Fluffy Cake

Project idea and Question.

In my project I will find out how many eggs make the fluffiest cake. I will be making 9 white cakes, 3 with 1 egg, 3 with 2 eggs, and 3 with 3 eggs.. They will consist of the same ingredients besides the eggs. I will find out which one is the fluffiest by measuring it with a ruler. My question is, Do more eggs make a cake fluffier?

Hypothesis

If different amount of eggs are put in cake batter, then two eggs would make a cake the fluffiest because in most cake recipes it requires two eggs.

Ingredients/Materials

This is for each cake

1 cup of white sugar
Cake trays

½ cup of butter
Knives

2 tsp of vanilla extract

Ruler

1 ½ cup of all-purpose flour

Oven

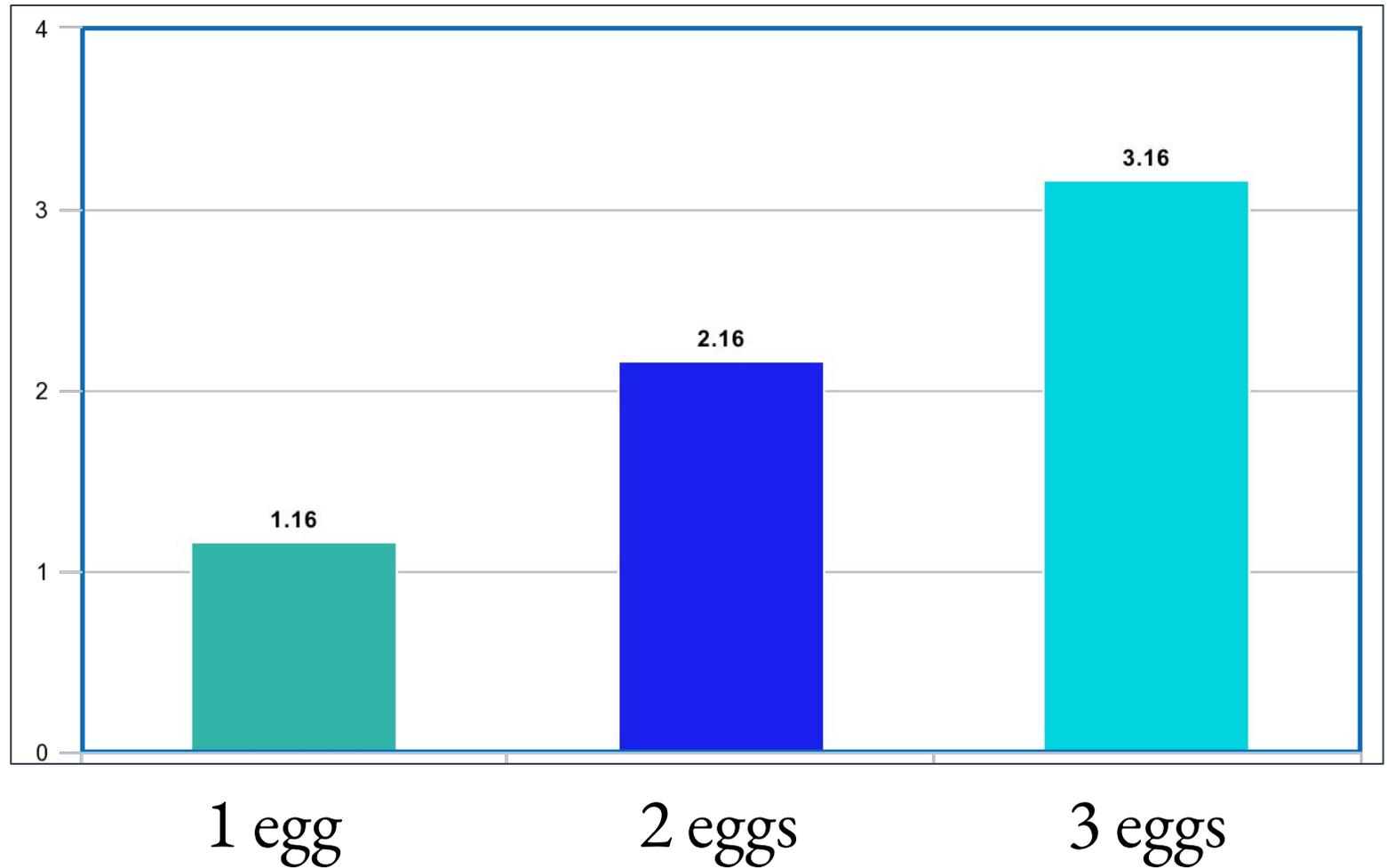1 ¾ tsp of baking powder

Whisk or Electric mixer

½ cup of milk
Big Bowl

18 eggs total for all cakes

Data Table: The height of each cake with different amount of eggs

|	Test 1	Test 2	Test 3	Average
Cake with one egg	1.25 cm	1.25 cm	1 cm	1.16 cm
Cake with two eggs	2 cm	2.5 cm	2 cm	2.16 cm
Cake with three eggs	2.75 cm	3 cm	3.75 cm	3.16 cm

Average height of cakes with different amounts of eggs.

Measured in centimeters

Test 1 (1 egg)

Test 1 was very small and very dry. It wasn't like a cake, it wasn't fluffy. It was more like cornbread. It was only 1.25 centimeters. It was hard to cut.
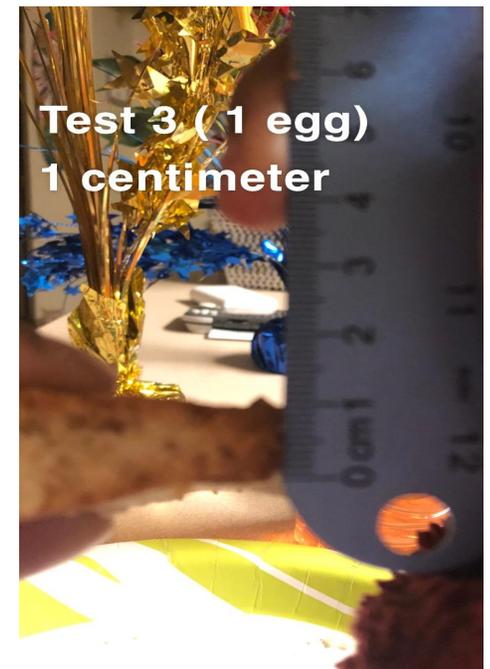

Test 1 (1 egg)
1.25 centimeters
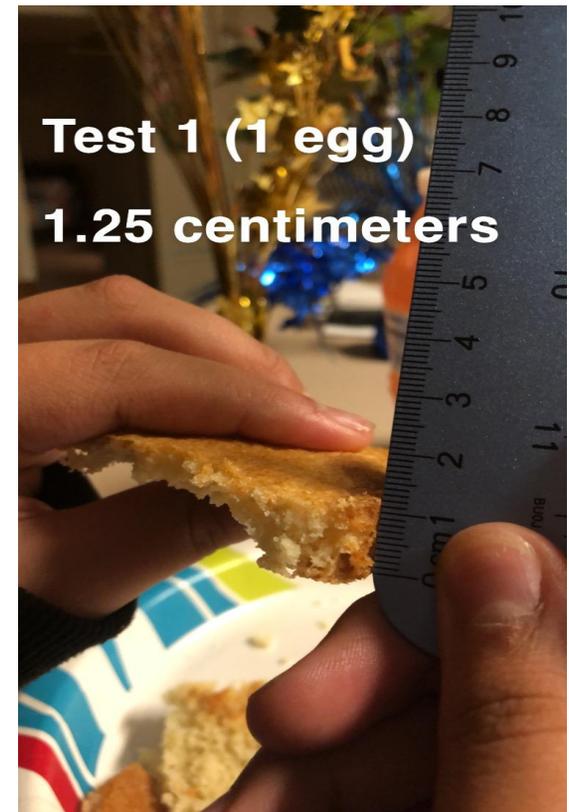
Test 2 (1 egg)

Test 3 (1 egg)

Test 2 was still not fluffy, still dry, and still small. It was very hard on the corners. It was the same size as test 1.

Test 3 was the same as test 1 and 2 but it was not as fluffy. It was only 1 centimeter but test 1 and 2 were 1.25 centimeters.

Test 2 (1 egg)

1.25 centimeters
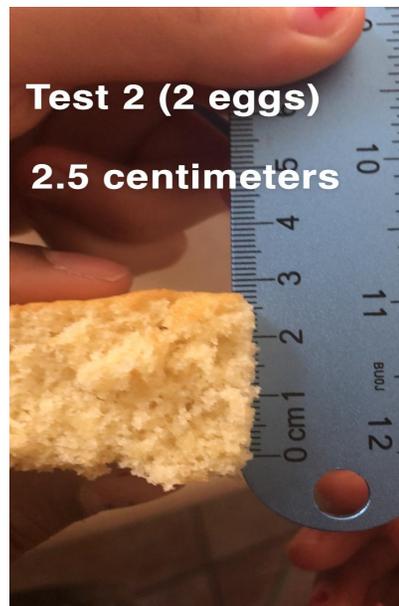

Test 3 (1 egg)
1 centimeter

Test 1 (2 eggs)

Test 1 was very fluffy. It was soft and it wasn't like cornbread like the the cakes with 1 egg. It was 2 centimeters so it was almost 2x bigger than the cakes with 1 egg. It was 2 centimeters.
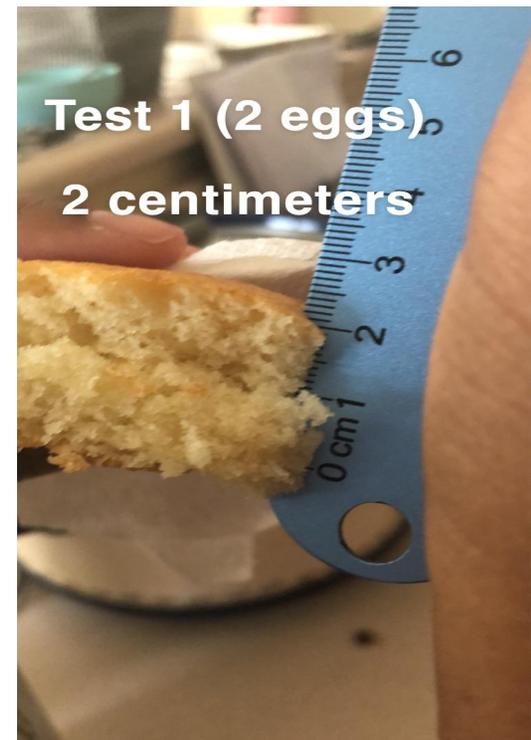
Test 2 (2 eggs)

Test 3 (2 eggs)

Test 2 was fluffier than test 1. Everything was same besides the fluffiness. It was 2.5 centimeters.

Test 3 was the same as test 1. It had everything the same as test 1 even the fluffiness of the cake. It was 2 centimeters.

Test 2 (2 eggs)
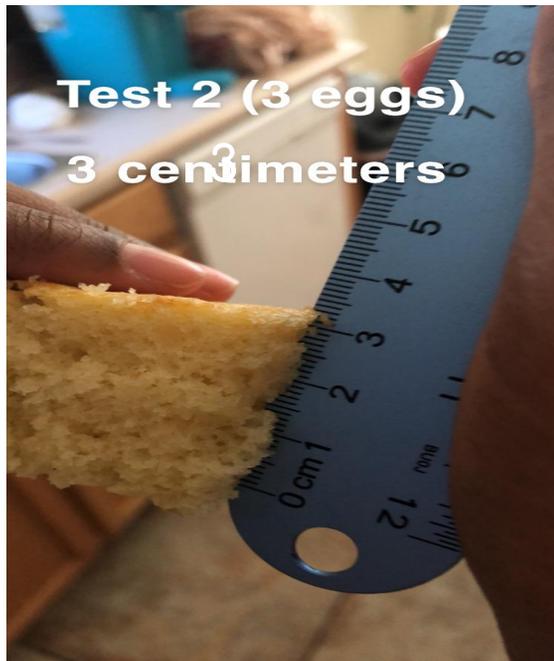
2.5 centimeters

Test 3 (2 eggs)

2 centimeters

Test 1 (3 eggs)

Test 1 was very fluffy and very soft. It was fluffier than the cakes with 1 egg and the cakes with 2 eggs. It was 2.75 centimeters.

Test 2 (3 eggs)

Test 3 (3 eggs)

Test 2 was very fluffy. It was fluffy than all the cakes besides test 3 (3 eggs) It was super super soft. It was 3 centimeters.

Test 3 was the fluffiest of every cake. It was very fluffy and very soft. It was 3.75 centimeters.

Overall data in height of the cakes

Three eggs made the cake the fluffiest. Two eggs made it not as fluffy, but it was harder to cut.. One egg was not fluffy at all. It was very hard to cut. It didn't taste like cake or look like cake. On average three eggs made the cake the fluffiest.

Conclusion

- My hypothesis was that two eggs would make a cake the fluffiest because two eggs are usually required in a cake recipe.
- My hypothesis was rejected because three eggs made the cake fluffier than just two eggs. It surprised me that three eggs made it the fluffiest because I thought that would be too many eggs and it wouldn't bake all the way through.
- This project could be useful in the real world because some people like fluffy cakes and some don't. Also if you want a fluffy cake you have to know how much is the best amount instead of guessing and having a chance to mess it up.
- My project was how much eggs make cake the fluffiest and it was shocking because in most cake recipes three eggs are rarely required.
- In the future, I would like to do a project that asked the question, what would happen if I added more flour? I think it would be more like a dough than a batter.

End of Project

This project was really fun and delicious to do! This project was also really surprising to me because my hypothesis was rejected. I suggest to do each test at different times because it makes a mess and it takes a lot of time.