



CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

Name(s) Luke A. Virsik	Project Number J1231
Project Title How Is Taste Affected by Age?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to find out how age affects the ability to taste. Specifically, do the different tastes (saltiness, sourness, sweetness, and bitterness) decrease or increase with age.</p> <p>Methods/Materials Eleven senior subjects (60+ years old), eight middle-aged subjects (25-59 years old), and nine young subjects (9-24 years old) were recruited for my experiment. Salt, citric acid, sugar and tonic water were used to make three solutions for each taste. The solution order was randomized to make sure the subjects could not guess the taste. Randomization was achieved by putting numbers 1-12 on slips of paper (representing the solutions) in a bag. Ten sequences were pulled out. The test subjects were assigned a sequence. The test was done by following the randomized sequence for each person. The subjects were given a tablespoon of each solution and their responses were recorded.</p> <p>Results The overall taste accuracy average for the young, medium and senior groups was 69%, 67%, and 62%, respectively. The salt taste accuracy average for the young, medium and senior groups was 85%, 88%, and 85%, respectively. The sour taste accuracy average for the young, medium and senior groups was 59%, 58%, and 55%, respectively. The sweet taste accuracy average for the young, medium and senior groups was 78%, 75%, and 64%, respectively. The bitter taste accuracy average for the young, medium and senior groups was 52%, 46%, and 45%, respectively.</p> <p>Conclusions/Discussion I investigated how age affects taste sensibility because I noticed that young kids do not like spicy foods while adults like spicy foods. My data showed me that taste does decrease as age increases, though it is a very mild change. My hypothesis was that sweetness and saltiness would be the most affected tastes. I also learned that people generally could not tell the difference between bitter and sour. All in all, I learned a lot about taste sensibility. My hypothesis was generally correct. As a person aged, their ability to taste started to fade a little.</p>	
Summary Statement The ability to taste (saltiness, sourness, sweetness, bitterness) decreases as a person ages.	
Help Received Mom bought poster board, Dad taught me how to graph in Excel, parents and siblings handed me the test solutions, Dad helped me find the bitter taste (tonic water) and he proofread my paper.	