

# Principles of the Bakeshop



# Ingredients



- Wheat Flours
- Whole-Wheat Flour
- Self-Rising Flour
- Non-Wheat Flours

- Granulated
- Turbinado
- Sanding
- Cube
- Brown
- Superfine
- Confectioners
- Liquid Sweeteners

- Shortening
- Lard
- Butter
- Margarine
- Oil

## Thickeners

- Gelatin

## Leavening

- Baking Soda
- Baking Powder
- Yeast
- Air

- Extracts
- Emulsions
- Chocolate

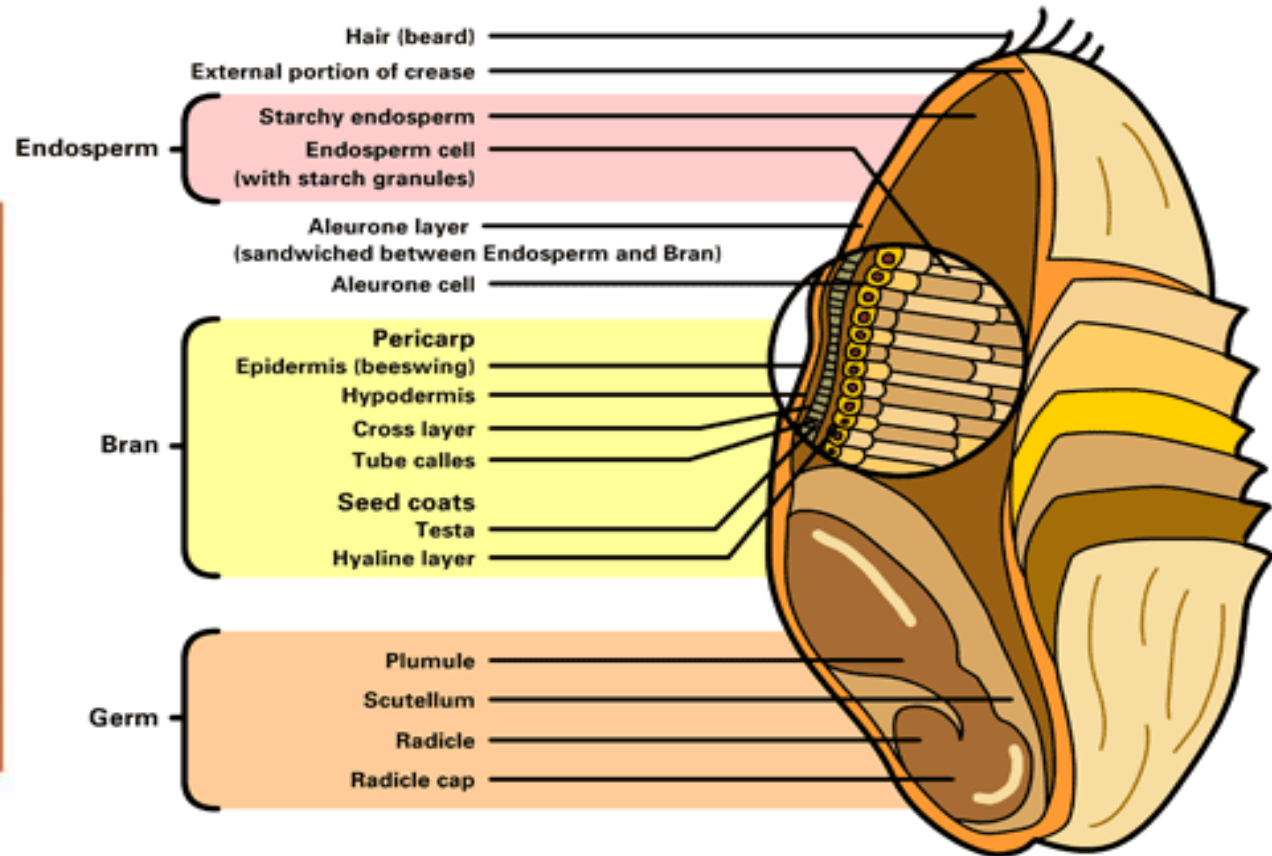
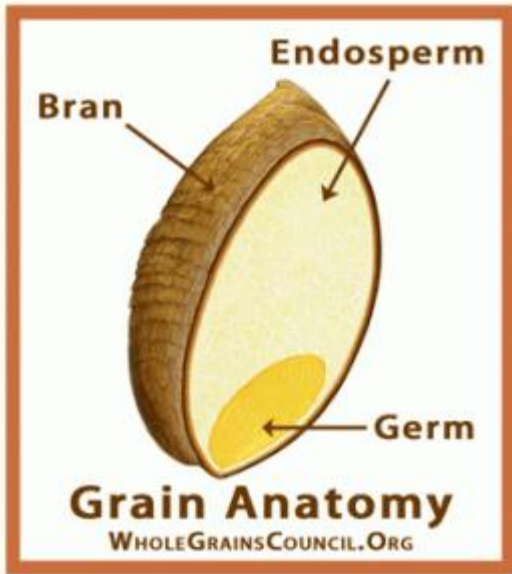
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# Varieties of Wheat Flour



# Flour Milling

- During milling, different parts of the wheat are used or removed at different stages to create different types of flour.



# Types of Flour

- **Wholemeal** – Made from the whole wheat grain without any additional ingredients or any parts being removed during the milling process.



# Types of Flour

- **Stoneground** – This is wholemeal flour ground in a traditional way between two stones using the whole wheat grain with no additional ingredients or any parts being removed.



# Types of Flour



- **Brown** – This usually contains about 85% of the original grain. During milling some bran and germ is been removed.

# Types of Flour



- **Wheat germ** – white or brown flour with at least 10% made up of wheat germ added during the milling process.



# Types of Flour

- **Organic** –This is made from grain that has been grown to organic standards. Growers and millers must be registered and are subject to regular inspections.



# Types of Flour

- **White** – This usually contains around 75% of the wheat grain. During milling most of the bran and wheatgerm is removed.

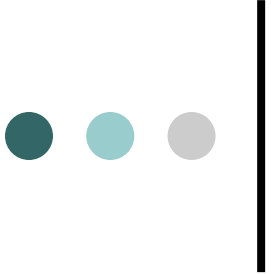




# Flours

Dependent on the amount of protein found in the flour

Type of Flour	Uses	% Protein
Cake	Tender Cakes	7-9.5%
Pastry	Biscuits, Pie Crust	7.5-12%
All-Purpose	General Baking	10-13%
Bread	Yeast Breads	12-15%
Whole-Wheat	Breads	13-14%
High-Gluten	Increase protein content of weaker flours for bread-making	41-42%



# *Specialty Flours*

Whole Wheat

Referred to as graham flour  
Nutty, sweet flavor  
Products will be more dense & have less volume

Self-Rising

AP flour + Salt +  
Chemical Leavener

Nonwheat  
*Corn*     *Soybean*  
*Rice*     *Oat*  
*Buckwheat*   *Potato*

Referred to as composite flours  
Made from grains, seeds, or beans  
Do not have gluten forming properties




# Sugar and Sweeteners







## Provide:

- Flavor
- Color
- Tenderize products by weakening gluten strands
- Food for yeast
- Preservative
- Creaming or foaming agent for leavening

# Types of Sugar

RAW	Unfit for direct use	
TURBINADO <i>(closest edible sugar to raw sugar)</i>	<ul style="list-style-type: none"><li>○ Light brown, coarse crystals</li><li>○ Caramel flavor</li><li>○ Not recommended for substituting brown and granulated</li></ul>	
SANDING	<ul style="list-style-type: none"><li>○ Large, coarse crystal</li><li>○ Does not dissolve</li><li>○ Decorating purposes only</li></ul>	
GRANULATED	<ul style="list-style-type: none"><li>○ Fine, uniform crystals</li><li>○ All purpose sugar</li></ul>	

# Types of Sugar *continued*

<b>CUBE</b>	<ul style="list-style-type: none"><li>○ Formed by pressing moistened granulated sugar into molds</li></ul>	
<b>BROWN</b>	<ul style="list-style-type: none"><li>○ Refined sugar with some of the molasses returned to it</li></ul>	
<b>SUPERFINE OR CASTOR</b>	<ul style="list-style-type: none"><li>○ Granulated with a smaller-crystal size</li><li>○ Dissolves quickly and produces light, tender products</li></ul>	
<b>POWDERED OR CONFECTIONERS</b>	<ul style="list-style-type: none"><li>○ Made by grinding granulated sugar through varying degrees of fine screens</li><li>○ Often used for icings and frostings</li></ul>	



# Liquid Sweeteners

## ○ **Corn Syrup**

- Extracted from corn kernels and treated with an acid or enzyme
- **Hygroscopic:** Water-attracting
  - Keeps products moister and fresher longer

## ○ **Honey**

- Created by honey bees collecting nectar

## ○ **Maple Syrup**

- Sap of sugar maple trees
- Maple-flavored: Corn syrups combined with artificial colors and flavorings

## ○ **Molasses**

- Liquid by-product of sugar refining



# Cooking Sugar

## Sugar Syrups:

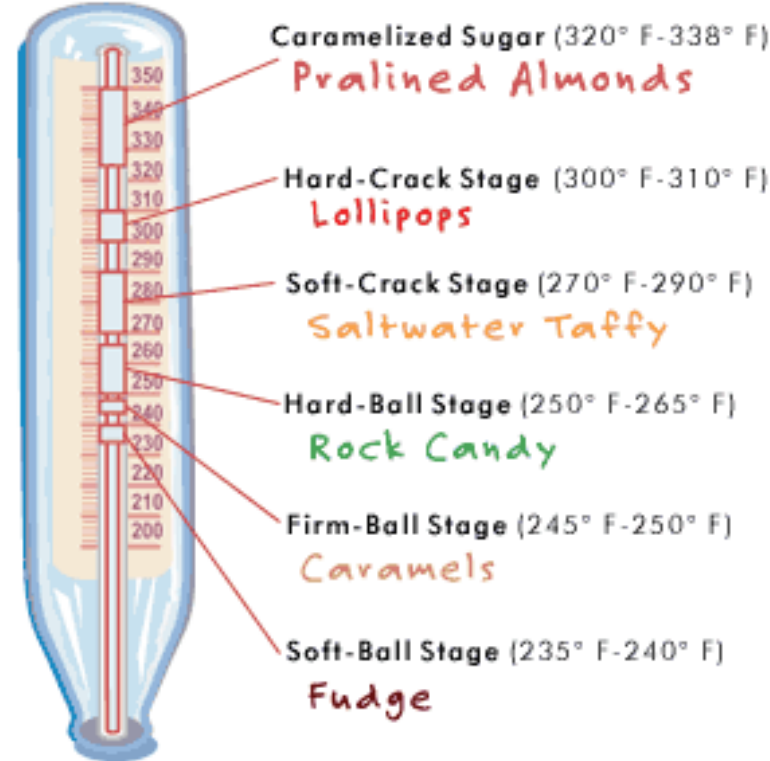
### 1. Cooked Sugar

- Melted sugar cooked to a specific temperature
- Caramel, meringue, candy

### 2. Simple Syrup

- Mixture of sugar and water

Moisten cakes, make sauces, sorbets, and beverages





# Simple Syrups

- Light:
  - 2:1 water to sugar ratio
- Medium:
  - 1.5:1 water to sugar ratio
- Heavy:
  - 1:1 water to sugar ratio
  - Basic, all purpose syrup