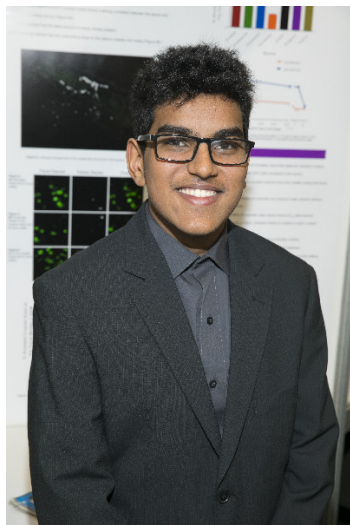


# CWSF 2017 - Regina, Saskatchewan



## Kavisha Dayarathna

### Spices are Key to be Kidney Stone Free

**Challenge:** Health

**Category:** Intermediate

**Region:** Thames Valley

**City:** London, ON

**School:** Central S.S.

**Abstract:** Kidney stones continue to increase global morbidity; treatments for the disease are expensive and invasive. This project aims to research non-invasive, cost-effective drugs from spices to treat oxalate stones using the animal model: *Drosophila Melanogaster*. Our findings show that flies fed with food containing 0.2% coriander extract and 0.5% oxalate produces 75% less kidney stones than flies fed with only 0.5% oxalate food.

#### Biography

Kavisha Dayarathna is a Grade 10 student at London Central Secondary School where he is studying to become an Automotive Engineer. He enjoys playing music, sports, and video games. As hobbies, he cooks and enjoys DIY activities. His passion for food has lead him to a research project that is meaningful to him; to see whether the intake of spices influence the formation of kidney stones. He came up with this topic because his family in Sri Lanka and the general Asian population produce less kidney stones than that of North America. He thought it might have something to do with the south Asian diet as spices are highly prevalent in their food, whereas spices aren't a common part of diets in North America. Because the results of his project support the prediction he made, one of his future steps is to research chemical constituents of the spices which causes kidney stone reduction. He believes that doing a science fair project is something that opens one's mind in a different way of thinking. He highly recommends that everyone try to find a topic that he/she is passionate about as they will enjoy their experience more.

#### Awards

#### Value

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