



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Delaney Berger; Nicole Gross	Project Number J2003
Project Title Is This Hairy Enough for You?	
Abstract Objectives/Goals Which liquid can break down cat hairballs the best? Hairballs in cats can be a huge problem, so we studied what could break them down. Hairballs can get stuck in their digestive tract and esophagus. We decided to do this project because we are both cat owners, and sometimes the hairball has to leave their body and we have clean them up. Methods/Materials We weighed out 1 gram of cat hair and put 10 in each of the 4 ice cube trays. Then, we poured 10ml of pineapple juice, dish washing detergent, egg yolk, and water. We let them soak in the liquid for 3 days. After, we washed them out; we weighed them again and compared. Results The cat hairballs soaked in dish washing detergent broke down the most hair with an average loss of 0.15 grams. Our hairballs soaked in pineapple juice lost an average of 0.13 grams. The hairballs soaked in egg yolk lost an average of 0.13 grams also. The control hairballs soaked in water did not have a change of mass. Conclusions/Discussion We believed that 10mL of pineapple juice poured onto 1 gram of cat hair would break down the hair more than 10mL of dish washing detergent or egg yolk. Our hypothesis was not supported because the average weight of the hair after being soaked in dish washing detergent was less than the average of the hair after being soaked in pineapple juice, and the average weight of hair after being soaked in egg yolk was the same as the pineapple juice. The hair soaked in dish washing detergent which had an average of 0.85g was 0.15g less than the average weight of hair soaked in pineapple juice which was 0.87g. The weight of the hair soaked in egg yolk went down an average of 0.13g and had an average mass of 0.87g. The hair soaked in water, our control, stayed at an average of 1.0g and did not change.	
Summary Statement Our project is about breaking down cat hairballs with house-hold remedies.	
Help Received Dr. Waterhouse	