



**CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY**

Name(s) Morgan E. Link	Project Number J0414
Project Title Wrap It Up! Investigating the Effects of Age on Responses to Packaging	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Today's big brands in the food industry use packaging to draw attention to their products and to appeal to the broadest possible base of consumers. For my project, I investigated preferred colors, color tone, and overall designs for the packaging of food products. I wondered whether packaging colors and color schemes might appeal differently to adults, middle school and elementary school children. I believed warmer, brighter colors of packaging would be preferred over other color tones by the majority of test subjects.</p> <p>Methods/Materials I tested a total of 235 subjects, including adults and children in grades 3 through 8. I used PicsArt to photoshop images of the packaging for Cheez-its, Cheerios, and Popcorn Indiana Kettle Corn, changing the colors and color tones of the product and background. I created a slideshow from these various images. I prepared a separate feedback sheet and distributed it to my test subjects. I displayed the slideshow and instructed my test subjects to circle the letter on the sheet that matched their favorite image. I recorded and analyzed my results.</p> <p>Results Packaging C, with a warm color background for each of the products, was most preferred by all ages. It was chosen by 35% of test subjects overall, including 49% of the adults, 36% of the 6th through 8th graders and 29% of the 3rd through 5th graders. Packaging D, also a warm color, was preferred by 12% of subjects, indicating that warm color packaging options were preferred by a total of nearly half of all test subjects. Packaging A and E, designed with cool colors, were chosen by 26% of test subjects. The white backgrounds of packaging B and F and the mixed colors presented in packaging G were the least appealing options, chosen by only 10% or fewer test subjects overall. When comparing the results by age group, the only consistent selection was the warm color packaging of option C.</p> <p>Conclusions/Discussion These results supported my hypothesis that packaging for food products designed with warmer colors might be the most appealing compared to cooler colors, mixed color tones, or white. My results also suggest that packaging preferences vary depending on age. While all age groups chose the warm color as their overall favorite, the preference order for the remaining six varied greatly for each group.</p>	
Summary Statement In my project I tested people in order to find out their color preferences for food product packaging and compared the results according to age.	
Help Received I designed my test sheet and presentation and tested the majority of subjects who participated. My science teacher allowed me to conduct my testing at school in her class and Mrs. Jodi Coe allowed me to conduct my testing on adults at Nuvasive.	