## Cookies and Bars

COOKIES are small, flat pastries usually eaten alone (although not singularly) as a snack or as a petit four with coffee at the end of a meal. The increase of cookie shops in malls and office buildings attests to the popularity of freshly baked cookies. They are indeed one of America's best-loved foods. Part of the pleasure of cookies comes from their versatility. They may be eaten as a midmorning
 snack or as the elegant end to a formal dinner. Cookies also provide the finishing touch to a serving of ice cream, custard or fruit. Flavors are limited only by the baker's imagination; chocolate, oatmeal, cornmeal, fresh and dried fruit and nuts all find their way into several types of cookies.

## Objective:



Describe cookie characteristics and summarize cookie preparation methods.

Key Terms:
bar cookies
carryover baking chewy cookie creaming method crisp cookie
double pan
drop cookie
one stage method rolled cookies soft cookie
spread
tuile
warped

## Cookie Characteristics and Preparation

Cookies are classified according to their texture. They can be crisp, soft, or chewy. For example: biscotti are hard and crispy, while a macaroon is chewy and soft. Sometimes, the texture of a cookie, such as a chocolate chip cookie, is a matter of personal taste. Some people pre-
fer them soft and chewy, while others prefer them crispy. It is important to know the various types of cookies so that you get the texture you want!

## CRISP COOKIES: A crisp

 cookie has very little moisture in the batter. Most are made from stiff dough, without much liquid in the mix. They also have a high ratio of sugar. During the baking process, crisp cookies spread, or expand, more than other cookies because of the greater amount of

FIGURE 1. Cookies are classified by their texture, crisp, soft or chewy. However, texture is usually a preference when it comes to cookies, therefore cookies are classified by type as well. sugar they contain. Crisp cookies dry fast during baking because of their thinness and must be stored in air-tight containers without refrigeration. If they absorb moisture, they will turn, or become soft.

SOFT COOKIES: Soft cookies have a much different ratio of ingredients than crisp cookies do. A soft cookie has low amounts of fat and sugar in the batter, and a high proportion of liquid, such as eggs. Corn syrup, molasses, or honey is often used along with granulated sugar. Syrups retain moisture after the baking process, providing a soft texture. Soft cookies finish baking when their bottoms and edges turn a light golden brown. Soft cookies, like crisp cookies, must be stored in air-tight containers and not refrigerated. Soft cookie dough can be used in cookie forming machines such as a spritz machine.

CHEWY COOKIES: All chewy cookies are soft, but not all soft cookies are chewy. A chewy cookie needs a high ratio of eggs, sugar, and liquid, but a low amount of fat. For chewy cookies, the gluten in the flour must develop during the mixing stage. The amount of gluten in a particular kind of flour determines how much the cookie will expand. Gluten provides both stretch and flexibility to the cookie, which makes it chewy. Pastry flour is ideal for cookie production. However, a combination of cake flour and bread flour may be used for a chewier texture.

## COOKIE SPREAD

Some cookies require hand-labor to produce a particular molded shape. Although, some cookies hold their shape while baking, most cookies will spread. The spread of a cookie is determined by six factors:

- FLOUR TYPE: Pastry flour is used in cookies for its medium gluten content. This creates the proper spread.
- SUGAR TYPE: Granulated sugar provides the right amount of spread. If a finer grain of sugar, such as confectioner's sugar is used, the cookie will spread less.
- AMOUNT OF LIQUID: A cookie dough with a high amount of liquid, such as eggs, will have more spread. For reduced spread, decrease the amount of eggs in the recipe.
- BAKING SODA: In a cookie dough, the baking soda promotes the proper spread by relaxing the gluten. Baking soda is used as a leavening agent when it is combined with liquid and an acid.
- FAT TYPE: The type of fat used in cookie dough also affects the spread of the cookie. When butter or margarine is used, more spread is created. When all-purpose shortening is used, less spread is created.
- BAKING TEMPERATURE: Oven temperatures that are too low cause excessive spread. Oven temperatures that are too high give little or no spread.


## COOKIE PREPARATION

When making cookies, you must determine the appropriate mixing type. The type of cookie that you make determines the mixing method you will use. Most cookie doughs contain the same ingredients: sugar, fat, eggs, flour, baking soda, and leavening agents, such as baking powder. These ingredients are mixed together in varying amounts. Additional ingredients such as chocolate, nuts or fruits may also be added.

ONE-STAGE METHOD: Some cookies are made using the one-stage method, where all ingredients, including melted butter or oil, are mixed in a single step. All ingredients should be room temperature and accurately measured. Follow these steps for the one-stage method:

- Put all the ingredients in the mixer.
- Blend at low speed using the paddle attachment. It will usually take two to three minutes to blend the batter or dough.
- Scrape down the sides of the bowl with a spatula as necessary to be sure all the ingredients are well blended.

CREAMING METHOD:
The creaming method is the most common method for mixing cookie dough. The creaming method creams together sugar and fat, such as butter or shorten-


FIGURE 2. A common mixing method for making cookies is the creaming method, similar to making cakes, the sugar and the fat are creamed together initially to create a light, fluffy mixture. This mixture will easily combine with other ingredients.
ing, making a smooth, creamy mixture. It is smooth because air has been beaten into the fat and sugar cells. The air cells expand, lightening the texture of the cookies while they bake. A smooth mixture that is created by the creaming method will easily combine with other ingredients, such as fruit, nuts, chocolate chips or seeds.

## Making Cookies

Cookies may be classified not only by texture and mixing methods, but also by type. The five basic types of cookies are drop, rolled, icebox, molded and bar cookies. It is easier to classify cookies by their type than by their mixing method. Mixing methods are relatively simple, but cookie types can vary a great amount. Regardless of the method used to make the cookie, it is important that all the cookies in a batch be of the same thickness and size.

DROP COOKIES: Chocolate chip, peanut butter and oatmeal are examples of a drop cookie. The soft batter or dough for drop cookies use the creaming process. Follow these steps to make drop cookies:

- Choose a scoop for the size of the cookie that is desired.
- Drop the cookies onto parchmentlined baking sheets; if the recipe calls for greased baking sheets, be sure to follow the directions.
- Leave enough space between the cookies on the baking sheet to allow for even baking and spreading. Keep in mind how much a particular type of cookie will spread. Sometimes a recipe will recommend using a weight dipped in sugar to flatten each cookie. Most drop cookies will spread without being flattened.

FIGURE 3. Drop cookies, such as, chocolate chip are made from a soft batter that is literally dropped onto parchment lined baking sheets. You can use a spoon or a scooper to drop the batter in uniform pieces.


ROLLED COOKIES: Sugar cookies are examples of rolled cookies. Rolled cookies have a stiff dough that is rolled out. Shapes are then cut out of the dough and baked. Rolled cookies can be cut by hand or by machine.

ICEBOX COOKIES: Icebox cookies are perfect for making sure that freshly baked cookies are always on hand. Drop cookie dough and sugar cookie dough work well for icebox cookies. The dough can be rolled into logs, wrapped and stored in the refrigerator. Once the rolls of mixed dough have been placed in the refrigerator, the cookies can be sliced and baked as needed.

MOLDED COOKIES: Crescents, almond lace and tuile are examples of molded cookies. Tuile is a Belgian cookie that comes out of the oven soft. Tuile and almond lace cookies are shaped after baking.


FIGURE 4. Icebox cookies are made from a soft dough that can be rolled into logs, colored and made into a pinwheel and many more elaborate combinations. The dough is chilled, sliced and baked.

BAR COOKIES: Bar cookies are made from dough that has been shaped into long bars, baked and then cut. Popular bar cookies are hermits, coconut bars and fruit bars. Biscotti are bar cookies that are baked, sliced, and then baked again.


FIGURE 5. Molded cookies are molded when they come out of the oven. Almond lace cookies are common examples of a molded cookie.


FIGURE 6. Bar cookies are made from dough that is then shaped into long bars, baked and then cut. There are many different variations of bar cookies.

## Baking and Cooling Cookies

Always use clean pans that are not warped for baking cookies. A warped pan has become slightly less flat because of excessive heat and use. Lining the pans with parchment paper keeps cookies from sticking to the pan. It also allows for even browning.

## BROADENING AWARENESS...

## AMAZING ASPECTS: The Story Behind the Chip

History was made in 1930 when Ruth Wakefield, innkeeper of the Toll House Inn in Whitman Massachusetts, cut up a semi-sweet chocolate bar and added the pieces to cookie dough. She was disappointed, however, that the pieces kept their shape when baked -until her first bite, that is. Mrs. Wakefield contacted Nestle Foods Corporation, which published her cookie recipe on the wrapper of their semisweet chocolate bars. The recipe's popularity led Nestle to create and begin selling chocolate chips in 1939. Today's cookie maker can now choose from milk, white, sweet or bitter chocolate chips, along with mint, butterscotch, peanut butter, cinnamon and other flavor chips, offered in several sizes from a variety of manufacturers.

The heat from the pan that continues to bake the cookies once they are removed from the oven is called carryover baking. It is better to slightly under bake cookies.

To prevent burning the bottoms or edges of cookies before they are done, double pan them by placing the sheet pan inside a second pan of the same size. This double-pan technique is recommended for a rich dough.

When you bake two sheets at one time on separate racks, reverse them half way through the baking process. This ensures even baking.

Cookies are done when the bottoms and edges turn light golden brown. Be sure not to remove cookies from the pans until they are firm enough to handle.

## Summary:



A cookie is a baked or cooked food, typically small, flat and sweet. Cookies may be mass produced in factories, made in small bakeries or homemade. Cookies are classified by their type: drop, icebox, molded, rolled, and bar. Cookies are most commonly baked until crisp or just long enough that they remain soft, but some kinds of cookies are not baked at all. Cookies are made in a wide variety of styles, using an array of ingredients including sugars, spices, chocolate, butter, peanut butter, nuts or even dried fruits.

## Checking Your Knowledge:

1. How are cookies classified?
2. Differentiate between a crispy, soft and chewy cookie.
3. Describe what carryover baking is and how it can affect cookies?
4. Describe the double pan technique and what it can do for cookies.
5. How can we determine a cookie's doneness?

## Expanding Your Knowledge:



An Oreo cookie is a sandwich cookie, consisting of two chocolate wafers (usually chocolate) with a sweet crème filling. Introduced in 1912, Oreo is the best-selling cookie brand in the United States. Oreos are available in over one hundred countries and many varieties have been produced over the years, many even limited-edition flavors. Overall, it is estimated that since the Oreo's inception in 1912, over 450 billion Oreos have been produced worldwide.

## Web Links:

How to Make Perfect Chocolate Chip Cookies
https://www.youtube.com/watch?v=rEdl2Uetpvo
2-minute vs. 2-hour vs 2-day Cookie
https://www.youtube.com/watch?v=h4CyhQqAPpk
The Science Behind the Perfect Chocolate Chip Cookies
https://www.youtube.com/watch?v=hCzVqaFMllw
Making Cookies: What to Do When They Don't Spread
https://www.youtube.com/watch?v=Yrwftl5OMDY
Almond Lace Cookies
https://www.youtube.com/watch?v=kTHW8ZSrOWY

