



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

Name(s) Taryn Manns	Project Number J0621
Project Title Fe-ueling Iron Absorption	
<p style="text-align: center;">Abstract</p> <p>Objectives The objective of my experiment is to determine if iron absorbs faster on an empty stomach or a full stomach.</p> <p>Methods Iron detector tablets, iron color chart, test tubes, distilled water, white distilled vinegar, almond flour. Measured the rate of absorption of iron in solutions representing a full stomach and an empty stomach.</p> <p>Results The rate of absorption of iron was significantly faster for the solution representing an empty stomach than the solution representing a full stomach. The solution representing an empty stomach also reached a higher level of absorption on the color chart reaching 5ppm (parts per million). The solution representing a full stomach only reached 1 ppm on the iron color chart.</p> <p>Conclusions Based on my experiment, iron absorption occurs faster on an empty stomach. This information is important for people who take iron supplements.</p>	
Summary Statement I showed that iron absorption occurs faster on an empty stomach.	
Help Received I prepared all of the solutions and compared the solutions to the color chart by myself. I had help with the timing at the beginning of each trial from my mom.	