



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Akshaya Ganesan	Project Number J0506
Project Title Do Common Genetically Modified Foods Carry Tnos and CAMV 35S Promoter Genes?	
Abstract Objectives/Goals PRIMARY GOAL of this project is to find if we consume DNA disasters in our daily GMO foods and also to create awareness among public about GMO foods. OBJECTIVE is to test the presence of Cauliflower Mosaic Virus Promoter genes and terminator of nopaline synthase genes of Agrobacterium tumefaciens in squash, Hawaiian papaya, corn on the cob, cluster tomato, corn chips and corn puffs and create awareness about GMO food among the public. BIG QUESTION - Do common GMO foods carry dangerous GMO genes? HYPOTHESIS - I think all tested food items will carry GMO genes.	
Methods/Materials Materials: 1. Food samples 2. GMO testing kit 3. Lab facilities - weighing balance, water bath, centrifuge, PCR thermal cycler, agarose gel electrophoresis apparatus, micropipettes, tips, beaker, conical flask and measuring cylinder 4. Lab coat, gloves, and goggles, Method 1. DNA extraction from food samples and control 2. DNA amplification using PCR 3. Separation of CAMV 35S and Tnos genes using Agarose gel electrophoresis.	
Results Results obtained indicated that the tested Hawaiian papaya, corn on the cob, cluster tomatoes, and soybeans carry GMO genes. Squash was GMO negative and the DNA extraction from corn chips and corn puffs were not successful even after repeated trials.	
Conclusions/Discussion With the results obtained, I conclude that the tested Hawaiian papaya, corn on the cob, cluster tomatoes and soy beans are not safe for human consumption as they carry GMO genes. Research evidences indicate that these GMO genes - CAMV35S and Tnos are proven to cause many health hazards including stomach problems, activating cancer genes and even HIV. So by finding their presence in our daily food, I advice the public to avoid these food items and request scientists to reconsider using these genes for engineering plant genome.	
Summary Statement I FOUND THE PRESENCE OF DNA DEVILS (CAMV 35S AND TNOS) IN THE COMMON GMO FOODS WE CONSUME IN OUR DAY TO DAY LIFE.	
Help Received 1. Ms. Jennifer East - my science teacher for encouraging me to participate 2. Biocurious lab for providing me lab space and equipments. 3. Mr. Antonio in the lab who taught me how to use the PCR and Agarose gel electrophoresis (only first time) and my parents for the moral support	