

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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Project Number

J0539

Project Title

Attack of the Chili Peppers

Abstract

Objectives/Goals

The objective is to determine whether chili peppers have high acidity to cause indigestion.

Methods/Materials

11 different chili peppers were used, ranging from mild to very spicy. The chili peppers were crushed with a mortar and pestle to create enough liquid to measure the acidity. They were each stored in separate containers. A calibrated pH meter was used to measure the acidity. The pH meter was rinsed with distilled water after each measurement to avoid contamination of the results.

Results

The pH range of all the chili peppers was 4.97 to 6.17. The spiciest chili pepper, Habanero, had a pH level of 5.8 and the mildest chili pepper, Anaheim, had a pH level of 6.0.

Conclusions/Discussion

The chili peppers did not have high acidity. A neutral pH is 7.0 with acidity measured at values below 7.0 and the highest acidity being the smallest number such as 1. That meant that the acid in the chili peppers was not the cause for indigestion.

Summary Statement

My project is about indigestion and if the acidity in chili peppers cause it.

Help Received

Mother helped crush the chili peppers; father helped measure the pH of the peppers.