



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Navleen K. Dhot	Project Number J2108
Project Title The Dissolution Time of Decongestants in Water and Stomach Acid	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this study was to determine which decongestant dissolved the fastest in stomach acid.</p> <p>Methods/Materials Three different decongestants, hydrochloric acid, magnetic mixer, water, and stopwatch. I dropped a decongestant into water and stirred it with the magnetic mixer for 10 seconds. Then, I added the hydrochloric acid and noted the time taken for the decongestant to dissolve.</p> <p>Results Sudafed dissolved the quickest in the hydrochloric acid and water, meaning that it will take effect the fastest when taken.</p> <p>Conclusions/Discussion Sudafed dissolved the quickest in the acid and water. This means that Sudafed will begin taking effect before the other medications. This information has helped me and my family because we switched our medications and have noticed drastic change.</p>	
Summary Statement I determined which decongestant begins affecting congestion the fastest by dissolving different decongestants in simulated stomach acid.	
Help Received My doctor helped me understand how much acid and water to use for dissolving the decongestants in. A science teacher at my school provided the hydrochloric acid and magnetic mixer.	