

by Yvonne Gentzler, Ph.D Liz Romero, Ph.D.



Goodheart-Willcox Co., Inc. Tinley Park, Illinois

Topic 15-3 Grain Products

- In this topic, you will study how to choose, store, and prepare grain products, as well as
 - ***** Buying grain products
 - Storing grain products
 - Preparing grain products
 - Cakes and cookies

Grain Products

Objectives for Topic 15-3

After studying this topic, you will be able to

- list factors to consider when buying grain products
- use proper storage methods for grain products
- describe methods used to prepare grain products

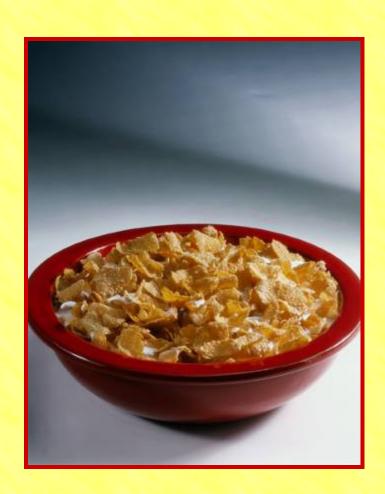
Topic 15-3 Terms

- * cereal
- * refined
- pasta
- * starch

- leavening agent
- *biscuit method
- muffin method

Buying Grain Products

- Cereals are starchy grains used as food, including wheat, corn, rice, and oats
- Grains can be used to make
 - flour
 - pasta
 - breakfast cereals
 - breads



Flour

- Flour is made by grinding grains into powder
 - * Refined flour has had parts of the grain kernel removed during the milling process
 - * All-purpose flour is used for general cooking and baking
 - * Self-rising flour has a leavening agent and salt added
 - * Cake flour is made of softer wheat and is milled more finely
 - * Whole wheat flour is made from the whole grain kernel and has a coarser texture

Pasta

- Pasta is a family name for the group of products that includes spaghetti, macaroni, and noodles
 - * It is made from water and *semolina* flour, which is made from durum wheat
 - Noodle products also contain eggs



Rice

- White rice
 - bran layer removed
- Brown rice
 - * whole grain, higher in fiber
- Precooked or instant rice
 - fully cooked and dried; expensive but convenient
- Wild rice
 - * not actually rice, but wild grass seed

Breakfast Cereals

- Include ready-to-eat and cooked
- Choose ones that are
 - * whole grain, enriched, or fortified
 - low in added sugars
- More expensive cereals include those that
 - are ready-to-eat
 - contain fruit and nuts
 - are presweetened
 - * are quick-cooking or instant

Breads

- Buy the freshest products available
- Choose from commercially prepared or fresh-baked
- **Brown-and-serve**products are partially baked
- Refrigerated and frozen doughs can be baked at home



Storing Grain Products

- Stored in tightly covered containers in cool dry place
- Storage times depend on the product
 - Breads—one week
 - Ready-to-eat cereals—two to three months
 - * Flour, pasta, white rice—one year
- Some whole-grain products, cakes, and cookies need refrigeration
- Baked products can be frozen for several months

Preparing Grain Products

Preparation methods depend on the product you are preparing



Cooking with Thickeners

- *Starch* is the complex carbohydrate part of plants
- Starch granules swell when heated, causing products to thicken
- Three methods are used to keep starch granules separated
 - Coat starch with melted fat before adding liquid
 - * Combine starch with sugar, then stir into liquid
 - * Mix starch with cold liquid to form a paste

Pasta

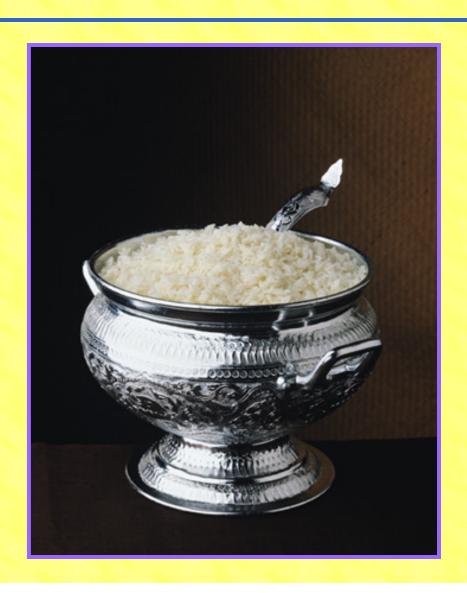
- Cook pasta in a large amount of rapidly boiling water
- Pasta should be tender but firm when cooked



Did You Know...

When cooking pasta, you don't need to add oil to the water if you use enough water and stir occasionally

Rice



- Combine the rice with water or other liquid in the proper size pan
- As rice cooks, it absorbs the liquid and swells
- Properly cooked rice should be tender and fluffy

Cooked Cereals

- Add cereal slowly to boiling water, stirring constantly
- Keep stirring to prevent lumps
- Use recommended pan or bowl size

Breads



- Leavening agents are ingredients used to produce carbon dioxide
- Yeast is the leavening agent in yeast breads
- Yeast breads must be mixed, kneaded, and allowed to rise before baking

Breads

- Quick breads are faster to make
- **Pour batters** are thin; **drop batters** are thick
 - * In the *biscuit method*, mix dry ingredients together, cut fat into the liquid, and add liquid
 - * In the *muffin method*, mix dry and liquid ingredients separately, then combine them

Cakes and Cookies

- Can be made from scratch or convenience mixes and doughs
- Baking success depends on
 - * accurate measurements
 - * high-quality ingredients
 - understanding of the mixing method
 - following instructions correctly





Preparing Cakes

- Shortened cakes contain fat, such as butter, margarine, or vegetable shortening
- *Unshortened cakes* contain no fat; beaten egg whites make them rise
- Chiffon cakes are a combination of the two types; they contain fat and beaten egg whites

Baking Guidelines

- Prepare pans as directed in the recipe
- Preheat oven to the correct temperature
- Allow at least one inch between pans and sides of oven
- Check cakes for doneness
- Follow recipe directions for cooling and removing from pans

Preparing Cookies

- **Dropped**—made from soft dough pushed from spoon onto cookie sheet
- Refrigerator—a long roll of chilled dough is sliced
- Bar—soft dough is spread in a greased pan
- *Rolled*—stiff dough is chilled, rolled, and cut into desired shapes
- *Molded*—formed from stiff dough that is broken off and shaped by hand
- *Pressed*—rich dough forced though a cookie press

Baking Guidelines



- Preheat oven to the correct temperature
- Use correct pan size
- Follow specified baking times
- Remove from cookie sheet according to recipe directions
- Store to maintain quality

Summary for Topic 15-3

- Grain products include flour, pasta, rice, breakfast cereals, and bread
- Grain products should be stored properly to maintain quality and prevent spoilage
- Because starch granules swell as they are cooked, grain products must be prepared carefully
- Success with cake and cookie recipes depends on following directions for the type of product you are preparing