

CWSF 2010 - Peterborough, Ontario



Arooj Hayat

Tylenol and Echinacea Don't Rhyme!

Division: Earth & Environmental Sciences

Category: Senior

Region: Greater Vancouver

City: Vancouver, BC

School: Britannia Community Secondary

Abstract: The interaction between Tylenol (acetaminophen) and Echinacea purpurea could "severely damage the liver." This project investigates how growth rate of HepG2 cultures is affected by this combination. Cells were observed over 10 days, while medium and high dosages of the drugs were added regularly. Since E.purpurea has inhibitory effects on cytochrome enzymes, acetaminophen may remain toxically un-metabolized, thus damaging liver tissue. Testing is in progress.

Biography

With the dream to become a doctor in the future, I have been actively involved in my school and community to serve others. I am an executive member in several school clubs, including a Global Issues Club, the Debate Club, and the Philosophers Club, which I founded in my school. In the Global City Club, I have worked with and led student teams to fight against growing world problems, like hunger, child soldiers, and illiteracy. At the moment, I am organizing a fundraising campaign to support cancer patients. I have also participated in several public speaking competitions, and am currently co-organizing a tournament in my school. In addition to my school involvement, I have volunteered with several organizations. I have worked as an Assistant Librarian in a local elementary school's library, and I have coached soccer and basketball to 8-yr-olds. I also face-paint at the Vancouver Children's Festival each year, and am a Student Ambassador for Kids Help Phone. Outside of serving my community, I enjoy playing tennis, ice skating, and reading mysteries. Next year, I will be studying towards a Bachelor of Science, before medical school, and I am aspiring towards a PhD as well.

Awards

Value

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| Honourable Mention - Biotechnology & Pharmaceutical Sciences Senior Sponsor: Youth Science Canada | \$100 |
| Total | \$100 |