CWSF 2016 - Montreal, Quebec

Ellen Moore, Madeline Shanks

Stop Light on Sweetener Street: Sweeteners and the Gut Microbiome

Challenge: Health
Category: Intermediate
Region: Annapolis Valley
City: Falmouth, NS, Upper Burlington , NS
School: West Hants Middle School
Abstract: To determine how different types of sweeteners (natural versus artificial) affect the bacteria in the gut microbiome. Bacteria colonies were grown using a probiotic powder containing two important species of the gut microbiome, Lactobacillus and Bifidobacterium. Natural sweeteners (cane sugar and corn syrup) and artificial sweeteners (Splenda and Equal) were added to test impeded or assisted growth of colonies.

Biographies
Ellen - I am a grade 9 student in rural Nova Scotia. I am an aspiring dancer and artist with strong interests in languages, mathematics, and science. Madeline and I have participated together in science fair for three years, with our project each year being relevant to human sciences. The gut microbiome was initially brought to my attention by my mother, who wondered if my sister's microbiome had been affected by antibiotic exposure and whether this was influencing her dietary choices. I found it fascinating that such tiny organisms are the foundation of a complex gut environment that affects our overall health. Although our study was limited to bact... Madeline - I am 15 years old and I go to West Hants Middle School in Newport Nova Scotia. I am a 4-H member and involved in photography. My interests include, fishing and camping. As well as traveling and studying world history. I find medical science to be extremely fascinating and I am definitely looking to study in this field. I am hoping to attend either Dalhousie University or Saint Francis Xavier University for a degree in nursing.

Awards	Value
Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - $1000 Entrance Scholarship Sponsor: Western University	$1 000
Total	$1 000