Candy Confusion
State Paper

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My experiment was testing small children to find out if they knew the difference between candy and medicine. Before this experiment I had to send out permission slips to the parents to get their permission to have their child participate. Then I went to the Elementary School to test 4 classes; 2 Kindergarten and 2 1st grades. Each child that brought permission slip back got to participate in my experiment. My results were interesting because they got some of the easiest tests wrong.
Candy Confusion

I want to find out if small children can confuse candy with medicine. Drug companies are going a different approach in medicine making for kids. They are making medicine that looks like candy. Some drug companies are making chewy medicine. One company made a chewy version of pain reliever in bubble gum (fruit and grape flavors). Another company made a gum that is a medicine for cold symptoms. These new medicines are becoming fun and tasty to kids, kids actually like taking it. Doctors say treating medicine as if it were candy is confusing and some what dangerous for kids. (Medicine for Children, Candy)

These are some definitions that have to do with medicine, and other facts about medicine. A drug is one of the medical professions most valuable tools. (World Book Encyclopedia, 2005) Doctors prescribe drugs to treat or prevent many diseases. (Monroe, 1998) The definition of medicine is any substance or preparation used in treating disease or illness. (Merriam Webster Intermediate Dictionary, pg. 446) An antibiotic is a type of medicine that a doctor prescribes to treat a certain illness. (Monroe, 1998) It is not to be taken unless prescribed because it could make you sick. Children do not need to be confused about what medicine and candy are because they could possible it by accident. Kids can get very sick by eating it. Almost 130,000 children that were under the age of 6 needed treatment of eating something poisonous. About 760 experienced potentially fatal and also permanently damaging effects, this all happened in 2005. (Candy and Medicine Look Alike, 2008)
Kids are starting to like medicine more than they ever have before, and that could be very dangerous or fatal to small children that don’t know the difference between medicine and candy. Some doctors say that children can become permanently ill if you eat medicine you don’t need or prescribed. (Medicine for Children….Candy) Parents confuse children sometimes and they don’t even realize that they are doing it. A mother in a library heard a little boy coughing, and then his mother then said hang on for a little bit and then we will go home and get some candy for that cough. (Irons, 2007) This is one way how parents confuse small children. A boy liked medicine so much that he faked a coughing fit just so he could have some medicine. (Kramer, 2007) This gave me a very good idea that kids are starting to like medicine too much, and they can confuse it with candy.

I am not sure if anyone has constructed my experiment before. From what I have researched it seems like small children can get confused very easily. So it is important that parents don’t confuse their kids because if they do it could be dangerous and also maybe even life threatening to your child. Just another reminder to all parents 760 children in 2005 experienced potentially fatal or permanently damaging effects. (Candy and Medicine can Look Alike, 2003) So keep a close eye on your children so this doesn’t happen to them.
Experiment

Purpose
Can Small Children Confuse Candy with Medicine?

Materials
1 Aspirin
1 Altoid
1 Ex-Lax
1 piece of Hershey candy bar
1 Sudaphed
1 Red hot
Orange Dimetap
Orange soda
1 Sweet art
1 Tums
1 chewy Rolaids
1 piece of bubble gum
1 Benadryl
1 Sour Mike-n-Ike
1 piece of black felt
<table>
<thead>
<tr>
<th>Medicine Type</th>
<th>Number of Responses Identified Correctly</th>
<th>Number of Responses Identified Incorrectly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirin</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Benadryl</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
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<td>Dimetap</td>
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<td>0</td>
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<tr>
<td>Tums</td>
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<td>1</td>
</tr>
<tr>
<td>Ex-Lax</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Rolaids</td>
<td>13</td>
<td>2</td>
</tr>
</tbody>
</table>
First Grade Identification of Candy or Medicine

Candy Confusion - Identification of Medicine Totals for Kindergarten and First Grade
Kindergarten Candy Confusion Percentage Identifying Medicine Correctly versus Incorrectly

- Identified Correctly: 66%
- Identified Incorrectly: 34%

First Graders Candy Confusion Percentage Identifying Medicine Correctly versus Incorrectly

- Identified Correctly: 52%
- Identified Incorrectly: 47%
Candy Confusion Percentage Identifying Medicine Correctly versus Incorrectly

41% Identified Correctly
59% Identified Incorrectly
Conclusion

My experiment was testing small children; on if they knew the difference between candy and medicine. I gave them a test that had 7 examples in it and asked them which one was candy. The test I made had a piece of candy and a piece of medicine that looked like it lying right next to it. The results I had were very shocking. Some of the easiest test ended up being the hardest for the kids. On some of the examples I had it took them a while to answer.

These are the results from the kindergarteners tests these numbers are out of 30. On the 1st test (Aspirin and Altoid) 13 of 30 got it right. On the 2nd test (Benadril and a Sour Mike-n-Ike) 19 of 30 kids got it right. On the 3rd test (Sudafed and Red Hots) 26 out of 30 got the answer right. 22 out of 30 got the answer right from my 4th test (Orange Motrin and Orange Soda). 19 of 30 kids got the answer right from my 5th example (Tums and Sweet Tarts). On the 6th test (Ex-Lax and Hershey’s) 24 out of 30 got the answer right. Lastly on my 7th test (Chewy Cherry Rolaid and Gum) 16 out of 30 got the answer right.

These are the results from the 1st graders. These numbers are out of 39. On my 1st test (Asprin and Altoid) 15 of out 39 got the answer right. The 2nd test (Benadril and Sour Mike-n-Ike) 23 of 39 got the answer right. On my 3rd test (Sudaphed and Red Hots) 24 out of 39 got the answer right. 24 of 39 kids got the answer right on my 4th test (Orange Motrin and Orange Soda). On my 5th test (Tums and Sweet Tarts) 21 out of 39 got the answer right. 22 out of 39 got the answer right on my 6th test (Ex-Lax and Hershey’s).
Lastly on my 7th test (Chewy Cherry Rolaid and Gum) 13 of 39 got the answer right. My data did support my hypothesis.

My major findings were that a lot of the children confused some of the easiest candies and medicine. I think these findings came out the way they did because people do not take the time to go over these types of things with their children because they don’t realize how common these things are. Most of the children got the Benadril and the Sour Mike-n-Ike confused even though the Benadril still had the letter B on it. Another scary finding that I found was that most of the children confused the chewy cherry rolaid and a piece of bubble gum. On this specific test less than half got it right 16 out of 30 kids got the question right for the Kindergarten classes. 23 out of 39 got the answer right for this exact test, these results were from the 1st graders.

My hypothesis was: I think a lot of small children will confuse candy with medicine. My data did support my hypothesis. Most of my results supported my hypothesis. On some of the easier tests that I had such as the test Benadril and Sour Mike-n-Ike less than half got it right from the 1st grade classes. Another reason why I think that my data supported my hypothesis is because that on the Benadril and Sour Mike-n-Ike’s test there was still a B on the Benadril pill and some of the kids still got it wrong. Another easier test was the Sudaphed and Red Hots the results were better. The results from the Kindergarten classes were 26 out of 30 got the answer right. From the 1st grader classes on this test 23 out of 39 got the answer right.

The experiment was valid. One of the errors in this experiment was not testing more children. If I would of tested more children then the percentages would have been more accurate. Another error that I made was I could of used other household items. I
could of used mouth wash and dish soap, and other things around the house that can be poisonous to small children. I have not found anyone that has done my experiment. Although my test happens in real life, but in those cases it is not on purpose it is on accident and these things do happen and can happen.


