



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Raymond Cho	Project Number J1610
Project Title Are We Eating Genetically Modified Papaya?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My goal of this project is to find out what percent of California's Hawaiian papaya is genetically engineered and whether the genetically engineered papaya tastes different from normal papaya.</p> <p>Methods/Materials 50mg X-Gluc; 100ml Phosphate buffer saline; 1 Microscope; 1 Digital camera; 1 pipetman; 1 surgical knife; 1 tweezer; 12 petri dishes; 1 tupperware.</p> <ol style="list-style-type: none">a. Buy some papayasb. remove all the seedsc. remove jelly coat off the seedsd. cut open seeds in halfe. put cut seeds into a petri dishf. apply X-Gluc and phosphate buffer salineg. put petri dishes into the tupperwareh. wait 24 hrs.i. record number of genetically engineered seedsj. take picturesk. eat the papayas <p>Results Every single papaya that I had bought had some genetically engineered seeds. Some of them even had almost 50% of their seeds genetically engineered. The taste of the genetically engineered papayas were identical to the normal papayas.</p> <p>Conclusions/Discussion Majority of the Hawaiian papaya that which I tested were geneticaly engineered because of cross-pollination. I know this because only about 1/2 or 1/4 of the seeds in most of the papaya were genetically engineered.</p>	
Summary Statement We are eating genetically modified hawaiian papayas.	
Help Received Dr.Melanie Bondera for providing positive seeds and procedure on how to do this experiment; Mother for going out and buying papayas; Father for letting me use his laboratory and buyinf the necessary supplies.	