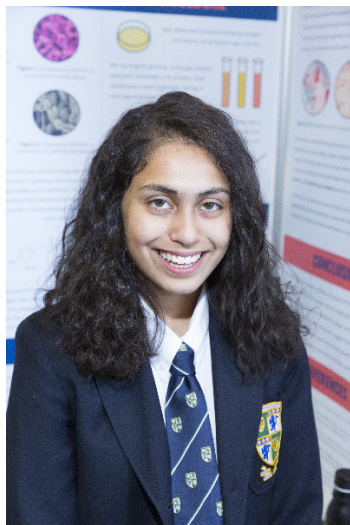


CWSF 2018 - Ottawa, Ontario



Riya Gandhi

A Cure for What ?Ails' You: A Study of the Antibacterial Effects of Garlic

Challenge: Health

Category: Intermediate

Region: Vancouver Island

City: Victoria, BC

School: Glenlyon Norfolk School

Abstract: I tested the antibacterial effects of ginger, ginseng, and garlic against common oral. After discovering that ginseng worked best in preventing the growth of oral bacteria, I extracted a compound called allicin from garlic, to determine why it did not perform as well. Results are currently progressing. This research looks to create a dissolvable tablet for the teeth that prevents the growth of harmful bacteria.

Biography

My name is Riya Gandhi, and I am in Grade 9 at Glenlyon Norfolk School. The inspiration for my project came from my grandmother, who would always tell me to use natural ingredients to cure my illnesses. Naturally, was skeptical, so I decided to test the antibacterial effects of garlic, ginseng and ginger (common ingredients found in naturopathic remedies). Later, I extracted allicin, an organosulfur compound from garlic to further determine its effects on oral bacteria. For further investigations, I would like to test the effects of S-allyl-L-cysteine sulfoxide (found in garlic) against a carcinoma squamous-cell to discover the potential reduction effects. I would encourage other students to participate in Science Fair, as it is extremely fun and an amazing learning opportunity! I am involved in dance (jazz, hip hop, contemporary, bharatanatyam and bollywood), Model UN, Piano, and Debate. As well, I love to do volunteer work for local projects in my community. Science Fair has been an amazing opportunity, and I hope to participate again next year!

Awards

Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000