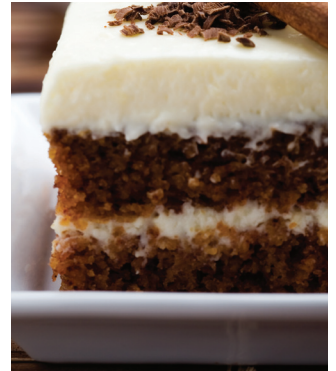


# Cake Troubleshooting Guide



## Coarse, Open Grain

### Possible Causes



#### Oven Temperature Too Low

Use correct temperature: 370°F-380°F (187°C-193°C).

#### Overmixed

Mix less in first stage.

#### Batter Temperature Too High

Use ingredients at correct temperature: 68°F-72°F (20°C-22°C).

#### Undermixed

Mix less in first stage.

#### Old Batter

Do not let batter stand for more than 20 minutes.

#### Excess Sugar or Leavening

Decrease amounts.

#### Poor Grade of Shortening

Use a quality high-ratio cake shortening.

#### Wrong Type of Flour or Leavening

Use correct type of flour or leavening (double acting).

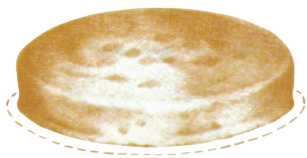
#### Batter Too Stiff

Use more liquid.

#### Creaming At High Speed

Use slower speed.

## Shrinking



#### Oven Temperature Too High or Low

Use correct temperature: 370°F-380°F (187°C-193°C).

#### Overmixed

Mix less.

#### Overbaked

Bake properly with solid, steady heat.

#### Pan Overgreased

Use less grease.

#### Flour Too Strong

Use all-purpose or cake flour.

#### Not Enough Batter in Pans

Increase amount.

#### Lean Formula

Use more sugar or shortening.

#### Too Much Liquid in Batter

Decrease liquid.

#### Wrong Type of Shortening

Use a quality cake shortening.

#### Excess Leavening

Decrease amount.

## Cake Troubleshooting Guide

### Thick, Tough Crust



#### Oven Temperature Too High

Bake at lower temperature.

#### Baked Too Long in Cool Oven

Bake at higher temperature.

#### Excessive Amount of Sugar in Dough

Reduce sugar content.

#### Flour Too Weak or Too Strong

Use a quality cake flour.

#### Overbaked

Bake properly with solid, steady heat.

#### Pan is Extra Deep

Use shallower pans.

#### Insufficient Sugar or Shortening

Increase amount.

#### Excessive Egg Content

Decrease amount.

#### Batter Overmixed

Decrease mixing time.

#### Eggs Overbeaten

Beat less.

### Crust Cracks on Top



#### Oven Temperature Too High

Bake at lower temperature.

#### Stiff Batter

Use more liquid.

#### Too Much Bottom Heat

Double-pan the cakes.

#### Batter Overmixed

Decrease mixing time.

#### Insufficient Sugar, Shortening or Leavening

Increase amount.

#### Flour Too Strong

Use a quality cake flour.

#### Too Much Top Heat

Decrease top heat.

### Tight Close Grain



#### Too Much Water

Decrease liquid.

#### Stiff Batter

Use more liquid.

#### Insufficient Leavening

Increase amount.

#### Wrong Type of Flour or Leavening

Use cake flour or double acting leavening.

#### Too Much Invert Syrup

Decrease amount.

#### Insufficient Sugar or Shortening (Lean Formula)

Increase amount.

#### Batter Too Warm

Keep batter at proper temperature:  
68°F-72°F (20°C-22°C).

### Sticky Crust



#### Excessive Sugar

Decrease sugar.

#### Too Much Steam in Oven

Open damper slightly.

#### Flour Too Weak

Use a quality cake flour.

#### Excessive Shortening

Decrease amount.

#### Lack of Sugar on Cooling Cloths

Sprinkle a little granulated sugar on cloths.

#### Improper Cooling

Cool appropriately.

## Cake Troubleshooting Guide

### Cake Peaks in Oven

#### Possible Causes



##### Oven Temperature Too High

Bake at lower temperature.

##### Stiff Batter

Use more liquid.

##### Overmixed

Decrease mixing time.

##### Not Enough Batter in Pans

Scale cakes heavier.

##### Egg Content Too High

Decrease eggs.

##### Lean Formula

Increase sugar and shortening.

##### Flour Too Strong

Use a quality cake flour.

### Cake Too Tender



##### Too Much Oil/Shortening

Decrease amount.

##### Undermixed

Mix longer.

##### Not Enough Eggs

Increase amount.

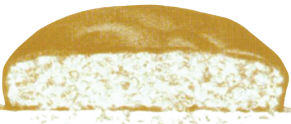
##### Too Much Sugar or Leavening

Decrease amount.

##### Flour Too Weak

Use a quality cake flour.

### Dry Crumbly Cake



##### Overbaked

Bake properly with solid, steady heat.

##### Use of Lean Formula

Use richer formula.

##### Flour Too Strong or Weak

Use a quality cake flour.

##### Batter Stiff

Use more liquid.

##### Excess Sugar, Shortening or Leavening

Decrease amount.

##### Cold Oven

Bake at higher temperature.

##### Improper Mixing

Mix properly.

##### Egg Content Too High

Decrease eggs.

##### Sugar Too Coarse

Use finer granulation.

##### Sugar and Shortening Overcreamed

Cream sugar and shortening properly.

##### Mix is Curdled

Add eggs and liquid gradually.

##### Shortening is Cold

Use shortening at 70°F- 75°F (20°C-24°C).

##### Eggs Not Thawed Out

Use eggs at 64°F-68°F (18°C-20°C).

##### Wrong Type of Shortening

Use a quality cake shortening.

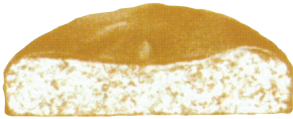
##### Old Batter

Do not let batter stand for more than 20 minutes.

## Cake Troubleshooting Guide

### Cake Falls in Center

#### Possible Causes



##### Oven Temperature Too Low

Bake at higher temperature.

##### Cake Bumped During Baking

Handle cakes carefully.

##### Altitude

If at high altitude, reduce leavening.

##### Excess Sugar, Shortening or Leavening

Decrease amount.

##### Overcreaming

Cream less.

##### Insufficient Eggs

Increase amount.

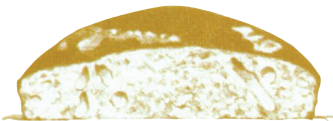
##### Flour Too Weak

Use a quality cake flour.

##### Wrong Type of Shortening

Use a quality cake shortening.

### Tunnels and Holes



##### Undermixed or Overmixed

Mix properly.

##### Wrong Type of Shortening

Use a quality cake shortening.

##### Improper Blending of Leavening

Blend leavening thoroughly with flour.

##### Incorrect Creaming Temperature

Batter temperature should be 68°F-72°F (20°C-22°C).

##### Flour Too Strong

Use a quality cake flour.

##### Batter Too Stiff

Use more liquid.

##### Insufficient Sugar

Increase amount.

##### Egg Content Too High

Decrease amount.

##### Mixing At High Speed

Use lower speed.

##### Too Much Sugar

Decrease amount.

##### Batter Curdled

Add eggs and liquid gradually.

##### Eggs Too Cold

Use eggs at 64°F-68°F (18°C-20°C).

### Low Volume



##### Undermixed or Overmixed

Mix properly.

##### Oven Temperature Too High

Use correct temperature: 370°F-380°F (187°C-193°C).

##### Batter Temperature Too High

Use mix at 68°F-72°F (20°C-22°C).

##### Insufficient Leavening

Increase amount.

##### Mix Too Stiff

Use more liquid.

##### Batter Too Soft

Decrease liquid.

##### Wrong Type of Shortening

Use a quality cake shortening.

##### Inferior Eggs

Use quality eggs.

##### Not Enough Dough in Pans

Scale cakes heavier.

##### Eggs Too Cold

Use eggs at 64°F-68°F (18°C-20°C).

##### Old Leavening

Use fresh leavening.

##### Flour Too Strong

Use a quality cake flour.

## Cake Troubleshooting Guide

### Cupping

#### Possible Causes



##### Stiff Batter

Use more liquid.

##### Air Trapped Under Liner

Place liner in pan firmly.

##### Too Much Bottom Heat

Decrease bottom heat or use double-pan.

##### Moisture in Pan

Dry pans thoroughly before use.

##### Pan Overgreased

Grease pans carefully.

##### Egg Content Too High

Decrease eggs.

### Uneven Cake



##### Uneven Pan

Use quality, level pans.

##### Uneven Spreading of Batter

Spread evenly throughout pan.

##### Uneven Heat in Oven

Check oven burner for defects.

##### Hot Spots in Oven

Eliminate hot spots, if possible, and check oven burner for defects.

##### Batter Improperly Mixed

Mix batter properly.

##### Too Much Bottom Heat

Decrease bottom heat or use double-pan.

##### Too Much Top Heat

Decrease top heat or cover cakes with paper.

##### Uneven Distribution of Leavening

Blend leavening thoroughly with flour.

##### Uneven Distribution of Sugar

Distribute sugar thoroughly.

##### Slanting Hearth/Shelves

Use level hearth.

### Wet Texture



##### Undermixed

Mix properly.

##### Use of Lean Formula

Use richer formula.

##### Flour Too Strong or Weak

Use a quality cake flour.

##### Batter is Stiff

Use more liquid.

##### Too Much Sugar

Decrease amount.

##### Excess Shortening or Leavening

Decrease amount.

##### Cold Oven

Bake at higher temperature.

##### Egg Content Too High

Decrease eggs; increase milk and leavening.

##### Sugar Too Coarse

Use finer granulation.

##### Too Much Acid in Dough

Decrease acid content of batter.

##### Sugar and Shortening Overcreamed

Cream properly.

##### Mix is Curdled

Add eggs and liquid gradually.

##### Shortening Too Cold

Use shortening at 70°F–75°F (20°C–24°C).

Get more tips at [progressivebaker.com](http://progressivebaker.com)

The situations identified above apply to most cake varieties and types. Please use your discretion when identifying a concern that may apply to your products. ©2011 Cargill, Incorporated. All rights reserved.