



CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s) Lior I. Schenk	Project Number J1830
Project Title Teeth Whitening with Natural Products	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose was to determine what foods can be used to effectively whiten teeth. What foods can be used to effectively whiten teeth. It is hypothesized that certain foods can be effective, or even superior, in teeth whitening.</p> <p>Methods/Materials Groups of eggs (representing teeth) were put into jars filed with stainers (tea, coffee, Coca-Cola, red wine, and a mix of the four). After ten days of being soaked, the eggs were taken out of the jars to dry. The variable would be sliced or crushed to get the juices flowing, and then it would be rubbed on a spot on the egg continuously for sixty seconds. (The variables were Lime, Apple, Orange, Strawberry, Carrot, Cauliflower, Celery, Jicama, Pear, Whitening Strips, 3% Peroxide, Baking Soda, and Whitening Toothpaste.) The colors and whiteness of the new spot were recorded and compared.</p> <p>Results From least to greatest effect, the resulting order of variables was: carrot, cauliflower, whitening strips, orange, celery, jicama, pear, baking soda, peroxide, apple, whitening toothpaste, strawberry, peroxide + baking soda, peroxide + lime, and finally, lime. All in all, lime, pear, apple, and strawberry would be the best foods to eat as substitutes for actual bleaching; they are just as effective, and in some cases, even better. When the testing was repeated, the resulting order of variables was: baking soda, carrot, cauliflower, whitening strip, orange, celery, jicama, pear, peroxide, apple, whitening toothpaste, strawberry, baking soda + peroxide, peroxide + lime, and lime.</p> <p>Conclusions/Discussion What foods can be used to effectively whiten teeth? All of the variables managed to whiten teeth by some degree, except for cauliflower and orange, which were worse than the control. The best foods were lime, followed by pear, apple, and strawberry. My hypothesis was that certain foods can be effective, or even superior, in teeth whitening. I was correct in stating that certain foods will be superior; however, not all of the variables were better than the leading products such as whitening toothpaste and whitening strips. All in all, lime, pear, apple, and strawberry would be the best foods to eat as substitutes for actual bleaching. They are just as good, and in some cases, even more effective.</p>	
Summary Statement Instead of using risky commercial teeth whiteners, people can use natural products for a whole cleaner feel.	
Help Received Mother helped buy supplies and research; Dr. C (orthodontist) helped get tooth chart.	