CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY

Name(s)
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Project Number
J0702

Project Title
At What Grade Level Can Children Distinguish between Candy and Non-Candy Items

Abstract

Objectives/Goals
My project goal was to determine at what grade level children could distinguish between candy and non-candy items. I believe that by the fourth grade, children will be able to distinguish between candy and non-candy items with a ninety percent success rate.

Methods/Materials
A four by two grid was prepared on a piece of tagboard paper. Into each box was glued an item that was candy or non-candy. The following candy and non-candy items were used: Tide detergent pod, Mike & Ike candy, Chewy Spree candy, One-A-Day Women's muti-vitamin, Sudafed pill, Tums antacid, Skittles candy, and an Advil Liquid gel capsule. Once items were placed, a record sheet was prepared, and finally the testing bagan. Ten randomly selected children, five boys and five girls, were asked if each item was candy or not candy. The results were then tabulated. A total of 90 children were tested, ten randomly selected, five boys and five girls, from each grade level K - 8.

Results
None of the grade levels attained a ninety percent accuracy rate. The highest accuracy rate was grade 6, with an accuracy rate of eighty-eight percent. The lowest accuracy rate was kindergarten, with an accuracy rate of sixty-five percent.
In addition, 45 of 90 students tested thought that a Tums antacid tablet was candy, and only two students out of 90 thought the muti-vitamin was candy.

Conclusions/Discussion
My conclusion is that children in grades K - 8 have a difficult time distinguishing between candy and non-candy items. My hypothesis was proven incorrect because none of the grade levels tested achieved a ninety percent accuracy rate of identification. My data suggests that parents should keep all medicines away from children at all times because they have difficulty differentiating between candy and medicines. My results also suggest that manufacturers of medicines need to be aware that their medicines are being mistaken for candy, and they need to manufacture items that do not resemble candy.

Summary Statement
Can children in grades K - 8 tell the difference between candy and medicines.

Help Received
Dad helped me type my reports and put items on display board.