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# VIDEO WORKSHEET

1. Why is it important to wash your hands before working in the kitchen?
2. Why is it important for the water to be the correct temperature to mix the yeast in?
3. What do fats/shortening do in yeast breads?
4. Name two types of flour available for making bread.
5. What does kneading do for the bread?
6. How can you tell if you have kneaded the bread long enough?
7. How many times should yeast bread rise/proof before baking?
8. Can yeast bread dough be refrigerated overnight and baked the following day?





# VIDEO WORKSHEET

## Teacher's Key

1. Why is it important to wash your hands before working in the kitchen?

***For food safety. You will be kneading the dough with your hands and you need to have clean hands and surfaces to not spread bacteria.***

2. Why is it important for the water to be the correct temperature to mix the yeast in?

***Yeast is actually a living organism and if the water is too hot it will kill the yeast and the dough will not rise. Bread rises because of carbon dioxide provided from yeast.***

3. What do fats/shortening do in yeast breads?

***Fats/shortening make bread soft and tender.***

4. Name two types of flour available for making bread.

***Buckwheat, rye, soy, whole wheat, rice***

5. What does kneading do for the bread?

***It makes the dough smooth and elastic. The gluten protein from the flour forms the structure.***

6. How can you tell if you have kneaded the bread long enough?

***When an indentation in the center of the bread stays in place.***

7. How many times should yeast bread rise/proof before baking?

***Two times.***

8. Can yeast bread dough be refrigerated overnight and baked the following day?

***Yes, absolutely. If time is an issue, refrigerate the bread after shaping it.***





# RECIPES

## "Cool-Rise" White Bread

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- 3 1/2 to 4 cups all-purpose flour
- 1 package quick-rise yeast
- 2 tablespoons sugar
- 1 1/2 teaspoon salt
- 1/2 cup water
- 1/2 cup milk
- 2 tablespoons vegetable oil/soft margarine or butter

In large mixing bowl, combine 1 1/4 cups flour, yeast, sugar and salt; mix well. Heat water and milk to about 125° F. (this feels like very hot tap water). Add liquids with oil to flour mixture. Blend with a mixer at low speed until just moistened and then beat at medium speed for 3 minutes. By hand, stir in 2 1/4 cups flour to make a soft dough. Use remaining flour to knead the dough on a floured surface until smooth and elastic, 5 to 8 minutes. Place the dough into a greased bowl, cover with plastic wrap. Cover; let rise in a warm place until doubled, about 35-40 minutes.

### **Shape into Loaf** (or make variations at this time):

Punch down the dough and shape. On a lightly floured surface, roll the dough into a 12" x 18" rectangle. Starting with the shorter side, roll the dough up tightly. Pinch edges to seal. Place in a greased 8" x 4" loaf pan. Brush surface of dough with oil and loosely cover (at this point the dough may be refrigerated 2-48 hours). When ready to bake, let rise in warm place until double, about 20 minutes.

Bake at 375° F. for 30-35 minutes until golden brown and loaf sounds hollow when tapped. Remove from pan. Cool on wire rack. Brush top surface with butter for a softer surface.

## Variations using "Cool-Rise" White Bread Recipe

### Caramel Rolls

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**Filling:**

1/4 c. melted margarine or butter  
1/4 cup brown sugar  
2 teaspoons cinnamon

**Caramel Sauce for Bottom:**

1/2 cup brown sugar  
1/4 cup margarine  
1 tablespoon light corn syrup

Roll dough on lightly floured surface to 12" x 8" rectangle. Sprinkle with brown sugar and cinnamon. Roll up beginning at wide side, seal edge. Cut roll into 1" slices.

**Caramel Sauce for Bottom:** Mix brown sugar, margarine and corn syrup in microwave-safe bowl, and microwave for 1 minute. Stir. Pour into greased 9" x 13" square pan. Place roll slices cut side down on top of sauce.

Cover loosely and let rise in warm place until doubled in size (or refrigerate 2-48 hours). Bake at 350° F. for 15-20 minutes until golden brown. To remove the rolls from the pan, cool for 15 minutes and flip the still warm pan onto a serving platter.

### Cinnamon Rolls

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2 tablespoons softened margarine  
1/4 cup sugar  
2 teaspoons cinnamon

Roll dough into a 12" x 8" rectangle, spread with softened margarine. Mix sugar and cinnamon and sprinkle over rectangle. Roll up, beginning at wide side. Pinch edge of dough into roll to seal well. Cut roll into 12 – 1" slices. Place slightly apart in greased 9" x 13" pan. Cover loosely and let rise in warm place until doubled in size (or refrigerate 2-48 hours).

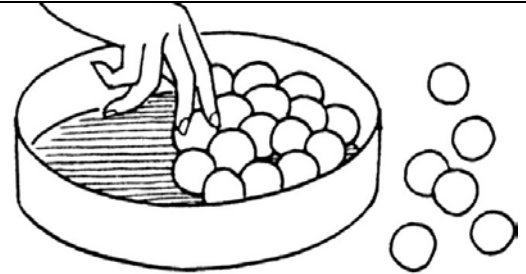
Bake at 350° F. for 15-20 minutes or until golden brown. To remove rolls from pan, flip the warm pan onto a serving plate.

# Dinner Roll Variations

Shape rolls as desired using the following diagrams and instructions. Cover loosely and let rise in warm place until doubled in size (or refrigerate 2-48 hours). Bake at 350° F. for 15-20 minutes until golden brown.

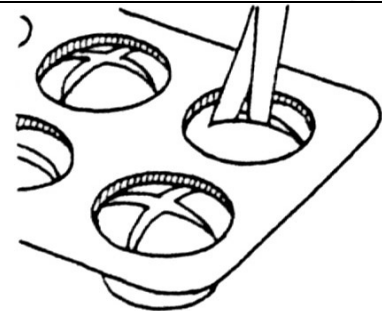
## Casseroles

Shape bits of dough into 1" balls. Place in lightly greased round layer pan, 9" diameter x 1 1/2" deep. Brush with butter.  
3 dozen rolls.



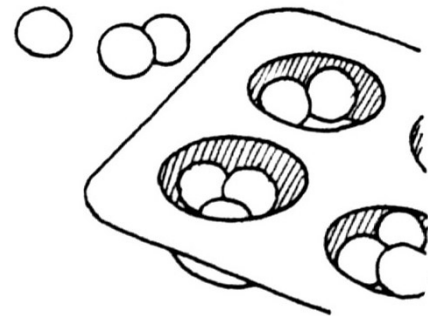
## Four-Leaf Clovers

Shape pieces of dough into 2" balls. Place each ball in greased medium muffin cup (2 3/4" diameter). With scissors, snip each ball in half, then into quarters. Brush with butter.  
1 dozen rolls.



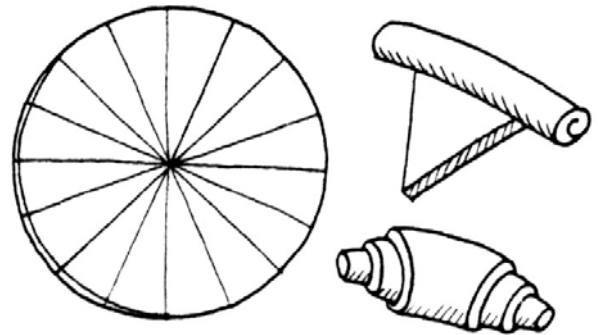
## Cloverleaves

Shape bits of dough into 1" balls. Place 3 balls in each greased muffin cup. Brush with butter.  
1 dozen rolls.



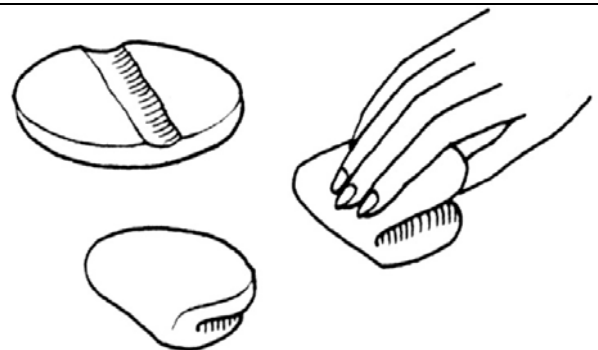
## Crescents

Roll dough into 12" circle, about 1/4" thick. Spread with soft butter. Cut into 16 wedges. Roll wedges, beginning at rounded edge. Place rolls, with point underneath, on greased baking sheet. Curve slightly toward point. Brush with butter.  
16 rolls.



## Parker House

Roll dough into oblong shape, 13" x 9", about 1/4" thick. Cut into 3" circles. Brush with butter. Make crease across each circle. Fold so top half overlaps slightly. Press edges together. Place close together in greased 9" pan. Brush with butter.  
10 rolls.



# Grains of truth about YEAST BREADS

## Definition

Flavor, aroma and texture are the qualities that account for the popularity of yeast bread and rolls. Yeast breads differ from quick breads in that they are leavened by yeast, a living organism, rather than baking soda and baking powder and are often much lower in fat and sugar. When mixed with water and sugar, the yeast ferments to produce carbon dioxide, filling the bread dough with tiny air bubbles. Water also combines with the gluten protein in the flour to form the elastic structure of the dough that traps the air bubbles and makes the bread rise.

## History

The bread of prehistoric man is believed to have been flat and unleavened and probably baked over stones or by the sun. The Egyptians are credited with inventing the oven and discovering yeast leavening, a development probably made when a batter left in the hot sun attracted wild, air-borne yeast.

## Nutritional value

All breads are nutritious — some more so than others. The 1995 U.S. Dietary Guidelines for Americans recommend eating six to 11 servings of bread, cereal, rice and pasta each day because they are a major source of complex carbohydrates (starches), fiber and B vitamins.

The dietary guidelines recommend that at least 55 to 60 percent of daily calories come from complex carbohydrates, less than 30 percent from fat, and 15 percent from protein. Bread helps achieve this because one slice (one serving) of white bread derives 76 percent of its calories from carbohydrates (mostly complex) and only 11 percent from fat.



White bread is also a good source of the three major B vitamins: thiamine, riboflavin and niacin. A slice contains almost a gram of iron and 10 micrograms of folacin. Cholesterol content varies among recipes, but the amounts are negligible.

Per slice, white bread has half a gram of soluble fiber, which contributes to daily fiber needs of 20 to 35 grams. Soluble fiber has been shown to help lower blood cholesterol when eaten as part of a low-fat diet. In the United States, white flour is "enriched" with the three major B vitamins and iron in an amount equal to whole wheat flour.

The nutritional content of whole wheat breads also varies among recipes, but an average slice of whole wheat bread derives 69 percent of its calories from carbohydrates and 15 percent from fat because of the oil found in the wheat germ. The nutrient profile of whole wheat bread is also excellent. It has 2 grams of fiber, primarily insoluble, which has been shown to help prevent colon cancer and possible breast cancer. With almost a gram of iron, a substantial amount of folacin (15.6 micrograms), vitamin E, copper, vitamin B<sub>6</sub> and the three major B vitamins per slice, whole wheat bread is a nutrient dense food.

The National Center for Nutrition and Dietetics of the American Dietetic Association recommend consumers eat at least three servings of whole grain foods daily.

## Ingredients

**Yeast:** A leavening agent that produces carbon dioxide, which makes the bread rise.

**Salt:** Regulates yeast growth and gives flavor.

**Sugar:** Acts as a yeast food and increases tenderness and browning and keeping qualities.

**Liquid:** Dissolves yeast and sugar and develops gluten. Water doughs make a higher, crustier bread. Milk doughs have a finer texture and better flavor.

and brown more quickly. Milk doughs also help make a complete protein.

**Shortening:** Keeps bread tender and fresh.

**Flour:** Provides the structure of bread.

## Storage

■ After baking, remove the bread from its pan, set on a rack and let cool slowly in a draft-free place. When cooled, place a plastic bag or plastic wrap and store at room temperature. It will last from two to seven days, depending on the bread.

■ Breads stale quicker in the refrigerator. They can, however, be frozen for several months if well-wrapped. Before freezing, wrap tightly in plastic and place in a plastic bag or wrap in foil and seal with tape. To thaw, leave wrapped at room temperature or wrap in foil. Do not shake ice crystals out of the bag while thawing so the moisture will be reabsorbed. Heat 20 to 40 minutes in a 350° F. oven.

■ Baking tips

■ For best results, use a high-protein bread flour. A flour too low in protein produces a loaf that is poor in volume and texture. When using a recipe that calls for all-purpose flour, substitute with a little less bread flour (about one to two tablespoons less per cup) and increase kneading time to about 12 to 15 minutes. Because the protein content of each brand of flour varies, each brand will react differently.

■ If the flour is old, it will cause a crumbly, "short" dough.

■ Salt should not be omitted because it controls the action of the yeast. Besides having a very bland flavor, breads made without salt tend to over-rise and will have a different texture than breads made with salt.

■ The time required for dough development varies considerably, depending on factors such as temperature, humidity, yeast characteristics, flour characteristics and kneading.

■ Let the dough rest five to 10 minutes after kneading to relax the gluten and make handling easier.

■ When adding wheat bran, wheat germ, bulgur or cracked wheat to a bread recipe, use about 1/4 cup of these products for every two cups of flour. Leave the bread dough as moist as possible, because these ingredients absorb liquid and tend to produce a drier

loaf. Reduce the amount of kneading to avoid cutting the gluten strands with the sharp edges of these products.

■ As the ratio of whole wheat flour to bread flour increases, so does the rising time. Don't expect darker breads to double in bulk when they are fully fermented.

■ Vigorous beating before all of the flour is added hasten gluten formation. Kneading develops the gluten, forming a mesh that traps the gas produced by the yeast. Over-kneading stretches the gluten to the breaking point and destroys the gas-trapping mesh, but this is not possible to do by hand-kneading.

■ To test if the dough is sufficiently kneaded, poke the dough with your fingers; it should spring back. Sometimes blisters will form on the surface of the dough, which is another sign the dough is sufficiently kneaded.

■ To properly dissolve the yeast, follow package directions. The remaining liquids should normally be about 80° - 90° F. if the flour is at room temperature. Ideal dough temperature is 78° F., so on hot days, cooler liquids may be used; on colder days, warmer ones.

■ Substitute honey for sugar, one for one.

■ With bread making, exact flour measurements are impossible. Dough is affected by heat, humidity, sugar, altitude and possibly the personality and mood of the baker. If too much flour is used, the bread may be very heavy and stiff. If too little is used, the bread will not hold up and a low-volume bread will result. It is difficult to make a serious mistake; errors often turn into inventions.

■ To slow the rising process, the dough may be placed in the refrigerator or cooler liquids may be used.

■ To quicken the rising process, place the covered bowl of dough in an oven heated with a pan of steaming water.



# Grains of truth about BREAD MACHINES

## Definitions

Operating on computer chip technology, the automatic bread machine (or auto bakery) is an appliance that performs all the steps in baking bread. The machine consists of a nonstick container with a mixing and kneading arm nestled inside an electronically controlled heating unit. All that is required is measuring the ingredients into the container and programming the machine.

## Operations

- Before using the bread machine, read the instruction manual provided.
- Place the machine on a clean, hard, dry surface. Flour or liquid getting under the feet or by an imbalance in ingredients causes "walking."
- Room temperature may affect the kneading, rising and baking times, and results. Ideal temperature is 65°-75°F. The bread machine should sit in a draft-free area.
- Do not exceed the maximum ingredient capacity of the machine. An overflow will result in an undercooked or sunken top or even the need to clean the inside of the machine. Two cups of flour produce a 1-pound loaf; three or more produce a 1 1/2 pound loaf.
- As a rule, reduce the amount of yeast by 1/4 teaspoon for every 2,000 feet of altitude. Sugar and water may need to decrease slightly.
- Accurate liquid and dry measurements are essential. Use liquid measuring cups for liquids. For flour, stir, spoon into dry measuring cup and level off.
- The ideal temperature for ingredients is 75°-85°F. A thermometer is necessary. An easy method is to combine the liquid ingredients and microwave to the ideal temperature.
- Place ingredients in the baking pan in the order listed. Do not let the yeast touch the liquids. This is imperative when using the delayed timer cycle.
- If the machine does not have a cool-down cycle, remove the loaf promptly. If the finished loaf is left in the pan, the inside becomes overcooked and the crust becomes soggy and over-browned.

## Flours

- As a rule, at least half of the flour used should be high-protein white, whole-wheat or bread flour. If all whole-wheat flour is used, choose high-protein flour.
- If substituting all-purpose for bread flour, the flour-to-liquid ration may have to be adjusted. Reserve a few tablespoons of liquid in the initial mixing process. If the dough is dry, add more liquid while it mixes.
- To improve loaf volume, add 1 to 2 tablespoons of wheat gluten plus an equal amount of additional water to recipes using all-purpose, whole-wheat, rye or other whole grains. Adding wheat gluten is not necessary when using all bread or high-protein whole-wheat flour. Gluten can be purchased at any grocery stores.
- A dough enhancer is an optional ingredient that is used to increase dough strength and tolerance, extend shelf life and make lighter-textured bread. Tofu and vitamin C are often used. Use 1 tablespoon per 3 to 3 1/2 cups whole-wheat flour.
- Adding too much wheat germ, fruit, vegetables or fresh milk will inhibit the rising of the bread. Dough that contains walnuts or raisins may not rise sufficiently when using the timer.

## Yeasts

- Most machines are programmed to use active dry yeast. Consult the manual if using a different kind of yeast. Cake or compressed yeast is not recommended. Both quick and regular dry yeasts may be used as directed by the manual.
- Check the expiration date on the package of yeast for freshness. Tightly seal containers of yeast and refrigerate or freeze. Bring to room temperature before using. One package equals 2 1/4 teaspoons, or 1/4 ounce.
- Salt should never be eliminated because it acts as a growth inhibitor for yeast. If necessary, decrease the amount 1/8 to 1/4 teaspoon per loaf. If the bread rises too high, decrease the amount of sugar. The usual salt-to-flour ratio is 1/4 teaspoon salt to 1 cup of flour.

# Sweeteners

■ White and brown sugar, honey and molasses may be interchanged. Honey is twice as sweet as sugar, so use only half as much. Decrease the water by the same amount as the honey or molasses added.

■ Do not use artificial sweeteners. Yeast cannot react to them and they break down under heat.

# Eggs & Liquids

■ Decrease liquid amounts in humid weather because humidity adds extra moisture to the dough.

■ Milk, buttermilk and water may be interchanged equally.

■ Never use perishable ingredients such as fresh milk, meat, eggs, cheese, yogurt, orange juice and vegetable purees with the timed delay because they may spoil while sitting in the machine. Unless making sourdough, milk should not sit for more than 1 or 2 hours.

■ When using the timer cycle, replace the fresh milk with nonfat dry milk. Add the dry milk (1 to 4 tablespoons, depending on the loaf size) and replace the fresh milk with equal amounts of water. Always place dry milk next to the yeast, away from liquids.

■ In substituting dry milk for fresh milk, remember that one tablespoon of dry milk equals about 1/4 cup of fresh milk. Reduce the amount of water in equal proportion to the amount of fresh milk added.

■ Using large eggs may make dough stickier, so reduce the amount of water accordingly.

■ Egg substitute, found in the frozen section of the grocery store, may be used in place of eggs, especially when a recipe calls for half an egg. One egg equals 1/4 cup of egg substitute; 1/2 egg equals 2 tablespoons.

# Troubleshooting

**Crust is too thick:** Select a lighter setting.

**Top is sunken:** Too much yeast or liquids are present or there is not enough flour. Be sure the temperature of the liquids is correct. If the correct amount of salt and sugar were used, a small increase of these two ingredients may be a remedy. Or, try reducing the water called for by 1/4 to 4 tablespoons. During high humidity or high temperatures, the loaves may have sunken tops. At such time, add 1 to 2 tablespoons flour or decrease the liquid. A quick-rise yeast may have been used. Too much yeast will cause the loaf to have a coarse, open grain and a flattened or sunken top.

**Bread is too moist:** Bread sat in a pan too long. Increase the baking temperature by setting the baking control dial towards dark. Lengthen the baking time by selecting a darker setting.

**Dough appears too dry or stiff:** After the first five minutes of kneading, additional liquid may gradually be added, 1 tablespoon at a time. Without enough liquid, the loaf will be short and dense.

**Dough appears too wet and sticky:** Add more flour, 1 tablespoon at a time, until the dough begins to mass around the blade in a soft, pliable ball. With too much liquid, the bread will rise, then fall when baked.

**Bread is too doughy or falls during the baking process:** The loaf may be too big for the machine or the humidity too high. This can be remedied by reducing the fat and liquid. Reserve 1/4 of the liquid from the total amount. One tablespoon at a time, add it back in until the dough forms a ball. Reduce the amount of yeast by 1/4 teaspoon and decrease the sugar and/or increase the salt used. Check for water or liquids that are too hot.

**Flour sticks to the side of the machine and does not knead the dough:** During the kneading cycle, push the flour into the dough with a rubber spatula or simply brush the flour off the finished loaf.

**Loaves don't rise as high as previous ones:** An underdeveloped loaf means too little yeast or too little liquid. Check the amount of yeast and increase, if necessary. Also check the freshness of the yeast. Or, use bread flour instead of all-purpose flour. Try increasing the sugar and water slightly.

**Dough rises then collapses:** The recipe produces too much dough for the size of the machine. Cut back the recipe or check the water temperature; it may be too warm.

**Loaf rises too high:** Use more salt or reduce the amount of sugar and/or yeast.

**Loaf does not rise:** Flour type is too low in protein content or too much salt is present. Also, there may not be enough sugar or yeast, or the yeast may be old. The water temperature may be too high.

**Loaf has an uneven top:** Not enough liquid is present.

**Loaf is pale in color:** Not enough sugar is present. Adding milk (dry or liquid) contributes to browning.

**Consistent poor dough development (rising):** This may mean the machine's calibration is off. To service the machine, contact the dealer or check the manual to find the nearest service center.

**Hint:** Buy a recipe book that was developed in the United States. Manuals translated into English from other countries may have confusing terminology and odd measurements, such as 1/3 teaspoon.

# Grains of truth about WHEAT FLOUR

## Definition

Flour is the product obtained by grinding wheat kernels or “berries.” The kernel consists of three distinct parts: bran, the outer covering of the grain; germ, the embryo contained inside the kernel; and endosperm, the part of the kernel that makes white flour. During milling, the three parts are separated and recombined accordingly to achieve different types of flours.

There are six different classes of wheat: Hard Red Winter, Hard Red Spring, Soft Red Winter, Hard White, Soft White and Durum. The end products are determined by the wheat’s characteristics, especially protein and gluten content. The harder the wheat, the higher the amount of protein in the flour. Soft, low protein wheats are used in cakes, pastries, cookies, crackers and Oriental noodles. Hard, high protein wheats are used in breads and quick breads. Durum is used in pasta and egg noodles.

## History

Ground grain was one of civilized man’s first foods. Ancient methods of grinding can be traced to the Far East, Egypt and Rome. As early as 6,700 B.C., man ground grains with rocks. Water mills did not appear until 85 B.C. in Asia Minor. Windmills appeared between 1180 and 1190 A.D. in Syria, France and England.

## Storage

Flour should be stored in airtight containers in a cool, dry place (less than 60 percent humidity). All-purpose, bread and cake flour will keep for 6 months to a year at 70°F and 2 years at 40°F. Store away from foods with strong odors. Whole-wheat flour should be refrigerated or frozen, if possible. Before using refrigerated or frozen flour, allow it to warm to room temperature and inspect for rancidity and taste.

## Nutritional value

Wheat flour is an excellent source of complex carbohydrates. Other than gluten flour, all types of wheat flour derive at least 80 percent of their calories from carbohydrates. Depending on the flour type, the percent of calories from protein ranges from 9 to 15 percent, except from gluten, which has a 45 percent protein content. Calories from fat are never more than 5 percent.

In addition, wheat flour provides from 3 g (cake flour) to 15 g (whole-wheat flour) of dietary fiber per 1-cup serving. Wheat flour contains B-vitamins, calcium, folacin, iron, magnesium, phosphorus, potassium, zinc, minimal amounts of sodium and other trace elements.

## Types of flour

- White flour is the finely ground endosperm of the wheat kernel.
- All-purpose flour is white flour milled from hard wheats or a blend of hard and soft wheats. It gives the best results for many kinds of products, including some yeast breads, quick breads, cakes, cookies, pastries and noodles. All-purpose flour is usually enriched and may be bleached or unbleached. Bleaching will not affect nutrient value. Different brands will vary in performance. Protein varies from 8 to 11 percent.
- Bread flour is white flour that is a blend of hard, high-protein wheats and has greater gluten strength and protein content than all-purpose flour. Unbleached and in some cases conditioned with ascorbic acid, bread flour is milled primarily for commercial bakers, but is available at most grocery stores. Protein varies from 12 to 14 percent.
- Cake flour is fine-textured, silky flour milled from soft wheats with low protein content. It is used to make cakes, cookies, crackers, quick breads and

some types of pastry. Cake flour has a greater percentage of starch and less protein, which keeps cakes and pastries tender and delicate. Protein varies from 7 to 9 percent.

■ Self-rising flour, also referred to as phosphated flour, is a convenience product made by adding salt and leavening to all-purpose flour. It is commonly used in biscuits and quick breads, but is not recommended for yeast breads. One cup of self-rising flour contains 1 1/2 teaspoons baking powder and 1/2 teaspoon salt. Self-rising can be substituted for all-purpose flour by reducing salt and baking powder according to these proportions.

■ Pastry flour has properties intermediate between those of all-purpose and cake flours. It is usually milled from soft wheat for pastry-making, but can be used for cookies, cakes, crackers and similar products. It differs from hard wheat flour in that it has a finer texture and lighter consistency. Protein varies from 8 to 9 percent.

■ Semolina is the coarsely ground endosperm of durum, a hard spring wheat with a high-gluten content and golden color. It is hard, granular and resembles sugar. Semolina is usually enriched and is used to make couscous and pasta products such as spaghetti, vermicelli, macaroni and lasagna noodles. Except for some specialty products, breads are seldom made with semolina.

■ Durum flour is finely ground semolina. It is usually enriched and used to make noodles.

■ Whole wheat, stone-ground and graham flour can be used interchangeably; nutrient values differ minimally. Either grinding the whole-wheat kernel or recombining the white flour, germ and bran that have been separated during milling produces them. Their only differences may be in coarseness and protein content. Insoluble fiber content is higher than in white flours.

■ Gluten flour is usually milled from spring wheat and has a high protein (40-45 percent), low-starch content. It is used primarily for diabetic breads, or mixed with other non-wheat or low-protein wheat flours to produce a stronger dough structure. Gluten flour improves baking quality and produces high-protein gluten bread.

## Wheat Flour Terms

The Food and Drug Administration inspects and approves the use of flour treatments and additives that are used to improve the storage, appearance and baking performance of flour. The treatment additives are in no way harmful.

“**Enriched**” flour supplemented with iron and four B-vitamins (thiamine, niacin, riboflavin and folic acid) and may be supplemented with calcium. There is no change in taste, color, texture, baking quality, or caloric value of flour.

“**Presifted**” flour is sifted at the mill, making it unnecessary to sift before measuring.

“**Bromated**” flour is largely discontinued in the United States. Ascorbic acid is now being added to strengthen the flour for bread doughs.

“**Bleached**” refers to flour that has been bleached chemically to whiten or improve the baking qualities. No change occurs in the nutritional value of the flour and no harmful chemical residues remain. It is a process which speeds up the natural lightening and maturing of flour.

“**Unbleached**” flour is aged and bleached naturally by oxygen in the air. It is more golden in color, generally more expensive and may not have the consistency in baking qualities that bleached flour does. Unbleached is preferred for yeast breads because bleaching affects gluten strength.

“**Patent**” flour, bleached or unbleached, is the highest grade of flour. It is lower in ash and protein with good color. Market-wise, it is considered the highest in value.

“**Organic**” or chemical-free flour is not standardized, so its definition varies from state to state. It may be grown and stored without the use of synthetic herbicides or insecticides. It may also mean no toxic fumigants were used to kill pests in the grain and no preservatives were added to the flour, packaging, or food product.

“**Gluten**” is a protein formed when water and wheat flour is mixed. Gluten gives bread dough elasticity, strength and gas-retaining properties. Wheat is the only grain with sufficient gluten content to make raised or leavened loaf of bread.

# Grains of truth about COMMERCIAL BREADS

## Definitions

Bread, called the staff of life, differs greatly in size, shape, texture, appearance, and flavor. Yeast breads come in a variety of shapes, including flatbreads such as pita or focaccia, buns, rolls and loaves in the form of hearth or pan breads.

**Pan breads:** These can be made from white flour, whole wheat, or a combination of flours. They are baked in loaf pans for a softer crust. Pan breads may include coarse-textured homestyle, richer premium, and buttery split-top breads.

**Hearth breads:** Baked directly on the hearth for crispier crusts, some white hearth breads include French, Italian and Vienna bread.

**Whole wheat bread:** This bread is made entirely from whole grain wheat flour, which contains all the components of the wheat kernel—the germ, bran and endosperm.

**“Wheat” bread:** Not to be misconstrued with whole wheat bread, this type usually contains a mixture of about 75 percent of white flour and 25 percent whole wheat flour.

**Mixed grain breads:** Other grain or vegetable flours, such as rye, oat, triticale, buckwheat, amaranth, potato, alfalfa, soy and barley, are used.

**Variety breads:** In today’s market, you can purchase nearly any variety of flavors and seasoned breads. From sweet fruity and nutty flavors to the savory and spicy.

## History

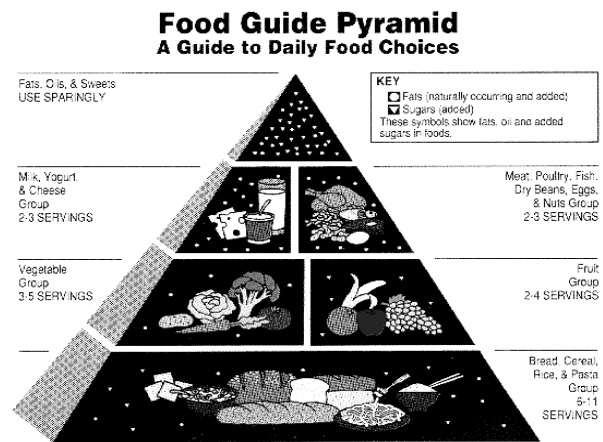
Around 10,000 B.C. man first started eating a crude form of flat bread—a baked combination of flour and water. Ancient Egyptians are usually credited with inventing the oven and discovering yeast leavening. About 3,000 B.C. they started fermenting flour and water mixtures by using wild, air-borne yeast. Eventually they added sugar, salt and flavorings such as poppy and sesame seeds.

Courtesy of the Wheat Foods Council • 303-840-8787

## Nutritional value

All breads are nutritious—some more so than others. The 2000 edition of the U.S. Dietary Guidelines for Americans recommends enjoying six to 11 servings daily of bread, cereal, rice and pasta – with at least three of those servings from whole grain. They are a major source of complex carbohydrates (starches), fiber, iron and B vitamins and are generally low in fat.

Keep in mind that serving sizes are relatively small. One slice of bread is a serving, so a sandwich would provide two servings.



The dietary guidelines also recommends at least 55 to 60 percent of daily calories come from carbohydrates, less than 30 percent from fat and 15 percent from protein.

**White bread:** To compare, one slice of white bread gets 76 percent of its calories from carbohydrates (mostly complex) and only 11 percent from fat. The rest, 13 percent, is from protein.

White bread is also a good source of the four major B vitamins—thiamin, riboflavin, niacin and folic acid. Since 1941, white flour in the United States has been “enriched” with three major B vitamins and iron in amounts equal to whole wheat flour. As of January 1, 1998, a new fortification law went into effect requiring enriched grain products to contain

specific levels of folic acid. One slice of bread contains almost a gram of iron and now 37 micrograms of folic acid. Compared to the 9.8 micrograms before the enrichment of folic acid became effective.

White bread has .5 gram of soluble fiber per slice, which contributes to daily fiber needs of 20 to 35 grams. When eaten as part of a low-fat diet, soluble fiber has been shown to help lower blood cholesterol.

**Whole wheat bread:** The nutritional content of whole wheat breads also varies between brands. An average slice of whole wheat bread gets 69 percent of its calories from carbohydrates and 15 percent from fat because the wheat germ in the whole wheat flour is about 10 percent fat.

However, the nutrient profile of whole wheat bread remains excellent. It has two grams of fiber, primarily insoluble. Foods containing insoluble fiber have been shown to help prevent colon cancer and possibly breast cancer. Almost a gram of iron per slice, a substantial amount of folic acid (17.5 micrograms), vitamin E, copper, vitamin B<sub>6</sub> and the three major B vitamins make it a nutrient dense food.

**Wheat bread, mixed grain or variety breads:** All of these vary slightly in nutritional value. Be sure to read the label.

The National Center for Nutrition and Dietetics of the American Dietetic Association recommend that Americans eat at least three servings of whole grain foods daily. The label should list first “whole wheat flour” or contain a combination of whole grain ingredients for it to be a whole grain food. When shopping for whole grain bread, remember that not all brown based bread is whole wheat. A brown color may be the effect of caramel coloring, which will be listed on the label. Its nutrient value is similar to white bread.

## Labeling

Read labels. These are your best source of nutrition and ingredient information. The Federal Nutrition Labeling and Education Act (NLEA) of 1990 standardized nutrition labels.

To alleviate consumer confusion, only certain terms—which have very strict definitions under the

NLEA—may be used on a product. The core terms are “free,” “low,” “low-fat,” “low calorie,” “high,” “good source,” “reduced,” “less,” “more,” “light,” and “healthy.”

Only seven nutritional claims may be made regarding a nutrient or a food and its effect on the risk of a disease or health-related condition. Those claims of risk-reduction that apply to breads define fiber-containing grain products and their relationship to cancer the risk of heart disease.

The list of mandatory nutrients which must be on the label includes: total calories, calories from fat, total fat, saturated fat, cholesterol, sodium, total carbohydrates dietary fiber, sugars, protein, vitamin A, vitamin C, calcium, iron and folic acid. Thiamin, riboflavin and niacin are not required because deficiencies of these are no longer prevalent due to the enrichment of white flour.

## Storage

Breads begin to stale once removed from the oven. Keep pan breads tightly wrapped and store at room temperature. Refrigerator storage has a tendency to stale bread quickly. Refrigerate only those breads that have a custard or meat filling. Crusty breads should be stored in paper bags that breathe. To freeze, wrap in air-tight, freezer-suitable packaging. Freeze and hold breads and rolls at 0°F up to three to six months. Commercially baked breads may be frozen in their own wrappings if they are used in one or two weeks.

Thaw frozen bread at room temperature. Microwave thawing is not recommended because bread may dry out and become over-heated, which results in toughening.



# Grains of truth about SOURDOUGH

## Definitions

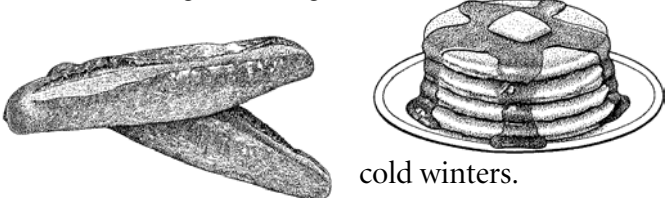
A sourdough starter is basically a method of growing yeast. The starter is a flour and water mixture—a basic unleavened dough—that serves as a medium for growing either commercial yeast that is added to the mixture or the ever-present wild yeast that is “captured” by the mixture from the air we breathe. (Yogurt is also sometimes added to provide yeast). This mixture is allowed to “sour” through a fermentation process that produces a gas and an acid. It is then used as a “starter” to leaven other breads: the gas produced by the fermentation is trapped in the elastic gluten structure of the dough, causing it to rise, while the acid imparts the final product with a tart flavor.

## History

Thought to be the very first instance of leavened bread, sourdough dates back to 4,000 B.C., when ancient Egyptians are credited for discovering yeast’s leavening power. Since then, it has spread to many cultures and has a solid place in U.S. history and folklore.

In the Old West, sourdough was the only continuous supply of leavening in the wilderness areas, earning the mountain men, sheepherders, pioneers, prospectors and miners of the time the nickname “Sourdoughs.” To carry the starter from camp to camp, they would add enough flour to make a ball of dough that was then buried deep in the flour sack. Water and warmth at the next campsite started it growing again.

Tales tell of the cherished sourdough crock with starter given as a part of a bride’s dowry and of the starter going to bed with its owner to assure its survival through the long,



cold winters.

## Starter methods

Flour and water are the only two necessary ingredients to grow the yeast. Milk may be used instead of water to produce a more sour flavor (the lower the milk fat, the more sour flavor), but always be consistent in the type of milk used to replenish the starter.

One tablespoon of sugar may be added as yeast food, but the yeast will also break down the flour’s complex carbohydrates into simple sugars for food.

To make a basic starter that requires catching yeast from the air, simply mix enough warm (105°-115°F) water into 1 cup of flour to make it a consistency that is a little thicker than cake batter.

The container should be glass, stoneware or plastic and large enough to allow for expansion of the starter to twice its original size. Prolonged contact with metal may change the sourdough’s flavor. Use only wooden or plastic spoons when mixing and stirring the starter.

Leave uncovered in a warm (85°), draft-free area for two to 10 days or until it has bubbled sufficiently. Pour into a non-metal container and store in the refrigerator.

To make a starter using commercial yeast, combine 1 cup flour, 1 cup warm (105°-115°) water, 1 package of dry yeast and 1 tablespoon of sugar.

Cover the container with a towel, cheesecloth, waxed paper, or plastic wrap. Or, poke a small hole in the top of the lid to allow gas to escape and the yeast to breathe; otherwise, the accumulated gases may crack or shatter the container.

Let the starter sit for two to 10 days, depending on the amount of sourness desired, in a warm (85°F), draft-free area. Remember to stir the starter, at least two or three times daily to incorporate the yeast and sugar.

Three kinds of commercial starters are available in stores: dehydrated starters, freeze-dried starters and specially packaged starter ingredients. All three require only the addition of water.

Once a good, tart starter is achieved, take care of it. The foamy, bubbling container of yeast is a living, self-perpetuating organism—it must be fed and cared for like a living plant.

## Sourdough hints

■ To ensure a warm (80°-85°F), draft-free place for the starter, place it on a sunny window, a high shelf or a warm corner. Do not allow the starter to be subjected to direct heat sources or temperatures exceeding 95°F.

■ Starter that has been sitting for a time will have a thin alcoholic layer of clean grayish liquid settle at the top of the batter. Old-timers referred to this alcohol as “hooch.” Just mix it back into the starter. If this layer is green, blue, pink or orange, discard the starter and begin anew.

■ If the starter smells particularly sour or is too tart, add 1 cup of warm liquid and 1 cup of flour to 1 cup of starter and mix thoroughly. Pour off all but 1 cup of this batter. This is known as freshening, or sweetening, the starter.

■ Replenish or “feed” the starter each time it is used. Measure out the required amount of starter from the container, then add equal amounts of flour and lukewarm liquid to the container. Cover and let sit in a warm place for six to 24 hours before using. Never let the starter get too low; always reserve at least 1 cup of starter in which to add 1 cup of flour and 1 cup of water. It is advisable to have several cups of starter on hand in your crock.

■ Use and replenish the starter at least once every two weeks and it will live indefinitely, gaining flavor and tang as it grows older. If not used within 10 days, add 1 teaspoon of sugar to feed the yeast.

## Storage

When not in use, date and refrigerate the freshened or replenished starter in a sealed container. Fermentation is slowed during refrigeration, so the starter may not need to be used or freshened for several weeks. Always bring it to room temperature and make sure it is bubbling before using (the process will take about 18 hours or overnight).

A healthy, freshened starter can be frozen for up to three months. Before using, let the starter thaw slowly in the refrigerator for 24 hours; then bring it to room temperature. Sudden temperature changes will damage the starter.

## Baking hints

Sourdough starter may be used as a leavening for pancakes, cakes, cookies and quick breads as well as for traditional yeast breads. Above all, be creative and don't limit yourself.

■ To substitute starter for yeast in breads, use 2 cups of starter for 1 package of yeast. Decrease the liquids in the recipe by 1 1/2 cups and the flour by 1 cup. If milk is the reduced liquid ingredient, stir in enough dry milk to make equivalent milk amounts. For example: 1/3 cup of dry milk makes 1 cup liquid milk, and would be substituted as such. No extra liquid would need to be added and no other change would be necessary. The starter used by itself works very slowly. Bread made with starter only is sometimes quite firm and chewy; adding yeast will give the bread a lighter texture.

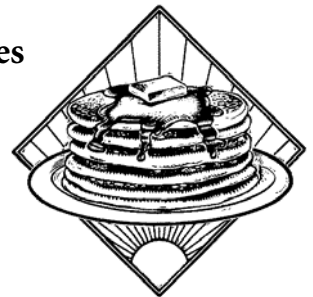
■ For best results with yeast breads, use bread flour. All-purpose or cake flour are suitable for pancakes, cookies and cakes. Avoid over mixing cakes, cookies, pancakes and batters. Over mixing will knock out the gas used to leaven baked goods.

■ If whole wheat flour is preferred, use 1 cup of starter, 1 cup whole wheat flour and 2 cups of warm water. Let stand 24 hours.

## Recipes

### Sourdough Hotcakes

- 1 cup flour
- 1 cup milk
- 1 cup starter
- 2 eggs, beaten
- 2 tablespoons sugar
- 2 tablespoons oil
- 1 1/2 teaspoons baking powder
- 1/2 teaspoon of salt
- 1/2 teaspoon baking soda



Measure flour, milk and starter into a large non-metal mixing bowl; beat until smooth. Cover loosely with waxed paper and let stand in a warm (80°-85°F) place at least 8 hours or overnight. Reserve 1 cup of starter back into crock or jar.

Add remaining ingredients and stir until smooth. Bake on a lightly greased, preheated 400°F griddle until golden brown on each side.

NAME \_\_\_\_\_

HOUR \_\_\_\_\_



# VIDEO HANDOUT

- Types of Quick Breads:
- Soft Dough, for example biscuits
  - Drop Batters, for example cornbread
  - Pour Batters, for example pancakes, waffles

- 
1. What makes quick breads rise so quickly?
  2. Name some of your favorite quick breads.
  3. Are quick breads always sweet?
  4. Can you bake breads in the microwave?
  5. Why is it important to measure ingredients accurately?
  6. Are liquid ingredients measured the same way as dry ingredients?
  7. How do you check for doneness on banana bread?



# Baking Basics



## Quick Breads

# VIDEO HANDOUT Teacher's Key

- Types of Quick Breads:
- Soft Dough, for example biscuits
  - Drop Batters, for example cornbread
  - Pour Batters, for example pancakes, waffles

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1. What makes quick breads rise so quickly?

***It uses baking powder or baking soda as its leavening agent. As soon as they are mixed, they are baked and cooked.***

2. Name some of your favorite quick breads.

***Pancakes, waffles, muffins, banana bread and other loaf breads, popovers, biscuits, cornbread, scones, and coffee cake.***

3. Are quick breads always sweet?

***No. Quick breads can be "savory" like popovers, biscuits and cornbread.***

4. Can you bake breads in the microwave?

***Yes, they do not brown and have a heavier and courser texture. Reheating quick breads for a short time in the microwave works well.***

5. Why is it important to measure ingredients accurately?

***Baking is like a chemical experiment. Accuracy is important for the recipe to be successful.***

6. Are liquid ingredients measured the same way as dry ingredients?

***No, liquids are measured in a liquid measuring cup and need to be at eye level for correct measurements. Dry ingredients are measured into dry measuring cups to overflowing and then the excess is scraped off using a straight edge tool, such as a spatula. Moist ingredients like brown sugar are packed into a dry measuring cup and leveled.***

7. How do you check for doneness on banana bread?

***Insert a toothpick into the center of the loaf; if the toothpick comes out clean, the bread is completely baked.***





# RECIPES

## Banana Bread

---

Makes 1 loaf

- |                          |                         |
|--------------------------|-------------------------|
| 1 1/4 cups sugar         | 1 teaspoon vanilla      |
| 1/2 cup butter, softened | 2 1/2 cups flour        |
| 2 eggs                   | 2 teaspoons baking soda |
| 3 ripe bananas, mashed   | 1/2 teaspoon salt       |
| 1/2 cup milk             |                         |

Preheat oven to 350° F.

Spray or grease the bottom only of a 9" x 5" or 8" x 4" loaf pan. In a large bowl, combine sugar and butter; beat until light and fluffy. Add eggs; beat well. Add bananas, milk and vanilla; blend well. In another bowl, stir together the flour, baking soda and salt; add the wet ingredients to the dry ingredients and stir until moistened. Pour mixture into loaf pan.

Bake for 50 to 60 minutes or until toothpick inserted in center comes out clean. Cool 5 minutes. Loosen sides of loaves from pan. Remove bread from pan. Cool completely on wire rack before slicing.

## Blueberry Muffins

---

Makes 1 dozen muffins

- |                           |                                   |
|---------------------------|-----------------------------------|
| 2 cups flour              | 1 cup milk                        |
| 2 teaspoons baking powder | 1 egg, slightly beaten            |
| 1 teaspoon salt           | 1/2 cup butter, melted            |
| 1/3 cup sugar             | 1 cup fresh or frozen blueberries |

Preheat oven to 375° F.

In a large bowl, stir together the dry ingredients. Stir together milk, egg, and butter in another bowl. Pour liquid ingredients into dry ingredients and stir, just until dry ingredients are moistened. Gently stir in blueberries. Spoon the batter into 12 greased or paper-lined muffin cups.

Bake for 15 – 20 minutes until lightly browned. Cool in a pan for 15 minutes then remove.

Mini Muffins – Bake for 8-10 minutes. Texas-Size Muffins – Make for 20-30 minutes.

# Popovers

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Makes 6 popovers

- 2 eggs
- 1 cup milk
- 1 tablespoon melted butter
- 1 cup flour
- 1/4 teaspoon salt

Preheat oven to 450° F.

Grease popover pan or muffin tins and place in the oven for 5 minutes. Beat eggs with mixer until light and fluffy, about 2 minutes. Add milk and melted butter; continue beating for 1 minute. Add flour and salt; beat for 1 more minute.

Fill the baking cups 3/4 full. Bake for 15 minutes. Reduce oven temperature to 350° F. DO NOT OPEN DOOR. Continue baking for 20-25 minutes or until golden brown. Insert knife into the popover to allow the steam to escape. Serve immediately.

# Quick Drop Biscuits

---

Makes 8 biscuits

- 2 cups flour
- 1 1/2 tablespoon sugar
- 3 teaspoons baking powder
- 1/4 teaspoon salt
- 1/4 cup shortening
- 2/3 cup milk
- 2/3 cup sour cream

Preheat oven to 450° F.

Spray a cookie sheet with nonstick cooking spray. In a medium bowl, combine flour, sugar, baking powder and salt. With a pastry blender or fork, "cut in" the shortening until the mixture is crumbly.

In a small bowl, combine milk and sour cream; blend well. Add all at once to the flour mixture; stir just until dry ingredients are moistened. Drop dough with a 1/4 measuring cup onto the prepared cookie sheet.

Bake for 10 to 12 minutes or until golden brown. Serve warm.

# Grains of truth about QUICK BREADS

## Definitions

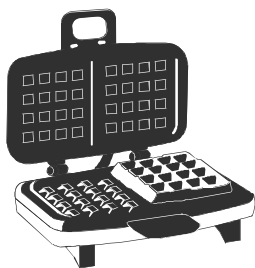
Quick breads offer instant gratification to busy people who love to bake. Quick breads, unlike yeast breads, rise with the help of quick-acting leavening agents (baking powder, baking soda or a combination of both) and are generally baked as soon as the dough has been mixed.

Quick breads can be savory or sweet, depending on the type of bread. Many of the quick breads are best served warm from the oven, however, nut and fruit loaves will slice easier if they are baked the day before; if sliced while hot they may crumble.

Mixtures vary in thickness from thin batters that pour, through drop batters to soft dough, depending on the type of quick bread. The characteristics of the finished product depends so much on the way the ingredients are combined that quick breads may be classified according to the methods by which they are mixed. There is an assortment of baked goods we eat everyday that are quick breads: muffins, corn bread, biscuits, scones and quick loaf breads, (i.e., banana bread, fruit and nut breads.) Also listed in the quick bread category are pancakes, waffles, doughnuts, fritters, dumplings, short cake and coffee cakes. Each of the quick breads listed has an array of recipes from which to choose.

## History

Chemically produced carbon dioxide was introduced as a leavening for baked goods less than 200 years ago. In 1846, Austin Church and John Dwight created the first commercial baking soda in New York City and in 1856, a Harvard University professor received a United States patent on a baking powder.



During the Civil War, quick breads became more popular than ever. Women who used to be at home all day to tend a rising loaf were suddenly given many new duties away from home. They needed bread that would be ready in a hurry.

## Techniques

### Pans:

Biscuit and muffins brown best on shiny metal cookie sheets and muffin pans. For browning loaves, use loaf pans made of dull metal, anodized aluminum or glass.

Try to use the size of pan indicated in the recipe. Different sized pan calls for different baking times. Always prepare the pan as directed in the recipe.

### Mixing:

Always read the directions thoroughly. It is important to mix the ingredients as described in the instructions. Combine dry and liquid ingredients separately, unless otherwise noted in the directions.

Do not overmix. Be sure to mix ingredients only as long as the recipe specifies. Otherwise, some quick breads may be coarse-textured and tough.

### Tips:

- To distribute the leavening evenly in the batter without overmixing, sift the dry ingredients together several times before stirring in the liquids.
- If using a self-rising flour, omit baking powder and salt.
- When mixing pancake or waffle batter, stir quickly just until flour is moistened; batter will be lumpy.
- Mix the dough for biscuits just until it leaves the side of the bowl; it will be sticky.

## **Baking:**

Preheat the oven before starting to mix the ingredients. Check the recipe or package directions for proper setting.

## **Tips:**

■ For optimum results, bake quick breads as soon as possible after mixing. The rising power (carbon dioxide) in baking soda and baking powder begins to release as soon as the dry ingredients are moistened.

■ When baking time is up, insert a toothpick into the center of the loaf. If the toothpick comes out clean, the bread is done. If not, continue baking in 2 to 3 minute increments, checking each time with the toothpick until it comes out clean.

■ Don't worry if loaf is cracked on top; a deep crack down the center of quick-bread loaves is typical.

■ Most quick bread recipes require the bread cool in the pan for 10 minutes. Finish cooling on a wire rack.

## **Storage**

### **Tips:**

■ Leftovers may be stored at room temperature, in a resealable plastic bag or an airtight container to retain moisture. Reheat and use within a day or so.

■ Nut and fruit loaves are at their best if made the day before serving. They should be cooled completely, wrapped tightly and kept at room temperature.

■ To freeze quick breads, wrap in foil, heavy-duty plastic wrap or freezer-wrap and press all the air from package; freeze for up to 3 months.

■ To thaw, let stand, wrapped, at room temperature for about 1 1/2 hours.

## **Reheat Quick Breads**

### **Biscuits:**

Wrap leftover biscuits in foil; heat in oven preheated to 375° F. about 20 minutes or until hot.

### **Corn bread:**

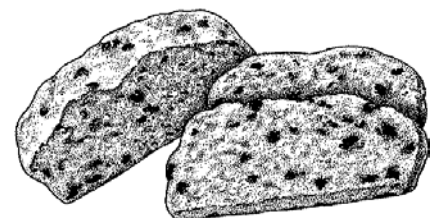
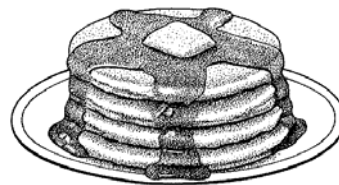
Split servings; spread split sides with softened butter or margarine and toast under broiler.

### **Coffee cakes and bread loaves:**

Wrap in foil; heat in oven preheated to 400° F. for 20 to 30 minutes or until hot.

### **Muffins:**

Wrap in foil; heat in oven preheated to 400° F. about 15 minutes.



# Grains of truth about BISCUITS

## Definitions

Biscuits are a variety of quick breads popular in different forms throughout the United States. They are made from a combination of flour, shortening, leavening and milk or water. This simple dough is generally rolled out, cut into small rounds, baked and served hot. Food preferences and ingredients in various regions of the country often determine what type of biscuit is preferred. People in the North enjoy tall, tender flaky biscuits; people from the South like biscuits with a soft, tender crumb.

## History

The original biscuit was a flat cake that was put back in the oven after being removed from its tin, hence the French name “bis” (twice) “cuit” (cooked). This very hard, dry biscuit was the staple for sailors and soldiers for centuries. During the time of Louis XIV, soldiers’ biscuits were known as “stone bread.”

“Animalized” biscuits were introduced later. They were thought to be very nutritious because they used meat juices as the liquid. In the 19<sup>th</sup> centuries, travelers’ biscuits were hard cakes that kept well wrapped in a kind of tin foil.

Feathery, light biscuits, now popular throughout the United States, originated in Southern plantation kitchens. Rolled biscuits were a staple at most meals, but beaten biscuits became another Southern favorite. Beaten biscuits are made light by beating air into the dough with a mallet or a rolling pin (up to 100 strokes “or more for company”). Beaten biscuits are typically thinner and crispier than baking powder biscuits.

## Availability

Prepared biscuit mix can be purchased in grocery stores. Just add liquid, roll out the dough and bake according to package directions. The leading commercial mix is now available in a reduced-fat formulation. Biscuit dough in tubes will be located in the refrigerated section of supermarkets.

Recipes for making biscuits at home can be found in most all-purpose cookbooks. Rarely are biscuits available from a bakery because their shelf-life is so short.

## Storage

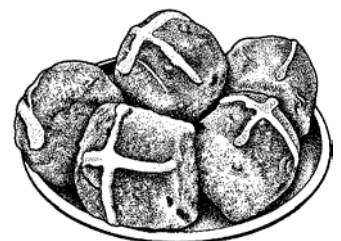
It’s best to enjoy biscuits steaming hot out of the oven because they do not contain preservatives that prevent staling. Biscuits tend to get hard and tasteless in a hurry, but they can be reheated for a short period of time in the microwave set at a low temperature. They also can be placed in a damp paper bag and reheated in a 350° F. oven for 10-15 minutes.

To freeze baked biscuits, cool to room temperature and place in plastic freezer bags, pressing out as much air as possible. Do not freeze the biscuits for longer than two months. To thaw, let biscuits set at room temperature for 1 hour, unwrap and reheat in a microwave or oven.

To freeze biscuit dough, prepare and cut biscuits according to directions. Freeze, uncovered, on a cookie sheet about 2-4 hours, then place in freezer bags or stack in rigid containers with a piece of waxed paper between each biscuit. Cover and freeze for up to 3-4 weeks. Thaw biscuits unwrapped at room temperature about 1 hour. Bake in a preheated 425° F. oven for 20-25 minutes.

## Nutrition

Biscuits are high in fat, which makes them flaky, tender and delicious. The average home recipe has 50 percent of calories from fat, so budget fat calories accordingly. The average recipe also derives 43 percent of its calories from carbohydrates and 7 percent from protein.



## Tips

■ Want variety? Make biscuits extra large or small; roll them out thin; or, make them tall, crisp or soft, buttermilk or plain milk. They can be dropped from a spoon, cut with a knife, a floured biscuit cutter or a floured glass.

■ Always sift dry ingredients together for even distribution of leavening. Otherwise, yellow or brown flecks result.

■ For tender, flaky biscuits, cut the shortening in thoroughly, using two knives, a fork or a pastry blender, until dough resembles meal.

■ To make a soft dough, stir the liquid into the dry ingredients just until the dough leaves the side of the bowl and forms a ball. Knead gently 10 to 12 strokes to blend all ingredients and assure tall, plump, evenly textured biscuits. Kneading with the fingertips helps avoid over-handling.

■ Cut dough straight down. Do not twist.

■ For crusty biscuits, place 3/4 inch apart for baking. For softer ones, place closer together. For a golden color, brush raw tops with milk.

## Recipes

### Basic Biscuits (reduced fat)

2 cups all-purpose flour

3 teaspoons baking powder

1 teaspoon salt

1/2 teaspoon sugar

1/4 cup shortening

3/4 cup 1% milk

In a bowl, sift together flour, baking powder, salt and sugar. Cut in shortening. Add milk; stir until dough forms a soft ball.

Turn dough onto a floured board; knead lightly 20-25 times. Roll or pat to 1/2-inch thickness. Cut with a floured biscuit cutter or glass. Place on an ungreased baking sheet and bake at 425° F. for 10-12 minutes. Makes 18.

**Nutritional Analysis:** Each biscuit provides approximately 81 calories; 1.7 g protein; 11 g carbohydrates; 3 g fat; .4g dietary fiber; .4 mg cholesterol; 3.7 mcg folic acid; .7 mg iron; 172 mg sodium.

## Options:

**Whole Wheat Biscuits:** Substitute 7/8 cup whole wheat flour for 1 cup all-purpose flour.

**Cheese Drop Biscuits:** Stir 1 cup grated cheese into flour mixture before adding shortening. Increase milk to 1 cup and drop biscuits onto baking sheets by large spoonfuls.

**Buttermilk Biscuits:** Substitute buttermilk for milk. Decrease Baking powder to 2 teaspoons and add 1/2 teaspoon baking soda to dry ingredients.

### Beaten Biscuits (reduced fat)

3 cups flour

1/2 teaspoon salt

1/2 teaspoon baking powder

1/4 teaspoon baking soda

3 tablespoons shortening

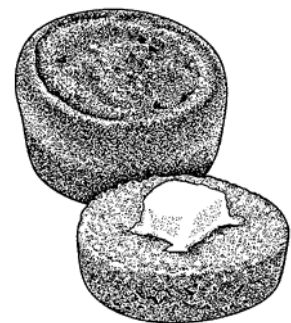
3/4 cup cold 1% milk

Sift together dry ingredients. Cut in shortening. Stir in milk.

Turn onto floured board and knead. Beat with a rolling pin until dough blisters, 100 whacks or more, folding edges in toward the center and turning after every few whacks. Roll dough to 3/8-inch thickness and cut with small round cutter. Using a fork, prick tops two or three times.

Arrange on lightly greased baking sheet and bake at 375° F. for 30 minutes, or until light golden. Makes about 30 thin biscuits.

**Nutritional Analysis:** One biscuit provides approximately 60 calories; 10 g carbohydrates; 1.5 g protein; 1.5 g fat; .4 mg dietary fiber; .2 mg cholesterol; 3 mcg folic acid; .6 mg iron; 51 mg sodium.



# Grains of truth about MUFFINS

## Definitions

Muffins are called quick breads because they contain no yeast, and therefore, they don't require all of the time spent on kneading, rising and resting. You can mix muffins from scratch in about five to ten minutes. If that's not quite fast enough for you, try a muffin mix.

A muffin's shape should have a uniform, well-rounded top, free from peaks, with no cracks and be large in proportion to weight. The outside color should be an even golden brown, and be tender, with a pebbly or slightly rough and shiny surface. The inside texture should be moist, tender and light with an even, round-holed grain. The inside color will be creamy white or slightly yellow and free from streaks. Muffins may be varied by adding fruits, nuts, herbs, cheese, chopped meats or spices to the batter.

## Availability

Muffins are available from most wholesale and retail bakers as well as many in-store bakeries. Pre-packaged muffins can be found in the bread aisle of your local convenience and grocery stores. Look for a variety of muffin mixes in the baking aisle of your local grocery.

## Nutritional value

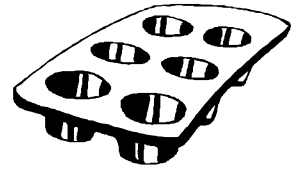
Muffins are high in complex carbohydrates and B vitamins. They are often a good source of fiber if they contain bran, fruits, vegetables and/or are made with whole wheat flour.

Many commercial and scratch recipes are high in fat, often containing 5 to 8 grams per muffin. Low-fat, reduced-fat and no-fat muffins are available in restaurants and grocery stores. You can also buy low-fat and no-fat mixes. When making muffins from scratch, experiment with substituting lower fat ingredients, such as egg substitute, skim milk and low-fat margarine.

## Preparation

### Pans:

Muffins will brown best if shiny metal muffin pans are used for baking them. Fill the muffin-pan cups 1/2 to 3/4 full with batter. They will rise above the pan surface.



### Tips:

- Tins should be greased rather heavily on the bottom for easy removal of muffins. Greasing the sides very lightly, or not at all, allows the batter to cling to the tins in rising, thus increasing volume.
- To keep muffins from burning around the edges, leave one muffin cup empty; fill 1/2 full with cold water before baking.

### Mixing:

Combine dry and liquid ingredients separately. The egg should be beaten enough to combine well with the liquid, then all liquids mixed thoroughly together. Cool melted shortening before it is added. Under-blending of liquid ingredients produces a muffin with thicker cell walls and a less tender texture.

The liquid mixture is stirred with the combined dry ingredients only until the flour is moistened. It is essential to keep mixing to a minimum—no more than 25 to 30 strokes. The batter should be lumpy not smooth. Over-mixing might result in peaked tops, a tough muffin and “tunnels.”

### Tips:

- For high altitudes, reduce baking powder or soda in the recipe by 1/2 teaspoon.
- If using a self-rising flour, omit baking powder and salt.
- Use an ice cream scoop to fill the cups in the muffin pan. This will measure your batter equally for each muffin.

## Baking:

Preheat the oven before starting to mix the ingredients. Muffins are usually baked on a high setting of 425 degrees for about 20 to 25 minutes. Check the recipe or package directions for proper setting.

## Tips:

■ When baking time is up, insert a toothpick into the center of the muffin. If the toothpick comes out clean, they are done. If not, continue baking in 2 to 3 minute increments, checking each time with the toothpick until it comes out clean.

■ When muffins are done, remove them at once from the muffin tins so they don't steam and soften. If they must stand in muffin tins, tip each one slightly in its cup so steam can evaporate.

## Storage

■ Leftovers may be stored at room temperature, in a resealable plastic bag or an airtight container to retain moisture. Reheat and use within a day or so.

■ Nut and fruit muffins are at their best if made the day before using. They should be cooled completely, wrapped tightly, and kept at room temperature.

■ To freeze muffins, wrap in foil, heavy-duty plastic wrap or freezer-wrap and press all the air from package; freeze for up to 3 months.

■ To thaw, let stand, wrapped, at room temperature for about 1 1/2 hours.

## Troubleshooting

■ **Tops are peaked and not rounded:** Muffins were baked too long or at too high a temperature.

■ **Muffin is excessively shrunken or dry:** Too little batter was placed in the tin; or, muffins were baked too long or at too high a temperature.

■ **Muffin texture (inside grain) has tunnels:** Batter was over-mixed. In addition, oven or batter temperature may have been too high.

■ **Texture is soggy:** Batter was over-mixed or muffin was under-baked.

■ **Tops are flat and smooth:** Oven temperature was too low; not enough batter was placed in the tin; or muffins were baked in paper liners.

■ **Crust is too light:** Muffins have been under-baked or baked at too low a temperature.

Courtesy of the Wheat Foods Council • 303-840-8787

## Recipes

### Low-Fat Bran Muffins

- 1 1/2 cups bran bud cereal
- 1 1/3 cups skim milk
- 1 egg
- 2 tablespoons vegetable oil
- 1 1/4 cups all-purpose flour
- 1 tablespoon baking powder
- 1/2 teaspoon salt
- 1/4 cup sugar
- 1/2 cup raisins

Mix cereal and milk; let stand 5 minutes. Add egg and vegetable oil and beat well. Add flour, baking powder, salt, sugar and raisins. Mix until dry ingredients are moistened. Grease bottom of muffin tin cups and spoon batter in. Bake at 400° F. for 20 to 25 minutes. Loosen from tins and let cool. Makes 12 muffins.

**Nutrient Analysis:** One serving provides approximately: 143 calories, 4 g protein, 28 g carbohydrates, 5 g dietary fiber, 3 g fat, 16 mg cholesterol, 45 mcg folate, 67 mg calcium, 289 mg potassium and 269 mg sodium.

### Variations of the above recipe:

**Surprise Muffins:** Fill muffin cups only 1/2 full; drop 1 teaspoon of your favorite jelly in the center of each and add batter to fill cups 3/4 full.

**Blueberry Muffins:** Fold 1 cup of fresh blueberries or 1/2 cup of well-drained frozen blueberries (thawed) into batter.

**Cranberry-Orange Muffins:** Fold 1 tablespoon grated orange peel and 1 cup cranberries, cut in half, into batter.



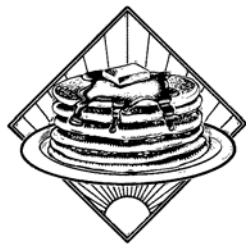
# Grains of truth about PANCAKES

## Definition

The pancake is a thin flat cake made from batter and fried on a griddle or in a skillet. The batter usually consists of eggs, flour, milk or water and oil or melted butter. The recipe for the batter often varies to include such ingredients as buttermilk, sugar and sourdough starter. Whether they are called pancakes, griddlecakes, flapjacks, wheatcakes, or flannel cakes, they are among our most popular food choices. Pancakes, in one form or another, are found in almost every culture.

## History

The oldest form of bread is believed to have been a type of unleavened pancake. It has survived throughout history as a distinct food. In earlier times, English pancakes were sometimes moistened with ale, which had a leavening effect when the pancake was fried. Today, yeast, baking powder or soda are sometimes added to lighten the cake.



## Availability

Pancakes are found on most restaurant breakfast menus across the United States and in most all-purpose cookbooks. There are numerous convenience commercial mixes available in grocery stores that require only the addition of liquid and eggs. They can also be found fully cooked and ready for the microwave in the frozen section of the grocery store.

“Silver-dollar” sized pancakes are often popular in restaurants, but pancakes can be big enough to cover an entire plate. Pancakes are traditionally eaten with butter and syrup or powdered sugar. They can also be spread with sugar, fruit mixture or peanut butter--rolled and eaten by hand.

## Storage

Pancakes should be served immediately after cooking. It is not recommended that pancakes be reheated as they can become tough. However, if necessary, they can be frozen and reheated in the microwave on low heat or you can pop them into your toaster.

## Nutritional value

The 1995 “Dietary Guidelines for Americans” recommend eating six to 11 servings of grain foods daily. Pancakes are a part of that food group. Balance toppings wisely with your other food choices throughout the day. Sugar, jams, jellies, fruits and fruit purees have only a four calories per gram; butter and margarine have nine. One 1-ounce pancake (about the size of a slice of bread) from a typical home recipe provides approximately: 60 calories, 2 g protein, 9 g carbohydrates, 2 g fat, 16 mg cholesterol, .5 g fiber, .5 mg iron and 115 mg sodium.

## Preparation

- Do not over-mix the batter, stir just until blended.
- Heat a heavy griddle or skillet and grease it lightly (a non-stick cooking spray works fine.) If the batter contains a high fat content (at least 2 tablespoons of fat per cup of liquid) the griddle will not need to be greased.
- Test the temperature of the griddle by dropping a few drops of water on it. If the water bounces and sputters, the griddle is ready.
- To make a round pancake, pour the batter from the tip of the spoon.
- Bake until bubbles appear on the surface and start to burst. If the underside is golden brown, turn the pancake over. Two or three minutes per side is usually sufficient.

## Variations

**BLINI:** A small pancake of Russia and Poland made of both wheat and buckwheat flour, yeast, butter, eggs and milk. Blini are often spread with caviar or slices of smoked salmon, stacked one on top of another and served with sour cream.

**BLINTZ:** The traditional pancake of Jewish cuisine with an eastern European origin. It is fried very thin and rolled with cheese, cream cheese or fruits, such as blueberries or apples, and served with sour cream.

**CANNELLONI:** An Italian hors d'oeuvre or entrée. It may be made with noodle dough or pancake batter. The pancake is spread with a cheese or finely chopped, well-seasoned meat mixture. It is then rolled and covered with a cheese sauce and baked.

**CREPE:** A French pancake. Crepes are made of a flour and egg batter and are very thin and light. They are often spread with jam, fruit, whipped cream or rolled in a sweet sauce and served as a dessert. The best known of these, Crepes Suzette, is doused with liqueur and set afire. Crepes may be filled with meat, poultry or cheese and served as an entrée.

**EIERKUCKAS:** A rich pancake from the Alsace Lorraine region of northeastern France. The batter is mixed with red currant jelly and cream.

**FLENSJES:** A very thick Dutch pancake made of egg batter and served as dessert with sugar, ginger jam, or marmalade.

**FLAESKPANNKAKA:** A pork or bacon pancake from Sweden. The batter is cooked until nearly set, then the meat is laid on top and the cooking then completed.

**PALASCINTA:** This Hungarian pancake may be served for dessert or a main course, depending on the filling. It can be spread with minced ham and mushrooms, grated cheese and sour cream or topped with preserves and/or sour cream.

**PANNEKOEKE:** The basic Dutch pancake. It might be small, filled with custard and served as dessert. Or, it might be large with bacon cooked into it and served with molasses as an entrée.

**PANNKUCHEN:** A crepe-like German pancake, it is often served with a mixture of currants, candied peel, grated lemon peel and sour cream.

**PLATTER of PANNKAKA:** A Swedish pancake traditionally served with syrup, jam or spiced cranberries.

**PO-PING:** In Chinese cuisine, the thin mandarin pancake used in such dishes as Peking duck and moo shu pork.

## Recipe

### Light-as-a-Feather Whole Wheat Pancakes

- 1 1/3 cups whole wheat flour
- 1 1/2 teaspoons baking powder
- 1/4 teaspoon salt
- 1/4 teaspoon baking soda
- 1 egg
- 1 1/3 cups buttermilk
- 1 tablespoon brown sugar
- 1 tablespoon oil

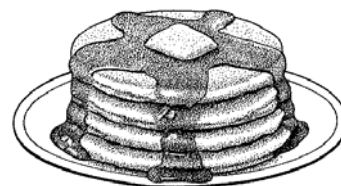
In a medium bowl, stir or sift dry ingredients together. Beat egg, buttermilk, brown sugar and oil together. Stir into dry ingredients just until moistened. Batter should be slightly lumpy.

Pour 1/4 cup batter for each cake onto a well-seasoned hot griddle. Turn when bubbles appear on surface. Turn only once. Makes 12 4-inch pancakes.

**Nutrient Analysis:** Each pancake provides approximately: 76 calories, 3 g protein, 2 g fat, 12 g carbohydrate, 2 g fiber, 19 mg cholesterol and 166 mg sodium.

### ALTERNATIVES:

- Omit soda, use 2 teaspoons baking powder and 1 1/3 cups regular or skim milk.
- Add 1/2 cup fresh or frozen blueberries.
- Serve hot, chunky, spiced applesauce or thick fruit sauce over cakes instead of syrup for extra nutrition and fiber.



# Grains of truth about COOKIES

## Definitions

Originally called “little cakes,” cookies are made with sweet dough or batter, baked in single-sized servings and eaten out-of-hand. Perfect for snacking or as dessert, cookies are consumed in 95.2 percent of U.S. households. Americans alone consume over 2 billion cookies a year, or 300 cookies for each person annually.

Cookies are most often classified by method of preparation—drop, molded, pressed, refrigerated, bar and rolled. Their dominant ingredient, such as nut cookies, fruit cookies or chocolate cookies, can also classify them. Whether gourmet, soft or bite-sized cookies, new categories are always cropping up as the American appetite for cookies continues to grow.

## History

The word cookie originally came from the Dutch *keokje*, meaning “little cake.” In addition, the Dutch first popularized cookies in the United States. The British took a liking to them in the 19<sup>th</sup> century, incorporating them into their daily tea service and calling them biscuits or sweet buns, as they do in Scotland.

Sometime in the 1930’s, so the story goes a Massachusetts innkeeper ran out of nuts while making cookies. Therefore, she substituted a bar of baking chocolate, breaking it into pieces and adding the chunks of chocolate to the flour, butter and brown sugar dough. The Toll House Cookie, so named after the inn in which it was served, was a hit.

Historians credit the innkeeper, Ruth Wakefield, with inventing what has since become an American classic—the chocolate chip cookie.



## Ingredients

Following are the basic ingredients used in cookie making. In addition to these, fruits, nuts, chocolates, candies and flavors are used to make the hundreds of cookie varieties that keep Americans asking for more.

### Flours:

Different types of flours may be used in cookie making, depending on the mix. For butter-rich cookies, all-purpose flour or a blend of cake and bread flour will maintain the desired shape and texture of the cookie. All-purpose flour also holds up better when egg yolks are used. A low gluten cake flour blends easily with whipped egg whites, and results in puffier, softer cookies.

### Sugar:

A finely granulated sugar is preferred for most cookie mixes unless the recipe calls for something different. Coarsely ground sugar is sometimes used for sprinkling on top of cookies but should not be used in the mix because it will result in poor baking performance. Molasses is ideal for soft cookies because it sweetens and increases moisture retention during baking. In some recipes, brown sugar, honey or corn syrup may be used as a sweetener.

### Fat:

Butter, margarine and vegetable shortening are the fats used in cookies in relatively high ratios to flour, sugar and other ingredients. Largely responsible for the rich taste associated with cookies, these fats also contribute tenderness and keeping qualities to the finished product. Cookies made with vegetable shortening will spread less in the oven than those made with butter because shortening will hold its shape over a wider temperature range.

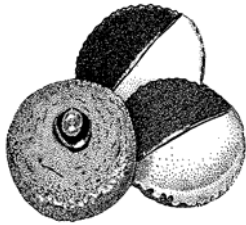
### Eggs:

Eggs add flavor and keeping qualities to cookies, and help maintain the final shape and structure of the cookie. The whole egg, the yolks only or the whites only may be used.

## Preparation

Mixing affects the overall quality and tenderness of the cookie, so recipes should be followed carefully. Thorough creaming or blending of ingredients before flour is added is important. Improper mixing can result in a tough cookie. Whip egg whites to wet peaks, rather than dry. In most cases, flour should be folded in gently to maintain tenderness of the final product.

If pans are to be greased, avoid over-greasing, which will cause cookies to spread excessively; or uneven greasing, which will cause some cookies to stick and not spread enough. Watch baking time and temperature closely. Unless directions state otherwise, remove from the oven as soon as the cookies are done and place on wire racks to cool.



## High altitude baking

Directions vary among altitudes from 5,000 to 8,000 feet above sea level. Ideally, the recipe will give high altitude directions, but if not, call your nearest county extension office for assistance.

## Storage

Cookies usually do not stale as quickly as other baked goods because of their high fat content. In general, store cookies in an airtight container at room temperature, or freeze in a sealed container for longer periods.

## Nutritional value

One of the rewards of eating plenty of low-fat grain products, fruits and vegetables is that one can occasionally enjoy treats that are higher in fat, such as cookies. There is also increasing availability of sugar-free, low-fat and fat-free cookies.

To compare how some of the traditional favorites measure up nutritionally, see the table below:

## Nutritional value (cookies listed according to ingredients used.)

ONE PIECE	WEIGHT (ounces)	CALORIES	CARBOHYDRATES (gm)	PROTEIN (gm)	FAT (gm)
Oatmeal Raisin	.5	61.0	9.0	.75	2.5
Shortbread	1.0	40.0	5.0	.5	2.0
Peanut Butter	.5	61.0	7.0	1.0	3.5
Chocolate Chip	.4	49.0	7.0	.6	2.0
Sugar Cookie	.4	60.0	8.0	.5	3.0
Brownie w/Nuts	.7	95.0	11.0	1.3	6.3



# Grains of truth about SCONES

## Definitions

Scones are biscuit-like pastries or quick breads that are often rolled into round shapes and cut into quarters, then baked, sometimes on a griddle.

## History

In the 1690s, King William of Britain indirectly sent scones to America when he booted the Scots from their highlands to make way for sheep. Emigrating to America via Ireland, they sought land in western Pennsylvania and frontier areas. With them, these transient Scots and Scotch-Irish brought the cuisine that made their new land more like home. Scones were baked in spiders — cast-iron frying pans equipped with long handles and short legs — over open fires even before the cottage fireplaces were built.

Scones became popular and an essential part of the fashionable ritual of "taking tea". They are still served daily, hot and buttered, throughout Britain and many regions of its former empire.

## Availability

Scones can be purchased in some bakeries and many retail grocery stores or can be made at home.

## Storage

To freeze scones, cool baked scones completely, then wrap tightly in heavy plastic bags, pressing out as much air as possible.

To reheat, spread frozen scones on a cookie sheet and heat for about 5 minutes at 250° F.

Most scones can be frozen before baking. After cutting or shaping, freeze on a cookie sheet or try lined with wax paper. When hard, wrap tightly in heavy plastic bags and return to freezer. Bake frozen scones a minute or two longer than the recipe specifies.

## Nutritional value

One 1.5 ounce scone from a basic scone recipe provides:

Calories	160	
Carbohydrates	20.0 g	
Cholesterol	0.8 mg	
Fat	8.0 g	
Fiber	0.5 g	
Potassium	42.0 mg	
Protein	2.4 g	
Selenium	6.0 mcg	
Sodium	225.0 mg	
Zinc	0.2 mg	
Calories from	Carbohydrates	49%
	Fat	45%
	Protein	6%

## Preparation

- Olive oil can be used to add flavor. Stir it in with the liquid ingredients.
- For best results, measure ingredients correctly. Use glass measuring cups for liquids and metal or plastic cups for dry ingredients.
- Scones tend to be a high-fat item. To reduce the fat, cut back on the amount of butter or margarine.
- Bake only one sheet of scones at a time, and place cookie sheet on the oven rack so that the sides do not touch the oven walls or door. Space around the cookie sheet allows for hot air to circulate evenly.
- Scones are cooked when they no longer look raw and have a slightly golden color.
- Scones need at least 30 minutes to cool and develop full flavor.

# Recipes:

## Cheese Scones

- 1 1/2 cups all-purpose flour
- 1 1/2 teaspoons baking powder
- 1 teaspoon dry mustard
- 1/4 teaspoon salt
- 4 tablespoons (1/2 stick) cold butter or margarine, cut up
- 1 cup (4 oz.) shredded sharp cheddar cheese
- 2 tablespoons grated Parmesan cheese
- 1 large egg
- 1/2 cup milk

Heat over to 400° F. Combine flour, baking powder, dry mustard and salt into a large bowl; mix well.

Add butter and cut in with pastry blender until the mixture looks like fine granules. Add cheeses and stir.

Break egg into milk and beat with a fork to blend well. Pour over flour mixture and stir with a fork until a dough forms.

Place dough onto a lightly floured board and knead 10 to 12 times. Cut dough in half. Knead each half briefly into a ball, turn smooth side up, and pat or roll into a 6-inch circle. Cut each circle into 6 wedges. Place on an ungreased cookie sheet.

Bake 12 to 15 minutes, or until medium brown. Cool, loosely wrapped in a towel, or a wire rack. Makes 12 scones.

**Nutrient Analysis.** Each scone provides 145 cal, 5.3 g protein, 13 g carbohydrates, .4 g dietary fiber, 8 g fat, 29 mg cholesterol, 124 mg calcium, 50 mg potassium and 219 mg sodium. Calories from carbohydrates, 35%; fats, 50%; and protein, 15%.

## Cranberry Scones

- 2/3 cup buttermilk or plain yogurt
- 1 large egg
- 3 cups all-purpose flour
- 4 teaspoons baking powder
- 1/2 teaspoon baking soda
- 1/4 teaspoon salt
- 8 tablespoons (1 stick) cold butter, cut up
- 1 cup fresh or frozen cranberries, cut in half
- 1/2 cup granulated sugar
- 1 teaspoon grated orange peel
- 1 tablespoon butter or margarine, softened

Heat over to 375° F. Combine buttermilk and egg; beat with a fork.

Combine flour, baking powder, baking soda, and salt in a large bowl. Stir well. Add the 8 tablespoons butter and cut in with a pastry blender until the mixture looks like fine granules.

Add cranberries, sugar and orange peel; toss lightly to distribute evenly. Add buttermilk mixture. Stir with a fork until a soft dough forms.

Turn dough onto a lightly floured surface and knead 5 to 6 times, just until well mixed. Form dough into a ball; cut into 12 wedges. Form each wedge into a ball and place on ungreased cookie sheet.

Bake 20 to 25 minutes, or until medium brown. Remove to a wire rack. Brush with the 1 tablespoon of soft butter. Let cool, uncovered, at least 1 hour before serving. Makes 12 scones.

**Nutrient Analysis.** Each scone provides 239 calories, 4.5 g protein, 34 g carbohydrates, 1 g dietary fiber, 9.5 g fat, 18 mg cholesterol, 71 mg potassium and 310 mg sodium. Calories from carbohydrates, 57%; fat, 36%; and protein, 7%.



NAME \_\_\_\_\_

HOUR \_\_\_\_\_

# VIDEO WORKSHEET

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1. Baking is like \_\_\_\_\_. The \_\_\_\_\_ is the formula and the \_\_\_\_\_ are the chemicals. How the ingredients are mixed, shaped and baked give the recipe its unique flavor, texture and appearance.
2. Draw a line between the ingredient to the way it is measured:

Brown sugar	Wet or glass measure at the line
White sugar	solid measure, packed and leveled at the top
Water	dry measure, plastic or metal, level at the top
3. If a recipe does not specify, what size egg should you use?
4. To bake great cookies, make sure the oven has been \_\_\_\_\_ and the racks are placed in the \_\_\_\_\_ of the oven.
5. So that cookies bake properly, they should be \_\_\_\_\_ in size.

6. Why is it important to pay attention to the recipe's directions about how far apart to place cookies on a baking sheet?

7. How does a bar cookie differ from drop cookie?

8. To make roll out cookies easier to handle, the dough should be \_\_\_\_\_ and the rolling pin and surface lightly \_\_\_\_\_ to prevent sticking.

9. Name two advantages to making refrigerator cookies:

1. \_\_\_\_\_

2. \_\_\_\_\_

10. Name 4 different types of cookies.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_



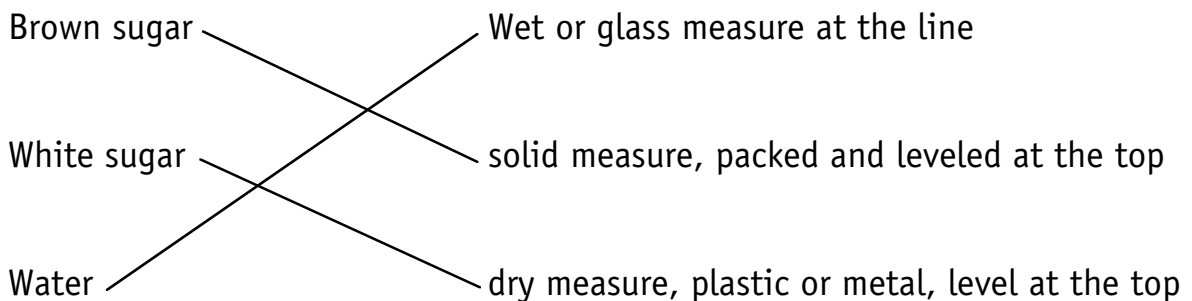


# VIDEO WORKSHEET

## Teacher's Key

1. Baking is like chemical formula . The recipe is the formula and the ingredients are the chemicals. How the ingredients are mixed, shaped and baked give the recipe its unique flavor, texture and appearance.

2. Draw a line between the ingredient to the way it is measured:



3. If a recipe does not specify, what size egg should you use?

***In recipes always use large eggs unless a different size is specified.***

4. To bake great cookies, make sure the oven has been preheated and the racks are placed in the center of the oven.

5. So that cookies bake properly, they should be uniform (the same) in size.



6. Why is it important to pay attention to the recipe's directions about how far apart to place cookies on a baking sheet?

***The dough should be placed on the cookie sheet according to the recipe's directions because batters will spread differently.***

7. How does a bar cookie differ from drop cookie?

***Drop cookies are baked separately on a cookie sheet. A bar cookie is made by taking dough and pressing it into a greased pan, then baking and cutting into portions after they have cooled.***

8. To make roll out cookies easier to handle, the dough should be   ***chilled***   and the rolling pin and surface lightly   ***floured***   to prevent sticking.

9. Name two advantages to making refrigerator cookies:

1. ***Make dough now and bake when you have time.*** \_\_\_\_\_
2. ***These are great when you want warm fresh baked cookies all week long.*** \_\_\_\_\_
3. ***The logs can be frozen for cookies later and you don't even have to thaw them before you slice and bake.*** \_\_\_\_\_

10. Name 4 different types of cookies.

1. \_\_\_\_\_ ***molded*** \_\_\_\_\_
2. \_\_\_\_\_ ***drop*** \_\_\_\_\_
3. \_\_\_\_\_ ***bar*** \_\_\_\_\_
4. \_\_\_\_\_ ***refrigerator*** \_\_\_\_\_
5. \_\_\_\_\_ ***pressed*** \_\_\_\_\_





# RECIPES

## CHOCOLATE CHIP COOKIES

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- 1/2 cup room temperature butter
- 1/2 cup sugar
- 1/2 cup brown sugar
- 1 large egg
- 1/4 teaspoon salt
- 1 1/2 teaspoons vanilla
- 1 cup flour
- 1/2 teaspoon baking soda
- 1 cup chocolate chips

Cream the butter in a medium bowl and add the sugar, brown sugar, egg, salt and vanilla. Add the flour and baking soda and mix thoroughly, then add the chocolate chips. Drop the dough by heaping spoonfuls on an ungreased cookie sheet about 2 inch apart. Bake in a preheated 375 degree oven for about 10 minutes or until golden.

# CUTOUT SUGAR COOKIES

---

- 1/2 cup butter or margarine, room temperature
- 1 cup sugar
- 1 egg
- 2 tablespoon milk
- 1 1/2 teaspoon vanilla
- 2 cups all purpose flour
- 2 teaspoons baking powder

In a medium bowl, cream together butter, sugar, egg, milk and vanilla with an electric mixer. Add flour, baking powder and salt and blend with mixer. Divide dough into 2 (two) equal portion disks, wrap and refrigerate for at least one hour.

Roll out on a lightly floured surface to 1/4 inch thick. Cut into desired shapes. Place 1 inch apart on an ungreased cookie sheet and bake in a 375 degree oven for about 7 minutes or until golden. Cool completely on a wire rack.

# INCREDIBLE PEANUT BUTTER COOKIES

---

- 1 cup peanut butter
- 1 cup sugar
- 1 egg

Combine the ingredients in a medium bowl. Roll the dough into 1 inch balls and place on a cookie sheet. Flatten the balls with a fork and bake in a 350 degree oven for 10 minutes. Cool completely on a wire rack.

# Grains of truth about COOKIES

## Definitions

Originally called “little cakes,” cookies are made with sweet dough or batter, baked in single-sized servings and eaten out-of-hand. Perfect for snacking or as dessert, cookies are consumed in 95.2 percent of U.S. households. Americans alone consume over 2 billion cookies a year, or 300 cookies for each person annually.

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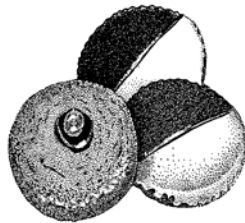
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One of the rewards of eating plenty of low-fat grain products, fruits and vegetables is that one can occasionally enjoy treats that are higher in fat, such as cookies. There is also increasing availability of sugar-free, low-fat and fat-free cookies.

To compare how some of the traditional favorites measure up nutritionally, see the table below:

## Nutritional value (cookies listed according to ingredients used.)

ONE PIECE	WEIGHT (ounces)	CALORIES	CARBOHYDRATES (gm)	PROTEIN (gm)	FAT (gm)
Oatmeal Raisin	.5	61.0	9.0	.75	2.5
Shortbread	1.0	40.0	5.0	.5	2.0
Peanut Butter	.5	61.0	7.0	1.0	3.5
Chocolate Chip	.4	49.0	7.0	.6	2.0
Sugar Cookie	.4	60.0	8.0	.5	3.0
Brownie w/Nuts	.7	95.0	11.0	1.3	6.3





NAME \_\_\_\_\_

HOUR \_\_\_\_\_

## **VIDEO WORKSHEET**

---

The method of mixing the fat into the dough affects the final texture. Fat may be "creamed", "cut-in", "rolled-in", or melted. Each of these techniques affects the final texture of a pastry. Pie crust uses the "cut-in" fat method to create a light, flaky crust.

1. Describe Renaissance pies and where the name "pie" originated.
2. Where does pie belong in the Food Guide Pyramid? Why?
3. Name the simple ingredients used in making a pastry crust (shell).
4. STOP! Before cooking or baking, what's the first step?
5. The trick to making flaky, tender pastry is to keep ingredients \_\_\_\_\_ and work \_\_\_\_\_.
6. Define the term "cutting" and what tools can be used to do the task.



7. What texture does the "cutting-in" mixing method create?
8. How can you stop the browning/burning of a crust, if the filling is not cooked (like apples)?

9. List three features of a "blue ribbon" crust:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

10. Do tarts have one or two crusts?

11. Draw a line to match the country with the pie:

Cornwall, England

Tart

Italy

Pastie (Pasty)/Turnover

France

Crostata

12. A French tart pan has a \_\_\_\_\_ rim/edge and a \_\_\_\_\_ bottom.

13. The Cornish pasties/turnover was a pie filled with \_\_\_\_\_ and taken for lunch by the coal miners in Cornwall.

14. Many things can be used for a crust, name three different crusts used in the video.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## Just for Fun!

15. What is the nursery rhyme that refers to a pie?





# VIDEO WORKSHEET

## Teacher's Key

The method of mixing the fat into the dough affects the final texture. Fat may be "creamed", "cut-in", "rolled-in", or melted. Each of these techniques affects the final texture of a pastry. Pie crust uses the "cut-in" fat method to create a light, flaky crust.

1. Describe Renaissance pies and where the name "pie" originated.

***The first pies were made of leftover meats and vegetables cooked in a pastry crust and the name may come from the bird the magpie who brings little scraps back to its nest.***

2. Where does pie belong in the Food Guide Pyramid? Why?

***They belong at the top of the food pyramid. They can be very high in fat and sugar so they should be eaten in moderation.***

3. Name the simple ingredients used in making a pastry crust (shell).

***Main ingredients are flour, salt, fat and water. Sometimes an acid like vinegar or sour cream is added for texture and flavor.***

4. STOP! Before cooking or baking, what's the first step?

***Hand washing and making sure work surface and utensils are clean.***

5. The trick to making flaky, tender pastry is to keep ingredients   **cold**   and work   **quickly**  .

6. Define the term "cutting" and what tools can be used to do the task.

***"Cutting" means to break the pieces of fat into small pea-sized pieces and distributing them through the flour mixture. A pastry blender or fork is the best tool for this task.***



7. What texture does the "cutting-in" mixing method create?

***The fat melts between the layers and creates a "flaky" tender texture. The "cutting-in" technique is also used in some biscuit recipes.***

8. How can you stop the browning/burning of a crust, if the filling is not cooked (like apples)?

***If your crust gets too brown before the filling is cooked, cover it with aluminum foil to stop the browning while the apples continue to cook.***

9. List three features of a "blue ribbon" crust:

1. crust is thin & crisp

2. tender, not tough

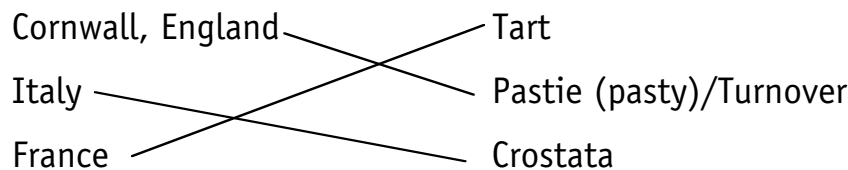
3. flaky, not soft

other: flavor is subtly rich

10. Do tarts have one or two crusts?

***Tarts have one crust.***

11. Draw a line to match the country with the pie:



12. A French tart pan has a fluted or ridged rim/edge and a removable bottom.

13. The Cornish pasty/turnover was a pie filled with leftovers and taken for lunch by the coal miners in Cornwall.

14. Many things can be used for a crust, name three different crusts used in the video.

1. pastry (of flour, fat & liquid)

2. graham crackers

3. spaghetti

Others: cookies, crackers

& cereals like cornflakes.

## Just for Fun!

15. What is the nursery rhyme that refers to a pie?

***Sing a Song of Sixpence (copy enclosed)***



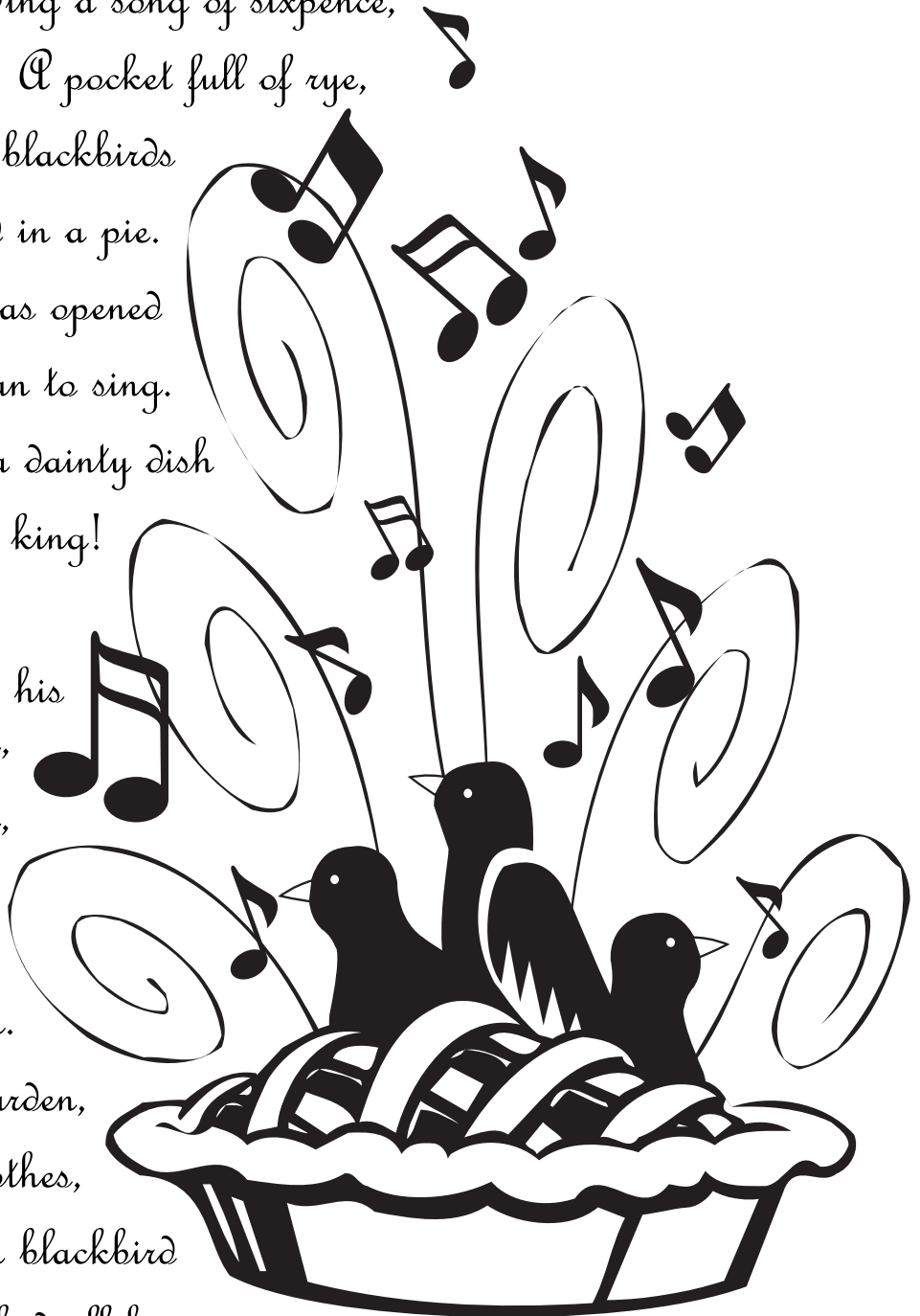


# Sing a Song of Sixpence

---

Sing a song of sixpence,  
A pocket full of rye,  
Four and twenty blackbirds  
Baked in a pie.  
When the pie was opened  
The birds began to sing.  
Wasn't that a dainty dish  
To set before the king!

The king was in his  
counting house,  
Counting out his money,  
The queen was in  
the parlor,  
Eating bread and honey.  
The maid was in the garden,  
Hanging out the clothes,  
When down came a blackbird  
And pecked off her nose.





# RECIPES

## ALL AMERICAN APPLE PIE

---

### Pie Crust (9" Pie):

2 cups flour  
1 teaspoon salt  
2/3 cup fat, like butter, shortening or lard  
7-8 tablespoons water

### Apple Filling:

6 cups peeled, cored and sliced tart apples  
3/4 cup sugar  
1 teaspoon apple pie spice or cinnamon  
2 tablespoons of flour  
1/4 teaspoon salt  
1 tablespoon lemon

### Pastry Crust:

For double pastry crust (2 crusts), stir the flour and salt together in a medium bowl. With a pastry blender or fork, cut in the shortening until pieces are the size of small peas. Add the smaller amount of water and toss with a fork until all flour is moistened and mixture starts to form a ball. If necessary, add remaining water. Gather dough in your hands and gently form into a disk. Divide dough into 2 equal portions. On a lightly floured surface roll out one portion to an 11" circle (2" larger than pie plate) 1/4" thick. Fit into a 9" pie plate.

### Filling:

Toss the apples with the remaining ingredients in a large bowl. Spoon this apple mixture into the piecrust. Roll the remaining dough into an 11" circle and place on top of the apple mixture. Fit the edges of the top and bottom crust together and flute with fork or pinch with fingers. Cut slits in top to allow steam to escape.

### Bake:

Place the pie on a cookie sheet in a preheated 425° F. oven for 15 minutes, then reduce heat to 350° F. and continue baking for 25-30 minutes. Check after 30 minutes and cover with aluminum foil if piecrust is browning too quickly. Pie is done when juice bubbles through slits in crust and crust is brown.

# FRENCH FRUIT TART

---

1-9" baked piecrust (also known as a pie "shell")

1-8 ounce package cream cheese, room temperature

3 ounces white chocolate chips, melted

4 cups assorted fruit (blueberries, raspberries, strawberries, kiwi, etc.)

1/4 cup jelly, melted in a measuring cup (choose your favorite, apple, currant, etc.)

**Crust:** One crust rolled and place in a 9" tart pan. Prick bottom and sides of pastry with a fork. Bake for 8-10 minutes at 450° F. Cool.

**Filling:** Combine the cream cheese and white chocolate in a medium bowl. Spread the mixture over the crust. Top with your choice of fruit to create a design. Pour melted jelly over fruit to glaze the tart.

# ITALIAN STRAWBERRY CROSTATA

---

## *Rustic Fruit Tart\**

1 prepared piecrust dough

2 tablespoons sugar

1/4 cup strawberry jam

1 teaspoon cinnamon

2 cups sliced strawberries

Place crust on a cookie sheet. Spread jam and top with strawberries leaving a 2" edge. Sprinkle with sugar and cinnamon. Fold the crust up 1" and pinch. Bake in a 375° F. oven for 20-25 minutes.

*\*Cornish Pastie recipe is not included. Use a prepared crust and canned beef stew for filling.*

# CRUMB CRUST

---

9" pie plate

1 1/2 cups of crumbs-graham crackers, vanilla or chocolate wafers, or cookies

1/3 cup melted butter

1/4 cup sugar

Mix the ingredients in a medium bowl and the press the mixture into a pie plate. Bake for 10 minutes at 350° F.

# **FRENCH CHOCOLATE SILK PIE IN A CHOCOLATE CRUMB CRUST**

---

Prepared 9" chocolate crumb crust

1 cup chocolate chips (6 oz.)

1 cup whipping cream

1 pasteurized egg or 1/2 cup pasteurized egg product

Place chocolate chips in blender, heat cream in the microwave for 1 minute. Add to the chocolate and turn blender on low. Add egg and blend. Pour filling into the crust. Place in refrigerator to cool for 2 hours. Top with whipped cream and serve.

## **EASY SPAGHETTI PIE**

---

6 ounces of spaghetti, cooked, rinsed and cooled

2 eggs, beaten

1/2 cup grated Parmesan cheese

1 cup sour cream

1 pound ground meat, cooked and drained

8 ounces spaghetti sauce

1 cup grated mozzarella cheese

Combine spaghetti with eggs and Parmesan cheese in a large bowl. Pour the mixture into a greased 9" pie pan and press up the sides. Cover the spaghetti with sour cream and top with ground meat and spaghetti sauce. Sprinkle with grated cheese. Bake in a 350° F. oven for 20-25 minutes or until golden. Slice into wedges to serve.

# Grains of truth about PASTRY

## Definitions

Pies... turnovers... strudel... cream puffs. These are just a few of the pastries loved the world over. The same basic ingredients — flour, fat and water — are used to make all of the them. When combined in different proportions and by varying mixing methods, these basic ingredients make flexible doughs that can be shaped into practical or decorative shapes to hold a variety of sweet and savory fillings.

### Short crust:

This basic dough is commonly used for pies, tarts and petits fours. It is a flaky, crisp pastry with several variations: the basic short crust, a sturdy but tender pastry made with a minimum of fat and water; the rich short crust, a fragile, crumbly dough made with egg; and refrigerator dough, the most delicate short crust, especially when made with cake flour, butter and sugar.

### Puff-pastry:

This pastry consists of as many as 700 layers of paper-thin pastry separated by butter and air for a light, crisp, and rich pastry. Puff pastry dough can be shaped for turnovers, cream horns and shells to hold different types of sweet or savory fillings.

### Strudel or phyllo:

Strong, elastic doughs are rolled and stretched so thin "you can read a newspaper through it," then layered with butter. Popular and versatile, they can be wrapped, folded, or shaped around various fillings, from fruit to meat. They are usually baked, as in fruit-filled strudels, but similar doughs can also be deep-fried.

### Chou paste (also called cream puff paste):

This is a unique cooked dough that, when baked, forms a high shell around an inner cavity. The cavity can be filled with whipped or vanilla cream, cheeses, and other sweet or savory fillings.

## History

The ancient Egyptians fashioned the first crude pastries out of grain meal flavored with honey, fruits and spices. The Greeks and Romans improved on the early recipes, but it was in the Middle East where pastries were developed into something of a culinary art form. Pastries were first brought to Europe during the Muslim invasion of the 7<sup>th</sup> century and quickly captured the imagination of European chefs. Their inventive use of pastries reached its zenith during the Renaissance when pies were filled with live rabbits, frogs, and birds for special banquets, just as in the old nursery rhyme "Four and twenty blackbirds baked in a pie."

## Availability

All pastry types can usually be found at retail bakeries and supermarket in-store bakeries. Ready-made pastries are also available frozen or packaged on the grocery shelf. Pie crust is sold as a mix, and in frozen or packaged form, shaped and ready to fill. Puff pastry and phyllo dough are both labor intensive to make from scratch, but can be purchased as frozen shells or sheets. Cookbooks and magazines are excellent sources for recipes for homemade pastries of all types.

## Nutritional value

By adhering to a well-balanced, low-fat diet, we can occasionally indulge our taste for light, tender pastries. Along with cakes and cookies, pastries have the highest sugar and fat content of the wheat foods. How high depends on the type of pastry and what fillings are used with it (see table on back).



# Ingredients

## Flours:

Wheat flour is essential to pastry making because it is the only flour with the gluten that allows dough to stretch and expand in the oven. Different types of wheat flours are suited to different types of pastry. Pastry flour, which is milled from soft wheat, is best for rich short crust and refrigerator doughs. Regular short crust and chou pastry require all-purpose flour, a mixture of hard and soft wheats, with a gluten content high enough to make doughs resilient but still tender. To produce tender puff pastry, a mixture of all-purpose flour and low-gluten cake flour is recommended. Doughs for strudel and phyllo should be made with a strong, high-gluten bread flour that can stand up to stretching into large thin sheets.



## Fat:

Fat, in the form of butter, margarine, solid vegetable shortening, lard, or vegetable oil, plays several important roles in pastry making. In addition to adding flavor, the fat coats and separates flour particles, helping to lubricate and tenderize the pastry. Because fat is not absorbed by the other ingredients, it acts as a spacer, contributing flakiness to the pastry. The method of incorporating the fat into the dough affects the final texture, and differs with the various pastry types. Whether the fat is creamed, cut in, rolled in, or melted, it should be evenly distributed throughout the mixture.

## Liquids:

Water and milk are the most commonly used liquids in pastry but orange and lemon juice, cream, egg, and other additions can contribute to the flavor and texture of the pastry. The liquid starts the development of gluten in the flour. During baking, the liquid turns to steam, helping to leaven the pastry. The amount of liquid used will affect the tenderness of the dough.

## Storage

Storage recommendations for pies and tarts will vary, depending on the filling used. While some will keep at room temperature or in the refrigerator (wrapped in foil) for several days, others are best served on the same day as baked. Pies are best frozen in an unbaked state to prevent crust shrinkage. Wrapped in a layer of plastic wrap and a layer of foil, they will keep for several months in the freezer. Bake before defrosting.

Baked cream puff pastry stales quickly and should be frozen if not used immediately. Cool after baking and seal in a container to prevent crushing. Limit freezing time to five days to prevent pastry from absorbing freezer odors.

Unbaked puff pastry, strudel and phyllo doughs can be refrigerated for several days, or wrapped in plastic or freezer wrap plus a layer of foil and frozen. Thaw to room temperature before baking. To freeze baked puff pastry shells, cool and wrap in aluminum foil. To use, unwrap and crisp in a 325° F. oven until warm. Fill as desired.

## Nutritional value of pastry according to the ingredients used.

One Piece/Item	Weight	Calories	Carbohydrates	Protein	Fat
	(oz)		(gm)	(gm)	(gm)
Cream Puff w/Filling	4.0	256.0	23.0	7.0	15.5
Strudel w/Filling	4.0	273.0	50.0	3.0	8.0
Apple Pie (1/6 pie)	5.6	404.0	60.0	3.5	17.5
Blueberry Pie (1/6 pie)	5.6	380.0	55.0	4.0	17.0
Short Crust (1/6 pie)	1.0	150.0	13.0	1.8	10.0



NAME \_\_\_\_\_

HOUR \_\_\_\_\_

# VIDEO WORKSHEET

---

1. What nutritional value does meat have? What is considered a serving size?

2. Draw a line from the meat to the animal it comes from:

beef

hogs

veal

sheep

lamb

cattle

pork

3. Name two basic parts of meat.

4. Why is it important to know about the different cuts of meat?



5. Name three things you can learn from the label of a meat package.
6. List two ways can you get the most for your money.
7. Describe the process of roasting meat. What kinds of cuts roast best?
8. What kind of meat is best for broiling or grilling?
9. What is par broiling?
10. What is marinade?
11. Describe the process of braising meat. What meat is best prepared this way?
12. Convenience meat products are increasing. List three.





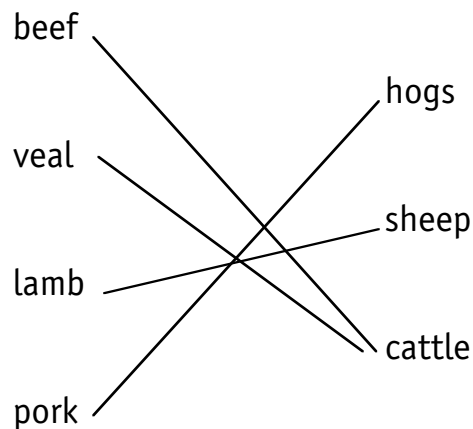
# VIDEO WORKSHEET

## Teacher's Key

1. What nutritional value does meat have? What is considered a serving size?

***Meat is an excellent source of protein, Iron and vitamin B. Meat should be eaten in moderation. A serving size is the size of a deck of cards or a small fist (2 or 3 ounce of cooked meat).***

2. Draw a line from the meat to the animal it comes from:



3. Name two basic parts of meat.

***All meat has muscle, connective tissue, bone and fat.***

4. Why is it important to know about the different cuts of meat?

***The "cut" or part of meat affects the tenderness, cooking method, leanness, and cost of the meat***



5. Name three things you can learn from the label of a meat package.

***The kind of meat — beef, veal, pork or lamb. The grade-based on how much fat is in the meat. The amount by weight. The sell by date. The price. It can sometimes even tell you the best way to cook this cut of meat.***

6. List two ways can you get the most for your money.

***Choosing a "select grade" or "good" instead of "prime" or "choice" which are more expensive. Combine less meat with other low cost ingredients like vegetables for stir fry. Buying a less-tender cut of meat and cooking them to tenderness. Store fresh meat quickly in its original package and use within two days.***

7. Describe the process of roasting meat. What kinds of "cuts" roast best?

***Roasting is the perfect method for cooking large, tender cuts of meat. Meat is placed on a large shallow pan, fat side up. It is placed uncovered in a 325 degree oven until it reaches an internal temperature of 160 for medium or 170 for well.***

***Cuts: rib, loin & leg roasts, all cuts of pork & ground meats.***

8. What kind of meat is best for broiling or grilling?

***Broiling or grilling is great for tender cuts of meat that are at least 3/4 inch thick. The meat is place on a grill 3 to 4 inches from the heat source. Broil – heat source at top. Grill – heat source at bottom.***

9. What is par broiling?

***Browning the meat in a heavy skillet without additional fat. Fat is poured off as meat is cooked. Use this method for tender cuts.***

10. What is marinade?

***Marinating is a good way to add flavor to meat and also to increase the tenderness. A marinade is a mixture of an acid food like a lemon juice and seasonings.***

11. Describe the process of braising meat. What meat is best prepared this way?

***This is the quickest way to cook less tender pieces of meat. The meat is browned on both sides in a heavy pan. After browning, liquid is added. Cooking can be on top of the stove, in the over or in a slow cooker. Use this method for less tender cuts of meat like beef chuck, stew meat and brisket.***

12. Convenience meat products are increasing. List three.

***Ham, sandwich meat, bacon, sausages. These are available in the refrigerated section, canned and microwavable.***





# RECIPES

## ROAST

---

- 1 roast- beef, veal, lamb or pork
- 1 tablespoon herbs
- 1/2 teaspoon freshly ground pepper
- 1 1/2 teaspoon salt
- 2 tablespoons butter

Place roast in a shallow pan on a rack, fat side up. Sprinkle both sides with herbs, salt and pepper. Roast in a 325 degree oven until temperature reaches 160° F.

## CHINESE PORK TENDERLOIN

---

- 1 pound of pork loin or tenderloin, cut into 1 inch cubes
- 1/3 cup soy sauce
- 1/3 cup brown sugar
- 1 tablespoon lemon juice

Combine the soy sauce, brown sugar and lemon juice in a ziplock plastic bag and add the cubed pork. Marinate the pork for 30 minutes. Place on a skewer. Place on a broiling pan under a 500° F. broiler for about 10 minutes or until meat is done, turning once.

# BEEF STIR-FRY WITH PEPPERS AND TOMATOES

---

- 12 ounces beef steak, sliced into thin 2 inch strips
- 1 tablespoon peanut or vegetable oil
- 1 clove garlic, minced or 1 teaspoon garlic powder
- 1 tablespoon minced fresh ginger or 1 teaspoon ground ginger
- 2 green onions, chopped
- 2 green peppers, cored and cut into 1/4" strips
- 2 tomatoes cut into wedges
- 1/4 cup "stir fry" sauce

Heat a wok or large frying pan with the oil and add the garlic, ginger and onions. Stir-fry for a minute, then add the beef and continue to stir-fry until lightly browned, but not completely cooked. Add the peppers and cook for another minute, then add the tomatoes. Add sauce to the stir-fry. Cook until the sauce thickens and serve immediately over rice or noodles.

# POT ROAST WITH VEGETABLES

---

- |                         |                                       |
|-------------------------|---------------------------------------|
| 1 tablespoon of oil     | salt and pepper                       |
| 2-3 pound beef roast    | 3 red potatoes                        |
| 2 medium onions, sliced | 3 sweet potatoes                      |
| 1/2 teaspoon cinnamon   | 4 carrots, peeled and cut into pieces |
| 1/2 teaspoon allspice   |                                       |

Heat the oil in a Dutch oven (heavy fry pan) over medium-high heat. Brown the meat on both sides. Add the onion and continue to cook over medium heat until browned. Add enough water to the pan to cover the meat and the salt, pepper, cinnamon and allspice. Bring the liquid to a boil, then cover and cook on low heat for about 1 hour. Add the vegetables to the pan and continue cooking for another hour.

# **FAVORITE BEEF STROGANOFF**

---

## **In a slow cooker**

- 2 pounds round steak
- 1 teaspoon salt
- 1/8 teaspoon pepper
- 1 onion sliced
- 1/4 teaspoon garlic salt
- 1 tablespoon Worcestershire
- 1 1/2 cups beef broth
- 1 tablespoon catsup
- 1 can mushrooms, drained
- 1/2 cup water
- 1/3 cup flour
- 1 cup sour cream, fat free

Cut steak into 1/4 inch strips. Coat with salt and pepper. Drop into bottom of slow cooker with the onion. Mix the next four ingredients and pour over the meat. Cover and cook on low for 6-8 hours or until tender. Add mushrooms. Then mix flour with a small amount of water in a 2-cup measurer with a fork or whisk. Add to the meat and mix. Cook on high for about 15 minutes or until thickened. Stir in the sour cream and turn off heat. Serve over noodles or rice.