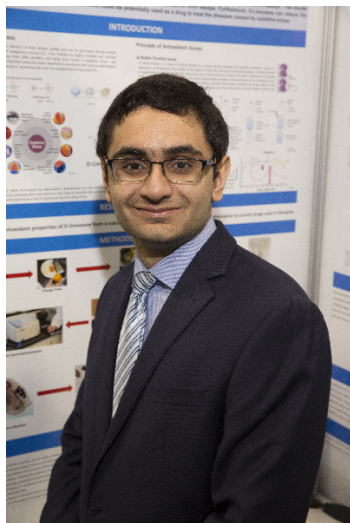


CWSF 2019 - Fredericton, New Brunswick



Ahmed Nadeem

A Novel Approach to Alleviate Oxidative Stress in *Daphnia magna* by D-limonene

Challenge: Health

Category: Senior

Region: York

City: Thornhill, ON

School: St. Robert Catholic H.S.

Abstract: This project explores an innovative method of curing diseases through a chemical called D-Limonene which is found in oranges. Diseases are commonly caused by evil molecules known as free radicals. But the superhero, D-Limonene can stop these bad guys through the power of chemistry. This project shows how D-Limonene fights bad guys, free radicals, and even helps little bugs known as water fleas.

Biography

My name is Ahmed Nadeem, and I am a grade 11 student in the International Baccalaureate program at St. Robert Catholic High School in Markham. I have a deep interest in the sciences, specifically biology and chemistry. I am a dynamic and active participant in many of my school clubs, HOSA, debate, and the French newspaper club. In my spare time, I make computer games and watch videos on the latest science news. Many times, news of foods curing cancer pop-up. Due to my analytical nature, I examined such claims and became very curious about the latest research. This is where my science project was born. I researched further and further, asking more profound and more in-depth questions. I stumbled upon resources, videos, and articles to help me in understanding my topic of antioxidants. But at the same time, I had to become resourceful and set up a little lab in my room. I was working with chemicals and equipment, but in the end, I pushed the envelope of humanity's understanding of biology. I discovered something new, and that would be my tip to future science fair participants. Push the envelope of what is known and stay curious.

Awards

Value

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| Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada | |
| Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science | \$2 500 |
| UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver) | \$2 000 |
| University of New Brunswick Canada-Wide Science Fair Scholarship Silver Medallist - \$2500 Entrance Scholarship Sponsor: University of New Brunswick | \$2 500 |
| University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa | \$2 000 |
| Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University | \$2 000 |
| Total | \$11 000 |