

# CWSF 2012 - Charlottetown, Prince Edward Island



## Madeline Stever

### Sunscreen: The Good, The Bad And The Metallic Taste In My Mouth - Part 3

**Challenge:** Health

**Category:** Intermediate

**Region:** Peterborough

**City:** Peterborough, ON

**School:** Kenner C.V.I.

**Abstract:** Sunscreen samples were tested for absorption using the living membrane in fertilized chicken eggs. Visual observations demonstrated that 100% of the sunscreens passed through this living membrane. ICP-MS analysis of albumen and yolk suggested that lead, aluminum, and chromium transferred through this membrane from the sunscreens. In addition, the chicken embryos exposed to sunscreens showed morphological abnormalities and high mortality rates.

#### Biography

My name is Madeline Stever. I'm a grade 8 student attending James Strath Public School in Peterborough, Ontario. My strongest subjects in school are science (go figure), language, math, and music. Some day I hope to go to university on a scholarship and study in the field of medicine. I would really like to make a positive difference in the lives of others. Outside of my hectic school life where I am involved in every school club and team, I have many different interests. I am a competitive swimmer on the Port Hope Swim Team, and I am a senpei at my karate dojo. I am working on earning my brown belt in karate. This spring I am taking my Royal Conservatory of Music grade 6 piano examination. I also love to read and spend time outside when I have free time. I always try my best in everything that I do. I like to work hard and I am very dedicated in trying to achieve my goals. I have a great deal of support from my family, teachers and coaches. I am extremely fortunate to have many opportunities to challenge myself and to grow as a person.

#### Awards

#### Value

Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	\$1 500
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Total	\$5 500