

# Cakes

There are two basic types of cake batters:

- Butter or shortened cakes. Butter or shortened cakes contain some kind of fat and they are usually leavened with either baking powder or baking soda and an acid, such as buttermilk or fruit juice.
- Foam or sponge cakes. Foam cakes include sponge cakes, angel food cakes, and chiffon cakes. These cakes are leavened by the air in the egg foam. They contain little or no fat. Foam cakes cannot be prepared in quantities greater than 100 portions per batch because the batter is delicate.

## Cake Mixes

Cake mixes are prepared using carefully tested formulas. Since these formulas are balanced, no changes should be made in the few ingredients that are added. For example, if the directions call for water to be added, do not add milk instead. Substituting ingredients or adding other ingredients will make the formula out of balance and can ruin the finished product. Follow the directions for a cake mix to get a good product.

## Baking Cakes

Be sure to have a timer when baking cakes. Cakes bake in four stages.

### Stage 1:

The cake batter becomes slightly thinner and rises rapidly. Rising starts at the sides and moves in toward the center.

### Stage 2:

The center of the cake begins to rise a little higher than the sides. The structure of the cake is beginning to form at this time. On



the surface of the cake, some browning begins and small bubbles may appear. This is a very delicate stage and any jarring may cause the cake to fall or lose volume. When a convection oven is used, the fan should be turned off until the second stage of baking is complete. The amount of time for this will vary with different recipes from one-third to one-half of the total baking time.

### Stage 3:

The cake begins to get firm and the crust continues to brown.

### Stage 4:

As the cake gets done, it begins to shrink slightly and pull away from the sides of the pan. When a cake is done, it should be firm to the touch and should spring back when touched not leaving a fingerprint. When a wire tester or toothpick that is inserted in the center of the cake comes out clean, the cake is done.



## What Happened to the Cake?

Cake Problem (Exterior)	What Could Have Happened to Cause It	
<b>Too little volume</b>	<ul style="list-style-type: none"> <li>• Too little flour</li> <li>• Too much leavening</li> <li>• Wrong kind of flour</li> <li>• Batter too warm</li> </ul>	<ul style="list-style-type: none"> <li>• Too much liquid</li> <li>• Oven too hot</li> <li>• Unbalanced recipe</li> </ul>
<b>Uneven shape</b>	<ul style="list-style-type: none"> <li>• Improper mixing</li> <li>• Uneven oven heat</li> </ul>	<ul style="list-style-type: none"> <li>• Batter spread unevenly</li> <li>• Oven rack not level</li> </ul>
<b>Crust too dark</b>	<ul style="list-style-type: none"> <li>• Too much sugar</li> <li>• Overbaked</li> </ul>	<ul style="list-style-type: none"> <li>• Oven too hot</li> </ul>
<b>Pale color</b>	<ul style="list-style-type: none"> <li>• Too little sugar</li> <li>• Wrong type pan</li> <li>• Oven temperature too low</li> </ul>	<ul style="list-style-type: none"> <li>• Too much liquid</li> <li>• Underbaked</li> </ul>
<b>Crust too thick</b>	<ul style="list-style-type: none"> <li>• Oven not hot enough</li> </ul>	
<b>Cake bursts on top</b>	<ul style="list-style-type: none"> <li>• Incorrect amount of flour</li> <li>• Oven too hot</li> <li>• Overmixed</li> </ul>	<ul style="list-style-type: none"> <li>• Too little liquid</li> <li>• Improper type of flour</li> </ul>
<b>Specks on cake</b>	<ul style="list-style-type: none"> <li>• Sugar too coarse</li> </ul>	<ul style="list-style-type: none"> <li>• Not enough liquid</li> </ul>
<b>Cake falls during baking</b>	<ul style="list-style-type: none"> <li>• Not enough flour</li> <li>• Cake is moved before structure is formed</li> </ul>	<ul style="list-style-type: none"> <li>• Underbaked</li> </ul>
<b>Cake Problem (Interior)</b>		
<b>Coarse, uneven crumb</b>	<ul style="list-style-type: none"> <li>• Improperly mixed</li> <li>• Not enough leavening agent</li> <li>• Unbalanced formula</li> </ul>	<ul style="list-style-type: none"> <li>• Batter too stiff</li> <li>• Not enough eggs</li> </ul>
<b>Compact texture</b>	<ul style="list-style-type: none"> <li>• Overmixed</li> </ul>	
<b>Tunnels</b>	<ul style="list-style-type: none"> <li>• Too much egg</li> <li>• Overmixed</li> <li>• Excessive bottom heat</li> </ul>	<ul style="list-style-type: none"> <li>• Too little sugar</li> <li>• Oven too hot</li> </ul>
<b>Sinking of fruit</b>	<ul style="list-style-type: none"> <li>• Too much leavening agent</li> <li>• Improper type of flour</li> <li>• Imbalanced recipe</li> </ul>	<ul style="list-style-type: none"> <li>• Too much heat</li> <li>• Fruit not drained properly</li> </ul>