



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Shelby A. Graham	Project Number S1904
Project Title How Does Feed Affect the Size and Weight of Chicken (Gallus domesticus) Eggs?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My project is measuring the growth of eggs while changing the feed. I want to see if feeding my chickens different foods will increase or decrease the size of the eggs they produce. I have fed my chickens different feed at one week intervals. The first week I fed them scratch which is basically corn. The second week I fed them crumble, which is processed alfalfa. The third week I fed them table scraps. I gave them three days before each week so that they can adjust to the food before I measured the eggs. I weighed the eggs and measured their length and width. My Hypothesis is that the crumble will produce larger eggs because it is rich in protein.</p> <p>Methods/Materials My materials are: Four laying chickens, One kitchen scale for weighing eggs, Crumble feed, Scratch (corn feed), Table scraps, Cloth tape measure for measuring circumference of eggs, Journal for recording.</p> <p>Using my background information I decided what feeds I wanted to test. I chose crumble (control), which is high in protein, corn scratch, and tables scraps. I kept track of how much food I put out each day, (about a cup except for the table scraps). I Fed the chickens each feed for one week. I collected the eggs daily and recorded the size and weight of the eggs from days one - seven. I measured the weight of the eggs in grams and the circumference in inches. I repeated each step for each feed.</p> <p>Results After completing my experiment I have found that although all three feeds have produced eggs with approximately the same horizontal circumference, crumble produced heavier eggs with greater vertical circumferences.</p> <p>Conclusions/Discussion The data has shown me that all three feeds produced eggs with approximately the same horizontal circumference; crumble produced heavier eggs with greater vertical circumference. The main point that I have learned is that different feed affects the size of eggs. The results occurred because the crumble is higher in protein than the other two and it is also made specifically for laying hens. My experiment proved the feed not only affects the size and weight of eggs it also proved that crumble does in fact produce larger eggs. My Hypothesis was correct; I hypothesized that the crumble would produce larger eggs because of the high protein content.</p>	
Summary Statement The goal of my project was to measure the change in size and weight of chicken eggs while changing there feed.	
Help Received	