

## CWSF 2014 - Windsor, Ontario



### Shuaa Rizvi

#### Dietary Approaches to Improve Heart Function in Obesity-Associated Heart Failure

**Challenge:** Health

**Category:** Senior

**Region:** Edmonton

**City:** Edmonton, AB

**School:** McNally School

**Abstract:** Heart failure is a condition of progressive deterioration of cardiac function. We investigated whether dietary approaches would improve cardiac function in obese heart failure mice. Obese heart failure mice had impaired ability to uptake and utilize glucose. But by changing the diet to Low Fat or Calorie Restricted resulted in decreased body weight, improved ability to uptake and utilize glucose, improved insulin signaling, improving cardiac function.

#### Biography

My name is Shuaa Rizvi, a grade 12 student currently enrolled at McNally Composite High School in Edmonton. I got the amazing opportunity to work on an experiment last summer at the University of Alberta, I was chosen out of almost 200 other applicants around central Alberta. To get chosen to partake in the experiment I wrote about my interest in science and specifically about my interest in cardiology. Both of grandfathers had passed away with some sort of heart condition and to figure out a method to help others with heart complications is more than just finding a cure, its about finding hope. I feel that I want to further my studies in the innovative field of medicine to help others around me. For me its not about the money, or accolades but about helping someone else. To be privileged with this opportunity is also a great responsibility. The responsibility for me as a role model for my siblings, friends and young scientists. I don't just want to achieve for myself but for those that feel that they can't. I hope I successfully represent my family, my school, and my region to show Canada what Edmontonians are made of!

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