



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Fiona P. Bandy	Project Number J2106
Project Title The Tear Catcher: An All-Purpose Finger Wipe. It's TEARific!	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of my Science Project was to determine which of the 5 materials tested (cotton rounds, organic cotton rounds, 2-ply tissues, toilet paper, and napkins) would absorb the most human tears, which was simulated with an I.V. drip. My hypothesis is that the cotton rounds would be the most absorbent material. My goal was to turn the most absorbent material into a new product called "The Tear Catcher", so that people undergoing chemotherapy, whom have lost their eyelashes, would have an alternative product to tissues that would be more convenient when dealing with their weepy/runny eyes. The product could also be used for persons with allergies, flu/cold, shingles, sunscreen or any other foreign substances irritating the eyes.</p> <p>Methods/Materials One wooden structure holding an I.V bag and tubing, which curved over a suspended funnel, was constructed. Five different materials were each individually placed into the funnel where water dripped until it leaked through the specific material onto the colored tissue paper. This indicated the maximum absorbency of that material and the counted water drops were tallied. I simply hand-stitched a sliver of cotton gauze to either side of the cotton round and created a slide on the finger wipe called "The Tear Catcher".</p> <p>Results The cotton round material with the quilted side consistently held the most drops of water before leaking through the funnel, while the 2-ply tissues, toilet paper, & paper towels - even folded into 4-ply - held the least amount of water drops. As I hypothesized, the tissues, napkins, toilet paper, nor the Organic cotton rounds would not be as absorbent as the regular cotton rounds. The results prove that a "Tear Catcher" made from an absorbent material like the cotton round will make the best product.</p> <p>Conclusions/Discussion My conclusion is that regular cotton rounds are the most absorbent material from which I created my new product, "The Tear Catcher". It's registered with a Provisional Patent with designs for different colored wipes to appeal to children. It's TEARific!</p>	
Summary Statement The central focus is find the most absorbent material in which to create a new product (THE TEAR CATCHER) that slides onto the finger and is used to wipe weepy/runny eyes due to chemotherapy, allergies, flu, or any foreign substance.	
Help Received Mother helped with tabulating drops; Father helped with construction of the wooden structure used for testing.	