

CALIFORNIA STATE SCIENCE FAIR 2009 PROJECT SUMMARY

Name(s)

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Project Number

S1418

Project Title

Can You Open This?

Abstract

Objectives/Goals

This experiment was to try to determine which typically used household products adults ranged from 50 to 90 found hardest to open. The purpose was to find a possible alternative for them to easily open these items of difficult and allow them to be more aware of their difficulty.

Methods/Materials

I tested as many elderly people I could find through senior citizen housing communities, my neighborhood, and other family and friends. I ended up testing 28 adults above the age of 50 and times how long it took them to open the items. I would give them up to a certain amount of time to open an object, then I would tell them to stop, inevitably giving up. The materials used for my project were Propel water bottles, water bottles, childproof medicine bottles, regular medicine bottles, hairspray can, and pretzel bags.

Results

Through my experiment i found that as the age increased, so did the difficulty in the persons ability to open the package or container. No sex was found to be commonly stronger than the other; they averaged roughly the same.

Conclusions/Discussion

I found that with age, difficulty is found most commonly between the ages of 70 and above. I found that both men and women alike found difficulty in their ability to open it, yet not one sex dominated over another. I believe that products with pull off tabs are found easiest to open rather that a twisting motion.

Summary Statement

I tested elder adults ability to open everyday useful products.

Help Received

My mother drove me to the senior citizen housing community.