



Ontario Society of Nutrition  
Professionals in Public Health

La société ontarienne des professionnel(le)s  
de la nutrition en santé publique

c/o Ontario Public Health Association  
439 University Ave, Suite 1850  
Toronto, ON M5G 1Y8

[www.osnp-ph.on.ca](http://www.osnp-ph.on.ca)

April 19, 2012

Karen Reece  
Administrative Assistant  
Association of Local Public Health Agencies  
[karen@alphaweb.org](mailto:karen@alphaweb.org)

Dear Ms. Reece:

Please find attached our alpha resolution submission for the 2012 Annual General Meeting. The Ontario Society of Nutrition Professionals in Public Health (OSNPPH) has sponsored the attached resolution related to energy drink regulations.

We would be happy to answer any clarification questions you may have.

Sincerely,

Amy MacDonald, RD  
OSNPPH  
Co-Chair

Shannon Edmonstone, RD  
OSNPPH  
Co-Chair

**TITLE:** Energy Drink Regulations

**SPONSOR:** Ontario Society of Nutrition Professionals in Public Health (OSNPPH)

WHEREAS energy drinks provide minimum nutritional value and contain high amounts of caffeine, sugar, and other potentially harmful additives;

WHEREAS 50% of Ontario adolescents consume energy drinks and 1 in 5 Ontario adolescents report energy drink consumption in the past week;

WHEREAS children and adolescents consuming energy drinks may easily exceed the maximum suggested amount of caffeine for their age and are at increased risk for behavioural and physiological effects from caffeine;

WHEREAS there are no regulations prohibiting the advertisement or sale of energy drinks to children and youth;

WHEREAS energy drinks are not recommended for consumption during or after exercise;

WHEREAS many consumers confuse the purpose and use of sports drinks and energy drinks;

WHEREAS some Ontario fitness facilities sell energy drinks;

WHEREAS caffeine in energy drinks can mask the symptoms of intoxication when energy drinks are mixed with alcohol and may lead to alcohol toxicity, impaired driving, violent behaviour, injury, increased incidence of risky behaviour, and other negative outcomes;

WHEREAS 20 to 90% of college-aged energy drink users regularly or recently mixed energy drinks with alcohol;

WHEREAS consuming energy drinks and alcohol increases likelihood of drinking beyond the Low-Risk Alcohol Drinking Guidelines, drinking to intoxication, and binge drinking;

WHEREAS the 2011 to 2013 Public Health Accountability Agreement Indicators include % of population (19+) that exceeds the Low-Risk Drinking Guidelines;

WHEREAS Health Canada prohibits the use of energy drinks as an ingredient in pre-mixed alcoholic beverages, but allows the sale of caffeinated-alcoholic beverages under the brand names of energy drinks (e.g., Rockstar™ + Vodka); and

WHEREAS Ontario bars currently advertise and sell drink combinations that include energy drinks and alcohol (e.g., Jaggerbomb made from Redbull™ and Jägermeister);

**NOW THEREFORE BE IT RESOLVED** that the Association of Local Public Health Agencies (alPHa) strongly recommends and urgently requests Health Canada and the Province of Ontario prohibit the advertising and sale of energy drinks to children and adolescents.

**AND FURTHER** that alPHa strongly recommends and urgently request Health Canada require the addition of a warning label to energy drink packaging that states: *“Energy drinks are not recommended for use during exercise or to rehydrate following exercise.”* The space allocated for warning labels should be at least 25% of the total packaging.

**AND FURTHER** that alPHa strongly recommend and urgently request the Province of Ontario to prohibit the sale of all pre-mixed caffeinated-alcoholic beverages at Provincial Liquor Outlets or at a minimum require the addition of a warning label to all pre-mixed caffeinated-alcoholic beverages packaging that states: *“This product contains alcohol and caffeine. Consuming alcohol and caffeine together may increase your risk of injury.”*

**AND FURTHER** that alPHa strongly recommends and urgently requests the Province of Ontario to prohibit the sale of energy drinks at all locations where alcohol is sold and served.

## **Statement of Sponsor Commitment**

In November 2011, OSNPPH submitted stakeholder feedback to Health Canada regarding their *Proposed Approach to Managing Caffeinated Energy Drinks*. OSNPPH developed this response in collaboration with the Ontario Energy Drink Work Group (OEDWG).

The OEDWG consists of health professionals from 20 Ontario health units and related organizations across Ontario. The mandate of the group is to plan and coordinate advocacy and education related to the formulation, sale, and consumption of energy drinks in Ontario.

OSNPPH and the OEDWG jointly prepared the energy drink alpha resolution. OSNPPH will continue to support the activities of the OEDWG.

In March 2012, the OEDWG sent advocacy letters to GoodLife Fitness Facilities and the Athletic Club to encourage them to discontinue the sale of energy drinks at their clubs. Currently, the OEDWG is collaborating on education materials for parents to heighten their awareness of consumption patterns in youth, risks associated with this practice, and misperceptions regarding energy drinks. The group is also working to engage youth leaders to communicate peer to peer using youth relevant messages about why energy drink consumption is problematic to their health and safety.

Kim Leacy representing OSNPPH and the OEDWG will be able to provide clarification on this resolution at the alpha Annual General Meeting in June.

## Background Summary

The production of energy drinks is a rapidly growing industry. In 2006, the Canadian energy drink market was valued at \$287.2 million and was expected to reach \$375.2 million by 2011. Energy drinks are particularly popular with children (<12 years old), youth (12-18 years) and young adults (19-25 years) (Seifert et al., 2011).

Energy drinks are beverages that typically contain caffeine, taurine (an amino acid), vitamins, herbal ingredients, and sugar or artificial sweeteners. The majority of energy drinks sold in Canada contain 70 to 80 mg caffeine per 8 oz (237 ml) serving, approximately 3 times the amount in cola drinks (Seifert et al., 2011). They are marketed to improve energy and concentration, increase stamina, improve athletic performance and for weight loss.

Energy drinks are unique beverages with unique concerns. Although some energy drinks have caffeine levels similar to coffee, there is evidence to suggest that the pure caffeine often added to energy drinks, as compared to the caffeine naturally occurring in coffee beans, may have different and more potent effects (Dietitians of Canada, 2012). Consumers may also find it easier to consume energy drinks more rapidly and in greater quantities compared to hot beverages like coffee and tea (Dietitians of Canada, 2012). In addition, energy drinks contain other ingredients (e.g., ginkgo biloba, ginseng, taurine, and glucuronolactone) that risk interacting with certain medications and are lacking long-term safety and health impact data (Dietitians of Canada, 2012).

Sixty-one adverse drug reactions (ADRs) relating to energy drink consumption have been reported to Health Canada (Macdonald et al., 2010). Thirty-two of the ADRs were classified as serious, with 15 involving the cardiovascular system and 7 occurring in adolescents.

In October 2011, Health Canada requested feedback from stakeholders regarding their *Proposed Approach to Managing Caffeinated Energy Drinks* (Health Canada, 2011b). In November 2011, the OSNPPH submitted stakeholder feedback to Health Canada regarding their proposed approach. Submissions were also received from Dietitians of Canada, British Columbia Ministry of Health, and various Ontario health units. Health Canada has yet to release the results of the stakeholder feedback or their final energy drink regulations. Hence it is a strategic time to be advocating for regulation change related to energy drinks, as Health Canada is revising their current energy drink directive.

### Children, Adolescents, and Energy Drinks

Although not recommended for children and teenagers (Health Canada, 2011a; Health Canada, 2011c), 50% of Ontario adolescents have consumed energy drinks in the past year and 1 in 5 have consumed them in the past week (Paglia-Boak, 2011). Children and adolescents are at increased risk of behavioural effects from caffeine (Health Canada, 2010) and may easily consume unsafe caffeine levels through the consumption of energy drinks (Reissig et al., 2009).

Energy drink companies claim they do not directly market to children and youth. However, their marketing strategies include youth appealing promotion strategies, including eye appealing packaging and product names, advertising via sporting events, athlete sponsorships, alcohol-alternative promotions, and product placement in video games (Seifert et al., 2011).

Advertisements aimed at children influence food preference, food choice, and purchasing behaviour (Dietitians of Canada, 2010). Canada's Health Ministers support the reduction of marketing of foods high in sugar to children as part of the Federal, Provincial and Territorial Framework for Action to Promote Healthy Weights (Public Health Agency of Canada, 2010). Since energy drinks are sugar sweetened beverages, addressing energy drink marketing supports this key policy priority area from the framework.

Internationally, recognizing the impact and prevalence of energy drink marketing to young people, the British Soft Drinks Association has legislated that high caffeine drinks (i.e., > 150 mg/L) may not be promoted or marketed to children less than 16 years of age (British Soft Drinks Association, 2010). The Union of European Beverages Associations restricts the marketing of energy drinks in any media with a majority audience under 12 years of age and samplings not to be conducted in the close proximity of primary and secondary schools or other institutions taking care of this age group (Union of European Beverages Association, 2010).

#### Exercise and Energy Drinks

Energy drinks are not recommended for use during or after exercise as they may interfere with proper hydration and cause stomach upset secondary to a high sugar content (Dietitians of Canada, 2012; Health Canada, 2005). The stimulant effects of caffeine have also been shown to increase heart rate and blood pressure, and reduce myocardial reserve (Macdonald et al., 2010).

As a result of the potential adverse effects between caffeine and exercise, Sweden requires warning labels stating the dangers of consuming high amounts of caffeine after exercise (Seifert et al., 2011). This is particularly important as consumer confusion exists about the difference between sports drinks and energy drinks. Adolescents in particular have been shown to use energy drinks as ergogenic aids (O'Dea, 2003).

Specific populations may be at increased risk for adverse reactions from energy drinks. Although some of these populations are already included on mandatory warning labels on energy drinks, others are not included (e.g., adolescents, those taking certain medications that may interact). The sale of energy drinks by fitness facilities sends the message that energy drinks are safe to use by their patrons before, during, and after exercise. This is especially concerning considering the growing number of adolescents obtaining gym memberships.

## Alcohol and Energy Drinks

Energy drinks are not recommended to be mixed with alcohol (Health Canada, 2005); however, approximately 20 to 90% of college-aged energy drink users regularly mix them with alcohol (Dietitians of Canada, 2012).

Health Canada prohibits the use of energy drinks as an ingredient in pre-mixed alcoholic beverages, but allows the sale of caffeinated-alcoholic beverages under the brand names of energy drinks (e.g., RockStar™ + Vodka). Although these products do not have the same formulation as energy drinks, they contain high levels of alcohol (6.9%), added caffeine from natural sources (e.g., guarana), and elevated levels of sugar.

Caffeinated-alcoholic beverages are a public health concern due to their association with injury, high risk-behaviour and increased alcohol consumption (e.g., binge drinking) (Atlantic Collaborative on Preventative Injury, 2011). Research has demonstrated that when individuals consume caffeinated-alcoholic beverages, as compared to alcohol alone, they experience a greater likelihood of being injured, requiring medical treatment, driving intoxicated or riding with an intoxicated driver, having alcohol poisoning, and being a victim or perpetrator of aggressive physical or sexual behaviour (Atlantic Collaborative on Preventative Injury, 2011). These outcomes are a result of the countering effects of the stimulant (i.e., caffeine) with the sedative effects of alcohol. Even though the person is impaired by alcohol, the stimulating effects of the caffeine give the subjective feeling of being more awake and having increased motor control and visual reactions. This increases the likelihood of poor decision making and risky behaviours (Atlantic Collaborative on Preventative Injury, 2011).

The 2011-2013 Public Health Accountability Agreement includes an indicator that may be impacted by energy drink consumption. The specific indicator is the “% of population (19+) that exceeds the Low-Risk Drinking Guidelines” (Ministry of Health and Long-Term Care, 2012). As described above, when alcohol and energy drinks are consumed together it increases the likelihood of drinking beyond the Low-Risk Alcohol Drinking Guidelines, drinking to intoxication, and binge drinking (Atlantic Collaborative on Preventative Injury, 2011).

An additional concern with alcohol and energy drinks occurs at bar and restaurant points of sale. Currently, energy drinks are allowed to be sold at bars and restaurants alongside, and sometimes mixed with, alcohol. As stated previously, mixing energy drinks and alcohol increases patrons’ risk for injury and risk-taking behaviours (Atlantic Collaborative on Preventative Injury, 2011) and is not considered safe by Health Canada (Health Canada, 2005).

## References

Atlantic Collaborative on Preventative Injury. (2011). *Caffeinated alcoholic beverages and injury*. Author.

British Soft Drinks Association. (2010). *BSDA code of practice for high caffeine content soft drinks*. Retrieved November 2, 2011, from British Soft Drinks Association Web site: <http://www.britishsoftdrinks.com/PDF/BSDA%20high%20caffeine%20content%20code%20f%20practice.pdf>.

Dietitians of Canada. (2010). *Advertising of food and beverages to children: Position of Dietitians of Canada*. Retrieved October 28, 2011, from Dietitians of Canada Web site: <http://www.dietitians.ca/Downloadable-Content/Public/Advertising-to-Children-position-paper.aspx>.

Dietitians of Canada. (2012). *Current issues the inside story: Energy drinks revisited*. Toronto, ON: Author.

Health Canada. (2005). *It's your health: safe use of energy drinks*. Retrieved October 19, 2011, from Health Canada Web site: <http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/food-aliment/boissons-energ-drinks-eng.php>.

Health Canada. (2010). *It's your health: caffeine*. Retrieved October 26, 2011, from Health Canada Web site: <http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/food-aliment/caffeine-eng.php>.

Health Canada. (2011a). *Energy drinks (video)*. Retrieved November 3, 2011, from Health Canada Web site: <http://www.hc-sc.gc.ca/ahc-asc/media/video/boissons-energ-drinks-eng.php>.

Health Canada. (2011b). *Health Canada's proposed approach to managing caffeinated energy drinks*. Retrieved October 25, 2011, from Health Canada Web site: <http://www.hc-sc.gc.ca/fn-an/legislation/pol/energy-drinks-boissons-energisantes-eng.php>.

Health Canada. (2011c). *Health Canada's proposed management approach in response to the expert panel on caffeinated energy drinks*. Retrieved October 25, 2011, from Health Canada Web site: <http://www.hc-sc.gc.ca/fn-an/securit/addit/caf/ced-response-bec-eng.php>.

Macdonald, N., Hamilton, R., Malloy, P., Moride, Y., & Shearer, J. (2010). *Report by the expert panel on caffeinated energy drinks*. Retrieved October 27, 2011, from Health Canada Web site: [http://www.hc-sc.gc.ca/dhp-mps/prodnatur/activit/groupe-expert-panel/report\\_rapport-eng.php](http://www.hc-sc.gc.ca/dhp-mps/prodnatur/activit/groupe-expert-panel/report_rapport-eng.php).

Ministry of Health and Long-Term Care. (2012). *Public Health Accountability Agreement Indicators 2011-13 – Technical Document*. Toronto, ON: Ministry of Health and Long-Term



Care.

O'Dea, J. (2003). Consumption of nutritional supplements among adolescents: Uses and perceived benefits. *Health Education Research*, 18(1), 98-107.

Paglia-Boak, A., Adlaf, E.M., & Mann, R.E. (2011). *Drug use among Ontario students, 1977-2011: Detailed findings* (CAMH Research Document Series No. 32). Toronto, ON: Centre for Addiction and Mental Health.

Public Health Agency of Canada. (2010). *Curbing childhood obesity. A federal, provincial and territorial framework for action to promote healthy weights*. Retrieved October 25, 2011, from Public Health Agency of Canada Web site: <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/framework-cadre/pdf/ccofw-eng.pdf>.

Reissig, C., Strain, E., & Griffiths, R. (2009). Caffeinated energy drinks: A growing problem. *Drug Alcohol and Dependence*, 99(1-3), 1-10.

Seifert, S., Schaechter, J., Hershorin, E., & Lipshultz, S. (2011). Health effects of energy drinks on children, adolescents, and young adults. *Pediatrics*, 127, 511-528.

Union of European Beverages Association. (2010). *UNESDA code for the labelling and marketing of energy drinks*. Retrieved November 2, 2011, from Union of European Beverages Association Web site: [http://www.unesda.org/sites/default/files/pdf/UNESDA%20Energy%20Drinks%20Code\\_10%20December%202010.pdf](http://www.unesda.org/sites/default/files/pdf/UNESDA%20Energy%20Drinks%20Code_10%20December%202010.pdf).