

# What mix of vegan milk and vegan leavening agents make the best vegan vanilla cake?

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## Abstract

This experiment is a test of using different vegan milks and vegan leavening agents to make the best vegan vanilla cake.

## Background Research

The background research in this project was looking in the [Epic Vegan](#) cookbook and seeing that it suggested almond or soy milk and apple cider vinegar with baking soda. The other background research from <https://thesweetsurprisecakes.wordpress.com/tag/characteristics/> showed that the qualities of a good sponge cake are a uniform rise, not too dense, light brown color, tender crust, evenly distributed grain, and well blended flavor.

## Materials & Methods

### Methods

The first method used was to take a vegan cake recipe and replace the vegan milk component with other types of vegan milk (refer to Table 1). The next method used was to incorporate the best two vegan milks into the recipe and replace the vegan leavening agent (vegan egg substitutes) component with other vegan leavening agents (refer to Table 2).

Because of the fact that oat milk scored so high in survey 1 but did not rise well, almond milk, which had a good rise and scored well was mixed with oat milk in the leavening agents test.

### Participants

The participants of this project were some of the staff at Tritt, the residents of the Havenridge community, and the Andrews family and they were asked to do blind taste tests and then rate the cakes based on texture, flavor, and overall. The winners in each category are highlighted in green in Survey Results 1 and 2.

### Experiment

The experiment was to test the effects of different vegan leavening agents, and vegan milks by changing only that component in a simple vegan vanilla sponge cake recipe and seeing what mix made the best vegan vanilla cake. The other ingredients, time, and temperature were kept the same throughout the experiment.

## Data Tables

Table 1

| Test | Type of milk |
|------|--------------|
| A    | Almond milk  |
| B    | Soy milk     |
| C    | Oat milk     |

Survey 1 Results

|         | A  | B | C  |
|---------|----|---|----|
| Texture | 8  | 8 | 10 |
| Flavor  | 10 | 4 | 12 |
| Overall | 9  | 3 | 14 |

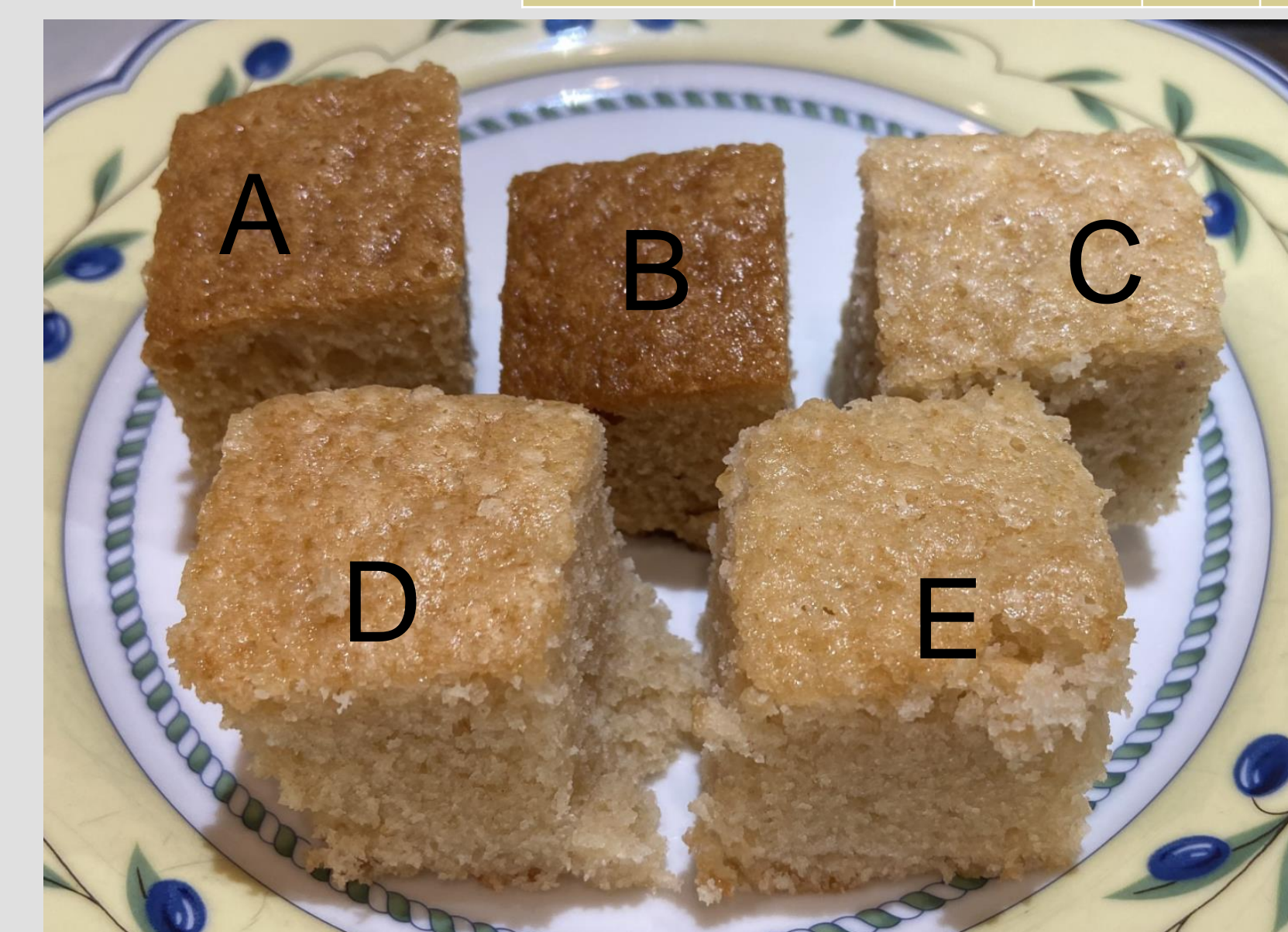


Table 2

| Test | Leavening agent/vegan egg replacer            |
|------|---|
| A    | Apple cider vinegar w/ baking soda            |
| B    | Lemon juice w/ baking soda                    |
| C    | Flaxseed w/ baking powder and water           |
| D    | Energy egg replacer w/ baking powder          |
| E    | Aquafaba w/ cream of tartar and baking powder |

Survey 1 Results

|         | A | B | C | D | E |
|---------|---|---|---|---|---|
| Texture | 3 | 4 | 3 | 5 | 4 |
| Flavor  | 2 | 4 | 2 | 4 | 7 |
| Overall | 2 | 2 | 2 | 5 | 8 |



## Conclusion

The conclusion drawn from this experimental journey was that based on objective criteria, a vegan cake with aquafaba, and oat and almond milk makes a good vegan vanilla cake because of its uniform rise, light brown color, tender crust, evenly distributed grain, well blended flavor, and that it was not dense. Another conclusion drawn from this very scientific and yummy experiment was that, subjectively, a vegan cake with aquafaba, and oat and almond milk is a well-favored cake.

## Limitations

One limitation was the number of cakes that could be baked at a time because we only had two cake pans.

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## Contact Information

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