

## CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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**Project Number** 

**S0321** 

**Project Title** 

# Color and a Mouse's Appetite

### **Objectives/Goals**

### **Abstract**

The objective is to learn whether the color of a mouse#s environment has an effect on the amount of food the mouse consumes. The purpose of this experiment is to learn if there are certain colors that increase the appetite. This information is useful to restaurant owners and other companies who deal with edibles when they are choosing how to decorate restaurants or stores.

#### **Methods/Materials**

Eight mice were placed in eight separate (but identical) cages. Frames covered with colored cellophane surrounded six of the cages. The cellophanes were red, yellow, or blue, and the remaining two cages were the colorless controls. Every day each mouse was given the same amount of food, and the following day the remaining food was weighed in order to determine how much the mice had eaten that day. After three days the each mouse was placed in a different colored environment and the tests were performed again. This happened two more times until each mouse had lived in each color for three days.

#### Results

It is statistically significant that the mice in the red environments at less food than the mice in a controlled environment. There was no statistical significance to the results of the mice in the blue or yellow environments. On average, the mice in the control (at 4.193g per day) at the most, and the mice in the red environment (at 2.885g per day) at the least.

#### **Conclusions/Discussion**

The conclusion is that when mice live in a red environment, they eat less than they would normally. If this is applied to humans then it tells us that restaurants should not be painted red.

#### **Summary Statement**

Does the color of mouse's environment have an effect on the amount of food the mouse consumes?

### **Help Received**

My parents bought the supplies and helped me figure out what to do when I encountered problems; my younger sister helped clean out cages; Jenny-eighth grade science teacher helped figure out logistics of experiment; employees at Mike#s Feed and Pets helped me get the right kind of mice