



CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s) Faith E. Castillo	Project Number J1205
Project Title How Sweet It Is, or Is It? Measuring Glucose in Fruit.	
Objectives/Goals The purpose of this project was to determine the sweetness of five fruits based on the taste in order from highest to lowest, compared to the reading of glucose strips. My hypothesis for this project was that if I separately blend a banana, mango, strawberry, apple, and orange, and then test for their glucose content using a glucose testing strip, the banana would have the greatest glucose content and the orange would have the least. (In the order from least to greatest: banana, mango, strawberry, apple, and orange.) This hypothesis was based upon what my sense of taste concluded was the sweetest fruit.	
Abstract The purpose of this project was to determine the sweetness of five fruits based on the taste in order from highest to lowest, compared to the reading of glucose strips. My hypothesis for this project was that if I separately blend a banana, mango, strawberry, apple, and orange, and then test for their glucose content using a glucose testing strip, the banana would have the greatest glucose content and the orange would have the least. (In the order from least to greatest: banana, mango, strawberry, apple, and orange.) This hypothesis was based upon what my sense of taste concluded was the sweetest fruit.	
Methods/Materials To test this, I blended 3 Tbsp. of fruit with 300ml of water, poured the mixture into a cup, and stirred a Diastix glucose strip in it for 30 seconds. Immediately after, I took a picture of each strip and continued this process for a total of 30 tests.	
Results By comparing the pictures of the test results with the Diastix scale, it proved my hypothesis wrong. My sense of taste was not as accurate as the Diastix and although the banana was the sweetest, the resultant order of sweetness, following the banana, was the orange, apple, strawberry, and then mango.	
Conclusions/Discussion Using my sense of taste to determine the sugar content of fruit was definitely not as accurate as using a more scientifically based measure. Even though my hypothesis was incorrect, I still achieved my goal of determining the fruit's approximate glucose content and I hope that this will encourage other people, such as diabetics, that can't have too much sugar, to evaluate the sugar content of they consume everyday.	
Summary Statement This project is about comparing the sweetness of fruit by taste to it's approximate measurement in a glucose test.	
Help Received	