

# CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

Horacio Herrera

**Project Number** 

**J1016** 

**Project Title** 

The Sense of Taste

### Abstract

## **Objectives/Goals**

I wanted to do this experiment; because it is my interest to see if there is a difference between genders and age groups for detecting flavors. I wanted also to find out what the most detectable flavor was for humans and which was the hardest to detect among salt, sour, sweet, bitter, and sweet and sour

#### Methods/Materials

Water, parsley, ginger, star fruit (Carambola), apple, lemon, blender, cups, scarf, empty water bottles, and salt. I started my process when I created taste samples for my experiment. When I was done I would take my samples outside so people could test them. I would cover my samples and ask people if they would like to take a test to sense different flavors. If they accepted I would sit them down and ask them complete a questioner with name, age, sex, and date. I would then cover their eyes and nose with a scarf, (the scarf had been perfumed to block smells). I would keep record of how many they got right, and then create a table of data.

#### Results

After applying a test to 200 people, where 100 were males and 100 were females. The difference of the genders with the variable of salt; both sexes had the same percent, for the variable sour; it is 1.0 % greater in males, for the variable sweet; the difference is 0.40 % greater in males, for the variable bitter; the difference is 2.0 % greater in males, and last the result with the variable sweet and sour; it is 1.20 % greater in females. In my experiment I found out that the best age range to detect flavors in the sample of males is from 05-15 years old; where as in the sample of females the best age group to detect flavor is 36-45 years old.

### **Conclusions/Discussion**

Finally I can conclude that my hypothesis was incorrect because the male gender was better in detecting flavors than females, and the sample group of 16-25 years old is not the most reliable to detect flavors, because there is a different age group for each gender. After I did this experiment I can see than both sexes are able to distinguish all the flavors. The difference in their results is minimal. I can conclude that the most detectable flavor for humans is different for males and females but the hardest to detect was the combination of sweet and sour. I can conclude that both sexes have the same capacity to detect both flavors.

### **Summary Statement**

My project id about: if their is a difference in age group and gender at detecting a flavor, without using you smelling ability and eye sight.

# **Help Received**

Dr. Humberto Luna helped me as a resource, Mother Tania Herrera helped me by taking me places to test people, Father Horacio Herrera helped me in putting my poster together.