

CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

Name(s)

Abigail M. Klein

Project Number

J0413

Project Title

Does the Color of Food Affect Its Taste?

Abstract

Objectives/Goals

The purpose of my experiment is to determine whether the color of food influences our perception of how they taste.

Methods/Materials

- 1.I began by making my different colors of soda (purple, red, normal/clear, and green). This step was fairly easy, because all I needed to do was add a certain amount of food dye and make sure that the colors looked like they were close to the same colors as a commercial brand soda. 2.Second, for the fries, I cut one potato, then took half the uncooked fries and placed them in black food dye. 3.Then I mixed the pudding in a large bowl. 4.Fourthly, I baked both colored and regular fries together on the same pan for 30 minutes with some light oil and salt at 400° F.
- 1.For the experiment, I placed each of my test subjects alone in a room. I gave each of them a pencil and a sheet of questions for them to answer after finishing eating a certain food group. The questions asked them what they thought of the different items in the section (ex. Was there something about each of the sodas that you particularly liked or disliked. Why?).
- 2. When a subject was in the room, I gave them one sample of each food item at a time. I did this so my subjects could not try a food more than once, then figure out that they were all the same.
- 3.I then gave them the sodas. First red,then purple,next original with no dye,then lastly green. Each subject was given 1.35 ounces of each soda.
- 4. After the soda section was complete, subjects were given 1 tbs. of each pudding. Vanilla first then "chocolate".
- 5. The last food section subjects were given were fries. I gave them three black then normal.

Results

Soda: 3 subjects recognized sameness, others preferred one of the 4 colors.

Fries: 2 thought they were the same, only 1 preferred the black to the regular.

Pudding: 1 recognized they were the same, all others preferred vanilla.

Conclusions/Discussion

I found out that my hypothesis was proven. I say this because at least 5 of my subjects did taste a difference in any of the foods used(every food in each category was the same). I also discovered that when testing families or two people related, that their test results were similar. By my research, I found that it could be hereditary for you to have close to or same taste recognition as a blood relative.

Summary Statement

To see is people's perception of taste is influenced by the colors of foods.

Help Received

My Father helped me buy materials, set up test, and do as well as discuss some of the research.