

## CWSF 2018 - Ottawa, Ontario



### Rafael Pedro

#### Does Feeding Hens Different Foods Change the Colour of the Egg Yolk?

**Challenge:** Discovery

**Category:** Junior

**Region:** Tri-County

**City:** Shelburne, NS

**School:** Shelburne Regional High School

**Abstract:** Chickens were fed a concentrated diet of foods containing carotenoids, such as lobster, peppers and kale. After each food was given for a week, the eggs were opened to note the change in yolk colour. The foods noted above gave noticeable change of yolk colour from yellow to orange. Foods such as pork and pasta, that do not contain carotenoids, presented very pale yellow yolks.

#### Biography

My name is Rafael Pedro. I was inspired to do this project when I saw that the egg yolks changed to a more orange colour when we gave our hens leftover lobster. I wanted to find out how and why the eggs changed to orange, so I researched the topic and discovered that carotenoids were responsible for changing colour. I further researched other foods containing carotenoids and then did some experiments with the hens' diet. I am interested in riding my bike, basketball, sailing and racing dinghies and playing video games.

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