



## ESPC 2015 - Fredericton (Nouveau-Brunswick)



## **Shanaya Ghaffar**

Hand Sanitizers at Work: Which Does the Job Best?

Défi: Santé
Catégorie: Junior
Région: Durham
Ville: Ajax, ON

École: Nottingham Public School

**Sommaire:** I experimented with 5 different brands of hand sanitizers, 2 expired, 1

homemade and a control to test & compare bacteria growth. I hypothesized that B&BW sanitizer with benzalkonium chloride would work the best and that the expired ones would have no effect like control; this I based on my study of their active ingredients which had varying percentages of either

ethanol or alkydimethylbenzylammonium chloride.

## Biographie

I am a 13 year old grade 7 student. I partake in Concert Band (playing trumpet) performing in & outside school, Step Club (dance), Make your Mark (women rights/bullying support group), Book Club, Office/Secretary helping and multiple charities. I have the Red Cross Baby-sitting diploma. I represented my school at the Ontario Science Olympics 2015. I enjoy traveling, reading, good food, k-pop (Korean) music, baking and playing outside, currently skate-boarding. I am fluent in English and Urdu, studied Arabic/Quran for 2 years & currently learning French & Korean. I won a silver and a gold medal at the Ajax & Durham Science Fairs 2015 respectively, plus got selected to participate in CWSF. I got inspiration for my project from the rapidly growing hand sanitizer use; I grew up thinking they weren't a good option to clean hands, therefore, I decided to test this theory. Eventually, I plan to create a new, healthier yet effective product. I aspire to become a neurologist; for that I'll study the biological/life sciences and also follow through my current project. My advice to other participants is to work hard and enjoy - even if you don't win, you will learn a lot and feel accomplished.





