

CWSF 2013 - Lethbridge, Alberta



Ainslie Pierrynowski

Electrolytes in Drinks

Challenge: Health

Category: Intermediate

Region: Cape Breton

City: Sydney River, NS

School: Sydney Academy

Abstract: The objective of the experiment was to determine which of six different beverages has the highest concentration of electrolytes by first finding the mean conductivity of each of the beverages, as a solution's conductivity is proportionate to that solution's concentration of electrolytes. The results of the experiment indicate that two different brands of sports drinks have the highest electrolyte levels of all beverages tested.

Biography

I have an interest in chemistry and in food science, so, when I came across an article examining the use of sports drinks to replace the electrolytes lost by athletes through sweating during physical activity, I wondered how the levels of electrolytes in different brands of frequently consumed sports drinks, as well as in other widely available beverages, compared. As my science fair project, I decided to determine which of six different beverages had the highest mean concentration of electrolytes. In further investigations, I would enjoy exploring other topics and issues in the fields of food science, healthcare, and nutrition, such as type one diabetes treatment and management. For students who are thinking about doing a science fair project, I would recommend approaching a current problem, question, or issue which relates to a field or topic which they are passionate about. In addition, I enjoy debating, theater, camping, and art. In the future, I would like to study nutrition, chemistry, or biology, and I would like to pursue a career in healthcare.

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