CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)
Emily B. Olewiler

Project Number
J0515

Project Title
What Effect Does Baking Powder Have on Cooking?

Abstract

Objectives/Goals
To determine what effect baking powder has on cooking. I think that the more baking powder put in a recipe, the higher it will rise, and the better it will taste.

Methods/Materials
I baked five sets of muffins putting various amounts of baking powder in them; no baking powder, 1/2 the amount of regular baking powder, the regular amount of baking powder, 1 1/2 amount of baking powder, and twice the amount of baking powder. All batches were prepared, and cooked identically. I used flour, salt, sugar, eggs, oil, milk, baking powder, measuring spoons, timer, oven, cooling racks, knife, spoons, mixing bowl, muffin pan and ruler.

Results
The group of muffins containing no baking powder were cream colored and had 'hard shells'. The group with 1/2 the regular amount of baking powder appeared tall and very light golden, and were partially rounded. The group containing the regular amount of baking powder were light golden and were perfectly rounded, with few cracks. The group with 1 1/2 the amount of baking powder were golden and had many air pockets; they had many cracks. The group with twice the amount of baking powder looked burnt and were dark golden, and had many cracks.

Conclusions/Discussion
I was correct in my hypothesis. I said that the more baking powder put in a recipe, the higher it would rise, with the exception of the group with twice the amount of baking powder. The less baking powder put in a recipe, the lower it would be.

Summary Statement
My project explains how to find the effect baking powder has on cooking.

Help Received
My parents supervised the cooking process.