



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Nishtha K. Mistry	Project Number 36471
Project Title An Eggsperiment: What Is the Best Egg Substitute in Baking?	
Abstract Objectives/Goals I tested which natural egg substitute best mimicked the binding, thickening, and rising properties of eggs in baking. Methods/Materials Four variables were compared to the control (eggs); blended silken tofu, applesauce, flax seed, and aquafaba. Each ingredient was used as a substitute for eggs in a commercial recipe for baking cupcakes. The different texture, height, and binding were observed and compared for each egg substitute used. Results Analyzing all the data collected, the results clearly showed aquafaba to be the best egg substitute in baking. It best mimicked the binding, height, and texture when baking with eggs. For example, aquafaba had the same exact height of 3.5 centimeters as the cupcake made with eggs. Conclusions/Discussion My original hypothesis, that silken tofu would be the best egg substitute, proved to be incorrect. Aquafaba resulted as the best egg substitute that mimics the binding, height, texture, and batter consistency when baking with eggs. To support today's new healthy lifestyle, this experiment shows that there are other natural ingredients that can be substituted in your favorite recipes.	
Summary Statement This project demonstrated that there are various natural ingredients that can be utilized as an egg substitute in baking.	
Help Received None. I performed all aspects of the experiment by myself, but was supervised by a parental guardian while working with some baking appliances.	