



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Kendall Robison	Project Number J0726
Project Title Taste the Power of Smell	
Abstract Objectives/Goals The hypothesis of this experiment is if a person is not able to smell, then they will not identify food because the cerebral cortex will not recognize the substance. Methods/Materials Materials Used: Nose plug, blind fold, masher, sharp knives, cutting board, Dixie cups, kitchen area, peas, onion, gluten free pretzel sticks, grapefruit, orange, Hershey Chocolate bars, lemon juice, candy canes/peppermint, and 24 people Project Method: Consent was given from the 24 people that were randomly selected from the ages of 5 to 79. Each test subject was brought into a room where they were given a blind fold and a nose plug to wear. Then they proceeded to eat each of the eight foods that had been mashed up by the experimenter. When the subjects described and attempted to guess the foods, the experimenter wrote them down in the lab notebook. The test was then given to the subject again, but without the nose plug to compare them. Results The data shows that there is a 22% increase in accuracy of identifying food from without smell to with. When the data was split up into the different categories: whole group, under 21, over 21, male and female, it showed that females had the highest average accuracy in with smell and without. With smell females had an average of 6.63 and without smell 6, while males showed the greatest improvement of 35% from 4.38 to 5.92. Conclusions/Discussion The results stated above supported the hypothesis because of the 22% average improvement of the whole group. This showed the experimenter that smell definitely affects the way people taste. The data indicates that males depend more on their sense of taste than females. This experiment may be useful to individuals who have lost their sense of smell by helping to identify what foods their brain can recognize through taste alone.	
Summary Statement This experiment shows that olfactory senses are important in enhancing gustation.	
Help Received Dad helped organize board; teacher mentor helped guide project	