



**CALIFORNIA SCIENCE & ENGINEERING FAIR  
2019 PROJECT SUMMARY**

<b>Name(s)</b> <b>Faith Day</b>	<b>Project Number</b> <b>J1209</b>
<b>Project Title</b> <b>The Effect of Tongue Type on the Ability to Taste PTC Paper</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives</b> The objective of this experiment was to determine the relationship between tongue type and the ability to taste the chemical PTC.</p> <p><b>Methods</b> 71 volunteers were given a piece of PTC paper and rated the taste or the absence of taste. The results were recorded and added on to a google spreadsheet. The materials of this experiment were PTC paper, google spreadsheet and chromebook, phone camera, food dye, tweezers, cotton swabs, petri dish, and water.</p> <p><b>Results</b> Those with tongue type one will have small gustatory cells and will either barely taste or not taste PTC paper. Those with tongue type two will have large gustatory cells and will taste PTC paper strongly.</p> <p><b>Conclusions</b> In this experiment, it was proven that tongue type does affect the ability to taste PTC paper. When the gustatory size increases the ability to taste the chemical will become greater. When the gustatory cells are small, then the taste will be lesser.</p>	
<b>Summary Statement</b> In this experiment, I tested the relationship between the size of human bitter taste receptors ( papillae/ gustatory cells) and the interprutaion of the chemical paper PTC.	
<b>Help Received</b> My project mentor is Mr. Dan Dummett. I also received advice from teachers; Mr. Chris Thibodeau and Mrs. Meghan Salter.	