

## CWSF 2016 - Montreal, Quebec



### Rushi Gandhi

#### Plant Pigments: A Novel Treatment for Cancer

**Challenge:** Health

**Category:** Intermediate

**Region:** Peel

**City:** Brampton, ON

**School:** Tomken Road Senior P.S.

**Abstract:** In this project, the effects of edible plant pigments were tested on T47D breast cancer cells. Beta-carotene, chlorophyll, and xanthophyll are pigments found in a variety of plants. It was discovered that all the pigments, at a concentration of 0.001 molar, were effective at inhibiting the growth of T47D breast cancer cells. Therefore, having the potential to play a major role in future cancer treatment.

#### Biography

Rushi Gandhi is a grade 7 student at the Tomken Road Middle School Science & Technology Program and has a great interest in science and innovation. His passion for scientific inquiry has him involved in many competitions, such as Skills Canada Robotics challenge and winning the Regional First Lego League Robotics competition. Rushi also enjoys competing in sports such as swimming and table-tennis. He has achieved many notable awards. Achieving the Math Student of the Year Award demonstrates his excellence in Mathematics. His motivation towards science has led him to achieving the Gold medal at the Peel Science Fair. Rushi's grandpa had been a victim of asthma and respiratory diseases. He had witnessed him struggle and seen the extensive damage that indoor air pollution can do to the human body. Rushi's desire for knowledge coupled with his curiosity has inspired him to investigate on the worldwide phenomena of indoor air pollution and how we can reduce it. He would like to extend his learning of the project by researching further on enhancing the techniques currently used in the project. Rushi intends to continue to focus on the wonders of science and technology and enter a career in that field.

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
[www.youthscience.ca](http://www.youthscience.ca) / [info@youthscience.ca](mailto:info@youthscience.ca)  
416-341-0040