



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Madelyn S. Wolfe	Project Number J1228
Project Title Cat Scat! What Does Your Cat's Scat Tell You?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals This project tests four cat foods to see which is best for your cat: Meow Mix, Friskies, Iams, and Natural Balance. My hypothesis was that Natural Balance would be the best out of the four because it had better quality ingredients.</p> <p>Methods/Materials I tested six trials of each type of cat food. Each trial started with 150 grams of cat food. I added 300 mL of hydrochloric acid and let it soak for 12 hours. The hydrochloric acid was pH level 2 and breaks down the food like the acid in a cat's stomach. I drained the hydrochloric acid and added 300 mL of meat tenderizer (pH level 5) to the cat food. The meat tenderizer breaks down the proteins in the cat food into amino acids. It is like the process in the cat's intestines. The meat tenderizer soaked for 12 hours and then I had to let the cat food drain. After 24 hours of draining, the remaining cat food is like the cat feces # it is what was not digested. The cat food with the smallest feces is the best because it can be digested best.</p> <p>Results My hypothesis was proven right. Natural Balance is the best cat food out of the four I tested because it had the smallest percent increase. The average percent digested for each cat food were Natural Balance at 151.7%, Iams at 179.9%, Friskies at 197.5%, and Meow Mix at 199.2%.</p> <p>Conclusions/Discussion Better quality ingredients will improve digestibility and make a healthier cat food. It also matters how the ingredients are listed and what quality and quantity of lesser valuable ingredients are included.</p>	
Summary Statement This project tests which cat food provides the best digestibility for your cat.	
Help Received My mom, dad, sister, and brother helped me in different ways to complete this project.	