

# Will different types of flour affect how much a cupcake rises?

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Project ID#

## Q1: Research Question/Engineering Goal

Will different types of flour affect how much a cupcakes rises in the oven?

## Q3: Data Analysis & Results

The data I found is,

Cake flour rose, 2 1/3 inches. All purpose flour rose, 2 inches. Whole wheat flour rose, 1 1/3 inches. Finally, Almond flour rose, 1 1/2 inches.

Cake flour has the more sugar so it makes it rise the most. All purpose flour is most common. Whole Wheat flour has a nutty flavor and a darker color. Almond flour is one of the healthiest type of flour.

Errors in my experimenting could have been eliminated because my measurement might not have been exact for each batch of batter. There were air bubble on the top of the batter because I did not slam the cupcake tins before baking.

A problem was that the almond flour sunk in the cupcake tin, which was weird because I never had worked with Almond flour. Also, that was a good experiment in which I should learn more about for future to come! I had to measure almond flour inside the cupcake tin because of the incident of the almond flour sinking and I couldn't pull it out or it would fall apart.

## Q2: Methodology/Project Design

I found all my flours and baked them in the oven, once they were done, they cooled and I measured them.

The data I collected was Cake flour with 2 1/3 inches, All purpose flour with 2 inches, next is Whole Wheat flour with 1 1/3 inches, and finally Almond flour 1 1/2 inches.

I collected my data by letting them cool and taking the ruler to the bottom of the cupcake to the top and writing it in my notes so I wouldn't forget.

My control was Cake flour because my hypothesis was cake flour would rise the highest. Other variables are All purpose flour, Whole wheat flour, and Almond flour.

## Q4: Interpretation & Conclusions

The results answer my research question because all the different kinds of flours used rose, but some more than others. My hypothesis was supported because I figured out how much each cupcake flour rose and measured each batch and figured out the 1st, 2nd, 3rd and 4th, and cake flour was my highest. So, my hypothesis was right.

My application for my work is to help people with gluten problems, diet problems, lose weight, eat more healthy in which Almond flour is considered to have more minerals and vitamins. When my project comes in to play is when the rising can help with the gas bubbles expand in the heat of the oven and rise up, giving you a fluffy and airy cake.