



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> <b>Thomas H. Palmer, II</b>	<b>Project Number</b> <b>J1922</b>
<b>Project Title</b> <b>Do Peanuts Make Chickens Lay Bigger Eggs?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective of this experiment was to determine whether or not the introduction of peanuts into the diet of chickens would result in larger and heavier chicken eggs. Assuming that peanuts would increase egg size, the additional goal was to determine the ideal amount of the peanut supplement.</p> <p><b>Methods/Materials</b> In order to obtain a proper control sample, the size and weight of the chickens' eggs were measured without changing their diet. Next, non-salted, unshelled Spanish peanuts were placed in a home blender and ground into a small chunky consistency. The method was to replace a small amount of their food with peanuts. The eight chickens were first fed two ounces of peanuts and their eggs were measured and weighed. Next, four ounces of peanuts and finally, six ounces were analyzed. The procedure for feeding the peanuts to the chickens was to equally spread the peanuts on the ground so that each chicken would get a close to equal amount. Each egg was weighed by an electronic ounce scale and measured using a medical Knee Brace measuring device. As further control, peanuts were withdrawn from the diet and eggs measured. Finally, the six ounces portion of the experiment was re-tested.</p> <p><b>Results</b> Egg size and weight averages were computed in order to make comparisons. Without peanuts, the weight of the eggs was 2.03 ounces. With two ounces of peanuts substituted into the chickens' diet, the weight of their eggs increased from 2.03 ounces to 2.22 ounces. The height and width also increased. Next, with four ounces of peanuts, the weight increased to 2.35 ounces and the size again increased. Then with six ounces of peanuts the chickens failed to produce eggs. Next, peanuts were withdrawn from the chickens. The eggs weighed 2.09 ounces and were smaller. Last, the experiment substituting six ounces of peanuts was again attempted and once again the chickens stopped laying eggs.</p> <p><b>Conclusions/Discussion</b> The test results support my hypothesis. This project expands our knowledge about the value of feeding a controlled amount of peanuts to chickens and perhaps other fowl. It has value to the chicken farmer who may want to increase the size of their chickens' eggs. It may also produce healthier baby chicks, but testing is required. Finally, adding peanuts may assist those attempting to increase the nutrition of other birds.</p>	
<b>Summary Statement</b> This project attempts to make hens produce larger eggs by the introduction of peanuts into their diet.	
<b>Help Received</b> Father, who allowed the use of his chickens and Sherri of Dave's Feed Store for providing me information about available chicken feeds.	