CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)
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Project Number
22915

Project Title
Feel the Burn

Abstract

Objectives/Goals
Heartburn is a problem that affects millions upon millions of Americans every year, and every year those Americans spend millions of dollars on different over the counter antacids to remedy thier heartburn. Just how effective are antacids at neutralizing corrosive stomach acid? And furthur, of the different antacids available on the market today, are certain ones able to achieve higher rates of efficacy than others? This project is the result of testing different antacids on hydrochloric acid to examine and compare thier neutralizing effects.

Methods/Materials
Initially, six different antacids in both tablet and liquid form were chosen and tested in an acidic and bod€ temperature environment to see if they were able to raise the pH level of the environment.

Results
The liquid Mylanta antacid proved to be the most effective antacid and generally both liquid medications were more successful than thier tablet counterparts.

Conclusions/Discussion
After collecting the data it became apparent that antacids are effective at neutralizing stomach acid and that the different antacids do have different rates of efficacy.
The contributions of this project and the potential of this project may be applied directly to the individual's life (granted that he or she experiences heartburn). Aside from comparing the different antacids for thier relative effectiveness, this project set the stage for many experiments to follow. These experiments may deal with economical factors when it comes to choosing an antacid, among other possibilities.

Summary Statement
This project is the result of testing different antacids on hydrochloric acid to examine and compare thier neutralizing effects.

Help Received
Father helped both obtain access to and properly operate special laboratory equipment.