



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <b>Matthew R. Jarecky</b>	<b>Project Number</b> <b>J1908</b>
<b>Project Title</b> <b>50 Shades of Yellow</b>	
<div><div><b>Objectives/Goals</b><p>For this year's science fair project, I chose to investigate what substance is most effective for cleaning teeth exposed to stain producing liquids. I am interested in this question because I've always seen that all the people I meet use a different type of substance to clean their teeth. I think this project will be fun to experiment with and I hope to find through this project, what substance is most effective for cleaning teeth. So my hypothesis is, if tar-tar control toothpaste is used on a person's teeth, then it will remove stains the most effectively.</p></div><div><b>Methods/Materials</b><p>For my science fair project I will have 14 petri dishes, half of them filled with coffee the other half filled with pomegranate juice. I will then take 14 molars and put each molar into its own petri dish. Then every 96 hours for three weeks I will brush each molar with a certain substance. I will also give each molar a rating between one and ten. One, being the tooth mostly white and ten, being the tooth really discolored every 96 hours for three weeks. Then at the end of the three weeks I will round up all the data and get my answer to my science fair question.</p></div><div><b>Results</b><p>The data I found after experimentation was that the overall best substance for the molars soaked in the coffee was the whitening toothpaste. The overall best substance for the molars soaked in the pomegranate juice was the fluoridated toothpaste. Finally, the overall best substance for both the coffee and the pomegranate juice was the baking soda.</p></div><div><b>Conclusions/Discussion</b><p>The conclusions I have drawn are that baking soda is the overall best tooth cleaner, followed up by whitening toothpaste. My hypothesis was incorrect. Baking soda was a better tooth cleaner than tartar-control toothpaste. The changes I would make if I were to do this project again is that I would somehow refrigerate my petri dished filled with the liquids so mold would not be able to grow on the liquids. This project is real world because people could finally know what type of substance they should use to get discolorations out of teeth. Also, dentists could use that substance to brush patients teeth most effectively. For further work on this project, I can add much more substances, so there is more experimenting to do.</p></div></div>	
<b>Summary Statement</b> <p>My project is about how I soaked molars in stain producing liquides and brushed them with certain substances to see which one cleaned the discoloration off the teeth most effectively.</p>	
<b>Help Received</b> <p>Orthopedic surgeon gave me 14 teeth for my experiment; my teacher gave me ideas on how to write my Science Fair Write Up.</p>	