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# Oregon Agricultural College

## EXTENSION DIVISION

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# Principles of Cake Making

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## CAKE.

When an article of diet comes into such general use as cake, factors affecting its economic and dietetic value, as well as the principles involved in its preparation, justify the housewife's consideration.

### METHOD OF MIXING.

According to the method of mixing most commonly used by the housewife in making butter cakes, butter is first creamed, sugar added gradually and the mixture creamed again. To this mixture the egg yolks, beaten until creamy, are added and thoroughly mixed. Then the milk and flour, in which the baking powder and salt have been sifted, are added alternately, the beating continued until a smooth mixture results. The egg whites beaten until stiff are then folded into the mixture, and the flavoring added and thoroughly mixed.

This method is one that has been used for many years. It has been handed down from generation to generation. And except for an occasional independent mind, housekeepers have accepted this as the "only way;" and to them a good result from any other manner of mixing has been a "happen so."

At present, when time and energy are considered important factors in economy, the question arises, why not simplify the process of cake making, decreasing its cost from this standpoint. In analyzing the situation, the factor which seems to involve so much time and energy is creaming the butter.

The following are conclusions reached after some experimentation with the so-called butter cake.

First. The cost of cakes may be reduced from the standpoint of time consumed in mixing, since the fat used in cake may be melted as well as creamed, a practice which is estimated to save on the average much of the time consumed in mixing.

### FLOUR.

Second. Good cakes may be obtained from the use of bread flours; still better may be obtained with bread flour by the addition of cornstarch. For each cup full of flour remove 2 tablespoons of flour and add 2 tablespoons of cornstarch). The best cakes, however, are obtained by the use of a pastry flour.

The difference in the cost of flours is a factor to be considered. The cost of the three cup flour recipe is: bread flour, 2½ cents; ordinary pastry flour, 4 cents, and the fine grade pastry flour, 6 cents.

### SUGAR.

Third. The form of the sugar has a marked effect on the quality of the cake produced, with little effect on the cost. It is most desirable to have the sugar for cake making in the form in which it can be most easily and thoroughly mixed, so long as it is kept in a solid state. Hence, powdered sugar affords the most desirable form. The use of powdered sugar instead of granulated sugar is not extravagant in most cases, as it adds only one cent to the cost of the average sized cake.

### LIQUID.

Fourth. Cakes of as good quality may be obtained with water as with whole or condensed milk. The use of water in cakes means a decrease of one and one-half cents (milk estimated at 8 cents per quart) on the cost of the entire cake. By the use of

water, however, the food value of the cake is also decreased.

The greatest gain from the use of water in cake making arises from the question of availability, which is a factor quite worthy of consideration.

### EGGS.

Fifth. The use of eggs is quite essential in cake making. They not only serve as partial leavening agents, but they bear a decided influence on the flavor, texture, grain, and food value of cake.

### FATS.

Sixth. With the standard three cup flour recipe, one-half instead of three-fourths cup of butter seems to give a cake of the best quality. This means a reduction of 5 cents for the ordinary sized cake, estimating butter at 32 cents per pound. In reducing the amount of butter from three-fourths to one-half cup, however, the food value of cake is lowered.

Snowdrift, cottolene, and lard may be substituted for butter in both whole egg and white cakes without detection, provided the cakes are not eaten when warm. When these fats, which contain no salt, are substituted for butter in cake making, less of the fat should be used, but an additional amount of salt.

By the substitution of these fats for butter, the cost of cakes is reduced perceptibly, as much as seven and one-half cents in the case of cottolene. The difference in the cost of cakes made with the different fats will vary with different localities and different seasons.

In the use of the cheaper fats care should be taken that they are fresh, for when rancid they are easily distinguished from butter in cakes, even by tastes that are not particularly sensitive.

## BAKING.

Seventh. The baking plays an important part in the success of the finished product. Cakes should be baked in a moderate oven and the temperature kept as nearly constant as possible.

### FOOD VALUE OF CAKE.

Cake is concentrated food, so concentrated that it should be used with discrimination. The average serving contains practically as much food value as one and one-half glasses of milk or three and one-half eggs. A decrease in the concentration by the substitution of water for milk and by a decrease in the amount of fat ordinarily used, would not seem objectionable.

### RECIPE.

Butter  $\frac{1}{2}$  cup, or 6 tablespoons of other fats.

Sugar  $1\frac{1}{2}$  cups granulated, or 2 cups powdered.

Eggs four whole.

Milk  $\frac{3}{4}$  cup or  $\frac{3}{4}$  cup water.

Flour  $2\frac{1}{2}$  cups sifted pastry or  $2\frac{1}{3}$  sifted bread flour.

Salt  $\frac{1}{2}$  teaspoon.

Four level teaspoons baking powder.

Flavoring, 1 teaspoon.

Melt the butter or fat (when firm); add sugar and mix well. To this mixture the egg yolks beaten until creamy are added. Then the flour, in which the baking powder and salt have been sifted, and milk are added alternately, the beating continued till a smooth mixture results. The egg whites, beaten until stiff, are then folded into the mixture and the flavoring added and thoroughly mixed. Bake in a moderate oven. This is a foundation cake recipe which by the addition of spice will give a

spice cake, and by other slight modifications will produce other kinds of cakes.

Score card for judging cake.

Baking—

Shape .....10

Color .....10

Thoroughness .....10

Flavor .....30

Texture—

Fineness .....10

Evenness .....10

Velvety Appearance .....20

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