CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY

Name(s)
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Project Number
38793

Project Title
The Effect of Age on Taste Buds

Abstract

Objectives/Goals
The purpose of this project is to find out if sense of taste changes with age and if the sensitivity to a certain flavor is more dominant in any particular age group than others. My hypothesis is: If the sense of taste is related to age and I people of different ages to see different taste thresholds then different ages will have different taste bud sensitivities.

Methods/Materials
24 volunteers of four different age groups tasted solutions of sweet, salty, bitter, and sour. Each flavor was given in four different concentrations. The taste sensitivity of each solution recorded in 0-10 scale, 10 being the most intense and 0 being the least intense.

Results
For sweet and salty flavors the data shows a common trend of lowest taste sensitivity in the age group of 0-20 and the highest in 21-40, the sense of taste slowly decreased after that. This supports my hypothesis that sense of taste changes with age. For the sour taste the taste sensitivity increased with age. For the bitter taste the lowest taste sensitivity was found in the 61-80 age group. This supports the second part of my hypothesis that certain age groups are more sensitive to certain flavors.

Conclusions/Discussion
From my study I found out that taste changes with age. The results gave a specific trend, and this is important because it tells us that taste sensitivity is less intense in younger as well as older ages which could be helpful to food industries when they make specific food for different age groups.

Summary Statement
The sensitivity of different taste and their effect on tastebuds as it changes through age.

Help Received
My teacher Amy Schwerdtfeger