



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Ryan M. Singer	Project Number J0521
Project Title Does Boiling Broccoli in Lemon Water Alter the Vitamin C Content?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this project was to find out if boiling broccoli in lemon water would change the vitamin C, and make a healthier option for eating.</p> <p>Methods/Materials Broccoli, lemon water, titration set. Boiled broccoli in lemon water, blended it to a liquid, dropped in the broccoli, and counted the number of drops it took for the titration chemical to change color.</p> <p>Results After using titration on the regular boiled broccoli and the lemon water broccoli, the average number of drops for the regular was 23.9, while the lemon water was 23.5. This evidence shows that the lemon water broccoli, having less drops, had slightly more vitamin C</p> <p>Conclusions/Discussion The lemon water broccoli had 0.4 less average drops, meaning it had a little bit more vitamin C than just normal boiled broccoli, but not enough to make a difference in healthy eating.</p>	
Summary Statement I proved that boiling broccoli in lemon water does not add to the vitamin C content.	
Help Received I performed the boiling along with the titration by myself, while Mrs. Cohen of Mt. Helix Academy helped me figure out the way to measure the vitamin C.	