



## Staff Report

### Energy Drinks

<b>Date:</b>	January 19, 2011
<b>To:</b>	Board of Health
<b>From:</b>	Dr. Rosana Pellizzari, Medical Officer of Health
<b>Original signed by</b>	<b>Original signed by</b>
_____ Rosana Pellizzari, M.D.	_____ Larry Stinson, Acting Director, Public Health Programs

### Purpose

This report provides the Board of Health with background information regarding energy drinks.

### Decision History

This staff report on energy drinks was prepared based on a request of a Board of Health member at the November 2010 Board of Health Meeting.

### Financial Implications and Impact

None.

### Recommendations

That the Board of Health for the Peterborough County-City Health Unit:

1. Send a letter to Minister Leona Aglukkaq, Federal Minister of Health, Minister Margaret Best, Ontario Minister of Health Promotion and Sport, and Minister Deb Matthews, Ontario Minister of Health requesting that:
  - Advertising and sale of energy drinks to children and youth be restricted.
  - Pre-mixed alcohol and energy drinks not be sold in liquor outlets.

evaluated under the NHP Regulations. Only energy drinks with an 8-digit code with the letters "NPN" (Natural Health Product Number) on the can have been evaluated.

Certain warnings must also appear on the labels of energy drinks. These warnings state that *energy drinks should not be:*

- used by children;
- used by women who are pregnant or breastfeeding;
- mixed with alcohol; or,
- consumed at more than 500 mL/day.

Currently there are no regulations prohibiting the sale of energy drinks to children.

Health Canada is investigating some serious medical reactions linked with energy drinks including dizziness, nausea and vomiting, stomach pain, electrolyte imbalances and heart irregularities. These effects have been reported after too many energy drinks were consumed or when mixed with alcohol.

### **What is in Energy Drinks and Why?**

Ingredients may be slightly different between brands, but most have the same two main ingredients: *sugar and caffeine*. Aside from the sugar-free versions, energy drinks have about the same amount of sugar as regular pop (i.e., approximately 26 grams in 240 mL) but they usually have more caffeine. For example, one 250 mL can of Red Bull® contains almost 7 teaspoons of sugar, 110 calories and 80 mg of caffeine.

**Caffeine:** Caffeine is a stimulant. When caffeine is added to products, such as cola, it must be listed in the ingredient list. Ingredients such as guarana and yerba mate, commonly found in energy drinks also contain caffeine. It is mandatory that these be listed as ingredients however, it is not currently mandatory that the amount of caffeine from these natural sources be listed on the label. Caffeine content of teas, coffee and cocoa beans, guarana and yerba mate plants all also vary by growing conditions, harvesting, plant genetics soil quality, serving size and preparation method, making accurate labelling difficult.

Most energy drinks have 80 mg caffeine per 250 mL can (though some have more). This is double the amount of caffeine found in soft drinks. The amount of caffeine in most energy drinks exceeds recommendations for children. Health Canada suggests no more than 45 mg/day for children 4-6 years, 62.5 mg/day for 7-9 years and 85 mg/day for children 10-12 years. *Caffeine can cause nervousness, anxiety, jitteriness, stomach/intestinal upset, rapid heart rate and trouble sleeping in some individuals. Withdrawal symptoms can include headache, fatigue, irritability and poor concentration for those who consume caffeine regularly.*

Children are more sensitive to caffeine than adults. They can become restless, irritable and have problems sleeping if they have too much caffeine. Drinking too much caffeine can cause

are definitely drunk and their faculties are impaired, but they don't feel the effects of intoxication.

Thus, people may not realize their inability to perform tasks that require alertness, such as driving a car.

If drinkers don't feel the effects of the alcohol, the self-regulating mechanisms associated with being drunk fail to function. Indeed, the scientific literature suggests that individuals drinking such beverages may consume more alcohol per drinking occasion (Thombs, 2010), a situation that is particularly dangerous for inexperienced drinkers.

There is research suggesting that mixing alcohol with energy drinks is related to increased rates of injury. A study of 4,271 American college students (McCoy, 2007) found that, compared to students who drank alcohol by itself, those who drank it in combination with an energy drink were twice as likely to:

- hurt themselves or be injured;
- require medical attention;
- get into a vehicle with a drunk driver;
- assault someone sexually;
- be sexually abused.

## **Comments**

The Ministry of Education's School Food and Beverage Policy, Policy/Program Memorandum 150 (2010), has classified energy drinks as a "not permitted for sale" beverage. As of September 2011, these beverages will no longer be allowed for sale in elementary or secondary schools.

Although not available at school, elementary and secondary school students will still have ample opportunity to purchase energy drinks at local convenience stores, gas stations and grocery stores.

Health Canada issued a media advisory in March of this year stating that it has not approved the sale of any pre-mixed alcoholic energy drinks for sale and that "An energy drink containing alcohol would be subject to different regulations under the Food and Drugs Act, and would be evaluated differently - as a food, and not as a natural health product...Health Canada will be following up with liquor boards and other relevant bodies to ensure that the regulations and their implications for energy drinks containing alcohol are appropriately understood... Health Canada continues to advise consumers not to mix energy drinks with alcohol." Meanwhile, a call to a Peterborough LCBO store confirmed that pre-mixed alcohol and energy drinks are still being sold to consumers. (December 22, 2010)

Health Canada, Alcoholic Energy Drinks NOT Approved by Health Canada 2010-83 May 21, 2010  
[http://hc-sc.gc.ca/ahc-asc/media/ftr-ati/2010/2010\\_83-eng.php](http://hc-sc.gc.ca/ahc-asc/media/ftr-ati/2010/2010_83-eng.php) (Accessed on Dec. 14, 2010)

Health Canada, It's your Health: Caffeine (2007)

Marin Institute, Alcohol, Energy Drinks and Youth: A Dangerous Mix (2007)  
<http://www.marininstitute.org/alcopops/resources/EnergyDrinkReport.pdf>

McCoy, Thomas et al. "Energy Drink 'Cocktails' Lead to Injury Risk, Study Shows." Science Daily, Nov. 6, 2007.

Practice Based Evidence in Nutrition (PEN): Caffeine Backgrounder The Global Resource for Nutrition Practice [www.pennutrition.com](http://www.pennutrition.com) (Accessed on December 8, 2010)

Thombs DL, O'Mara RJ, Tsukamoto M, Rossheim Me, Weiler RM, Merves ML, Goldberger BA. Event-level analyses of energy drink consumption and alcohol intoxication in bar patrons. Addictive Behaviors 2010;35;325-330.

Windsor Essex County Health Unit, The Buzz on Energy Drinks, August 2010

January 25, 2011

The Honourable Leona Aglukkaq, P.C., M.P.  
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The Honourable Margaret R. Best  
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Honourable Ministers:

On January 19, 2011, the Board of Health for the Peterborough County-City Health Unit received/reviewed a staff report on energy drinks. The attached report highlights general nutrition information about energy drinks that are commonly available throughout our community in corner stores, grocery stores, gas stations and bars. We know that these products, despite clear warnings on the label advising against the use by children, are marketed towards children and youth and their sales continue to grow across Canada.

Another concern is the mixing of alcohol with energy drinks and the availability of these pre-mixed products in LCBO outlets in Ontario. Research shows there are significant health risks associated with this practice including reduced perception of the influence of alcohol, inability to perform tasks that require alertness, increased consumption of alcohol, increased risk for injury, and sexual assault. These risks may all require medical attention.

To this end, the Peterborough County-City Health Unit requests that you consider the following:

1. That advertising and sale of energy drinks to children and youth be restricted; and,
2. Premixed alcohol and energy drinks not be sold in liquor outlets as follow-up from the Health Canada Media Advisory in March 2010 that stated "*An energy drink containing*