



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Mathew R. Evans	Project Number J1409
Project Title Which Food Substances Produce Brain Freezes Most Often?	
Abstract Objectives/Goals To determine if the consistency of frozen foods cause brain freezes to occur equally. Utilizing the same time constraints, I tested whether drinking liquid products containing ice (Slurpees) would cause brain freezes more often than eating solid frozen food products (ice cream) Methods/Materials Materials list: 1. one scoop ice cream 2. bowl and spoon 3. one cup Slurpee with straw 4. timer or stopwatch 5. subject people Procedure: 1. prepare subjects for testing. 2. prepare equal ice cream scoops into bowls with spoons, or one cup Slurpee with straw 3. Instruct subjects to eat or drink as much as possible and as fast as possible when told to start 4. Instruct subjects to make a mental note if a brain freeze occurs and duration of brain freeze in 5 second intervals 5. Announce that subjects are to start eating/drinking, then identify time in 5 second intervals 6. Continue to call out time intervals for people to track occurrence and duration of brain freeze in 5 second intervals. Results Slurpees consistently produced brain freezes more often, for longer duration and were of more intense duration than ice cream brain freezes. Conclusions/Discussion My original hypothesis was that drinking liquid products containing ice (Slurpee) would cause brain freezes more often than eating solid frozen foods (ice cream). Based on the data I collected I believe my hypothesis to be correct. The Slurpee brain freezes seem to start sooner and last longer, and be more intense. The reason I think this is true is because the Slurpee straw forces the ice cold beverage to the roof of your mouth faster than ice cream does.	
Summary Statement My project was to determine if drinking liquid products containing ice (Slurpees) would produce brain freeze more often than eating solid frozen food products (ice cream) utilizing the same time constraints for both.	
Help Received Mom purchased Slurpees/ice cream products and helped with internet research, science board arrangement and the filling out of this application!	