



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Dov Fradkin	Project Number 36497
Project Title How Do Different Breads Affect Blood Sugar Levels of Diabetics and Non-Diabetics?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of this project is to determine which bread, sprouted or wholewheat causes the greatest spike in the blood sugar levels of type II diabetics or non-diabetics.</p> <p>Methods/Materials Testing equipment included lancets, needles, meters, test strips, as well as bio hazard container. A RN conducted the testing of 50 test subjects with 6 tests each. Testing included 1) baseline blood level after fasting 2) An hour after eating sprouted bread 3) final test 2 hours after consumption. Same 3 steps repeated with wholewheat bread the following day</p> <p>Results Data shows that whole wheat caused a higher spike/crash in both diabetics and non-diabetics. Also the highest overall increase during the spike. Diabetic data indicated a higher crash than spike with the wholewheat. Non-diabetics spike was greater for sprouted wheat & crash was greater for whole wheat. The data from this project suggests that sprouted and whole wheat breads both create a higher glycemic response in diabetics.</p> <p>Conclusions/Discussion Conventional wisdom dictates that "Low Glycemic" bread does not cause significant spike/crash in blood sugar level. The data indicates otherwise for diabetics and non diabetics. I have not found this data published. The Price Pottinger Foundation recognized this project as important in the field of nutritional research.</p>	
Summary Statement The purpose of this project is to determine which bread, sprouted wheat or whole wheat causes the greatest spike in the blood sugar levels of type two diabetics or people without diabetes.	
Help Received I benefited from the guidance of my school lab director and diabetics in my community and designed the project on my own.	