

Brownies

The editors at Cook's Illustrated magazine pride themselves are experimenting and optimizing the recipes that they publish in their magazine. They have recently compiled 700 of these optimized recipes have been published in the book "The Best Recipe" by the editors of Cook's Illustrated Magazine (1999, published by Boston Common Press, Brookline, MA).

What follows is a reprint of the commentary of how they optimized the brownie recipe. This is from pages 434 – 436 of the Best Recipes.

Our goal was simple, we did not want a fancy brownie. We wanted chocolate pure and simple baked into a substantial but not leaden brownie. Our ideal brownie would have contrasting textures – a dens, fudgy center and a crackly, crisp top.

Even novice bakers know how to make brownies – just combine chocolate, butter, sugar, eggs and flour. But cook book authors are not content to leave well enough alone. We research dozens of recipes and started our testing by examining some often more unusual leads we uncovered. We used brown sugar instead of the traditional white sugar and ended up with brownies that tasted burned from overcaramelization. For extra moistness, we replaced some of the sugar with corn syrup and the result was a dull chocolate flavor and puffy cakelike texture. We added all manner of dairy – milk, sour cream, buttermilk – but each toned down the chocolate flavor and gave the brownies a light, cake texture. We beat eggs and sugar for 15 minutes to increase aeration and build structure but ended up with tough, hard bricks. We separated eggs and folded white beaten to soft peaks into the batter to produce soufflé brownies. All this fruitless testing convenience use that the basic recipe – with chocolate, better, sugar, eggs and flour – was best. But we still had some questions about the ratio of ingredients as well as the baking time. We also wondered what kind of flour we should use and whether we should melt or cream the butter. In the course of perfecting our recipe, we addressed these fundamental issues.

Basic brownies begin with melted chocolate that has been cooled slightly so as not to "cook" the eggs. However, some recipes call for the butter to be melted along with the chocolate, while others instruct you to cream softened butter and sugar and then add eggs and melted chocolate. In Recipes without leavening, creaming the butter does create a slightly fluffier brownie; the sharp sugar crystals separate fat molecules in the butter, adding more air to the batter.

At a sampling of brownies made with melted and creamed butter, a majority of tasters preferred the latter. The improvement was so slight, however, it hardly seemed worth the loss of spontaneity. Brownies are spire-of-the-moment baking at its best. By the time butter softens, the craving may pass. We decided to melt the butter, then see if there were other techniques we could use to compensate for the slightly heavier texture.

After the melted butter and chocolate have cooled a bit – they don't need to be a room temperature, but should not be hot either – sugar is added. At this point the mixture will appear grainy. Next, eggs and vanilla are beaten in. The better thickness and becomes smoother with the addition of the eggs, and the

teaspoon of vanilla highlights the chocolate. The final step is to combine and add the dry ingredients.

The most unusual ingredient in our recipe is baking powder. Many classic recipes omit chemical leavening and we were initially adverse to adding any. Our brownies, however, were a bit leaden, especially when we decided to melt the butter and not cream it, and the addition of $\frac{1}{2}$ teaspoon baking powder provided the contrasting textures we associate with the perfect brownie – a crackly top that lifts gently from the fudgy center.

We also compared brownies made with all-purpose and plain (not self-rising) cake flour. All-purpose flour yields taller brownies that are more cakey and tough. In contrast, brownies made with cake flour have a tender, melt-in-your-mouth quality, which we prefer.

We found recipes that call for as little as $\frac{1}{4}$ cup of flour and as much as $1\frac{1}{3}$ cups for an eight-inch pan. Brownies made with less than $\frac{2}{3}$ cup cake flour were too greasy, while those made with more were too dry.

In tests with and without salt, we found that the presence of just a quarter teaspoon helps balance the sweetness. A brief whisk of the dry ingredients – sifting is unnecessary – distributes them evenly and provides a bit of aeration. If you feel the need to jazz up brownies, fold a half cup or so of chopped pecans or walnuts in the batter along with the dry ingredients.

Even a few extra minutes in the oven can turn the best batter into dry brownies. The problem is complicated by the imprecise results of the “tooth-pick test.” Batter around the outer edge of the pan cooks much faster and can appear dry after only 15 minutes. The center of the pan can remain moist even after 30 minutes, when the brownies are way overdone.

We recommend using two visual clues to determine when brownies should be removed from the oven. First, check to see if the center is set. After 15 minutes, the center should still wobble or jiggle when the pan is moved. After 20 minutes however, the center should be gently set. At this point, stick a tooth-pick or cake tester into the batter halfway between the center and edge of the pan – the middle of the pan should always remain fairly moist. If the toothpick comes out clean (a few fudge crumbs are OK, but the batter should not be liquidy), the brownies are done.

In many cases, the brownies will not be completely cooked after 20 minutes. If the toothpick comes out covered with batter, bake the brownies another 2 to 4 minutes. However, if the toothpick comes out moist after 24 minutes, resist the temptation to keep baking. The brownie is moist – even slightly underdone.

The other great thing about the Cook’s illustrated magazine, is that they do not accept any advertising dollars. The cost of the subscription pays for the cost of the magazine. This gives them editorial freedom to comment on the quality of commercially available ingredients.

The editors at Cook’s illustrated looked that the unsweetened chocolate. Again from the book “The Best Recipe” by the editors of Cook’s Illustrated Magazine (1999, published by Boston Common Press, Brookline, MA).

Ingredients: Unsweetened Chocolate

Many American Desserts have traditionally been made with unsweetened chocolate. Brownies, frostings and fudge., for example start with unsweetened chocolate, also called baking chocolate or chocolate liquor.

Chocolate liquor is simply cocoa beans that have been fermented, roasted, shelled, and then ground into a molten paste and cooled in forms to make bars or squares. Nothing else is added – no sugar or milk. By law, the cocoa butter content can vary only from 50 percent to 58 percent. The differences in content between brands are fairly slight.

We wondered if the brand of baking chocolate would make a difference in our baking. Because it's very difficult to taste baking chocolate as is, we decided to make two different preparations with each brand. We made a simple blender frosting (sugar, boiling water, butter and chocolate) as well as our basic brownie recipe.

Nestlé took top honors in the brownie tasting (by a wide margin) and finished second among the frostings. It was the clear favorite. Guittard, Merckens, Ghirardelli, Van Leer and Baker's finished fairly close together. Hershey's and Callebaut showed quite poorly. The low ranking of Hershey's, an inexpensive mass-market brand, may not be much of a surprise, but our panel was shocked at the last-place finish of Callebaut, an expensive Belgian Chocolate that many professional bakers use.

Our panel detected some real style differences, especially in the chocolates at the top and bottom of the list. Sourcing as well as blending and roasting can affect the final flavor of chocolate liquor. Some companies obviously want a spicier flavor, while others are aiming for a more neutral or middle-of-the-road approach.

Our panel of tasters favored samples with a strong clean chocolate flavor. With a high proportion of chocolate and not cooking involved, distinct character traits were easy to detect in coconut, cherry and cinnamon tones) shower poorly in the frosting tasting.

However, when it came time to taste brownies, some of these oddities faded. Such was the case with Baker's., which zoomed from last place among the frosting to fourth among the brownies. Flour, eggs, sugar and the effects of baking masked many individual peculiarities in chocolate samples. Brownies also require less chocolate than frosting.

Familiarity may also be a factor affecting the results. So many Americans grew up eating brownies made with Baker's that this assertive chocolate in some sense defines brownies. In contrast, several premium chocolates, especially Callebaut were considered too mild in the brownies.