Are We Eating Genetically Modified Papaya?

**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.

**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.

a. Buy some papayas  
b. remove all the seeds  
c. remove jelly coat off the seeds  
d. cut open seeds in half  
e. put cut seeds into a petri dish  
f. apply X-Gluc and phosphate buffer saline  
g. put petri dishes into the tupperware  
h. wait 24 hrs.  
i. record number of genetically engineered seeds  
j. take pictures  
k. eat the papayas

**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.

**Conclusions/Discussion**
Majority of the Hawaiian papaya that which I tested were genetically 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.

**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 buying the necessary supplies.