

## CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

Name(s) **Project Number Joeyta Banerjee J0602 Project Title Investigation of Glucose and Sucrose Using the Enzyme Invertase** Abstract **Objectives/Goals** In my project, I was testing the glucose and sucrose concentrations of commonly eaten foods. Methods/Materials In the first part of my project, I tested the activity of invertase by finding the linear time point. I used a sucrose solution and glucose test strips in order to find the linear time point, which I found to be thirty minutes. Using this information and Glucose Test Strips, I began testing the glucose and sucrose concentration of the food samples. First I tested the glucose, and then using the Invertase I tested the sucrose. I repeated each test three times. I used Diastix Glucose test strips, Invertase, and several food samples. Results In my project, I learned that honey and lactose-free milk have the highest glucose concentration and that sweet potato has the highest sucrose concentration. I also learned that chicken, milk, almond milk, and almond butter have the least glucose concentration and that chicken, milk, honey, and lactose free milk have the least sucrose concentration. **Conclusions/Discussion** I found that my hypothesis was partially correct because chicken did have the least glucose and sucrose concentrations, but ice cream did not have the highest. **Summary Statement** In my project I tested the glucose and sucrose concentration in commonly eaten foods using the enzyme invertase.

## Help Received

Dr. Uzma Khan was the qualified scientist for my project. My parents and sister helped me assemble the board.