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# Cookies

The Dutch introduced cookies, or “little cakes,” to the new American colonies in 1614. They were actually small amounts of batter or dough placed in the oven to see if the oven was hot enough to bake bread. Since then, most of our most popular cookies have only been around since the late 19th and early 20th century. According to the Home Baking Association, 95 percent of American homes bake cookies. Cookies have been used to organize A Bake-and-Take Day, to remember friends and shut-ins with a favorite baked goodie, and The Great American Bake Sale ([www.greatamericanbakesale.org](http://www.greatamericanbakesale.org)), to help end childhood hunger in America. No matter why you bake cookies, the measuring of the ingredients is the most important part. An extra tablespoon or two can make a big difference in whether the cookie spreads or puffs. Measure all ingredients carefully for the best results.

## FAT

Shortening, butter, and margarine are all fats. But not all fats are created equal when it comes to baking cookies. Fats are used in cookies to:

- ★ tenderize and soften the texture
- ★ add moistness and richness
- ★ increase the keeping quality
- ★ add flavor
- ★ assist in leavening when used as a creaming agent

Butter or margarine is usually used in cookies because it adds a desirable flavor and melts in your mouth. Margarines with added water, or “light” margarines, are not suitable for cookies. (If you must use margarine, look for one that is at least 65 percent vegetable oil.) Unless a recipe calls for shortening, it is unsuitable because it is 100 percent fat. Butter is a natural product that is hard and brittle when cold but very soft at room temperature and melts easily. Avoid over softening butter, as it makes for oily, thin cookies. Half butter and half shortening offers both flavor and a controlled spread.

## SUGAR

Sugar has a tenderizing effect on gluten and egg proteins in the cookie dough. Most recipes call for “creaming” of the fat and sugar. This creaming traps air to make the cookie tender. Cream the fat and sugar on medium high speed until it appears light and fluffy. Then reduce the mixer speed and add eggs and liquid, mixing completely before adding the flour. A finely granulated sugar blends completely with the other ingredients and makes for a thinner, crispier cookie. If the sugar doesn’t dissolve in the other ingredients, the cookie will be open-textured. Brown sugar use develops a chewier, more moist cookie. Make sure to pack brown sugar into the measuring device; it should hold its form when unmolded). Substituting honey adds moisture, so cookies are softer, browner, and spread more. Because honey has a higher moisture content than sugar, is about 20 percent sweeter, and browns faster, adjustments have to be made in the recipe ingredient amounts and baking time.

## EGGS

The most important function of eggs is to act as an emulsifier. By surrounding small particles of fat, the egg helps make the cookie dough smoother. In addition, eggs incorporate tiny air bubbles when beaten and add moisture, color, flavor, and nutritional value. Generally, recipes call for large eggs. More eggs in a recipe produce a chewier cookie. Eggs left at room temperature for about 30 minutes produce a lighter cookie.

## LIQUID

Cookies may call for water, milk, juice, or vanilla to add flavor and moisture. These ingredients are usually added with the eggs.

## ALL-PURPOSE FLOUR

After creaming, and adding the egg and liquid, it's time to add the dry ingredients. The flour and leavening agent should be whisked together before adding to the wet ingredients. The dry ingredients should be added one-third at a time and incorporated well, with the mixing bowl scraped as you go. The protein or gluten found in flour helps form the structure of the cookie dough. To prevent elasticity in the dough of cookies, softer flour or one with less protein (less than 11 percent) is recommended). All-purpose flour is the best choice. Self-rising flour may also be used in recipes, but because it has added baking powder and salt, these ingredients must be eliminated from the original recipe. Higher protein flour tends to absorb more moisture, causing less spread in cookies. The use of pastry or cake flour will make for tender cookies. Since measurement is so important, spoon the flour into the measuring device and level off for greatest accuracy.

## BAKING POWDER AND SODA

Baking powder is a mixture of baking soda plus an acid. Most consumers use double-acting baking powder. It contains a fast-acting acid that reacts with the moisture in the recipe and a slow-acting baking powder that reacts with the addition of heat. If moisture is present, the acid reacts, causing the release of carbon dioxide, which causes cookies to rise slightly.

## SALT

The amount of salt is constant in cookie recipes, about 1 teaspoon for every pound of flour.

## SPICES, FLAVORINGS, AND EXTRACTS

Spices, flavorings, and extracts add flavor to the cookies. Usually these are added in small amounts.

## COOKIE TYPES

Cookies can be separated into six types based on the softness of the dough. They are: drop, refrigerator, piped or pressed, rolled, molded, and bar.

## BAR AND DROP COOKIES

The dough for bar and drop cookies is much softer than for the other types, which allows you to push the dough from a spoon onto a cookie sheet for baking. The cookies will be uniform in size if you scoop the same amount of dough onto the spoon each time. To bake, place them about 2 inches apart on an ungreased cookie sheet. If you use a cool cookie sheet, you can prevent unnecessary spreading. Bar cookies such as brownies are spread into a greased pan and then baked. They are then cut into the desired shape before serving. Bar cookies bake well in the microwave but must be watched carefully to prevent overcooking.

## REFRIGERATOR AND ROLLED COOKIES

Refrigerator and rolled cookies are made from stiff dough. They require more space between cookies because they spread. The dough for refrigerator cookies is usually pressed into a long, smooth roll; chilled; and then cut before baking. For extra-crisp cookies, slice very thinly. Refrigerator dough may be stored in the refrigerator several days before baking or frozen for up to two months, if tightly wrapped. The dough for rolled cookies is rolled out into a thin sheet (from  $\frac{1}{8}$  to  $\frac{1}{4}$ -inch thick) and then cut with cookie cutters into the desired shapes before baking. To prevent toughness, do not over handle the dough or add extra flour.

## PRESSED AND MOLDED COOKIES

Pressed and molded cookies are also made from stiff dough. A cookie press forces the dough through discs that act as cookie cutters. Place them onto an ungreased cookie sheet, leaving a small amount of space between the cookies. To shape molded cookies, roll the dough into a ball and then flatten or press the dough into pans of any shape.

## EQUIPMENT

For proper heat circulation, cookies should be baked on shiny, flat pans without sides. Grease the cookie sheets for meringue cookies, but do not grease the pans for rolled and refrigerator cookies. Baking stones make crisp cookies if the stone has been preheated. Bar cookies require a pan with sides. Either metal or glass will do. Try to fit as many cookies on a sheet as possible for efficiency in baking. Baking mats made of fiberglass mesh and/or silicone help prevent sticking and are easy to clean up.

For best browning results, place the cookie sheet in the center of the oven and bake one sheet of cookies at a time. If you want to bake two sheets of cookies at a time, arrange the oven racks into thirds to prevent cookies on the bottom rack from being too near the heat source and over baking. To ensure cookies brown evenly, switch the position of the cookie sheets when baking is half finished.

To be more efficient in your cookie baking, use at least two to three cookie sheets. While one sheet of cookies bakes, you can get another ready for the oven. Place cookie dough on cool pans only. Set the timer for the minimum baking time indicated in the recipe, then check cookies so they do not over bake. All cookies should be baked only until done, as overly brown or dried-out cookies are unsatisfactory and store poorly.

## OVEN TEMPERATURE

Cookies are baked at slightly higher temperatures than cakes. Cookies with very high sugar content or with condensed milk as an ingredient may need a lower temperature for baking. Low temperatures increase spreading and slow browning, while high temperatures have the opposite effect. Always preheat the oven before baking cookies.

## COOLING

Remove cookies from the baking sheet immediately to prevent sticking and overcooking. Then cool cookies on a rack for at least 10 minutes before handling. Cookies firm up as they cool. Cool cookies completely before storing.

## NUTRITIONAL VALUE

The ingredients found in the largest amounts in cookies are flour, sugar, and fat. These ingredients will provide calories but very little essential nutrients. Combined with a glass of milk, a serving of fruit, or by themselves, cookies can be enjoyed as part of a healthful diet.

## EVALUATION

Besides their flavor and appearance, cookies are judged according to crispness, softness, chewiness, and spread.

- ★ Crispness occurs as a result of a low ratio of liquid to flour (i.e., a small amount of liquid, high fat and sugar content, or sufficient baking) or a thin or small shape.
- ★ Softness is related to a high ratio of liquid to flour (i.e., a large amount of liquid, a low fat and sugar content, or insufficient baking); use of sugars such as honey, molasses, and corn syrup; and a thick or large shape.
- ★ Chewiness is caused by a high moisture content, a large amount of eggs, and/or the development of gluten during mixing. Recipes with brown sugar are more likely to be chewy than those with white sugar.
- ★ Spread is increased when the recipe calls for a high amount of sugar or large amount of baking soda or powder, high oven temperature, small development of gluten during mixing, and/or a greased cookie sheet.

## STORING COOKIES

Extra dough of rolled or refrigerated cookies can be kept in the refrigerator for up to three days or frozen for up to three months. Bar cookie dough should be baked immediately. For short-term storage, store soft-baked cookies in a tightly-covered container. To add moisture, add a fresh-cut apple or slice of bread to the container daily. Crisp cookies should be stored in a container with a loose-fitting lid. You can crisp-up cookies before serving them by warming them in a 300°F oven for five minutes. Baked rolled, refrigerator, or drop cookies (except meringues) will keep from three to five days at room temperature. Bar cookies are best if eaten before three to four days. For lengthy storage of bar cookies, wrap each individually in clear plastic or aluminum foil. Baked cookies can be frozen for up to three months, at which time they tend to lose their flavor. Freeze cookies in an air-tight container and thaw at room temperature at least one hour before serving. As with any food product, it is important to label the package with the product name and date.

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