

## CWSF 2012 - Charlottetown, Prince Edward Island



### Kaelyn Gras

#### Bisphenol A in Epoxy-Resin Lined Baby Formula Cans

**Challenge:** Health

**Category:** Senior

**Region:** Edmonton

**City:** Edmonton, AB

**School:** Archbishop MacDonald H.S.

**Abstract:** A controversial chemical, Bisphenol A (BPA), has adverse effects and is present in epoxy resin lined metal cans. This project tested BPA levels in commercially available Canadian baby formula cans and unused cans using gas chromatography mass spectrometry. Several variables were manipulated, replicating the canning process conditions, including temperature, duration, and acidity, to which correlations were found. Also an extraction to exhaustion was conducted.

#### Biography

My name is Kaelyn Gras and I am in grade 11 with a full IB program at Archbishop MacDonald High School in Edmonton, Alberta. As well as competing in the science fair, I am in Ukrainian dance, play the flute in a concert band and I am a balloon artist. I often volunteer with multiple organizations, in and out of school, and because of this; I won the prestigious "Heart of the Community" award at my school. My dream is to be a pediatrician and work with Doctors Without Borders. This interest of wanting to help improve children's lives was the inspiration for this project and I would love to continue this project in the future. When I am not trying to keep up with my busy schedule, I love to read. I also love to travel, and I have been to many different places, including Austria, Italy, Holland, Mexico, Greece, and, my favorite destination, Egypt. I am really excited to come to the Canada Wide Science Fair again this year, as I have been looking forward to this since going for the first time last year.