



**CALIFORNIA STATE SCIENCE FAIR  
2008 PROJECT SUMMARY**

<b>Name(s)</b> <b>Stephanie T. Cuaderno</b>	<b>Project Number</b> <b>S1104</b>
<b>Project Title</b> <b>Does Natural or Commercial Food Increase Weight Gain the Most?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My purpose of my experiment is to find out if natural foods (mealworms, lettuce, carrots) or commercial food (pellets) increases weight gain the most. I want to know this answer because before I had a hamster and it gained a lot of weight during its lifetime. I thought maybe there is a chance I can control a hamster's weight with different foods. You see, my hamster was only fed commercial pellets, which seemed to be fattening to his health. Now, I have had the chance to attempt to solve the answer of weight gain in hamsters among different foods for the science fair project.</p> <p><b>Methods/Materials</b> To summarize the most important steps, this was my procedure: feed one hamster about 3 pellets (or as much as it can eat) and the other hamster about 5 mealworms, 2 baby carrots, and 2-3 small leaves of lettuce (or as much as it can eat). Weigh the hamsters for their starting weights, and then at a designated time every day, weigh them again and keep their food supplements in control. Try not to underfeed them, but give them extra food, even if they don't finish it. Then record your results.</p> <p><b>Results</b> I showed my results in charts that you can observe on my board. I recorded mainly each hamster's daily consumption and their weight gains during different trials. My first trial, my mistake was blindly allowing one hamster to eat as much as he wanted, and the other hamster finishing his own meal and not being able to continue. There, my results proved that with one hamster on a restricted diet of natural food and the other hamster eating normal food (1-2 pellets average), the commercial eating hamster gained weight and the natural food eating hamster lost weight. Then, I changed it so that both hamsters were allowed to eat to their extent and the natural eating hamster gained weight alongside the other hamster.</p> <p><b>Conclusions/Discussion</b> In conclusion, both natural and commercial food can increase weight gain, but the amount of food eaten and given to each hamster can greatly fluctuate the results. I also found that some of the natural food given to one hamster was a favorite which was why he ate so much, compared to the hamster who didn't like his pellets that much, so he didn't eat much of it. That influenced my results too.</p>	
<b>Summary Statement</b> My project is about what foods will affect the weight gain of hamsters the most.	
<b>Help Received</b> parent funded project; borrowed cage from friend	