



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Connor C. Chooljian	Project Number J1306
Project Title Comparing Different Fruit Pastes as a Preservative in Baked Goods	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of my project is to determine if adding fruit pastes to baked goods will help inhibit mold growth, thereby giving the baked products a longer shelf life.</p> <p>Methods/Materials Obtain different dried fruits such as dates, raisins, apricots, prunes, and figs. Put each different kind of fruit paste in the cookie dough and bake them. Check the pH level of each cookie. After checking the pH level place the rest of the cookie in an incubator for 21 days and check for mold growth. If there is no mold growth in 21 days blend the rest of the cookie with 1 bottle of buffer with 1 milliliter of the cookie dough in a petri dish. Cover the blended mixture with blood agar and place the petri dishes back to the incubator for 7 days.</p> <p>Results When I was finished the dates had an average mold growth of .25 inches of mold growth. The raisins had an average growth of .08 inches of mold which is pretty good. Fig, apricot, and prune had no mold growth, which gave them the longest shelf life.</p> <p>Conclusions/Discussion After completing my project I found that different fruit pastes in baked products would help them have a longer a shelf life. I learned how to check the pH level of different products. I also learned how to make fruit paste with a grinder. I would probably put raisin paste in products because the cookie with the raisin paste stayed very moist.</p>	
Summary Statement Testing different fruit pastes in baked goods to extend the shelf life of products using natural and healthy ingredients.	
Help Received Thomas Jones a micorbiologist taught me mow to check for pH levels and lab work.	