

CWSF 2016 - Montreal, Quebec



Dante Severini

The Effect of Antacids on the Breakdown of Enteric Coated Pharmaceuticals

Challenge: Health

Category: Senior

Region: Algoma Rotary

City: Sault Ste. Marie, ON

School: Korah Collegiate & Vocational School

Abstract: The experiment tested how antacid tablets interact with enteric coating on common anti-inflammatory drugs, specifically, methacrylic acid copolymer on 325mg Aspirin. I observed several quantitative factors; mass change of the tablet and conductivity and pH change of the solution. From this data I was able to support my hypothesis that it can be dangerous to take excess amounts of antacids with enteric coated pharmaceuticals.

Biography

My name is Dante Severini and I am a grade 12 student from Sault Ste. Marie Ontario, currently enrolled in the International Baccalaureate program at Korah Collegiate and Vocational School. Outside of school I compete competitively in swimming, badminton and golf and play many other sports recreationally. In my spare time, I volunteer within my school and local hospital. I acquired inspiration for my project when my younger cousin, who hates swallowing pills, asked my uncle (her father) if she could chew the pill. He told her that she could not, because the box said so. In the middle of brainstorming ideas for my IB extended essay, I began to wonder, why does the box say so. This was the inspiration for my topic, and from this and extensive pre-lab experimentation came several developments which eventually developed my method and research question. Next year I plan to attend either the University of Western Ontario, or Queens University (decision pending) pursuing a degree in engineering. After the completion of my undergraduate degree, I wish to pursue a career in the medical field which also contributed to my inspiration as I am very interested in medicinal chemistry.

Awards

Value

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| Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada | |
| University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa | \$1 000 |
| Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University | \$1 000 |
| Total | \$2 000 |