CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY

Name(s)
Tyler J. Newcomb

Project Number
J1717

Project Title
The Carotene Cure?

Abstract

Objectives/Goals
The objective of my project is to see whether Vitamin A / Beta-Carotene will have any effect on the growth of Agrobacterium Tumefaciens (cancer) in plants.

Methods/Materials
I used nine of the same type of plants, 9 pots soil, water, beta-carotene liquid pills, 3 sterilized needles, bleach, latex gloves, ruler, paper, pencil, vial of Agrobacterium Tumefaciens, 6 popsicle sticks, 6 toothpicks and one measuring cup. After making a slit with a toothpick on 6 of the plants, with a popsicle stick I took roughly the same amount of Agrobacterium Tumefaciens from the vial it came in and placed it in the slit in the stem of the plants and then watered all 9 regularly but 3 of them got injections of beta-carotene every other day.

Results
The beta-carotene had no effect on stopping the growth of the Agrobacterium Tumefaciens in the plants and the beta-carotene even stopped growth of leaves where it was injected.

Conclusions/Discussion
My conclusion is that beta-carotene/vitamin A does not stop cancer (Agrobacterium Tumefaciens) in plants like I predicted. Studies have shown that it is better to get our vitamin sources from the food we eat than from supplements and too many supplements can actually be harmful to our bodies. Our moms were right...we need to eat our veggies.

Summary Statement
My project is about whether using vitamin A can stop a carcinogen's growth in plants.

Help Received
Desert Hematology Oncology for supplies; Science Teacher helping obtain plant carcinogen