

# CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

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**Project Number** 

J0524

## **Project Title**

# The Effects of Leavening on Baked Goods

## **Abstract**

# **Objectives/Goals**

The purpose of this project was to find out the effects baking soda and baking powder have on the taste and texture of baked goods.

#### Methods/Materials

First, I found a cake recipe and a biscuit recipe. Then I doubled, left out, or kept the leavening agent the same as in the original recipe. The experiment involved measuring the height and the texture of the cakes and biscuits. This was done by recording the height of the item after baking and performing taste tests to determine texture differences.

#### **Results**

The double cake recipe did rise the most, but fell on cooling, while the original recipe maintained its height. Both the double and the original tasted similar, the only difference was the texture. The double biscuit recipe rose slightly higher than the original, but the taste tests favored the original recipe. Both the recipes where the leavening was left out did not rise and were very doughy.

#### **Conclusions/Discussion**

The data both proved and disproved my hypothesis: I think the original recipes will rise and taste the best. I learned that leavening agents are very important to make baked goods rise and give them the preferred texture.

## **Summary Statement**

The effects of leavening agents on the taste and texture of baked goods.

## Help Received

Mother assisted me in baking, taste testing, and taking pictures; Father helped taste test