



**CALIFORNIA SCIENCE & ENGINEERING FAIR
2019 PROJECT SUMMARY**

Name(s) Isabelle Luna	Project Number J1217
Project Title Effects of Various Feed Container Patterns on Dairy Goat Consumption	
<p style="text-align: center;">Abstract</p> <p>Objectives The reason I chose this project is because of my love for animals and wanting to help strengthen the relationships between them and humans. Understanding animal behavior is one of the keys to this goal.</p> <p>Methods The materials I used in my project consisted of Goat grain obtained from my local feed store, white and black feed containers and white duct tape to make the patterns on my buckets. These materials were all purchased at local stores such as Walmart. With these materials, I created different patterns on each of the 6 buckets for the goats to choose from. The goats were isolated from the feed container area so they did not all run in together and affect their individual decision making process.</p> <p>Results The black bucket was the most preferred bucket. The least was the checkered pattern bucket. The goats did not make an immediate decision, they thought about it as well as checked their surroundings before choosing.</p> <p>Conclusions The black bucket was the most preferred over the buckets with patterns. What is interesting, is the goats did not simply come into the pen and choose a bucket. They had to get comfortable with me first so that they trusted me. They then made sure the other goats were calm and seemed to agree with their choice. This leads me to believe that the goats made a conscious decision rather than acting on instinct or impulse.</p>	
Summary Statement The goats made a cognitive decision and chose the solid black bucket over the patterned ones.	
Help Received my Parents provided resources and my Grandfather allowed me to use his herd of goats for testing. Dr. Gale O'bannon, a local Veterinarian gave me advice on making sure the goats were safe during my tests.	