Cakes from Chapter 23
Guide to Good Food textbook
Page 403
Kinds of Cakes
Shortened cakes
- Made with fat (butter, margarine, or shortening)
- Sometimes called butter cakes
- Most leavened with baking powder or baking soda & sour milk
- Pound cake is a shortened cake, but leavened by air & steam
- Tender, moist, and velvety cakes

Kinds of Cakes
Unshortened cakes
- Sometimes called foam cakes
- Have no fat
- Leavened by air and steam
  - Air added in beaten eggs
  - Steam added during baking
- Angel food and sponge cakes are examples
  - Angel food just uses egg white
  - Light and fluffy cakes

Kinds of Cakes
Chiffon cakes
- Cross between shortened and unshortened
- Contain fat like shortened cakes
- Contain beaten egg whites like unshortened cakes
- Large volume but are not light and fluffy as unshortened cakes

7 Basic Ingredients
Flour
- Structure
- The gluten (formed by mixing liquid with flour) hold leavening gases (air, steam, CO2)
- Cakes made with cake flour are more delicate and tender because of less proteins
- All-purpose flour can also be used
- If recipe calls for cake flour, can substitute all purpose
  - 1 cup cake flour = 1 cup all-purpose flour – 2 T
- 7 Basic Ingredients
Sugar
- Adds sweetness
- Tenderizes gluten and improved texture
- Can use either granulated white or brown sugar
- Make sure sugar is free of lumps
Eggs
- Improve flavor and color
• In angel food and sponge cakes eggs important for leavening (air used to leaven added by beating eggs)
• Also a liquid, which evaporates and makes steam to help leaven
• 7 Basic Ingredients
• Salt
  • For flavor or taste
  • Smaller amount used in cakes than bread
• Fat
  • Tenderizes gluten
  • Adds flavor
  • Solid fats used in shortened cakes: butter margarine, or shortening
  • Chiffon cakes use oil for fat
• 7 Basic Ingredients
• Leavening Agent
  • Causes cake to rise and become porous and light
  • Shortened cakes leavened by baking powder or baking soda and sour milk
  • Angel food and sponge cakes leavened by air and steam
• Liquid
  • Adds moisture
  • Incorporates dry ingredients
  • Creates steam during baking to aid in leavening
• Additional Ingredients
• Cream of tartar
  • Used in angel food and sponge cakes
  • Is an acid, improves color of egg whites and help make cake grain finer
  • Stabilizes proteins in egg whites, which increases volume
• Flavorings
  • Not essential ingredients
  • Spices (cinnamon), extracts (vanilla, almond), fruits, nuts, poppy seeds, coconut, etc. may be used
• Measuring
• Flour, fat, sugar, liquid and eggs affect development of gluten which is needed for structure
• Proper proportions make for light and tender cakes
• Too much flour causes compact and dry cake
• Too little flour causes coarse texture, cake may fall
• Too much fat or sugar over tenderizes gluten, which weakens the structure, makes coarse texture, may fall
• Too little fat or sugar will be tough
• Too much liquid makes cake soggy and heavy
• Too little liquid makes cake dry and heavy
• Too many eggs makes cake rubbery and tough
• Mixing
• Mix correct amounts of ingredients according to recipe
- Over mixing causes gluten to overdevelop
  - Makes cake tough
  - Over mixed angel food and sponge cakes will cause air to be lost from beaten egg whites
  - Causes loss of volume
- Baking
  - Use correct size of pan
    - If pan too small batter may overflow
    - Too large a pan causes cake to be too flat and dry
  - Cakes should have a gently rounded top
  - Shortened cakes should have a greased and lightly floured pan
  - Unshortened cakes should not have greased pans
    - Batter needs to cling to sides to help rise
  - Preheat oven and bake until just done
- Mixing Methods
  - Conventional mixing method
    - Used for most shortened cakes
    - Cream fat and sugar, add eggs and liquid
    - Sift dry ingredients together in separate bowl
    - Mix together
  - Quick mix method
    - One-bowl method
    - Sift dry ingredients into mixing bowl
    - Fat and part of liquid beaten into dry ingredients
    - Remaining liquid and eggs added last
- Angel food cakes
  - Egg whites are beaten with some of the sugar until stiff
  - Flour and rest of sugar folded into beaten egg whites
- Sponge cakes
  - Dry ingredients are beaten into egg yolks
  - Beaten egg whites are folded into egg yolk mixture
- Baking Shortened Cake
  - Pans should not touch each other or oven
    - Causes uneven baking
  - To test for doneness: lightly touch center, if springs back the cake is done or insert toothpick, should come out clean
  - Let cake cool in pan about 10 minutes
    - Makes easier to remove cake from pan
    - Run tip of spatula or knife around sides of cake to loosen
    - Place cooling rack on top of pan and flip carefully
- Microwaving: most shortened cakes do well, will not brown
- Cakes are velvety and light, crusts are thin and evenly browned, top is smooth and gently rounded, flavor is mild
• Baking Unshortened Cake
  • Angel food most common
    • Ingredients mix best at room temperature
      • Egg whites get more volume when warm
    • Suspend cake upside down immediately
      • Prevents loss of volume, see page 409
    • Cool completely before removing from pan
    • Cake should have large volume, be spongy and porous, tender and moist but not gummy
  • Sponge cake
    • Have the whole egg, batter is stiff
• Baking Chiffon Cake
  • Large volume (not as large as angel food), moist, tender and pleasing flavor
  • Mixed by combining egg yolks, oil liquid and flavoring to sifted dry ingredients
  • Beaten until smooth, fold in egg whites
• Filling and frosting cakes
  • Fillings: whipped cream, puddings, fruits
    • May be spread between layers or rolled into center
    • Also can be spooned into center
  • Frosting can be homemade, or come in a can or from a mix
    • Cooked and uncooked frostings, uncooked creamier
    • Frosting used as glue to hold layers of cake together
    • Decorators tube: bag used to apply frosting
    • Decorating tips: held to tube with a coupler, create different designs
• Review
  • Complete To Review questions 1-8 page 425
• Write out and define the following vocabulary terms from page 425:
  • Chiffon cake
  • Conventional method
  • Quick mix method
  • Shortened cake
  • Unshortened cake