



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Emma X. Hernandez	Project Number J0503
Project Title Sucrose vs. Glucose	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of my study was to observe how Invertase changes the glucose concentration in foods when sucrose is present.</p> <p>Methods/Materials Tested the glucose concentrations using urinalysis test strips that measure low concentrations. Affected how to perform the rest of the procedure by creating 10% food dilutions to be able to observe the glucose concentrations. Testing the Invertase activity with a known amount of sucrose to have a linear time point for the experiment because of product inhibition.</p> <p>Results Results of the experiment were affected by the limit of the invertase converted only 5% of the foods' original sucrose concentration. Foods with the highest glucose and sucrose concentration did not correlate when compared, however the glucose concentration increase when sucrose was present after adding invertase.</p> <p>Conclusions/Discussion The data collected will provide more insight of the importance of monitoring what you eat and how it affects your body because of the rise of obesity rates especially in the US. Also to know there are multiple sugars and process differently inside our bodies.</p>	
Summary Statement I investigated how an enzyme converts sucrose into glucose and how this changes the amount of glucose we digest from different foods.	
Help Received No help with the experiment itself, but I do want to acknowledge my math and science teacher, Dr. Ullman, for the further understanding of chemical properties and structures.	