

CHAPTER 19

INTRODUCTION TO BAKING



BAKER'S INGREDIENTS

- Fats/shortenings
- Sweeteners
- Chemical, organic, and physical leaveners
- Thickeners
- Flavorings
- Liquids
- Additives



BAKER'S INGREDIENTS

- Fats/shortenings—butter and oils
- Sweeteners—sugars and syrups
- Chemical, organic, and physical leaveners—baking powder, baking soda, yeast, steam
- Thickeners—cornstarch, flour, eggs
- Flavorings—extracts and spices
- Liquids—water, milk, cream, eggs, honey, molasses, butter
- Additives—food coloring



BAKER'S INGREDIENTS

Strengtheners:

- Stability
- Main strengthener used
- Higher protein = higher gluten
- Gluten—protein in flour
- Too much mixing, working, kneading = elastic and stretchy

TYPES OF WHEAT FLOUR

All-purpose flour



- Between pastry and bread flour
- Cookies, biscuits, general production work
- Gluten content 10%–12%

Bread flour



- Strong flour
- Bread, hard rolls
- Gluten content 12.5%–13.5%

Cake flour



- Soft, smooth texture
- Pure white color
- Cake and delicate baked goods
- Gluten content 7%–9%

TYPES OF WHEAT FLOUR

Durum flour



- Hard wheat flour
- Breads
- Gluten content 13.5%–14%

Pastry flour



- Cookies, pie pastry, sweet yeast doughs, biscuits, muffins
- Feels like cake flour
- Creamy color of bread flour
- Gluten content 9%–10%

Semolina flour



- Type of durum flour
- Coarsely ground
- Fine texture
- Pastas and Italian pastries
- Gluten content 13.5% or more

BAKER'S INGREDIENTS

Fats/shortenings:

- Moist
- Add flavor
- Stays fresh longer
- Thoroughly mixed—impact overall texture
- Rubbed, cut, or rolled—flaky texture
- Creamed—smooth, soft, cake-like

BAKER'S INGREDIENTS

Sweeteners:

- Refined sugars, sugar syrups, molasses, brown sugar, corn syrup, honey, malt syrup
- Add flavor and color
- Product soft and tender
- Caramelization—heat causes sugar to brown
- Artificial sweeteners and sugar substitutes do not caramelize

Leaveners:

- Dough or batter rises
- Measure carefully
- Chemical, organic, and physical

TYPES OF LEAVENERS

Baking powder & Baking soda:

- Chemical leavener
- Produces carbon dioxide gas
- Batter rises



TYPES OF LEAVENERS

Physical leavener:

- Introduce air into batter
- Creaming method
 - Fat and sugar
 - Cakes and cookies
- Foaming method
 - Eggs with or without sugar



TYPES OF LEAVENERS

Organic leavener - Yeast:

- Microscopic fungus
- Fresh or dry
- Ferment—yeast and carbohydrates
- Release carbon dioxide gas—dough rises



BAKER'S INGREDIENTS

Thickeners:

- Gelatin, flour, arrowroot, cornstarch, eggs
- Determine consistency of finished product

Flavorings:

- Cocoa, spices, salt, nuts, extracts
- Taste and color
- Spices—cinnamon, nutmeg, mace, cloves, ginger, caraway, cardamom, allspice, anise, poppy seed

BAKER'S INGREDIENTS

Liquids:

- Water, milk, cream, molasses, honey, vegetable oils, butter
- Provides moisture
- Gluten develops properly

TYPES OF COOKIES

Bagged cookies



- Force soft dough through pastry bag
- Ladyfingers, macarons, tea cookies

Dropped cookies



- Soft dough
- Dropped from spoon or scoop
- Chocolate chip or oatmeal raisin

Molded cookies



- Mold stiff dough by hand
- Peanut butter cookies

TYPES OF COOKIES

Bar cookies



- Three or four bars of dough
- Length of baking pan
- Slice into small bars
- Biscotti

Icebox cookies



- Roll dough into log
- Chill and slice before baking
- Butterscotch icebox and chocolate icebox

TYPES OF COOKIES

Rolled cookies



- Cut from stiff dough
- Rolled out on baking bench
- Decorated sugar cookies and shortbread

Sheet cookies



- Pour batter into baking pan
- Slice individual squares or rectangles
- Brownies, butterscotch brownies, or blondies

QUICK BREADS

- Any baked good not leavened by yeast or eggs
- Chemical leaveners
- Three methods for mixing quick breads
 - Creaming method
 - Muffin method
 - Biscuit method

THE THREE METHODS OF PREPARING QUICK BREADS

Creaming method:

- Fat creamed with sugar
- Electric mixer with paddle attachment
- Mix until creamy
- Add dry ingredients gradually
- Chocolate chip or raisin spice muffins



THE THREE METHODS OF PREPARING QUICK BREADS

Muffin method:

- Liquid/melted fat and dry ingredients
- Mix by hand or use paddle attachment
- Cornbread and blueberry muffins; pancakes



THE THREE METHODS OF PREPARING QUICK BREADS

Biscuit method:

- Solid fat “cut” into flour by hand
- Pea-size pieces
- Use very cold ingredients
- Buttermilk biscuits, cornbread biscuits

