

CALIFORNIA STATE SCIENCE FAIR 2011 PROJECT SUMMARY

Name(s)

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Project Number

J2002

Project Title

Does Quality in Cat Food Count?

Abstract

Objectives/Goals

The purpose of my experimental project was to determine which brand of dry cat food leaves the most amount of undigested residue after simulating the cat digestive process.

Methods/Materials

To begin my experiment I obtained needed materials such as Vinegar, Meat tenderizer, Fancy Feast dry cat food, Iams dry cat food, Special Kitty dry cat food, Friskies dry cat food, Petri dishes, distilled water, and a strainer. The methods to my experiment involved to first pour ten (10) grams of cat food into each Petri dish. Second, I poured 20 mL of Vinegar into each Petri dish, applied the lid, and let it sit for 24 hours. After 24 hours, I created a mixture of distilled water and meat tenderizer and poured 20 mL of the mixture into each Petri dish, applied the lid, and let it sit for three (3) hours. When three (3) hours pasted, I strained any liquid that was still left and thoroughly rinsed the cat food in the sink. Last, I transferred the dry cat food back into each Petri dish and weighed my results.

Results

The results of my investigation on determining which brand of dry cat food leaves the most amount of undigested residue is left after simulating the cat digestive process indicates that the Special Kitty brand of dry cat food left the most amount of undigested residue, and the Iams brand of dry cat food left the least amount of undigested residue. In order of most undigested to least undigested is Special Kitty, Friskies, Fancy Feast, and Iams.

Special Kitty: least- 25.2 grams, greatest-31.3 grams, average- 28.12 grams

Friskies: least- 25 grams, greatest-29.8 grams, average- 27.92 grams

Fancy Feast: least- 24.9 grams, greatest- 30.5 grams, average- 26.76 grams

Iams: least- 20.6 grams, greatest- 27 grams, average- 23.76 grams

Conclusions/Discussion

In conclusion, I successfully found the results of my investigation. I also learned several things along the way of creating this project such as learning how to simulate the cat digestive process. Although there are positive aspects of my project, others may ask, how does my project help others? Having the knowledge of which brand of dry cat food may leave the least amount of undigested residue, will help families and other to keep their cats healthy.

Summary Statement

I am investigating which brand of dry cat food leaves the most amount of undigested cat residue after simulating the cat digestive process.

Help Received

My mother provided transportation to needed destinations; my coaches helped me create my procedures.