



# CALIFORNIA STATE SCIENCE FAIR 2013 PROJECT SUMMARY

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| <b>Name(s)</b><br><b>Alana M. Hernandez</b>  | <b>Project Number</b><br><b>J0707</b> |
| <b>Project Title</b><br><b>Is It a Pill or Candy?</b>  |                                       |
| <p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b><br/>I wanted to see if children, Kindergarten to grade three, can tell the difference between candy and over-the-counter medicine/pill. My goal was to get a sample of 150 students in grades Kindergarten to grade three and see if they can tell the difference. My hypothesis is that the majority of my sample will be able to tell the difference and obtain an 83% percent correct.</p> <p><b>Methods/Materials</b><br/>Materials - over-the-counter medication: antacid tablets/Tums, children gummy bear vitamins, night-time acetaminophen, ibuprofen/Motrin, nasal decongestant/Sudafed, Dayquil; candies: Sweet Tarts, Gummy Bears, licorice flavored candy, Tic-Tacs, Red Hots, red Mike and Ikes</p> <p>My project involved putting six pairs of pills and candy that looked very similar on a color-coded poster board along with making answer sheets for students that was color-coded to allow for easy answering. I went to classes, ranging from Kindergarten to third grade, and had these students look at the poster board and answer on the answer sheets, which were the pills/candy.</p> <p><b>Results</b><br/>My results showed that the highest percent received from the entire sample of students was 66% or 4 out of 6 correct. This was 25% of the entire sample. My hypothesis of 83% correct was 17% of the sample. And, only 17% of the sample had 100% correct. My results showed that young children in grades Kindergarten to third grade DO mistake pills for candy.</p> <p><b>Conclusions/Discussion</b><br/>The results indicated that children cannot, with 100% accuracy, tell the difference between pills/over the counter medication and candy. My results showed that the majority of my sample only got 66% percent correct, which is dangerous since we are talking about medication that children "could be" ingesting.</p> <p>It is a warning to parents that they must put medicine away in a safe place or lock them away. Also, pharmaceutical companies must continue to ensure safety and make all pills difficult to access and continue with the safety locks or protective seals, and or other methods. Pharmaceutical companies needs to make medication look bland and not make pills look so colorful like candy. Finally, parents must continually educate, teach and warn their children about the dangers of medicine looking like candy. There are many "mock" tests on-line, and books that parents can show their children.</p> |                                       |
| <b>Summary Statement</b><br>I wanted to see if children, Kindergarten to grade 3, can tell the difference between candy and over the counter medication/pills.   |                                       |
| <b>Help Received</b><br>My mother helped me get the materials, and helped me correct the tests and put the information together.   |                                       |