



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Bradley E. Perek	Project Number J1126
---	---------------------------------------

Project Title
Burn Baby Burn. Antacids: Do They Work?

Abstract

Objectives/Goals
 To determine how well different antacids work in liquids.
 HYPOTHESIS: All antacids perform the same in liquids.

Methods/Materials
 The experiment was carried out by measuring, testing, and recording pH* levels in the test liquids. After crushing the two antacid tablets (the recommended dose) into a powder, it was poured into each liquid and stirred thoroughly. A pH strip was inserted at 0, 1, 15, and 30 minutes. Once these tests were completed, the results were recorded and graphed.

Results

Liquid	pH	pH							
Roloids Brand	Target	Generic	Brand						
	0 min	1 min	15 min	30 min	0 min	1 min	15 min	30 min	
Water (Folsom Tap)	6.0	7.0	8.0	10.0	6.0	7.0	7.0	8.0	
	0 min	1 min	15 min	30 min	0 min	1 min	15 min	30 min	
Milk (1%)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
	0 min	1 min	15 min	30 min	0 min	1 min	15 min	30 min	
Apple Juice (Tropicana Light)	3.0	6.0	6.0	7.0	3.0	5.0	6.0	7.0	
	0 min	1 min	15 min	30 min	0 min	1 min	15 min	30 min	
Orange Juice (Tropicana Calcium Enriched)	4.0	4.5	5.0	6.0	4.0	4.0	4.5	5.0	
	0 min	1 min	15 min	30 min	0 min	1 min	15 min	30 min	
Lemon Juice (Realemon)	2.0	3.0	4.0	4.0	2.0	3.0	3.0	3.0	
	0 min	1 min	15 min	30 min	0 min	1 min	15 min	30 min	
Cola (Coke Regular Classic)	2.0	6.0	7.0	7.0	2.0	6.0	6.0	6.0	
	0 min	1 min	15 min	30 min	0 min	1 min	15 min	30 min	
Vinegar (Heinz)	2.0	5.0	5.0	4.5	2.0	4.0	4.0	4.0	

Conclusions/Discussion
 The data collected from the experiment showed that the name brand antacid, Roloids, worked better at neutralizing the acid in the liquids than the generic brand. Coloring of the antacid tablets affected the color of the liquid, but not the effectiveness. Coca Cola and vinegar seemed to fizz and froth the most once the antacid was added, but was more substantial with the Roloids. The Target brand did very little to change the pH in many of the test liquids. In many cases, the Target brand did not dissolve well and

Summary Statement
 This Science Fair Project investigated how different antacids reacted in several liquids typically consumed around the home.

Help Received
 Mom helped with the typing and dad explained how to create a graph in Excel.