



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <b>Josephine V. Woldemar</b>	<b>Project Number</b> <b>J1924</b>
<b>Project Title</b> <b>Drinks to Keep Your Teeth Sporty Clean: What Athletic Drink Is Better for Your Teeth?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective was to determine what athletic drink is better for your teeth. This student discovered that drinks pH levels determine the acidity of the drinks and that higher acidity levels possibly caused more damage to teeth. This student hypothesized that soda would have the worst effect on teeth, energy drinks would have some effect, and sports and water would have little to no effect on teeth and therefore would be better for your teeth.</p> <p><b>Methods/Materials</b> This student used eggshells to represent teeth, put the eggs in plastic containers filled with each drink and kept them in an unplugged refrigerator to keep the environment the same for all drinks. This student ran 2 trials of each type of drink. Each drink's pH level was tested with an electronic pH gauge to determine the acidity. The drinks were observed each day for changes and recorded in the logbook.</p> <p><b>Results</b> The results showed that all drinks except for water caused some type of damage by day 5. By day 10, all drinks except for water caused 3 or more types of damage. The pH levels did not appear to make a difference in the amount of types of damage. In the end, the results showed that energy drinks were slightly more harmful than soda, but Coke was still more harmful than a sports drink. Water had no harmful effect on the teeth.</p> <p><b>Conclusions/Discussion</b> Therefore, this student found that water is the best athletic drink to quench your thirst and keep healthy teeth.</p>	
<b>Summary Statement</b> The focus of this project was to determine which athletic drink is better for your teeth by comparing the difference between the drinks, water and soda which is known to cause damage to teeth.	
<b>Help Received</b> Orthodontist helped by being the first to tell me about pH levels and the effect on teeth. Mom helped me with some of the picture taking.	