



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Denise Gutierrez; Maria L. Navarro	Project Number 22213
Project Title An Investigation in the Correlation Between the Hotness of Peppers and Using Using Salsas	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals To determine if there is a correlation between the hotness of chili peppers and acidity, using chili salsas. Our hypothesis is that if there is range of hotness in chili peppers, as measured by capsaicin level, then salsas made with different chilis should show a correlation between the increasing levels of hotness and acidity.</p> <p>Methods/Materials Peppers: Habanero, Serrano, Yellow Jalapeno, Jalapeno, Bellpepper, Anaheim, Roma tomatoes; sodium chloride; computer Probeware; comal; blender; banalce; six plastic containers; Scoville hotness scale (capsaicin content).</p> <p>Results Using bellpepper and Anaheim chilis as our controls, and the Scoville scale of hotness, we determined that there was an inverse trend between hotness and acidity in chili salsas. Other than Jalapeno salsa, and the controls, the hotter the peppers, the less acid they were.</p> <p>Conclusions/Discussion Our hypothesis was incorrect; there was not a direct correlation between the hotness of peppers and acidity. We saw an inverse trend between hotness and acidity. The more capsaicin, the hotter the chili the less acid the salsa tends to be.</p>	
Summary Statement There is a lack of correlation between capsaicin level of chilis and acidity in salsas.	
Help Received Input of the Women in Science Club members and advisors.	