



**CALIFORNIA STATE SCIENCE FAIR  
2010 PROJECT SUMMARY**

<b>Name(s)</b> <b>Grace M. Kiralla</b>	<b>Project Number</b> <b>J2116</b>
<b>Project Title</b> <b>Moldy Fruit, Anyone?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The purpose of the experiment is finding out whether or not nano-technology boxes, such as the Kinetic Go Green box, really work better than traditional storage methods. What I am trying to figure out is if the boxes do keep foods fresh for a longer amount of time, or if the other leading brands store food for a longer time. No one has found one solid answer to the prevention of spoilage, but that is what I am attempting to do in my science fair project.</p> <p><b>Methods/Materials</b></p> <ol style="list-style-type: none"><li>1. A refrigerator set to 33 degrees Fahrenheit</li><li>2. One 2.5 gallon Kinetic Go Green Food Storage Container</li><li>3. One 1.3 gallon Rubbermaid Tupperware container</li><li>4. One single gallon Ziploc Bag</li><li>5. Three boxes of unwashed California Well-PicT Strawberries</li><li>6. Any writing materials needed to make observations about the berries</li></ol> <p><b>Results</b> The results of my experiment were as follows. The Rubbermaid Tupperware container demonstrated rot after 8 days, the Ziploc bag demonstrated rot after 10 days, and Kinetic Premium demonstrated rot after 12 days. The rubric for rot was a five point scale, ranging from one being normal, to five being moldy. My hypothesis predicted that the nano-silver technology container would be the best, which it was. However, the Ziploc and the Tupperware were not as i predicted. The Ziploc was superior.</p> <p><b>Conclusions/Discussion</b> My experiment was to find out if the Kinetic Go Green Premium Food Storage Container keeps food fresh for a longer time rather than the other methods. The Kinetic container did keep food fresher. When I started my experiment, I thought that the food inside of the Ziploc bag would spoil faster than the others. It turned out that the strawberries inside of the Rubbermaid Tupperware started to rot first, then the Ziploc, and then finally, the Kinetic Go Green box. If I could do anything differently about my experiment, it would be to select a specific breed of strawberry with a very large sample size. I also think that the experiment might be different if the strawberries surface areas were very similar. I was unable to determine if ethylene gas release is different by breed or by size of strawberry. In that way, individuals could better predict the decline of the foods to reduce waste.</p>	
<b>Summary Statement</b> My experimental purpose is to find the best and most efficient way to store food.	
<b>Help Received</b> Father helped understand concepts, Ms. Hiss helped guide me to the right recourses and helped me refine my question	