

# CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) Project Number

**Laurel Manion** 

**J2019** 

**Project Title** 

# **Cookie Cooking**

#### **Abstract**

# **Objectives**

My experiment was designed to use the same cookie dough and alter the cookie dough only by temperature for a period of time to see the effects it had on taste and texture.

#### **Methods**

I used the same recipe for all the cookie dough, so I ended up tripling the recipe (dependent variable). Then I put the cookie dough balls either in the refrigerator or the freezer for either 5 hours or 24 hours (independent variables). The control variables were the oven temperature, bake time, and the baking sheet. Then I performed the experiment by baking cookies at the different intervals. All that was left was for my taste testers to eat the cookies.

#### **Results**

My testers overall picked Batch C as the BEST cookie, which was the cookie that was frozen for 5 hours. The next best cookie was Batch E which was frozen for 24 hours. These cookies had the best taste and texture to my taste testers.

### **Conclusions**

My conclusion was that, YES the temperature of the cookie dough does make a difference in the way the cookie is baked. My results proved that cookie dough that is frozen tasted better than dough that was not. I found that when the cookie dough had time to combine in the colder temperature the molecules of the ingredients were able to be absorbed better which produced a better tasting cookie.

# **Summary Statement**

Temperature of cookie dough can effect the taste and texture of a basic chocolate chip cookie.

# Help Received

I give credit to my mom, Linda Manion for helping me with making the cookie dough.