

## Cookie Baking 101

### Chocolate Chip Cookies

Why Soft, hard, thin, thick, chewy?

A final cookie is affected by a number of variables. Soft cookies have more moisture, thin chewy cookies have more butter to the amount of flour. Hard cookies are cooked longer at a lower temperature. The same recipe can have different results from minor changes.

### Recipes:

#### The Puffy

Recipe: Alton Brown, The Food Network

1 cup butter-flavored shortening  
3/4 cup sugar  
1 cup brown sugar  
2 1/4 cups cake flour  
1 teaspoon kosher salt  
1 1/2 teaspoons baking powder  
2 eggs  
1 1/2 teaspoons vanilla extract  
2 cups semisweet chocolate chips

Hardware:

Ice cream scooper (#20 disher, to be exact)

Parchment paper

Baking sheets

Mixer

Heat oven to 375 degrees F. Combine the shortening, sugar, and brown sugar in the mixer's work bowl, and cream until light and fluffy. In the meantime, sift together the cake flour, salt, and baking powder and set aside.

Add the eggs 1 at a time to the creamed mixture. Then add vanilla. Increase the speed until thoroughly incorporated.

With the mixer set to low, slowly add the dry ingredients to the shortening and combine well. Stir in the chocolate chips. Chill the dough. Scoop onto parchment-lined baking sheets, 6 per sheet. Bake for 13 minutes or until golden brown and puffy, checking the cookies after 5 minutes. Rotate the baking sheet for even browning. Cool and store in an airtight-container.

## The Thin

Recipe: Alton Brown, The Food Network

2 1/4 cups all-purpose flour  
1 teaspoon kosher salt  
1 teaspoon baking soda  
1 egg  
2 ounces milk  
1 1/2 teaspoons vanilla extract  
2 sticks unsalted butter  
1 cup sugar  
1/2 cup brown sugar  
2 cups semisweet chocolate chips

Hardware:

Ice cream scooper (#20 disher, to be exact)

Parchment paper

Baking sheets

Mixer

Heat oven to 375 degrees F. Sift together the flour, salt, and baking soda in a mixing bowl. Combine the egg, milk, and vanilla and bring to room temperature in another bowl.

Cream the butter in the mixer's work bowl, starting on low speed to soften the butter. Add the sugars.

Increase the speed, and cream the mixture until light and fluffy. Reduce the speed and add the egg mixture slowly. Increase the speed and mix until well combined.

Slowly add the flour mixture, scraping the sides of the bowl until thoroughly combined. Stir in the chocolate chips. Scoop onto parchment-lined baking sheets, 6 cookies per sheet. Bake for 13 to 15 minutes, checking the cookies after 5 minutes. Rotate the baking sheet for more even browning.

Remove the cookies from the pans immediately. Once cooled, store in an airtight container.

## The Chewy

Recipe: Alton Brown, The Food Network

2 sticks unsalted butter  
2 1/4 cups bread flour  
1 teaspoon kosher salt  
1 teaspoon baking soda  
1/4 cup sugar  
1 1/4 cups brown sugar  
1 egg  
1 egg yolk  
2 tablespoons milk  
1 1/2 teaspoons vanilla extract  
2 cups semisweet chocolate chips

Hardware:

Ice cream scooper (#20 disher, to be exact)

Parchment paper

Baking sheets

Mixer

Heat oven to 375 degrees F.

Melt the butter in a heavy-bottom medium saucepan over low heat. Sift together the flour, salt, and baking soda and set aside.

Pour the melted butter in the mixer's work bowl. Add the sugar and brown sugar. Cream the butter and sugars on medium speed. Add the egg, yolk, 2 tablespoons milk and vanilla extract and mix until well combined. Slowly incorporate the flour mixture until thoroughly combined. Stir in the chocolate chips. Chill the dough, then scoop onto parchment-lined baking sheets, 6 cookies per sheet. Bake for 14 minutes or until golden brown, checking the cookies after 5 minutes. Rotate the baking sheet for even browning. Cool completely and store in an airtight container.

## **Equipment:**

### Cookie Sheets:

- Shiny Aluminum or Stainless Steel, Non-Stick: Even Browning. Can be lined with parchment or a mat to prevent sticking. Never spray a chocolate chip cookie pan.
- Insulated: Cookies will not brown. They heat too slow and the fat will melt and spread before cookies can evenly bake. Not recommended.
- Dark Aluminum: Can absorb heat causing the bottoms of the cookies to brown quickly.

### Scoopers:

- Using a cookie scoop will help get even size and shaped cookies.
- Larger cookies will be softer and chewier than small cookies. The edges will have a crisper texture than the middle.
- FYI: Ice cream scoops are numbered by how many scoops per quart; a #10 scoop yields 10 scoops per quart, a #20 yields 20 scoops per quart. This is how many 'level' scoops - in other words, a scoop of water.

## **Storage & Freezing:**

**Storing Cookies:** Cookies may be stored for 1-2 weeks. To keep soft cookies soft in a dry climate place in a covered container. Be sure the cookies are completely cooled before storing. If warm cookies are stored they will produce condensation and become damp and soggy.

**Freezing Dough:** Dough can be stored for 4-6 weeks in a freezer bag or container. Freeze individual cookie balls on a cookie sheet and then transfer to a freezer container to make baking later easier. Place frozen cookie balls directly into the oven for fresh baked cookies. They may require a minute or two longer cooking. Watch closely.

**Freezing Pre-baked cookies:** Cookies can be stored in a freezer bag or container for 3-4 weeks. Make sure they are completely cooled before freezing.

## What Makes the Difference/Summary:

If you have a cookie recipe that you love, but aren't getting the desired results, use these tips to get your perfect cookie:

- **Flat** If you want your cookies on the flat side, you can do some or all of the following things: Use all butter, use all-purpose flour or bread flour, increase the sugar content slightly, add a bit of liquid to your dough, and bring the dough to room temperature before baking.
- **Puffy** For light, puffy cookies, use shortening or margarine and cut back on the amount of fat; add an egg, cut back on the sugar, use cake flour or pastry flour, use baking powder instead of baking soda and refrigerate your dough before baking.
- **Chewy** Try melting the butter before adding it to the sugars when mixing. Remove cookies from the oven a few minutes before they are done, while their centers are still soft but are just cooked through. The edges should be golden. Use brown sugar, honey or molasses as a sweetener. Let cookies cool on the pan for several minutes after baking before transferring to cooling rack.
- **Crispy** For crisp, crunchy cookies, use all butter and a proportion of white sugar. Use egg yolks in place of a whole egg. Cookies should be baked completely. Let cool on the baking sheet for one minute before transferring to a cooling rack.

\*Allrecipes.com

## Tips:

- Larger cookies will be softer and chewier than small cookies. The edges will have a crisper texture than the middle.
- Cool the cookie sheet between use. That will prevent the fats inside the cookie from melting to quickly.
- Quality ingredients make quality cookies.
- Small changes in a recipe can create big results.

## Resources:

[www.foodnetwork.com](http://www.foodnetwork.com)

[www.allrecipes.com](http://www.allrecipes.com)

[www.Baking911.com/cookies](http://www.Baking911.com/cookies)

[www.foodreference.com](http://www.foodreference.com)

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## The History of the Toll House Chocolate Chip Cookie

Back in 1930, Kenneth and Ruth Wakefield purchased a Cape Cod-style toll house located halfway between Boston and New Bedford, on the outskirts of Whitman, Massachusetts. The same year the chocolate chip cookie was invented in that house by Ruth. Originally constructed in 1709, the house served as a haven for road-weary travelers.



Here, passengers paid toll, changed horses, and ate much-welcomed home-cooked meals. It was also here, over 200 years later, that the Wakefield decided to open a lodge, calling it the Toll House Inn. In keeping with the tradition of creating delicious homemade meals, Ruth baked for guests who stayed at the Toll House Inn. She graduated from the Framingham State Normal School Department of Household Arts in 1924. After graduation, she worked as a dietitian and food lecturer.

As she improved upon traditional Colonial recipes, Ruth's incredible desserts began attracting people from all over New England. One day, while preparing a batch of Butter Drop Do cookies, a favorite recipe dating back to Colonial days, Ruth cut a bar of our Nestlé Semi-Sweet Chocolate into tiny bits and added them to her dough, expecting them to melt. Instead, the chocolate held its shape and softened to a delicately creamy texture. The resulting creation became very popular at the Inn. Soon, Ruth's recipe was published in a Boston newspaper, as well as other papers in the New England area. Regional sales of Nestlé Semi-Sweet Chocolate Bar skyrocketed.



Ruth eventually approached Nestlé and together, they reached an agreement that allowed Nestle to print what would become the Toll House Cookie recipe on the wrapper of the Semi-Sweet Chocolate Bar. Part of this agreement included supplying Ruth with all of the chocolate she could use to make her delicious cookies for the rest of her life.

As the popularity of the Toll House cookie continued to grow Nestle looked for ways to make it easier for people to bake. Soon, they began scoring the Semi-Sweet Chocolate Bar, and packaged it with a special chopper for easily cutting it into small morsels. Shortly after, in 1939, they began offering tiny pieces of chocolate in convenient, ready-to-use packages and that is how the first Nestlé Toll House Real Semi-Sweet Chocolate Morsels were introduced. **(History from [nestles.com](http://nestles.com))**



## Basic Cookie Ingredients

[www.Baking911.com/cookies](http://www.Baking911.com/cookies)

The three main ingredients present in nearly every type of cookie are fat, flour, and sugar, but you'll see other ingredients in recipes such as leaveners, eggs, milk, perhaps some chocolate, coconut, spices or nuts.

As in all other areas of baking, using fresh, high-quality ingredients is critical to success.

**Flour:** The type of flour determines the structure of the cookie, and is the main binding agent. Each type of flour has an individual protein profile suitable almost exclusively for specific uses. All-purpose flour is generally used in most cookie recipes, but other wheat flour types are found, as well. The addition or substitution of other flours, such as bread or cake flour are sometimes added to get different results in a recipe. For example, bread flour can be used instead of all-purpose flour; it can absorb much more liquid because of its higher protein content, more moisture will stay in the cookie and it will be chewier. Replacing a few tablespoons of all-purpose flour with cake flour will give you a more tender cookie. However, each cookie recipe is different and the anticipated results will vary.

**FYI:** Cake flour is made with soft wheat, so you get less protein (7.5%) in your flour, less gluten in the mixture, and a very tender, potentially puffy, cookie. With bread flour, made from hard wheat, you have an increase in protein (to 12%), an increase in gluten and, therefore, a chewy cookie.

**Sweeteners:** Some form of sugar is used in all cookie recipes. It is a tenderizing agent, adds sweetness and affects the spread of the cookie. Granulated sugar or brown sugar is used frequently in cookie making, but honey, molasses, corn syrup and other sugars can be used, sometimes in combinations. It can be confusing as to which type to use; when a recipe calls simply for "sugar," it is safe to assume that granulated table sugar is intended. Powdered or confectioners' sugar is referred to as 10X.

The **type of sugar** and how much you use plays a big role in the outcome of the cookie's taste and texture, but the recipe plays the biggest role. Most chocolate chip recipes call for both types of sugar, such as in the **Nestle's Chocolate Chip Cookie Recipe**, to get the best of both worlds.

- To prevent cookies from cracking around the edges when baking, I like to use **superfine sugar**.
- White sugar will make a crisper cookie than one made with brown sugar, molasses or honey. It doesn't attract as much moisture from the environment keeping them crispy.
- Cookies made with brown sugar tend to be more soft and chewy. It's because brown sugar contains molasses which is hygroscopic and absorbs water from the atmosphere. In fact, upon standing, cookies made from brown sugar stay chewy.
- For a chewier cookie, liquid sweetener, such as honey, corn syrup or molasses is preferred. These will act as humectants and hold some of the moisture for longer periods of time than other types of sugar, thus, helping to maintain softness from one to two days to five or six days, in some cases even more than that. Just beware: using too much honey in the recipe can cause the cookies to become really brown.
- Cookie spread decreases as sugar particle size increases. A coarse granulated sugar produces less cookie spread during baking than powdered sugar.

**Fats:** such as stick butter and margarine, lard and shortening, all have their place in the cookie world. They coat the flour's **gluten strands**, some better than others and prevent the cookie from becoming tough when moistened and stirred. I like to use plain, pure (unsalted) butter because I find it adds the best flavor to a cookie recipe, but every baker has their own preference.

### Shortening vs. Butter vs. Margarine vs. Oil:

Each type of fat used in cookie recipes separately affects the cookie's texture and taste. Generally, the use of butter means a flatter, crispier cookies because it allows the dough to spread as it cooks on the hot cookie sheet. Cookies made with shortening will not spread, however all shortening will give you a cookie without a lot of taste. This approach gives you the best of both worlds: shortening is not as sensitive to shifts in temperature and the butter gives a lot of flavor.

- **Shortening: Least spread / Least flavor**, however can use butter flavored. Because of its higher melting point (98 to 100 degrees F) than butter, cookies keep their shape as it bakes, yielding a puffier more cake-like treat.
- **Stick Butter: Medium spread / Best flavor**. Because of the lower the melting point of butter (92 to 98 degrees F) than shortening, cookies spread and become flatter and crispier as the result. To help

reduce cookie spread when using butter, freeze the formed dough on the cookie sheets. When you place the frozen cookie dough immediately in the oven, the fat will stay colder longer and when baked, the cookie will retain its shape better. For flavor, there is no substitute for butter. Cookies made with butter have outstanding taste and a finely grained, often crisp texture. Butter also helps cookies to keep well and maintain their flavor. I recommend using unsalted butter in baking.

■ **Stick Margarine: Most spread / Some flavor**

■ **Vegetable oils:** cookies are softer than those made with butter or margarine.

**Eggs:** Use only fresh eggs, of course, and at room temperature. If the recipe is simply written with the word "eggs", use large which have a volume of about 1/4 cup each. The liquid from the egg forms steam and gets trapped in the cookie, puffing it up. In addition, they emulsify the dough, bringing the water and fat phases together in a recipe for a creamier, smoother texture. On the other hand, egg whites have a drying effect and but also contribute to the structure or shape of a cookie.

**Liquids:** Liquids are essential to cookie recipes. When wheat flour is moistened and stirred, **gluten** is formed from the proteins present. Gluten strands form the structure of the cookie, but they also have a toughening effect. Fats, such as stick butter and shortening, shorten the strands, and give you a more tender cookie. If you add too much liquid, like milk or water, your cookie dough is going to be like a very thick pancake batter which won't bake like a cookie.

**Leaveners:** Baking soda and baking powder are the classic leaveners in cookie recipes, but beaten egg whites are also used. Used together and separately, these components affect the puffiness to some degree (baking powder), but they also affect the color of the cookie (baking soda).

**Flavorings:** Cocoa, nuts, extracts, and other flavorings, all contribute to the character and taste of a cookie. I recommend using only pure vanilla extract, never imitation, even though you can buy quarts of the imitation stuff for the price of one good bottle of pure vanilla -- it keeps forever in a dark and cool storage cabinet. The taste of imitation vanilla is immediately detected, and is exaggerated if the dough or cookies are frozen. Use them discriminately but courageously. A touch of almond extract in a plain sugar-cookie recipe (add about 1/2 teaspoon at the same time you add the eggs to the dough), or a good dash of cardamom in spicy applesauce bars (add 1/2 teaspoon cardamom along with the other spices) makes a subtle but significant difference.

**Others:** Don't over add ingredients, such as chocolate chips, because the cookies, although they taste great, will get too mushy from the melted chocolate and will not bake well.

■ **Oatmeal** means uncooked rolled oats, either old-fashioned or quick, but not instant. Instant will get too mushy in the recipe.

■ **Coconut** means the shredded or flaked and sweetened kind. If you have fresh coconut, grate it and soak it in milk, refrigerated, for about 6 hours, then drain. This will give it about the same moisture content as the packaged kind.

■ **Raisins**, which may be used interchangeably with chopped dates in most recipes, are the dark Thompson seedless variety, unless golden raisins are specified. Currants and muscat raisins are occasionally used. Raisins should be plump and soft. If they seem dry and hard, soak them in hot water for 15 or 20 minutes, then drain before using.

■ **Nuts** can mean walnuts, pecans, and almonds, plus others. They can become rancid quickly (in just a week or two, depending on conditions) at room temperature, and should be stored in the refrigerator or freezer. When a recipe calls for **chopped nuts**, it usually means walnuts or pecans. Almonds, with their delicate flavor, and peanuts, which are more assertive, should be used only when specified.

■ **Grated orange and lemon rind** (known as "zest") refers to the outer colored portion of the rind.

■ Unless you are on a diet, choose **full-fat dairy products**. Always use solid **cream cheese** and not the whipped variety.

■ **Chocolate** may be specified as unsweetened, sweetened or bittersweet chocolate, semi-sweet (such as the chocolate chips commonly used in Toll House cookies), or sweet. Cocoa (the unsweetened powder, not a mix) is also called for in some recipes. Be sure to use the type of chocolate specified, as substitutions may not be successful. Chocolate burns easily, so the best **way to melt it** is in a double boiler over hot water, in a microwave oven or in an oven as it preheats for the recipe. Experienced cooks sometimes place chocolate in a heavy saucepan over direct low heat, but that method carries the risk of scorching.