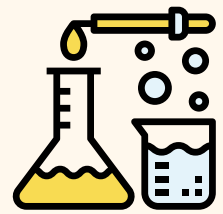


FOOD LAB REPORT

The effect of different sugars in a cookie recipe



BACKGROUND:

Sugar is a key ingredient in making cookies. It impacts not just the taste, but also the texture and spread of the cookie. Most cookies use two different sugars: white sugar and brown sugar. The amount of either will result in a different outcome.

Sugar breaks down as it is mixed in the dough, and even more as it is baked. White granulated sugar absorbs the water in the batter and encourages spread, while brown sugar is ideal for chewier cookies due to the presence of molasses.

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QUESTION/PROBLEM:

What happens when you use different sugar types in a cookie recipe? What are the effects of changing the amount?



HYPOTHESIS:

The kind and amount of sugar used in a recipe will affect the outcome of the cookie.

MATERIALS:

- 10 large eggs
- 10 sticks butter, softened
- 1 lb flour
- 1 lb brown sugar
- 1 lb white sugar
- Baking soda
- Salt
- Vanilla (optional)
- Chocolate chips (optional)
- 5 large mixing bowls
- 5 baking pans
- Ice cream scoop
- Spatula
- Parchment paper
- Oven
- Pot holders



PROCEDURE:

1. Measure out the sugars in different quantities. Keep each type and measurement separate.
 - Batch 1: 1 cup white sugar, 1 cup brown sugar (packed)
 - Batch 2: 3/4 cup white sugar, 1 1/4 cup brown sugar (packed)
 - Batch 3: 1/2 cup white sugar, 1 cup brown sugar (packed)
 - Batch 4: 3/4 cup white sugar, 1 cup brown sugar (packed)
- Prepare the dough. Repeat process for each batch of sugar.
2. Cream 2 sticks of butter.
3. Add brown sugar and white sugar and mix until dissolved.
4. Mix 2 eggs.
5. Add 2 1/2 c. flour, 1 tsp. baking soda, 1/2 tsp. salt, and 1 tsp. vanilla.
7. Add 3/4 c. chocolate chips and fold in.
8. Preheat oven to 360°C.
9. Line the baking sheet with parchment paper. Place a scoop of each batter on the paper. Don't forget to note which batter is which!
10. Bake the cookies for 10 minutes. Leave it in the oven for 5 minutes and let sit to cool for another 10.

RESULTS:

Batch 1: 1 cup white sugar and 1 cup brown sugar

The cookie has a slightly wider spread after baking. It has a crispy exterior and breaks like a cracker. Its interior is soft after cooling, but hardens like a biscuit when left after a few hours.

Batch 2: 3/4 cup white sugar, 1 1/4 cup brown sugar

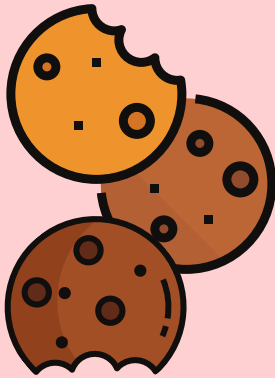
This cookie has the second smallest spread. Exterior is crispy, but interior is chewy even after it has been chilled for a few hours. Quite sweet.

Batch 3: 1/2 cup white sugar, 1 cup brown sugar

This one has the smallest spread of all the cookies but has the softest texture.

Batch 4: 3/4 cup white sugar, 1 cup brown sugar

This cookie is similar to batch 1.



CONCLUSION:

The amount of sugar in a cookie does affect the taste. The minute differences between the sugar in each batch does not seem significant to the texture. The length of baking time and cooling time will also affect the outcome of the cookie, as well as how it is stored.