluten would not be strong enough to hold the gas in the product during the long process of rising. (A discussion of baking powder and soda as leavening agents can be found in the Bread Club Manual.)

Use and Care of Baking Powder and Soda: Baking powder should be kept in a tightly covered can, because otherwise moisture from the air will cause certain chemicals to react in such a way that the baking powder will lose its strength or leavening power. A dry spoon should always be used to measure baking powder. Either soda or baking powder should be sifted with the dry ingredients. As soon as the leavening agent is put into a liquid, the chemical action starts and some of the gas (carbon dioxid) will be lost unless it is caught and held by the gluten in the dough.

Amount of Baking Powder to Use: In a recipe in which no eggs are included the general rule is to use *two* level teaspoons of baking powder to *one* cup of flour. When eggs are used, the amount of baking powder should be decreased one-half teaspoon for each egg. This is because the air which it is possible to incorporate in beaten eggs helps to leaven the product.

Amount of Soda to Use: Sour milk varies in the amount of acid present, but milk which has reached the clabbered stage has a fairly uniform amount of acid. The amount of acid must be considered when deciding upon the amount of soda to use in sour milk products. If more soda is used than can be neutralized, or reacted upon, by the acid, the product will have brown spots and a very unpleasant taste of soda. It is always best to use a *scant* measure of soda. If an additional leavening agent is necessary, baking powder should be added. The general rule is to use $\frac{1}{4}$ to $\frac{1}{2}$ teaspoon of soda to one cup of sour milk, and $\frac{1}{2}$ teaspoon of soda to one cup of molasses.

Air as Leaven: Air, which is a mixture of gases, may be used instead of carbon dioxid, to leaven a baked product. The problem is to incorporate and hold the air in the product until heat has expanded

the air and cooked the dough. This is usually done by incorporating the air in some elastic, sticky substance. By beating egg white, the albumin can be stretched and broken up so that it will hold many air particles; this property makes it possible for eggs to serve as a leavening agent. However, if eggs are beaten until "dry," the albumin walls become very thin and break easily. To get the best leavening effect, eggs should be beaten until they are stiff enough to stand up well, but not longer.

Air may also be beaten into gluten, but it must be remembered that beating dough or batter tends to develop gluten and thus toughens the product. Since a delicate texture is desirable in baked products, the air should be incorporated in the eggs before they are added to the other ingredients.

Air is incorporated in pastry by cutting pieces of fat into the flour. If pastry is kept cold it is much flakier, because the colder the air incorporated in the pastry, the greater will be its expansion when heated.

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, however, results in a heavy, sticky consistency and may be the cause of a cake's 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 a 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. Corn starch is sometimes added to prevent lumping. Pulverized sugar makes 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.

Fats: Fats act as a liquid and serve to make a product tender. They also prevent cake from drying out quickly. The kinds of fat which may be used in a baked product are: butter and butter substitutes such as lard, oleomargarine, the commercial combinations and

preparations of fats, and clarified bacon 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.

Nuts are rich in fat. One cup of nuts *ground fine* is equivalent to $\frac{1}{3}$ cup of butter. If the nuts are used in large pieces, less of the fat in them is then available. If chopped or ground before being added to a cake, they can be mixed more thoroly thru the product; more richness and flavor can thus be obtained from the same amount of nuts, and the cake will have a finer texture. These facts should be considered when adding nuts to a cake.

Eggs: The 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. In substituting yolks and whites for whole eggs in a baked product, it is valuable to know that 8 egg whites are equivalent to 4 whole eggs, and that 7 egg yolks and 1 whole egg are equivalent to 4 whole eggs.

Liquids: Water and milk are the liquids commonly used in baked products. Some other ingredients, such as molasses, fat, sugar, and apple sauce, have the effect of liquid when baked in 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 have alcohol in their composition, and so 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 teaspoon less of flour is needed for each square of chocolate used. Soda used with chocolate will darken the cake and aid in leavening it, but not more than $\frac{1}{6}$ teaspoon of soda is needed for each square of chocolate. 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. Cocoa contains more starch than chocolate but only a small amount of fat, so that when substituting

cocoa for chocolate the amount of fat required in the recipe should be increased, about $\frac{1}{2}$ teaspoon of extra fat being used for each 2 tablespoons of cocoa.

Fruit adds flavor and moisture to the cake. Raisins or other dried fruit chopped fine give a better flavor to the cake than when added whole and also help it to retain its moisture. Large pieces of fruit make a cake coarse grained.

PREPARATION FOR MAKING BAKED PRODUCTS

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 thoroly. 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 the utensils and ingredients to be used.
6. Be sure the egg beater is dry.
7. Grease the baking pans, if they are to be greased.
8. Sift the flour at least once before measuring.
9. If the sugar is lumpy, sift it also. *Do not pack.*
10. Remember that all measurements are level.
11. If dried fruit of any kind is to be used, wash it by placing the fruit in a sieve and pouring boiling water thru it. Then dry on a paper towel or a clean cloth. (An excess of water adhering to the fruit may make the product too moist.)

Table of Equivalents and Abbreviations

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

Review *Directions for Measuring* given in the Bread Club Manual.

BAKING

Much of the success of baked products depends upon the way in which they are baked. The following table gives the oven temperatures that have been found to produce the best results:

CLASSIFICATION OF OVEN TEMPERATURES¹

Slow	Moderate	Hot or "quick"	Very hot
250°-350° F.	350°-400° F.	400°-450° F.	450°-550° F.
Custards			
Meringues			
	Sponge cake		
	Angel cake		
	Bread		
	Gingerbread		
	Plain cake		
	Cookies		
		Popovers	
		Parker house rolls	
		Baking-powder biscuits	
			Pastry

¹From Teachers College, Columbia University, Technical Bulletin 22, by May B. Van Arsdale.

It is possible to secure a fairly successful type of oven thermometer that stands in the oven. Perfect accuracy is not possible, but in the directions that come with these thermometers allowance is made for the heat lost when the door is opened. Beginners who are not accustomed to judging temperature by the feel of the oven will find the thermometer of great assistance. For more accurate temperature measurement, the thermometer should slip thru a hole in the side or top of the oven so that it can be read without opening the oven door.

In the absence of a thermometer, a very simple test is made by browning flour. Place a half teaspoon of flour on a piece of unglazed paper. If the flour is made a light brown in 10 seconds, the oven is *hot*; if in 30 seconds, it is *moderate*; and if in 60 seconds, it is *slow*.

If one is using coal or wood as fuel, the fire should be built and well regulated before the product to be baked is put together. If the oven becomes too hot and the product is baking too fast, the temperature may be lowered by placing a pan of cold water in the oven.

The oven of a gas stove is likely to get too hot unless carefully watched and regulated.

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; because of the shortening of the gluten, a chemical leavening agent must be used. Sponge cakes are those in which the gluten is not shortened and in which egg whites are used the leavening agent; a very delicate texture results.

General Equipment

The following general equipment should be assembled before starting to make a cake:

- | | |
|-----------------------------|-------------------------------------------|
| 2 measuring cups | 1 flour sifter |
| 2 teaspoons | 1 bowl into which to sift dry ingredients |
| 1 tablespoon | 1 egg beater and bowl |
| 1 spatula or flexible knife | 1 baking pan |
| 1 mixing spoon | Paper for greasing pans |
| 1 mixing bowl | |

The special equipment necessary for the making of each product will be listed under the recipes.



FIG. 1.—GENERAL EQUIPMENT FOR CAKE MAKING

SHORTENED CAKES

INGREDIENTS

Shortened cakes contain sugar, fat, liquid (usually in the form of milk), eggs, flavorings, flour, and a chemical leavening agent. Heavy substances, such as nuts and fruit, may be added, and various kinds of liquid and sugar may be used. Because the gluten is shortened, there is less need of a specially prepared pastry flour than there is in sponge cakes.

METHODS OF MIXING

A shortened cake may be stirred or beaten, or mixed in any other way providing all the ingredients are thoroly blended. Careless mixing results in a coarse cake; long beating gives a fine 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 a 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.)

Warm shortening just enough to soften it by placing mixing bowl over warm water or in a luke-warm oven. Stir and cream butter slightly before adding sugar. (Caution: take care never to overheat the butter.)

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

Why

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

This distributes the 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 the liquid.

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

Creaming distributes the fat more evenly thru the batter.

Break eggs one at a time into a small utensil.

Beat eggs well and add both milk and eggs to creamed sugar and fat.

Sift dry ingredients and add to mixture; stir until smooth. Beat only slightly. (In general, combine ingredients in the order given in recipe.)

Pour into greased baking pan; fill tins only $\frac{1}{2}$ to $\frac{2}{3}$ full. (Use spatula to scrape out bowl.)

When filling tins, gently press batter into the corners, making center slightly lower than sides.

Bake in moderate oven. (Follow general directions for baking shortened cakes.)

After removing from oven, allow cake to stand in tin for 10 or 15 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.

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

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

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

If the tins are only partially filled, the cake can rise without overflowing.

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 the 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 the cake from drying out. Ventilation is needed, however, to prevent the cake from getting moldy.

Muffin Method

A plain cake may be made by the muffin method, which is a time and labor saver. Melt the fat, put all of the ingredients in a mixing bowl, and beat thoroly. While the eggs need not be beaten before being added, they are more easily mixed if that is done.

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 10).

Do not try to bake more than one kind of cake in the 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 on the lower grate at first and as near the center of the oven as possible. This permits the greatest heat to be at the bottom and center of the cake 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; a clean toothpick inserted in the center of the cake has no dough adhering to it when removed. 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. If the hot water heater is attached to the stove, removing water from it lowers the temperature of the oven.

Do not open the oven door frequently to look at a cake. Be sure of the oven temperature before putting it 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 that required for a plain cake. Tin baking pans

do not retain the heat as do iron ones and are less likely to cause the cake to burn.

SUCCESS OR FAILURE IN CAKE MAKING

It has been said that success does not depend upon never making mistakes but upon never making the same mistake twice. Recognition of the causes of success or failure gives assurance and makes it possible for one to have more uniform results. A few of the general causes of success or failure in cake making are given below. Consider your 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:

Falling of cake and heavy product 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 leaven
- Too much flour

Rough edges may be due to:

- Too much sugar
- Too much shortening
- Too little flour

RECIPES FOR SHORTENED CAKES

Plain Loaf Cake

Equipment

(See General Equipment, page 11)

Materials

Large Recipe

$\frac{1}{3}$ c butter
 $\frac{3}{4}$ c sugar
 2 eggs
 $\frac{1}{2}$ c milk
 $1\frac{1}{2}$ c flour
 $\frac{1}{4}$ t salt
 2 t baking powder

Small Recipe

$2\frac{2}{3}$ Tb butter
 6 Tb sugar
 1 egg
 $\frac{1}{4}$ c milk
 $\frac{3}{4}$ c flour
 $\frac{1}{8}$ t salt
 1 t baking powder

Amount in large recipe: 1 loaf cake 3 x $3\frac{1}{2}$ x 8 inches

Method

Use either the general method or the muffin method for mixing shortened cakes.

Layer Cake

Special Equipment

3 layer cake pans

Materials

Same as for plain cake

Amount in large recipe: 3 round layers 9 inches in diameter

Method

Same as for plain cake. When filling the tins, make the center of the cake a little thinner than the edges. It is necessary to have the layers of an even thickness when they are baked if the filling is to stay between them and a well-shaped cake result. Fill the tin only two-thirds full of batter. Bake 15 to 30 minutes in a moderate oven. The exact length of time depends upon the temperature of the oven and the thickness of the layers. (Review general directions for baking shortened cakes.) After removing the cake from the oven, allow it to remain in the tins for 10 or 15 minutes. Remove from the tins and put the layers together with a prepared filling. Carefully frost the outside. See directions for fillings, page 33.

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

Special Equipment

Platter or shallow dish

Wire egg beater



FIG. 2.—JELLY ROLL

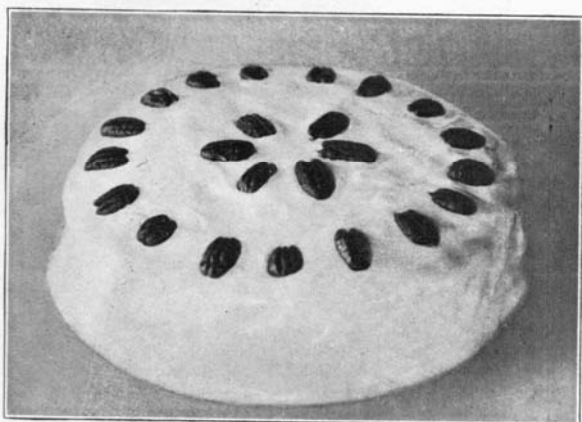


FIG. 3.—LAYER CAKE
FILLED AND ICED

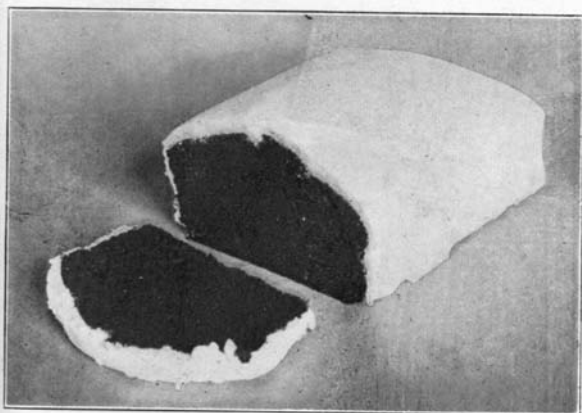


FIG. 4.—DEVIL'S
FOOD CAKE

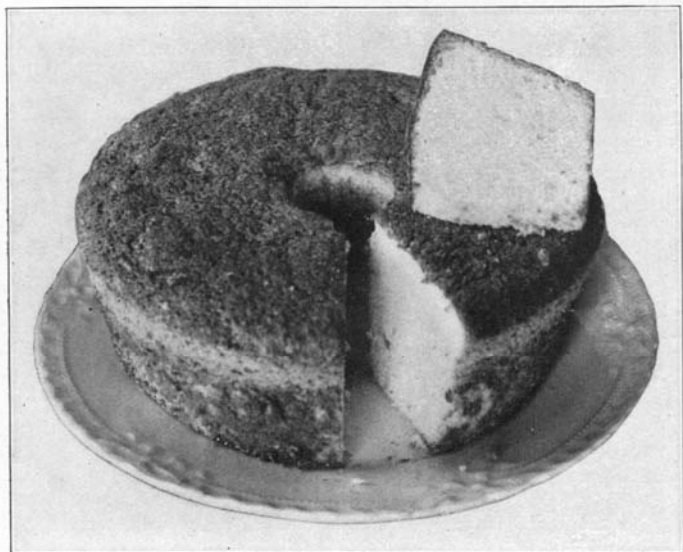


FIG. 5.—ANGEL FOOD CAKE

Materials

Large Recipe

- 1 c butter
- 2 c sugar
- 1 c milk
- 4 eggs
- 1 t flavoring
- 3 c flour
- 4 t baking powder

Small Recipe

- 1/2 c butter
- 1 c sugar
- 1/2 c milk
- 2 eggs
- 1/2 t flavoring
- 1 1/2 c flour
- 2 t baking powder

Amount in large recipe: 2 loaf cakes 3 x 3 1/2 x 8 inches, or 4 round layers 9 inches in diameter

Method

Use the general method described for plain cake. As this is a very rich cake, great care must be taken to have the measurements exact. Until some skill has been acquired, it will be well to use a scant measure of sugar and shortening. When a fine-textured, light cake is desired, the egg whites and yolks are beaten separately. The yolks are added to the cake in the regular way; the whites are added by the "cutting and folding" method (see general directions under Unshortened Cakes, page 28). All mixing of the cake must be done before the egg whites are added, since any stirring would break down the fragile albumin walls and cause the eggs to lose their lightness.

Jelly Roll

Special Equipment

Shallow dripping pan

Oiled paper or clean wrapping paper

Materials

Large Recipe

- 3 eggs
- 1 c sugar
- 1/2 Tb milk
- 1 c flour
- 1 t baking powder
- 1/4 t salt
- 1 Tb melted butter
- Jelly stirred or mixed thoroly

Small Recipe

- 1 egg and 2 Tb beaten egg
- 1/2 c sugar
- 3/4 t milk
- 1/2 c flour
- 1/2 t baking powder
- Speck salt
- 1/2 Tb melted butter
- Jelly

Eggs used in this proportion make a tough product which can be rolled without breaking. A larger proportion of shortening and liquid would make the product too tender to roll.

Amount in large recipe: 1 jelly roll 12 inches long and 6 1/2 inches in diameter

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. Lastly, put in melted butter.

Spread mixture evenly over bottom of pan. A fairly large pan should be used so that the cake will be only about $\frac{3}{4}$ inch thick when baked.

Bake twelve minutes in moderate oven. (Meanwhile stir jelly to spreading consistency.)

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

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

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

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

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

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

Why

The paper makes it possible to remove a thin cake from the tin without breaking the edges of the cake.

The eggs serve as part of the liquid to dissolve the sugar.

The butter blends better with the 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. The sugar helps to make the roll stick together and also makes an attractive finish.

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

This crusty part would crack if rolled.

If more is used, it will soak in and make the product soggy.

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

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

Nut Cake

Amount: 1 medium loaf cake

Prepare the plain cake (large) recipe, using $\frac{1}{4}$ cup of butter and $\frac{1}{2}$ cup of walnut or hickory nut meats ground or chopped fine. 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

(See General Equipment, page 11)

Materials

Large Recipe

- $\frac{1}{2}$ c shortening
- $\frac{1}{2}$ c brown sugar
- $\frac{1}{2}$ c molasses
- $\frac{1}{2}$ c milk
- 1 egg
- 4 egg yolks
- $2\frac{1}{4}$ c flour
- 1 t baking powder
- $\frac{1}{2}$ t soda
- $\frac{1}{2}$ t cloves
- 1 t cinnamon
- $\frac{1}{2}$ t grated lemon rind

Small Recipe

- 4 Tb shortening
- 4 Tb brown sugar
- $\frac{1}{4}$ c molasses
- $\frac{1}{4}$ c milk
- 2 Tb beaten egg
- 2 egg yolks
- 1 c and 2 Tb flour
- $\frac{1}{2}$ t baking powder
- $\frac{1}{4}$ t soda
- $\frac{1}{4}$ t cloves
- $\frac{1}{2}$ t grated lemon rind
- Speck nutmeg

Amount in large recipe: 1 loaf cake $3 \times 3\frac{1}{2} \times 8$ inches

Method

Use the general method for plain cake. Sift the sugar if it is lumpy. Bake in a tin baking pan in a moderate oven.

Apple Sauce Cake

Special Equipment

Sieve or colander

Paper towel or clean cloth

Materials

Large Recipe

- 1 c sugar
- $\frac{1}{2}$ c shortening
- 1 c apple sauce (unsweetened and consistency to pour)
- $2\frac{1}{2}$ c flour
- 1 t soda
- 1 t cinnamon
- $\frac{1}{4}$ t cloves
- $\frac{1}{4}$ t nutmeg
- 1 c raisins

Small Recipe

- $\frac{1}{2}$ c sugar
- 4 Tb shortening
- $\frac{1}{2}$ c apple sauce
- $1\frac{1}{4}$ c flour
- $\frac{1}{2}$ t soda
- $\frac{1}{2}$ t cinnamon
- Speck cloves
- Speck nutmeg
- $\frac{1}{2}$ c raisins

Amount in large recipe: 1 loaf cake $8\frac{1}{2} \times 4\frac{1}{2} \times 2\frac{1}{2}$ inches

Method

Cook the 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. Cleanse the raisins (see general directions). Proceed as for plain cake. Apple sauce is added in place of other liquid. Bake in a moderate oven. 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

Special Equipment

Sieve or colander and pan Paper towel or clean cloth
Chopping bowl or food chopper

Materials

Large Recipe

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

Small Recipe

4 Tb shortening
6 Tb brown sugar
1/4 c molasses
1/4 c milk
1 egg
1 c flour
1/4 t soda
1/2 t cinnamon
1/4 t allspice
1/4 t mace
Speck cloves
1/4 t lemon extract
6 Tb raisins
6 Tb currants
1/4 c citron

Amount in large recipe: 1 loaf cake 6 1/2 x 8 x 3 inches

Method

See general directions for the preparation of dried fruit. Chop the raisins or put them thru a coarse food chopper. Cut the citron rather fine. Reserve 3 tablespoons of flour with which to flour the fruit.

Prepare according to general directions. 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 1 1/4 hours in a moderate oven. Be sure the cake is thoroly done. Test with a clean toothpick. 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

Special Equipment

Double boiler

Sharp knife

Materials

Large Recipe

- (I) $\frac{1}{3}$ cake Baker's chocolate
 1 c sugar
 $\frac{3}{4}$ c sweet milk
- (II) 1 c sugar
 $\frac{3}{4}$ c butter
 $\frac{3}{4}$ c sour milk (clabbered)
 1 t vanilla
 3 eggs
 1 t salt
 1 t soda
 2 t baking powder
 $2\frac{3}{4}$ c flour

Small Recipe

- (I) $\frac{1}{6}$ cake Baker's chocolate
 $\frac{1}{2}$ c sugar
 6 Tb sweet milk
- (II) $\frac{1}{2}$ c sugar
 6 Tb butter
 6 Tb sour milk (clabbered)
 $\frac{1}{2}$ t vanilla
 1 egg and 2 Tb beaten egg
 $\frac{1}{2}$ t salt
 $\frac{1}{2}$ t soda
 1 t baking powder
 1 c and 6 Tb flour

Amount in large recipe: 1 loaf cake 10 x $6\frac{1}{2}$ x 2 inches, or 2 loaves
 8 x $3\frac{1}{2}$ x $2\frac{1}{2}$ 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 the milk slowly, stirring constantly.

Allow to stand until Part II is prepared. Prepare Part II according to the general method for plain cake.

When Part II is thoroly mixed, add Part I and beat until the two batters are well blended.

Why

Chocolate should melt slowly so that it will have a smooth consistency and will blend well with the other ingredients.

If chocolate remains over the heat after melting, it becomes thick as a result of the cooking of the starch in the chocolate and the separation of the fat from the other substances. It then does not mix well with other ingredients.

The milk dissolves the sugar and makes a liquid which can be beaten into the cake batter easily.

An even color and texture result from thoro mixing.

Bake as a loaf cake in a moderate oven for 40 to 60 minutes, depending on shape and size of loaf.

If the cake is thick, it will require a longer time for baking.

If cocoa is used instead of chocolate, the cocoa may be sifted with the flour or mixed with the sugar, the sugar and milk of Part I may be added to Part II, and the amount of flour called for in the large recipe should be decreased by $\frac{1}{4}$ cup. Three tablespoons of cocoa equal 1 square of chocolate by weight.

COOKIES

Cookies are small cakes made thin and baked quickly. They contain practically the same ingredients as do ordinary cakes but in a different proportion, 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 later needed.

The method of mixing is the same as the general method for mixing plain cake.

Method of Rolling

How

Put small amount of flour on kneading board. On this flour put about three 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 the cookies as near each other as possible. Try to avoid leaving any large irregular pieces of dough.

Just before cutting, a little sugar may be sprinkled on top of dough.

Why

If cookie dough is handled too much and flour is mixed into it, the cookies are often stiff and tough.

Too much flour is wasteful and may make the cookies too stiff.

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

The amount of trimming should be as small as possible for it 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.

The sugar gives the cookies a finished appearance when baked.

With a spatula or flexible knife, lift the cookie off the board, and without handling it place it on an oiled cookie tin.

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

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 the cookies off the spatula without touching them.

Method of Baking

How

Bake in a moderate oven for 5 to 7 minutes. Place first on the lower grate; when partly baked, place on the upper grate to brown.

When baked, remove from the tin by slipping a spatula or flexible knife under the 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. Pale, pasty cookies are not so wholesome as well-baked ones.

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

Oatmeal Drop Cookies

Special Equipment

A food chopper or bowl and chopping knife

Materials

Large Recipe

1 c sugar
 $\frac{2}{3}$ c shortening
 $\frac{1}{2}$ c sour milk
 2 eggs
 1 t lemon flavoring
 2 c oatmeal
 2 c flour
 $\frac{1}{2}$ t soda
 1 t baking powder
 1 t cinnamon
 $\frac{1}{4}$ t cloves
 $\frac{1}{4}$ t nutmeg
 1 c raisins and currants
 1 c nuts

Small Recipe

$\frac{1}{2}$ c sugar
 5 Tb and 1 t shortening
 $\frac{1}{4}$ c sour milk
 1 egg
 $\frac{1}{2}$ t lemon flavoring
 1 c oatmeal
 1 c flour
 $\frac{1}{4}$ t soda
 $\frac{1}{2}$ t baking powder
 $\frac{1}{2}$ t cinnamon
 Speck cloves
 Speck nutmeg
 $\frac{1}{2}$ c raisins and currants
 $\frac{1}{2}$ c nuts

Amount in large recipe: 5 dozen cookies

Method

Use the general method for plain cake. Combine in the order given above (the oatmeal should be added to the liquid ingredients and allowed to become thoroly moist before the flour is added). Chop the fruit and nuts, flour well, and add at the last. Stir until well blended. Drop from the 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 a fairly hot oven for 8 or 10 minutes. Keep in a covered stone jar. The flavor is richer after the cookies have been kept a few days.

White Rolled Cookies

Special Equipment

Molding board

Rolling pin

Cookie cutter

Materials

Large Recipe

1/2 c butter
 1 c sugar
 1/2 c milk
 2 eggs
 1/2 t lemon extract
 2 3/4 c flour
 2 t baking powder
 1/2 t grated nutmeg

Small Recipe

1/4 c butter
 1/2 c sugar
 1/4 c milk
 1 egg
 1/4 t lemon extract
 1 c and 6 Tb flour
 1 t baking powder
 1/4 t grated nutmeg

(Variations may be made by adding chocolate, fruit, or nuts)
 Amount in large recipe: 4 dozen cookies 3 inches in diameter
 Use general method for mixing plain cake.

Molasses Cookies

Special Equipment

1 molding board
 1 rolling pin

1 small sauce pan
 1 small cookie cutter

Materials

Large Recipe

1 c lard or other shortening
 1 c molasses
 1 c sugar
 1/2 c cold water
 1 t vanilla
 2 eggs
 5 c flour
 1 t soda
 1 t cinnamon
 1 t ginger
 1/4 t nutmeg

Small Recipe

1/2 c shortening
 1/2 c molasses
 1/2 c sugar
 1/4 c cold water
 1/2 t vanilla
 1 egg
 2 1/2 c flour
 1/2 t soda
 1/2 t cinnamon
 1/2 t ginger
 1/8 t nutmeg

Amount in large recipe: 11 dozen cookies 3 1/2 inches in diameter

Method

How

Place shortening, sugar, and molasses in stew pan. Mix well and boil 3 minutes. The mixture must be carefully watched and stirred because it burns easily.

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

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

In rolling, follow general directions for rolled cookies but remember that molasses cookies should not be rolled as thin as either white rolled cookies or ginger snaps. Bake in a moderate oven about 10 minutes, watching 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

Special Equipment

1 molding board

1 rolling pin

1 small cookie cutter

Materials

Large Recipe

1 c molasses

$\frac{1}{2}$ c lard

$3\frac{1}{4}$ c flour

$\frac{1}{2}$ t soda

1 Tb ginger

$1\frac{1}{2}$ t salt

Amount in large recipe: 11 dozen cookies

Small Recipe

$\frac{1}{2}$ c molasses

$\frac{1}{4}$ c lard

1 c and 10 Tb flour

$\frac{1}{4}$ t soda

$\frac{1}{2}$ Tb ginger

$\frac{3}{4}$ t salt

Method

How

Heat molasses to boiling point and pour over shortening.

Why

Boiling molasses even slightly, condenses it and makes it richer.

(How)

(Why)

The hot molasses melts the shortening, and the mixture serves as a liquid into which the other ingredients can be blended.

Add dry ingredients mixed and sifted.

Chill thoroly.

The dough is more easily handled and can be rolled thinner when cold.

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

If the dough gets warm, it will be sticky; more flour will then be needed and the cookies will be stiff rather than crisp.

Bake in moderate oven about 10 minutes. Allow to cool before packing.

Ginger snaps lose their crispness if packed while warm.

UNSHORTENED CAKES

INGREDIENTS

Cakes without shortening are typified by the sponge cake. As this type has few ingredients, great care should be taken in their selection. The gluten is not shortened, the egg whites being used as the leavening agent; special care is therefore necessary in combining the ingredients.

The sugar should be fine, but confectioner's sugar makes a cake of very close texture and is not generally recommended for sponge and angel food cakes. Only strictly fresh eggs can be beaten sufficiently to make a light product. Any soft flour may be used (since the gluten is unshortened, bread flour would make a tough cake). A delicate flavoring should be used.

METHOD OF MIXING

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

General Method

How

Why

Sift the sugar.

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

(How)

Sift flour four or five times before measuring, and be careful not to pack it in cup when measuring.

Separate whites and yolks of eggs.

Just before they are to be used, beat the 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 the beater up and out of the egg white with each stroke.)

Mix other ingredients with beaten egg white by using the cutting and folding motion. To do this put the spoon or spatula edge-wise into the middle of the dough, slide it under the dough and bring it up at the edge of the bowl, at the same time folding that part of the dough toward the center. Turn the bowl each time so that a new portion of the dough is folded over. Try not to stir the product but let the cutting and folding motion thoroly mix the egg whites into the dough. (See illustrations on page 49.)

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

(Why)

Sifting increases the bulk of the flour by separating the particles and incorporating air between them. Also, if the particles of flour are separated they can be mixed more thoroly and easily with the egg white. Ever so little extra flour may make a sponge cake too stiff.

Since air is to be the only leaven used, it is necessary to beat the 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 the product would be heavy. As an illustration, beaten egg whites may be compared to the honey comb and the incorporated air to the 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 the 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 the air cells of the beaten egg white. By leaving the pan

(How)

Use a standard angel food cake pan.

(Why)

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

The hollow stem in the center makes it possible for the heat to penetrate evenly to all parts of the 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. (See *Oven Temperatures*, page 10.)

This type of cake should bake in a slow oven for 1 to 1½ hours, the exact length of time depending on its size. Be careful not to jar the oven while the cake is baking. Test with a clean toothpick. When done, invert the cake pan over a wire rack in a place free from draft and allow the cake to hang in the pan and cool gradually. If removed from the pan while warm, the cake will be sticky or will fall because the delicate albumin walls have not completely set.

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

RECIPES FOR UNSHORTENED CAKES

Sponge Cake

Special Equipment

Platter or big bowl

Wire egg beater

Grater

Materials

Large Recipe

5 egg yolks
1 c sugar
½ t grated lemon rind
1 t lemon juice
1 Tb cold water
¼ t salt
5 egg whites
1 c flour

Small Recipe

3 egg yolks (small eggs)
½ c sugar
¼ t grated lemon rind
½ t lemon juice
½ Tb cold water
⅛ t salt
3 egg whites
½ c flour

Amount in large recipe: 1 sponge cake 9 inches in diameter

Method

(NOTE—Only when the steps differ from the steps given in the general method is the question *Why* answered.)

How

Sift the sugar. Sift the flour before measuring. Be careful not to pack it in the cup when measuring.

Grate lemon rind into sugar.

Separate whites and yolks of eggs. Beat yolks until thick, being careful to scrape down any egg yolk that may stick to sides of bowl.

Gradually beat in sugar and grated rind; then add lemon juice and water.

Beat whites until **stiff** but **not dry**.

Cut and fold a part of the whites into the yolks and sugar. Then gradually cut and fold in the flour.

Cut and fold in the rest of the egg whites. Do not stir or beat. (See general directions for mixing unshortened cakes.)

Put in an ungreased angel food cake pan. Bake immediately in a slow oven for 1 to 1½ hours. (See general directions for baking unshortened cakes.)

Why

The sugar separates the moist particles of lemon rind and quickly absorbs the lemon flavor.

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

It is believed that the effect of cream of tartar, lemon juice, or dilute acid is to stiffen the egg before it is baked. This helps the albumin walls to retain their shape and hold in the leaven. Acid also makes egg whites more tender after baking, and a better texture results.

There is not enough liquid in the yolk mixture to make a batter of the flour; consequently a part of the egg white must be added before any of the flour is added.

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

Angel Food Cake

Special Equipment

Platter

Wire egg beater

Materials

Large Recipe

1 c or 9 egg whites
 $\frac{1}{4}$ t salt
 1 t cream of tartar
 1 c sugar
 $\frac{3}{4}$ t vanilla
 $\frac{3}{4}$ c flour

Small Recipe

$\frac{1}{2}$ c or 4 egg whites
 $\frac{1}{8}$ t salt
 $\frac{1}{2}$ t cream of tartar
 $\frac{1}{2}$ c sugar
 $\frac{3}{8}$ t vanilla
 6 Tb flour

Amount in large recipe: 1 cake 9 inches in diameter

Method

How

Sift and measure sugar carefully. Sift flour four or five times and measure lightly, being careful not to pack.

Pour egg whites on a large platter, 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 an ungreased pan and bake in slow oven for 50 to 60 minutes.

Why

A flat wire egg beater will make larger air cells in the egg whites than will a Dover egg beater.

Cream of tartar is an acid. In angel food cake there is no liquid except that in the eggs, which makes it necessary to combine both sugar and flour directly with the egg white. Consequently the albumin walls must be strengthened in some way and the acid does this. (See further explanation under sponge cake.)

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

Kisses

Equipment

1 mixing bowl
1 Dover beater

1 measuring cup
2 teaspoons

Materials

2 egg whites
 $\frac{1}{4}$ t vanilla

$\frac{1}{2}$ c fine granulated
sugar

Amount: 2 dozen, $1\frac{1}{2}$ inches in diameter

Method

How

Beat egg whites until stiff but not dry.

Add half the sugar and beat.

Beat until the mixture will hold its shape.

Cut and fold in remaining sugar and add flavoring.

Shape with a spoon or a pastry bag on a wet board covered with oiled paper. If a board is not available, use the bottom of a baking pan covered with oiled paper. Bake in a slow oven 15 to 20 minutes.

Why

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

The dissolved sugar must be thoroly blended with the egg white.

By folding in half the sugar at the last, the sugar does not have a chance to dissolve before the 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 the heat as does a tin mold; and if wet, will not become scorched or burned in the oven.

FROSTINGS AND FILLINGS

The frosting of a cake may be compared to the trimming of a garment—quite unnecessary so far as utility is concerned, but adding to the esthetic effect and the enjoyment of the product. 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 as fillings and to spread over the surface of the cake are made of sugar and a liquid. These 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 nor too sweet or rich.

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 fillings may be made of whipped cream, jelly, jam, or confectioner's sugar and a liquid. A pulverized 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 and the fineness of the sugar tend to prevent the formation of a sirup.

Confectioner's Frosting

Equipment

1 measuring cup	1 tablespoon
1 mixing bowl	1 teaspoon

Materials

2 Tb boiling water	$\frac{3}{4}$ c confectioner's sugar
—or cream	Flavoring
—or fruit juice	

Amount: Enough to cover 1 loaf cake 3 x 3 x 8 inches

Method

Roll and sift the 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. A smooth surface should result.

Whipped Cream and Fruit Filling

Equipment

1 bowl	1 Dover egg beater	1 sharp knife
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Materials

	2 Tb sugar		$\frac{3}{4}$ pt whipping cream	
Fruit	3 oranges	Nuts	walnuts	
	or		or	
	3 bananas		pecans	{ ground or chopped fine
	or		or	
1 small can pineapple	hickory nuts			

Amount: Enough for a 3-layer cake

Method

How

Chill bowl, beater, and cream.

Beat with Dover egg beater. When stiff and of a 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 the smooth, stiff stage. If beaten longer it becomes granular; this is the 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 and some of the cane sugar is changed into simpler sugars having smaller crystals. 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 stew pan	1 measuring cup
1 fork	1 Dover egg beater
1 tablespoon	1 large bowl
1 teaspoon	Clean narrow strip of cloth

Materials

1 c sugar	White of 1 egg
$\frac{1}{2}$ c water	1 t vanilla or
$\frac{1}{16}$ t cream of tartar	$\frac{1}{2}$ t lemon juice

Amount: Enough to frost 2 loaf cakes 3 x $3\frac{1}{2}$ x 8 inches

Method

How

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

Stir mixture until sugar has dissolved.

Cover pan for first few minutes the solution is boiling.

Remove cover from stew pan.

Wrap a small cloth about the tines of a fork and wet fork in cold water. With an upward stroke use the fork to wash from the sides of the pan any crystals that may have collected.

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 the sirup is nearly cooked, beat egg whites until **stiff** but **not dry**.

Why

Cream of tartar is an acid. When cane sugar is boiled with an acid, it is changed into a sugar having smaller crystals. A smoother consistency results.

Stirring prevents the sugar from sticking to the sauce pan. It also aids in dissolving the sugar crystals.

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

Evaporation must take place before the sirup can condense.

Crystals must not be allowed to fall back into a concentrated solution. One crystal causes others to form around it and a grainy product results.

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

Sirup cooked to 238° F. is said to be at the soft-ball stage, because if a little sirup is dropped into cold water, it forms a soft ball. In rainy weather, the 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.

The 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 beating cannot be delayed too long, for the sirup

(How)

Cool sirup slightly. Slowly pour sirup on beaten white of egg (using a Dover egg beater); beat continuously while pouring.

Continue beating until mixture is of such consistency that it will spread readily on the cake and yet remain in place. Add flavoring.

Put the frosting on the cake with as few motions as possible. Slowly pour it on the center of cake and allow it to run down the sides. Smooth it around the sides with a few well directed strokes of the spatula. Allow the frosting to harden before cutting the cake. To cut, use a knife that has been dipped in hot water. (The hot water prevents the frosting from cracking or sticking to the knife.)

(Why)

will require close attention at the very last.

If the 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 it is used, the person making the frosting will need assistance.)

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.

Milk Frosting

Equipment

1 measuring cup
1 teaspoon

1 stirring spoon
1 sauce pan

Materials

1½ c sugar
½ c milk

1 t butter
½ t vanilla

Amount: Enough to frost 1 loaf cake 3 x 3½ x 8 inches

Method

Put milk and sugar in sauce pan 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 slightly. (If the 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. When beating, do not scrape down any crystals or sirup that collect on the sides of pan (that can be utilized in other ways later). Do not add flavoring until the last, since flavorings have alcohol in their composition and will evaporate when heated. Pour frosting over cake, spreading evenly with spatula or back of stirring spoon.

Chocolate Frosting

Amount: Enough to frost 1 loaf cake 3 x 3½ x 8 inches

Follow directions given for milk frosting, but as soon as the boiling point is reached add 1 or 1½ squares of chocolate melted. (If chocolate is added at first, it does not blend well and is likely to cause the milk to curdle.) Flavor with ⅛ teaspoon of cinnamon.

Brown Sugar Frosting

Equipment

Same as for milk frosting

Materials

1½ c brown sugar
1 Tb butter

⅓ to ½ c cream

Amount: Enough to frost 1 loaf cake 3 x 3½ x 8 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 ¼ cup of fat to 1 cup of flour.

General Equipment for Pastry

1 cup
1 mixing bowl
1 teaspoon
1 fork
2 knives

1 flour sifter
1 rolling pin
1 molding board
1 pie tin

Materials

1½ c flour
1 t salt

6 Tb fat
Cold water

Amount: 2 single crusts or 1 pie

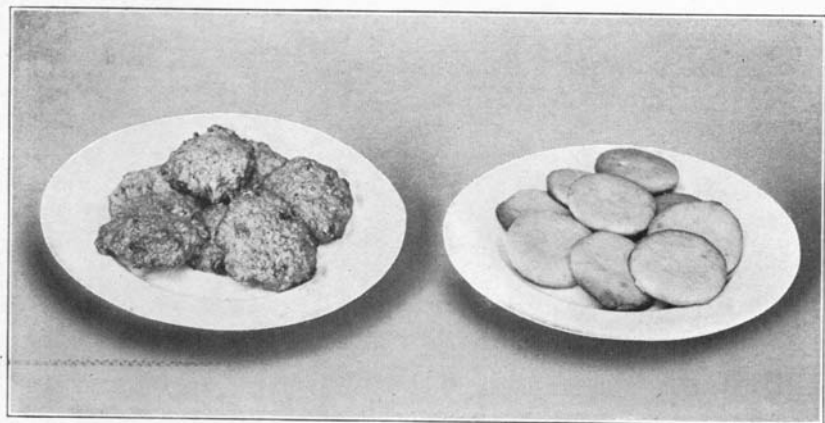


FIG. 6.—OATMEAL DROP COOKIES AND WHITE ROLLED COOKIES

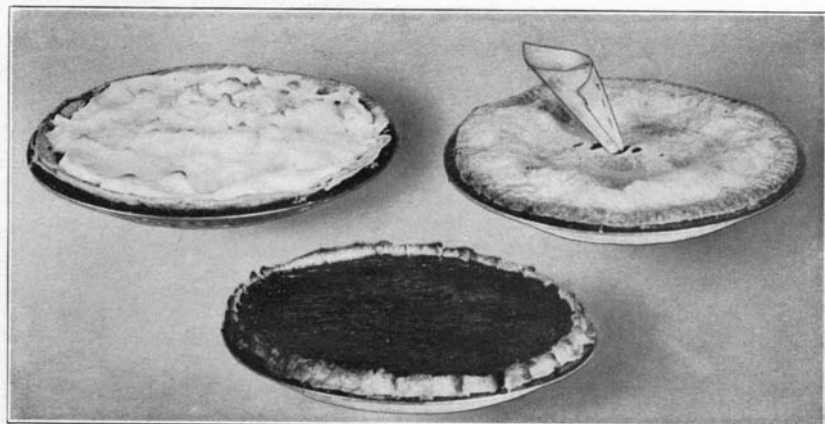


FIG. 7.—LEMON MERINGUE, BERRY, AND PUMPKIN PIES

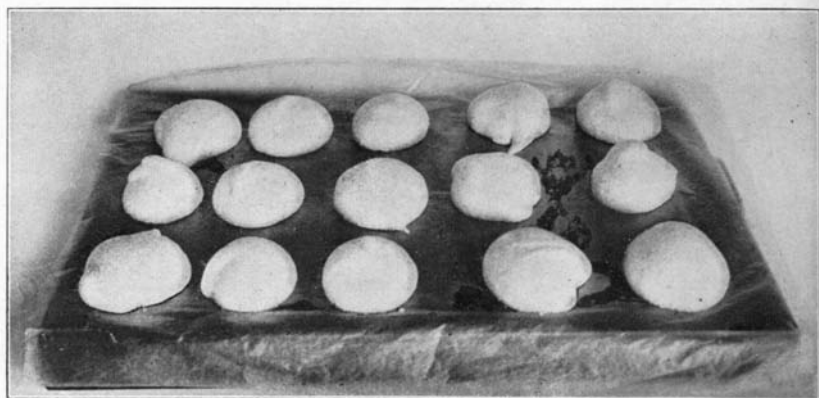


FIG. 8.—KISSES

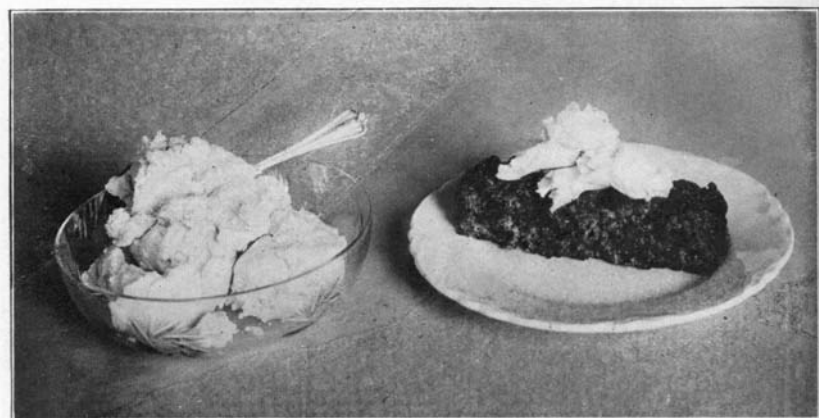


FIG. 9.—DATE PUDDING

Method

How

Have all ingredients cold.

Sift flour and salt together.

Cut the cold fat into the flour, using two knives, a wire egg beater, or a fork.

Use only enough water to hold ingredients together. Add slowly and toss the mixture with a knife or fork. **Do not stir.**

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

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

Reverse piece of dough so that both sides are floured. With both hands forming a circle around the dough, 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. There should be no flour left on the board when the product is finished.)

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 is to insure thoro distribution of the salt.

Handling pastry with the 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 the dough from the board or to turn it slightly to prevent it from sticking, but this should be done without stretching the dough.

(How)

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

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

Roll out upper crust and cut small holes in center. The 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 the filling is added.]

Fold the upper crust in half.

With the 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. A pretty finish is made by using a fork. Cut around with a knife to make edges even.

Place a few dots of lard on upper crust, or touch with ice water, just before putting in oven.

Place on lower grate and bake in a hot oven about 40 minutes or until light brown.

(Why)

The crust is more easily handled in this way, and stretching of the dough is prevented.

Air bubbles under the crust make an uneven surface after baking, as a result of the expansion of the air by heat. This is especially true of one-crust pies.

The holes are to allow for the escape of the steam and to prevent the pie from running over.

The moistened surface causes the two crusts to stick together.

When baked, a flaky appearance results.

Pie crusts should be well baked to make them digestible, but should never be over-browned or burned. Burned fat is very irritating to the digestive tract.

One-Crust Pie

Method

Prepare plain pastry, using $\frac{1}{2}$ 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 larger pan in oven, so that edge of crust will not come in contact with floor of oven. Bake for 15 minutes in a hot oven, but be careful not to over-brown. Cool and fill with prepared filling. (See Recipes for Pie Fillings.)

Lemon Pie

(See Fig. 7)

Equipment (for filling)

1 double boiler	1 bowl
1 cup	1 Dover beater
1 tablespoon	1 grater
1 teaspoon	1 lemon squeezer

Materials

$\frac{3}{4}$ c sugar	2 egg yolks
2 Tb cornstarch	1 t butter
2 Tb flour	3 Tb lemon juice
$\frac{3}{4}$ c boiling water	Grated rind 1 lemon

Amount: Filling for 1 pie crust

Method

How

Mix cornstarch, 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 two parts of double boiler together. Cook for 20 minutes over boiling water.

Add butter.

Why

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

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

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

Starch must be thoroly cooked to give it a good flavor and to make it more digestible. The double boiler prevents scorching and insures more even cooking.

More of the flavor of the butter is retained if it is added toward the last.

(How)

Remove from fire and cool slightly; beat egg yolks and add. (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.

(Why)

If eggs are added when the mixture is very hot, it is difficult to obtain a smooth consistency.

If the acid were added at the first the mixture would not thicken well, because acid heated with starch tends to change the starch to sugar.

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

Meringue

(See Fig. 7)

Equipment

1 platter or large bowl	1 tablespoon
1 wire egg beater	1 teaspoon

Materials

2 egg whites	$\frac{1}{2}$ Tb lemon juice or
2 Tb powdered sugar	$\frac{1}{4}$ 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 loosely, taking care to cover only the filling. The finished product should not look flat and uniform; it is more attractive if uneven. Brown in a slow oven.

Pumpkin Pie**Special Equipment**

1 mixing bowl	1 egg beater
1 cup	1 stirring spoon

Materials

$1\frac{1}{2}$ c steamed and strained pumpkin	$\frac{1}{2}$ t salt	} or 2 c milk
$\frac{2}{3}$ c brown sugar	2 eggs	
1 t cinnamon	$1\frac{1}{2}$ c milk	
$\frac{1}{2}$ t ginger	$\frac{1}{2}$ c cream	

Amount: Enough for 1 large pie

Method

How

Wash and pare pumpkin; cut in small pieces; steam, or add a few tablespoons of water and stew until very soft. Watch carefully and stir occasionally, being careful not to let it stick to the pan.

Carefully strain cooked pumpkin.

Mix sugar and spices together and add to pumpkin.

Beat eggs until whites and yolks are thoroly blended but not frothy.

Add other ingredients and stir until thoroly blended. Taste the mixture, using a clean teaspoon. (Drop some of liquid from mixing spoon on teaspoon.) Make any necessary additions according to taste.

Prepare a crust of plain or rich pastry. Line a tin with the pastry. Carefully work out air bubbles from underneath the pastry. The crust may be made deeper by making a fluted edge (see Fig. 7). 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.

Bake at once in moderate oven until the custard is perfectly set and the crust is a light brown. (If baking is delayed, the liquid soaks into the crust and makes it soggy.) A moderate oven is used because egg forms the thickening agent in the pumpkin mixture and if over-heated, the egg albumin becomes too hard and separates from the rest of the mixture, resulting in a curdled or "watery" product. However, pastry requires a rather high temperature. Therefore, when baking a pie containing a custard filling, a compromise must be made.

Why

Pumpkin requires careful watching and occasional stirring because the sugar in it causes it to burn easily.

A smooth consistency is very desirable.

The spices are likely to lump if not separated by the sugar before being added to the liquid.

Foamy eggs do not make a smooth custard nor thicken well.

"Good cooking demands much tasting."—Ruskin.

After a spoon or other utensil has been in someone's mouth, it should not be put back into food that is to be eaten by others. To do so is insanitary and may even be the means of spreading contagion.

Berry Pie

Method

Prepare two pie 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 to $\frac{1}{2}$ cup of sugar. The flour thickens the juice and prevents it from soaking into the crust. The amount of sugar needed in one pie will depend upon the sourness of the fruit used.

Insert a paper funnel in one of the openings in the upper crust (see Fig. 7). The funnel acts as a chimney, allowing the steam to escape and preventing the pie from running over.

Bake in a moderate oven until the crust is a light brown and the juice bubbles up in the opening of the top crust.

Apple Pie

Special Equipment

1 paring knife 1 cup

Materials

Pastry for two crusts	1 t cinnamon
2 or 3 sour apples, or enough to fill the pie	$\frac{1}{2}$ 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 fine 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 cinnamon and sugar together, using $\frac{1}{2}$ to 1 cup of sugar to one apple pie (the exact amount depending upon the sourness of the apples) and 1 teaspoon cinnamon. Sprinkle the sugar and cinnamon evenly over the apples. Put on the upper crust, following general directions for plain pastry.

An apple pie should be baked until the apples are very soft. Test with a clean toothpick placed 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. See "Effect of Various Ingredients," page 7.) Care must be taken to keep the ingredients cold during the mixing process. The baking must be done carefully to prevent scorching the fat.

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 the double boiler.

Baked Custard

Equipment

1 bowl	1 stew pan
1 Dover egg beater	1 baking dish
1 cup	1 pan
1 teaspoon	1 strainer
1 tablespoon	

Materials

Large Recipe

4 c scalded milk
4-6 eggs
 $\frac{1}{2}$ c sugar
 $\frac{1}{4}$ t salt
 $\frac{1}{2}$ t vanilla
Few gratings nutmeg

Small Recipe

1 c milk
1 egg
2 Tb sugar
Speck salt
Speck nutmeg or
few drops vanilla

Amount in large recipe: Enough to fill 1 baking dish 8 inches in diameter and 3 inches deep

If cup custards are to be made, allow one egg for each cup of milk used. A larger custard, if it is to be turned out of the mold when served, requires more eggs in proportion to the amount of milk used; the greater bulk means a greater strain and the custard must therefore be stiffer if it is to retain its shape.

Method

How

Carefully heat milk to scalding point.

Beat eggs until well blended but not frothy.

Why

Having the mixture of uniform temperature insures more even baking and requires less time for baking.

A smoother custard results if the eggs are not beaten until foamy.

(How)

Add sugar and salt to eggs.

Slowly pour scalded milk on egg mixture, stirring constantly. In case any lumps have formed, strain the custard before pouring into buttered mold. If the custard is carefully made, however, there will be no lumps and no need of straining.

Set in pan of hot water. Sprinkle with nutmeg. Bake in slow oven until firm. The test of a firm custard is made by inserting the blade of a silver knife; if no material adheres to the knife the custard is done.

(Why)

Sugar dilutes the egg, and so prevents the albumin from coagulating in large solid particles. A well blended product results.

If the eggs were added to the hot milk instead of the milk to the eggs, the egg would be likely to coagulate in small pieces and the product become lumpy.

The baking of a custard is the most important part of its preparation. Custards require a very low temperature for a long time. The slower the baking, the smoother the custard will be. (See Pumpkin Pie.) Hot water keeps an even temperature around the custard and helps to protect it from too hot an oven.

Prune Whip**Equipment**

1 stew pan
1 mixing bowl
1 cup

1 sieve
1 mixing spoon or spatula

Materials

$\frac{1}{3}$ lb. prunes
 $\frac{1}{2}$ c sugar

$\frac{1}{2}$ Tb lemon juice
5 egg whites

Amount: 6 or 8 servings

Method**How**

Look over the prunes carefully and discard any that are not in good condition. Wash and drain in a sieve.

Cover with water and allow to soak for 10 to 12 hours, or over night.

Why

By using a sieve it is easier to remove any gritty substances.

The prunes are soaked to replace the water which was lost in drying. When the cells of the prunes are filled with water, cooking softens them much more readily.

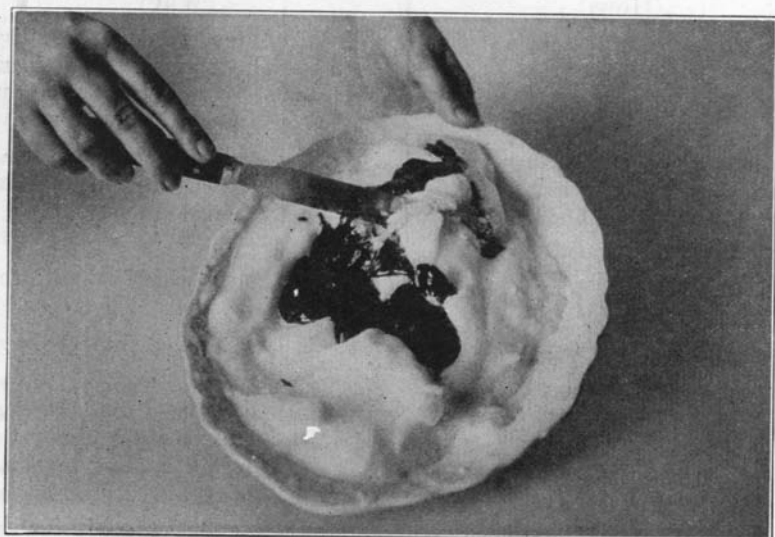


FIG. 10.—CUTTING EDGEWISE WITH A SPATULA INTO THE MIDDLE OF THE MIXTURE



FIG. 11.—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. 10)

THE CUTTING AND FOLDING MOTION ILLUSTRATED WITH PRUNE WHIP

(How)

Cook until soft in the same water in which they have soaked.

Remove stones and rub prunes thru a sieve. Return to stew pan. Add sugar and cook five minutes. Add lemon juice.

Cool thoroly.

Beat whites of eggs until stiff.

Carefully cut and fold the prune pulp into the egg whites.

Slip the mixture out of the mixing bowl and pile lightly on a buttered baking dish. Do not stir or mix unnecessarily.

Bake 20 minutes in a slow oven. Serve hot with cooked custard.

(Why)

Much of the valuable nutritive material, especially the sugar, soaks out into the water and can be conserved only in this way.

The 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.

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 cup

1 mixing bowl

1 teaspoon

1 baking dish

1 knife or food chopper

1 egg beater

Materials

Large Recipe

3 eggs

1 c sugar

2 c dates

1 c pastry flour

1 t baking powder

1/2 t salt

1 c chopped nut meats

Small Recipe

2 eggs

1/2 c sugar

1 c dates

Speck salt

1/2 c pastry flour

1/2 t baking powder

1/2 c chopped nut meats

Amount in large recipe: 14 servings about 1 x 3 1/2 inches

Method

Scald dates and dry on paper or soft cloth. (Dates need cleaning just as do raisins and other dried fruits.) Chop or cut up fine with knife. Grind or chop the nuts. Sift dry ingredients. Beat yolks until thick; add

to dry ingredients. If the mixture seems too stiff, add 1 tablespoon of milk or water. Beat egg whites until stiff. Fold them into above mixture.

Bake in a large pan $\frac{1}{2}$ hour in a moderate oven. Cut into strips for individual servings. Serve with hard sauce or cream.

Hard Sauce

Equipment

1 bowl	1 wooden spoon
1 cup	1 teaspoon

Materials

$\frac{1}{3}$ c butter	$\frac{1}{3}$ t lemon extract
1 c powdered sugar	$\frac{2}{3}$ t vanilla

Amount: 1 cup

Method

Cream the butter (the butter must be soft and well worked before it will absorb and hold the 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.

STARCHY 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 teaspoon
1 cup	1 strainer
1 fork	1 baking dish

Materials

Large Recipe

$\frac{1}{2}$ 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

Small Recipe

$\frac{1}{4}$ c rice
1 c water
1 c milk
$\frac{1}{4}$ t cinnamon
1 egg
$\frac{1}{2}$ t salt
6 Tb sugar
$\frac{1}{4}$ c raisins or currants
$\frac{1}{2}$ Tb butter
Grated lemon rind

Amount in large recipe: Enough to fill a large casserole

Method

How

Carefully wash rice by putting it in a sieve 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. (The rice may be steamed by putting it into a container and standing the container in a steamer or kettle of water, or it may be cooked in a fireless cooker.)

Boil 3 to 5 minutes. Place over under part of double boiler, in which there is boiling water. Steam for 30 minutes.

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

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 for 20 minutes, or until custard is done. Serve with cream.

Why

Unless unpolished rice is used, there is always a talcum powder on the starch, 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 a spoon does.

The milk is not added until the water is absorbed because salt heated with milk would tend to curdle the milk. In order to have a well-flavored product, the rice must absorb the salt. After the water is absorbed the milk may safely be added.

Cottage Pudding

Equipment

1 mixing bowl
1 cup
1 egg beater

1 teaspoon
1 mixing spoon

Materials

Large Recipe

- 1/4 c butter
- 2/3 c sugar
- 1 egg
- 1 c milk
- 2 1/4 c flour
- 4 t baking powder
- 1/2 t salt

Small Recipe

- 2 Tb butter
- 1/3 c sugar
- 2 Tb beaten egg
- 1/2 c milk
- 1 c and 2 Tb flour
- 2 t baking powder
- 1/4 t salt

Amount in large recipe: 2 dozen small cup puddings

Method

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

Lemon Sauce

Equipment

- | | |
|--------------|------------------|
| 1 stew pan | 1 teaspoon |
| 2 cups | 1 lemon squeezer |
| 1 tablespoon | |

Materials

- | | |
|-------------------|------------------------|
| 1/2 c sugar | 2 Tb butter |
| 1 c boiling water | 1 1/2 Tb lemon juice |
| 1 Tb cornstarch | Few gratings of nutmeg |
| or 1 1/2 Tb flour | Few grains of salt |

Amount: 1 1/4 cups

Method

Mix together sugar and cornstarch. Gradually add boiling water, stirring constantly. Boil five minutes to thoroly cook starch. Remove from fire. Add butter, lemon juice, and nutmeg. Serve hot on puddings or on cakes that serve as puddings.

Chocolate Sauce

Equipment

- | | |
|------------|--------------|
| 1 stew pan | 1 teaspoon |
| 1 cup | 1 tablespoon |

Materials

- | | |
|------------------------------|--------------------|
| 1 1/2 c water | 1/2 c cold water |
| 1/2 c sugar | Few grains of salt |
| 6 Tb grated chocolate | 1/2 t vanilla |
| 1 Tb arrowroot or cornstarch | |

Amount: 2 cups

Method

How

Boil water and sugar five minutes.

Mix arrowroot with cold water for the thickening.

Add grated chocolate to arrowroot and water, and then add all to sirup, pouring slowly and stirring constantly.

Boil 3 to 5 minutes. (If cornstarch is used, the product must be cooked a longer time.) Flavor with vanilla and serve hot on ice cream or pudding.

Why

Chocolate blends better in a hot sirup than in water.

Arrowroot starch cooks more quickly and easily than cornstarch; and as long cooking will make this sauce too thick and gummy, arrowroot starch is preferred to other starches.

Adding the chocolate to the hot sirup at the same time as the thickening results in a smooth consistency because the starch acts as a 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.

WAYS OF USING OLD CAKE

As Pudding

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

Freshening a Whole Loaf Cake

Pour cold water over surface of cake. Place cake in the same shaped tin in which it was baked. Put in a hot oven for a few minutes. Watch carefully so that it does not burn. The cake should steam, then form a delicate crust which holds in the moisture and allows it to penetrate to the center of the cake to replace the lost moisture.

pudding Made from Cake

Equipment

1 mixing bowl	1 bowl and Dover egg beater
1 stew pan	2 teaspoons
1 measuring cup	1 tablespoon

Materials

Large Recipe

- 1/2 c stale bread crumbs
- 2 c stale cake crumbs
- 1 qt scalded milk
- 2-4 Tb sugar (depending on
the kind of cake used)
- 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

Small Recipe

- 1/4 c stale bread crumbs
- 1 c stale cake crumbs
- 1 pt scalded milk
- 1-2 Tb sugar
- 1 Tb melted butter
- 1 egg
- 1/4 t salt
- 1/4 c raisins or currants
- 1/2 t vanilla
- 2 Tb nuts

Amount in large recipe: 8 large servings

Method

Scald the milk, for the crumbs will absorb hot milk more quickly and thoroly than cold milk and the more thoroly they absorb the milk the more perfectly they can be mixed with the other-ingredients. Soak bread and cake crumbs in milk. Set aside to cool. (Do not use crusts; dry them out, grind up, and use for buttered crumbs.) Add sugar, butter, slightly beaten eggs, salt, and flavoring. The amount of sugar, butter, and flavoring used will depend upon the kind of cake. If a plain cake is used, raisins and nuts may be added at the last.

Bake one hour in buttered pudding dish in slow oven. This pudding requires the same care in baking as does a custard. Serve with lemon or hard sauce.

NOTE.—For score cards for products described in this circular, see Circular 247, "Home Economics Exhibits for County and Community Fairs."

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