

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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Project Number

J1121

Project Title

Seize That Stain!

Abstract

Objectives/Goals

My project goal was to determine which laundry detergent works most effectively on a pizza sauce stain. I used five different detergents. Besides the detergents, nothing in each trial was changed.

Methods/Materials

MATERIALS

Five two-tablespoon quantities of Tide laundry detergent (liquid), Cheer laundry detergent (liquid), All laundry detergent (liquid), Purex laundry detergent(liquid), and Gain laundry detergent(liquid),

Teaspoon for measuring

Tablespoon for measuring

Twenty-five one-teaspoon amounts of pizza sauce

Twenty-five three-inch by three-inch pieces of cotton

One glass bowl

One toothbrush

One porcelain plate

One digital timer

One water temperature thermometer

Two tweezers

Seventy-five cups of water at 106 degrees Fahrenheit

I hand washed pieces of cotton laundry detergent with pizza sauce stained into the cotton. I mimicked how a washing machine would wash this item by hand. Doing my experiment, I didn't change any aspect except for the laundry detergent. You can see how I conducted each trial by looking at my procedures in my notebook or on my backboard.

Results

My results varied much from detergent to detergent. Each laundry detergent had a specific number which was the average coming from all the trials of that specific detergent. The averages are as follows: Tide-8.2; All-7.4; Cheer-7; Purex-6.2; and Gain-5.4. You can see what the color of each average on my scale of results in my notebook, or on my backboard.

Conclusions/Discussion

My conclusion was that Tide laundry detergent worked most effectively on stains. This might be because the Tide laundry detergent formula leaves out quite a bit of water to make their formula more

Summary Statement

I tested different laundry detergent brands to see which one was most effective on a pizza sauce stain.

Help Received

Mother paid for and bought all supplies; Science teacher answered my questions.