

INTRODUCTION

The purpose of this research brief is to provide PEI stakeholders with a new look at findings from the School Health Action Planning and Evaluation System-Prince Edward Island (SHAPES-PEI) 2014-2015 survey. A total of 5 621 students in grades 5-12 from schools across Prince Edward Island were asked questions about a variety of health related topics, including physical activity, mental fitness, tobacco, drugs and alcohol and healthy eating. In this brief, we explore the dietary habits of PEI youth, and consider their consumption of three specific categories of sugar sweetened beverages (SSBs): **fruit flavoured drinks, pop, and energy drinks.**

With thanks to our partners:



Education, Early Learning and Culture

WHY BEVERAGE CONSUMPTION MATTERS

When considering overall beverage consumption, many available drink options contain added sugar. Sugar-sweetened beverages (SSBs) include “soft drinks, fruit drinks, sports drinks, tea and coffee drinks, energy drinks, sweetened milk or milk alternatives, and any other beverages to which sugar... has been added” (CDC, 2010, p. 4). In Canada,

20% of children’s total daily calories have been found to come from drinking sugar-sweetened beverages (Statistics Canada, 2008).

Given the prevalence of added sugar in many drink options, it is important to understand the preferences and consumption trends of SSBs among Island youth.

Dietary habits are closely related to overall well-being, and are important health predictors for children and adolescents. When it comes to nutritional value, not all beverages that children and youth consume are created equal. **Drinking sugar-sweetened beverages (SSBs) – filled with excess sugar and calories – has been linked to various health problems,** including a rise in overweight and obesity rates among Canadian youth (Boles, Adams, Gredler, & Manhas, 2014; Mazarello Paes et al., 2015; Statistics Canada, 2010; Zheng, Allman-Farinelli, Heitmann, & Rangan, 2015). Drinking SSBs can lead to excess calorie consumption and often displaces the drinking of other, more nutritionally superior, beverages such as water or milk (Keller et al., 2009; Lobstein, 2014; Qi et al., 2012). Moreover, routinely engaging in a high sugar, high caloric diet is related to long-term health problems, such as Type II diabetes, cardiovascular disease, and obesity (Hert, Fisk, Rhee, & Brunt, 2014).

DID YOU KNOW?

The WHO recommends that “free” sugar consumption be limited to only 10% of one’s daily energy intake, but that reducing this to 5% would be preferable (World Health Organization, 2015). Based on an average body mass index (BMI), this translates to roughly 25-50 grams of sugar per day. A 16oz can of a popular energy drink contains 49 grams, while a can of an average cola beverage contains 33 grams of added sugar. So, drinking *just one* of these SSBs can put you over the recommended daily guideline for “free” sugar!



BEVERAGE CONSUMPTION: TRENDS IN PEI

In 2014-15, SHAPES-PEI measured beverage consumption among Island youth, including water, milk, 100% juice, tea and coffee, diet pop, and SSBs (see Figure 1). Based on self-reported beverage consumption from the previous day, the SHAPES-PEI data indicates that – aside from water and milk – 100% fruit juice was the most commonly consumed beverage, with almost two-thirds (59%) of youth reporting that they drank it at least once the previous day. Although 100% fruit juice is not a SSB, and has typically been considered a ‘good’ drink option, its relationship with health outcomes is complicated (Clemens et al., 2015; Hyson, 2015; Wojcicki & Heyman, 2012). There is a need to better understand the influence of 100% fruit juice consumption on youth health, particularly if there is a concern that it is replacing healthier choices such as milk and water.

Overall Beverage Consumption by PEI Youth, Yesterday

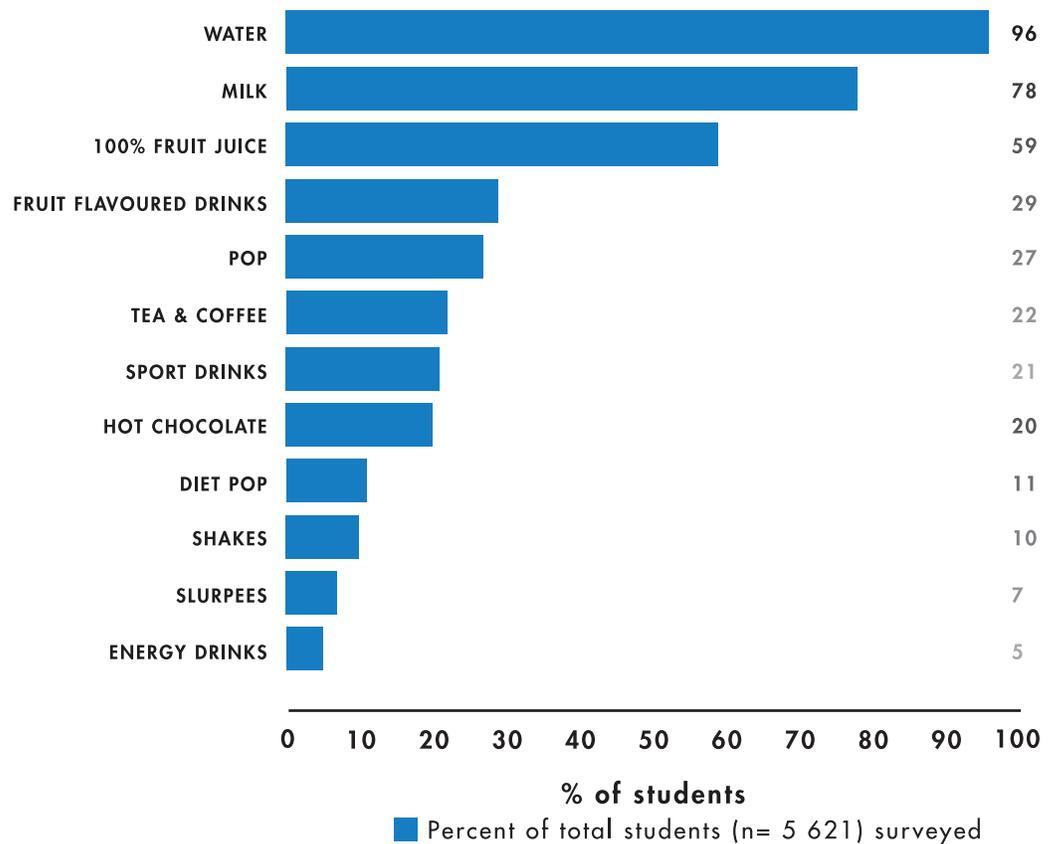


FIGURE 1: Overall Beverage Consumption

Many of the other commonly consumed beverages (including fruit flavoured drinks, pop, sports drinks, hot chocolate, slurpees, shakes, and energy drinks) fall into the category of sugar-sweetened beverages. Data gathered on beverage consumption showed that PEI youth frequently choose these sugary drinks. **When considered altogether, 89% of Island students reported consuming at least one of these sugar-sweetened beverages, and 19% of students reported consuming three or more, during the previous day.**

We will now narrow our focus for this brief to the consumption patterns for three SSBs in particular: **fruit flavoured drinks, pop, and energy drinks.**



DIFFERENCES IN SSB PREFERENCES - BY GRADE

Overall, approximately one third of PEI youth reported drinking a fruit-flavoured drink or pop at least once yesterday (29% and 27%, respectively). When looked at by grade, the kinds of SSBs being consumed appear to change as youth get older; the consumption of fruit flavoured drinks decreased with age, while consumption of pop and energy drinks increased with age (see Figure 2).

DIFFERENCES IN SSB PREFERENCES - BY GENDER

In addition to differences in consumption patterns by grade, there were also interesting differences in SSB consumption by gender. Overall, females reported consuming more SSBs than their male counterparts across all grade levels and each category of beverage examined here (see Figure 3). Particularly interesting is the finding around energy drinks, where over twice as many females (11%) as males (5%) reported consuming at least one the previous day. Other research has suggested that differences in gender-based consumption of SSBs can be heavily influenced by a variety of factors, such as identity and marketing strategies (Bunting, Baggett, & Grigor, 2013; Miller, 2008). These findings could suggest the need for a ‘gender-targeted’ approach to public health SSB reduction strategies.

(Select) SSB Consumption by PEI Youth, Yesterday (by grade)

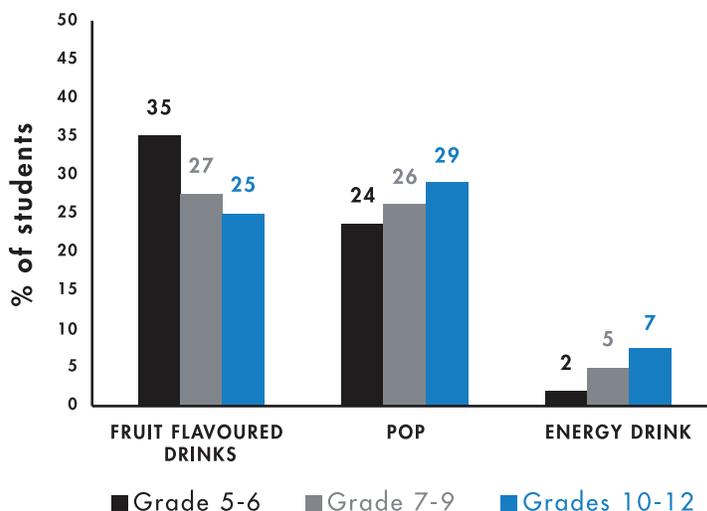


FIGURE 2: (Select) SSB Consumption, by grade
Grades 5-6 (n= 1 603), Grades 7-9 (n=1 815), Grades 10-12 (n= 2 203)

(Select) SSB Consumption by PEI Youth, Yesterday (by gender)

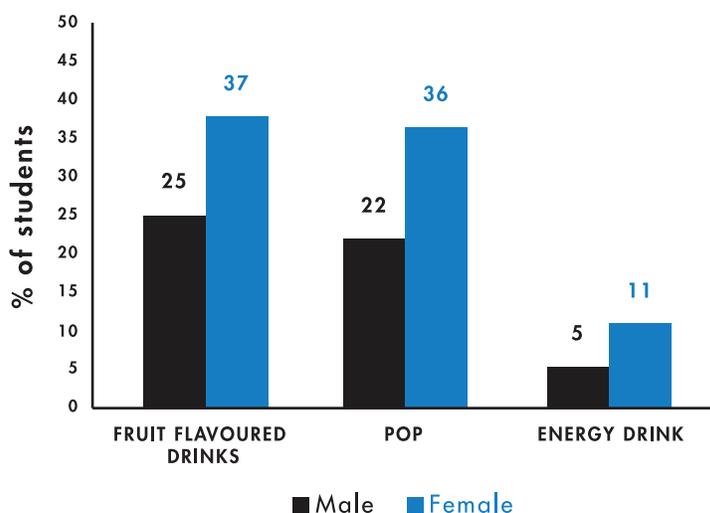


FIGURE 3: (Select) SSB Consumption, by gender
Males (n=2 766), Females (n=2 855)



ENERGY DRINKS AND CAFFEINE

Although the overall consumption of energy drinks is low among PEI students (5%), those who are consuming energy drinks tend to do so in large quantities. Of the PEI youth who reported drinking energy drinks, approximately half had consumed two or more during the previous day. Research suggests that youth are consuming energy drinks for their mood and performance-enhancing abilities, and to counteract fatigue (Owens et al., 2014). A recent study also revealed some major misconceptions among youth regarding energy drinks, such as the assumption that they are safe to drink and that they are comparable to consuming sports drinks (Kumar, Park, & Onufrak, 2015).

Aside from energy drinks, the 2014-15 SHAPES-PEI data shows relatively high levels of caffeinated beverage consumption among Island youth. Caffeine consumption was most common among high school students, with one-third (29%) reporting having a tea or coffee the previous day. Caffeine consumption among youth is very concerning; it is believed to have a variety of negative impacts on the well-being of youth, including poor sleep quality and quantity, along with decreased school performance, memory and concentration (Gibson et al., 2006; James, Kristjánsson, & Sigfúsdóttir, 2011; Owens, Mindell, & Baylor, 2014).

KEY TAKEAWAY MESSAGES

Dietary habits are complex behaviors that are influenced by both external factors and personal preferences. The 2014-15 SHAPES-PEI data shows that large numbers of Island students – of all ages – are drinking SSBs regularly. Given the evidence connecting consumption of SSBs to obesity in youth and future risk of chronic disease (Boles, Adams, Gredler, & Manhas et al., 2014, Mazarello Paes et al., 2015), education efforts aimed at reducing SSB consumption requires continued attention and ought to be a focus of supports to enhance the health and well-being of PEI youth. In addition, there is a need for more education and awareness around the popularity of 100% fruit juice consumption as compared to healthier beverages choices like milk or water.

Generally, we know that the consumption of SSBs can have both immediate and long-term health consequences. As youth increase in age, our data shows a decrease in the consumption of fruit-flavoured drinks, while the consumption of pop and energy drinks rises. Of particular note is that twice as many female youth in PEI report consuming energy drinks as males. This raises the question as to whether current marketing campaigns promoting energy drinks may be having a disproportionate effect on female consumption patterns. Successful strategies to decrease the consumption of SSB in other regions have included education and awareness-raising around SSB marketing campaigns, taxes on SSBs, and school policies targeting the availability of these beverages (Lobstein, 2014; Whatley Blum, et al., 2008). However, schools and governments cannot do it alone. Families and home environments also play a critical role in determining the availability of, and access to, SSBs. For this reason, both family education and school policies are excellent targets for future interventions aimed at reducing SSB

DID YOU KNOW?

As technology advances, so do the marketing strategies aimed at today's youth. Online and social media marketing complement in-store advertisements as well as the direct labelling of products to be more appealing to target audiences. **These marketing strategies have been shown to directly influence the dietary preferences of youth, especially when it comes to high caffeine SSBs.** However, when presented with tangible images of the sugar content in these beverages, research has shown that youth are less likely to choose these beverages (Babu, Church, & Lewander, 2008; Boles, Adams, Gredler, & Manhas, 2014; Bunting, Baggett, & Grigor, 2013; Grigsby-Toussaint, Moise, & Geiger, 2011).



consumption among Island youth. In addition, continued monitoring the dietary habits of Island youth will be critical to assess ongoing changes in these consumption patterns.

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