- 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
- Mixing Methods
- 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