

# CWSF 2016 - Montreal, Quebec



## Iqra Sahar Tariq

### Exploring the Effects of Twelve Herbs on Type 2 Diabetes and Their Components

**Challenge:** Resources

**Category:** Senior

**Region:** Manitoba Schools Science Symposium

**City:** Winnipeg, MB

**School:** Balmoral Hall School

**Abstract:** All of the most basic synthetic pharmaceuticals originate from plant or herbal properties. This experiment explores the effects of twelve herbs on Type 2 Diabetes, through an alpha glucosidase inhibition. Further, a proton nuclear magnetic resonance spectroscopy was performed on the herbs with activity (6) to identify which, if any constituents of the herbs act upon this disease, and why.

#### Biography

I am in Grade 12 and attend Balmoral Hall School. For the greater scientific community, I wish to cross-correlate between fields of scientific study to make a wider impact in the world. Becoming a long-term provincial science fair participant (8 years) through mentored natural product chemistry research (University of Winnipeg) and a student leader has helped me become unique. Factors including correlating between different communities and bringing various volunteer and work experiences (such as at local pharmacies, mosques, charitable organizations, social justice clubs, FIFA WWC games, peer tutoring) help me bring various perspectives and opportunities to any table. I intend to study Pharmacy. I received inspiration for my project through my interest in natural product chemistry, my South Asian background, and my mentor's research experience with the very prevalent illness, type 2 diabetes. I am involved in a path to antidiabetic all natural drug discovery. In the future, I intend to isolate the components I have identified through my research. I advise other students to do something they are passionate about, never be afraid to ask questions, and get involved in other activities that correlate between your research and other interests.

#### Awards

#### Value

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
<b>Total</b>	<b>\$2 000</b>