

CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s)

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Project Number

J0611

Project Title

The Nose Knows (Or Does It?)

Abstract

Objectives/Goals

The objective of my experiment is to determine who your smell interacts with your taste.

Methods/Materials

Subjects were asked to taste and smell two different flavors at the same time. Each subject was blindfolded, given a scent to hold under their nose while sucking on a cherry sucker. Subjects were then asked what flavor they tasted and it was recorded. Subjects then rinsed their mouths and repeated the procedure two times more with the same cherry sucker but two different scents. The three scents used were vanilla, cinnamon and pepperment. 100 subjects were used.

Results

When my subjects smelled peppermint while tasting cherry, 85% of the subjects did not taste cherry, while 15% did. When my subjects smelled cinnamon while tasting cherry, 77% of the subjects did not taste cherry while 23% did. When my subjects smelled vanilla while tasting cherry, 62% did not taste cherry while 38% did.

Conclusions/Discussion

I predicted in my hypothesis that the two flavors would combine. For example: peppermint-cherry. However, my results show that if the scent is strong, it will most likely overpower what you taste. My data supported this because most of my subjects did not taste the cherry sucker when they smelled pepperment and cinnamon. However, less of my subjects did not taste the cherry sucker when they smelled the vanilla which was a weaker scent. I also found that if a subject had allergies or a cold that interrupted their ability to smell, they most likely didn't taste anything at all.

Summary Statement

How does smell interact with your taste.

Help Received

My mother suggested I use more than one scent.