



• Shortened cakes—flour, eggs, liquid, shortening, baking powder or soda, sugar, salt, flavorings.

- Angel cakes—flour, egg whites, cream of tartar, sugar, salt, flavorings.
- Sponge cakes—flour, egg yolks and whites, cream of tartar or lemon juice, liquid, sugar, salt, flavorings.
- Chiffon cakes—flour, egg yolks and whites, cream of tartar, salad oil, baking powder, sugar, salt, flavorings.

Measure ingredients carefully. Cake recipes are carefully balanced and may fail if you use incorrect measurements. Ingredients should be at room temperature so they can be beaten more easily.

Flour gives the cake structure by building a framework. Use the type of flour specified. Be sure to sift flour before measuring. Cake flour gives cakes a larger volume and a finer grain than all-purpose flour. If a recipe calls for cake flour but it is not available, substitute 1 cup of all-purpose flour minus 2 tablespoons for each cup of cake flour.

Eggs give structure to cakes and increase richness. Whites and yolks can be beaten to incorporate air, which makes the cake rise. Use medium or large eggs. To avoid variations in the size of eggs, the amount of whites for angel cakes usually is given in cups.

Sugar sweetens and tenderizes cake. It also helps to brown the crust. Generally, granulated sugar is used unless the recipe calls for brown or confectioner's sugar.

Fat tenderizes cakes and makes them rich and moist. Butter is used in many recipes for shortened cakes. Hydrogenated shortening or margarine also can be used. Use oil only when the recipe calls for it (such as for chiffon cakes).

Liquids provide moisture for blending of ingredients. Milk, water, fruit juice, buttermilk, and sour milk are the liquids generally used. Use the type of liquid specified in the recipe. Substitutions may change the quality of the cake.

Leavening agents make cakes rise. Baking powder is a common leavening agent that releases carbon dioxide gas. When baking soda is used, the recipe also will include an acidic food (such as sour milk, buttermilk, or molasses), which is needed to release the gas. Air incorporated in beaten eggs and steam from liquid also leaven cakes.

Salt usually is added to give flavor. Other flavorings often are added as well.

mericans have enjoyed cakes for hundreds of years. Back in colonial days, the old "recipes" called for measurements like "a lump of butter the size of a walnut" or "a dessert spoon full of sugar." Ingredients were beaten for hours and housewives guessed at the oven temperatures in their wood stoves. Today, modern appliances and standardized recipes have taken away much of the labor and trial-and-error of cake baking.

Types

There are two basic types of cakes: shortened and foam. Shortened cakes are made with hydrogenated shortening, butter, or margarine. The infinite variety includes pound, butter, chocolate, spice, and fruit and nut cakes. Foam cakes are made without fat or oil. Examples are sponge cakes and angel cakes. Chiffon cake, made with salad oil, is a cross between a light foam cake and a rich shortened cake.

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Selecting and Preparing Pans

Choose the right size and shape of pan. If the pan is too shallow, the texture of the cake will not be as good. For the best results, cake pans should be one-half to two-thirds full of batter.

Baking is faster in pans with a dull finish than in pans with a shiny finish (which tend to reflect the heat). Although cakes that bake faster have a larger volume and a better crumb quality, they are not as attractive because their tops are more rounded and their sides are browner. Shiny aluminum pans are a good choice if appearance is important.

Glass baking pans absorb heat more slowly than most metal pans and are therefore not as good for foods that are to be baked for a short time. Since glass ovenware holds heat very well, you will need to reduce the baking temperature if you use glass pans for cakes that take a longer time to bake. (Depending on the thickness of the glass and the baking time, the baking temperature should be 15–25°F less than for metal baking pans.)

Prepare pans for shortened cakes by greasing the bottom. Dust with flour if desired. Or line the bottom of the pan with waxed paper and grease the side of the paper next to the cake. Do not grease pans for foam cakes!

Mixing

Follow recipe directions for mixing cakes. Do not overbeat!

Shortened Cakes

There are several methods of mixing shortened cakes. The conventional method gives the best results and is used most often.
Recipes developed for the "one-bowl" or "quick mix" method

Steps in Making a Cake

- 1. Read the recipe carefully.
- 2. Let refrigerated ingredients warm to room temperature.
- 3. Be sure the oven will be heated by the time your cake is ready to bake.
- 4. Wash your hands.
- 5. Assemble all utensils you will need.
- 6. Prepare pans for baking.
- 7. Assemble all ingredients you will need.
- 8. Measure ingredients accurately.
- 9. Mix ingredients according to the directions.
- 10. Put cake in the oven and check the oven temperature.
- 11. Test the cake for doneness.
- 12. Cool the cake and remove from the pan.

usually contain higher proportions of sugar and liquid. Therefore, the one-bowl method should not be used for recipes developed for the conventional method.

Conventional method. The fat is creamed until soft and pliable. The sugar is added slowly to the fat and creaming is continued until the consistency is like whipped cream. Eggs are beaten in one at a time. Dry ingredients are sifted together to distribute the baking powder or soda evenly. Dry and liquid ingredients are added alternately and beaten after each addition. Beaten egg whites then may be folded in.

Quick mix or one-bowl method. Dry ingredients are sifted into the bowl used for mixing. The fat, flavoring, and part of the liquid are added and the batter is mixed for a specified length of time. The unbeaten eggs or egg whites and the remaining liquid are then added and the batter is again mixed for a specified length of time.

Angel Cakes

Egg whites are whipped until foamy, and cream of tartar is added

to prevent the foam from collapsing. After the egg whites have been beaten to soft peaks, part of the sugar is added gradually and the beating is continued until the peaks are stiff. Flavoring is then folded in. Flour and the remaining sugar are sifted together and this mixture is folded into the beaten egg whites.

Sponge Cakes

Yolks and whites can be beaten together or separately. In the traditional method, yolks and whites are beaten separately. The beaten whites are folded in after the flour, sugar, and flavoring have been added to the yolk.

Chiffon Cakes

Dry ingredients are sifted together. Liquid ingredients are beaten into the dry ingredients. This mixture is folded gradually into egg whites beaten to stiff peaks.

Cake Mixes

You can buy commercial cake mixes for shortened cakes as well as foam cakes. When you are deciding whether to buy a mix or make a cake from scratch, consider:

- The time you have available
- The ingredients you have on hand
- The cost of the ingredients versus the cost of the mix (plus added ingredients)
- Your personal preferences for the flavor and texture of cakes made from scratch and cakes made from mixes

There are many flavors and types of shortened cake mixes. These mixes usually include flour, shortening, sugar, leavening, nonfat dry milk, salt, and flavorings. Eggs and water usually are added by the cook.

Mixes for angel food cakes usually include flour, sugar, salt, and flavorings. Dried egg whites are packaged separately. Water is added by the cook. When making a cake with a mix, it's important to follow package directions carefully. Add the ingredients called for and beat the length of time specified. Use the pan sizes recommended.

Baking

It's important to have the correct oven temperature. Oven temperatures that are too low will give cakes a low volume and a poor texture. If the oven temperature is too high, the crust will be tough and the top of the cake may be peaked or cracked. An oven temperature of 350–375°F is commonly used. The oven should be preheated and, if possible, tested with an oven thermometer before baking the cake.

Place pans in the center of the oven away from the sides. Be sure that there is plenty of space around each pan for heat to evenly circulate.

Don't open the oven during the baking process! An open oven door

may drop the temperature 50 to 100 degrees so the cake may fall or fail to rise.

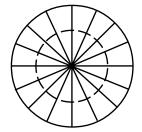
At the end of the baking time given in the recipe, test the cake to see if it's done. The cake is done when (1) the center of the top springs back when you touch it lightly with your finger, (2) a toothpick or metal cake tester you insert comes out clean, (3) and the cake shrinks slightly from the sides of the pan.

Allow the cake to cool 10 to 15 minutes on a wire rack before removing it from the pan. Angel, sponge, and chiffon cakes should be cooled upside down until the structure becomes firm. The cake may collapse if removed before cool.

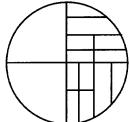
Storing

Keep the cake moist by covering with a cake cover or a large, deep bowl. Place a piece of waxed paper or clear plastic wrap over the cut edges for extra protection. A

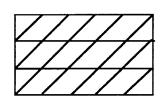
Ways to Cut Cakes



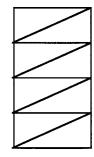
Round cake: Cut cake in pie-shaped wedges. For smaller pieces, cut in circle halfway to center (see dotted line). Then slice from outer and inner circles. 20 pieces.



Round cake: Cut cake into four quarters. Cut each quarter into four slices. Cut two pieces closest to middle in half. 24 small pieces.



Oblong cake: Cut cake lengthwise twice. Then cut diagonally across the first two slices to make diamonds and triangles. 21 pieces.



Loaf cake: Cut cake into sections across the width. Then cut diagonally across each section to make triangles. 8 pieces if cake first cut into quarters.

frosting on the cake will help to keep it moist.

Refrigerate cakes that have ingredients requiring a cool temperature, including whipped cream and cream fillings, or frosting containing raw eggs.

Serving

Cakes are used primarily as desserts but also are popular as formal or informal refreshments and snacks. Serve cakes plain or with frosting, whipped cream, or fruit. Slice shortened cakes with a thin, sharp knife. Foam cakes can be pulled apart with two forks or a cake breaker, or sliced using a serrated knife with a sawing motion.

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Evaluating Shortened Cakes

Desirable Characteristics	Poor Characteristics	Possible Causes
Volume—high	Low volume	Too much shortening or liquid Oven not hot enough Wrong size pan
	Sunken	Too little liquid Too much sugar, shortening, or leavening Underbaked
Shape —slightly rounded top	Peaked or cracked	Pan too deep Too much flour Oven too hot Too little shortening or leavening
Surface—smooth and golden brown	Pale color	Too little sugar Wrong type pan Underbaked
	Too dark brown	Too much sugar Oven too hot Overbaked
Texture—light and tender, slightly moist	Dry	Too little sugar or fat Too much leavening Baked too long Egg whites overbeaten
	Soggy	Underbaked Too much shortening or liquid Undermixed
	Tough	Overmixed Overbaked Too little shortening or leavening
Grain—fine grained; small cell walls evenly distributed; light but not crumbly	Large, uneven cells	Too little liquid Insufficient mixing Too much sugar, shortening, or leavening Oven not hot enough
	Tunnels	Too much egg Too little sugar Poor mixing Oven too hot
	Crumbly when cut	Too much sugar or shortening Insufficient mixing
	Compact	Overbeating Too much liquid Too much flour
Flavor —delicate, sweet, well blended	Flat	Too little salt
orended	Unpleasant, bitter	Strong or rancid shortening Poor quality eggs or flavoring Too much leavening

Evaluating Angel, Yellow, and Sponge Cakes

Desirable Characteristics	Poor Characteristics	Possible Causes
Volume —weight in proportion to size (cake nearly doubles its volume)	Undersized	Overbeaten egg whites Egg whites not fresh Underbeaten egg whites (or yolks in chiffon) Too much cream of tartar
	Sunken	Too much sugar (or oil in chiffon) Removed from oven too soon Pan not inverted for cooling
Shape—flat or slightly rounded top with no cracks and peaks	Runs over top	Too much batter for pan Too much leavening
	Cracks	Too much flour Not enough liquid Placed too high in oven
Surface—delicate brown with tender, thin, rough crust free from stickiness	Sticky crust	Too much sugar Underbaked
Texture —tender, slightly moist, fluffy	Tough crust	Not enough sugar Too much flour Oven too hot Baked too long
	Pale crust	Oven not hot enough Not enough sugar
	Tough	Not enough sugar Not enough shortening (chiffon) Overbaked
	Dry	Too much flour Not enough shortening (for chiffon) Not enough liquid Overbaked
	Soggy	Too much cream of tartar (chiffon & angel)
Grain —fine grained; even-sized cells throughout; free from tunnels	Heavy and compact	Overbeating of egg white or yolk Too little sugar or liquid Wrong baking temperature Pan not inverted for cooling
	Coarse grain	Flour not folded in well Egg whites under beaten
Color—uniform	Dark spots or streaks	Insufficient mixing
Flavor —delicate; free from excessive taste of egg, acid, or flavorings	Unpleasant flavor	Poor quality eggs or flavorings