Taxing Sugary Drinks in Canada: Evidence and Challenges

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Disclosure

- I have no industry sponsorship
- I did drink a can of Coke on the plane Thursday

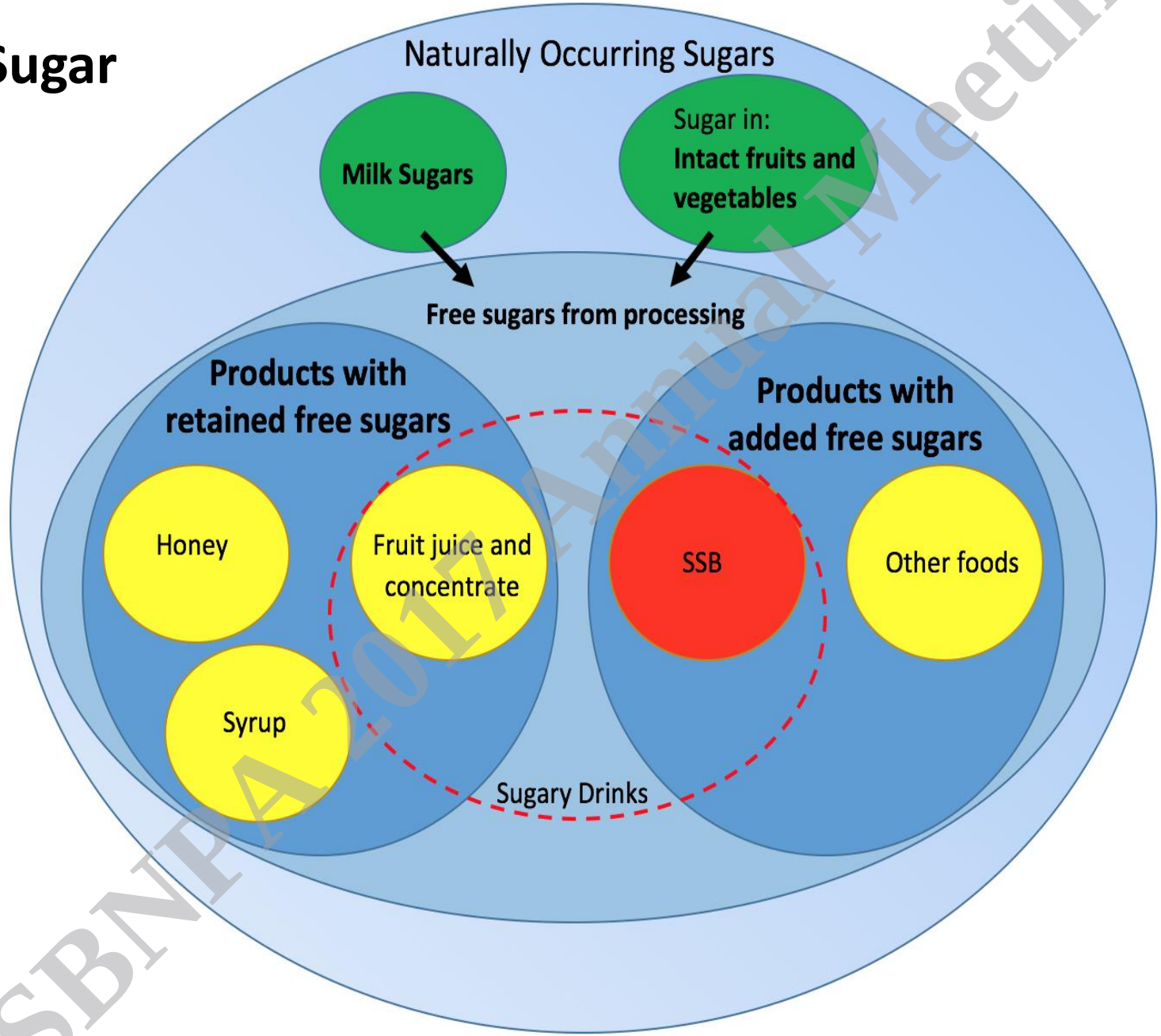
Taxing Sugary Drinks in Canada: Evidence and Challenges

- Why target sugary drinks (SD)?
- What do we know about SD consumption in Canada?
- What are the health implications for Canadians?
- What will a tax achieve?
- What is the state of activity in Canada towards a tax on SD?

What is Sugar?

- **Disaccharides:** monosaccharides (galactose, glucose, fructose) paired
- **Sucrose:** Glucose:fructose(50:50)
- **High Fructose Corn Syrup**: processed corn syrup (100% glucose)
  => glucose/fructose mixture
  - 55% F in bev
  - 42%F in foods
- **Starch:** Glucose chains

Bound vs Free Sugar



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SD, Free Sugars and Health

- SD are basically free sugars dissolved in liquid
- SD have high caloric density: 0.4 cals /ml or 238 cals per 591 ml
- Marketed as thirst quencher often to be consumed with meals
- Humans tend not to compensate for liquid calories by reducing solid calorie intake and may even be stimulated to overeat
- There is strong and convincing evidence linking SSB consumption with **obesity in children, youth and adults**

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SSB and Unhealthy Weight Gain

- Jeffrey Dunn, past president of Coca-Cola North America and Latin America, "… you can look at obesity rates, and you can look at per capita consumption of sugary soft drinks and overlay those on a map, and I promise you they correlate about 99.99 percent." *Salt, Sugar, Fat*
- "…reducing sugar sweetened beverage consumption may be the best single opportunity to curb the obesity epidemic" (JAMA 2004)
- Obesity linked with numerous chronic diseases (DM2, CVS, hypertension, 11 Cancers, stroke)

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SSB and Non BMI Mediated Disease

Regardless of BMI, SSB consumption is an independent risk factor for:

- **CHD** (Yang, JAMA 2013, de Koning et al, Circulation, 2012; Malik, Circulation. 2007; Fung, Am J Clin Nutr, 2009)
- **Hypertension** (Chen, Circulation, 2010; Brown, Hypertension, 2011)
- **Hyperlipidemia** (Stanhope, J Clin Endocrinol Metab, 2011;Aeberli, Am J Clin Nutr, 2011)
- **Type 2 diabetes** (Imamura et al. BMJ 2015, Schulze, JAMA, 2004; Malik, Diabetes Care, 2010; Palmer, Arch Intern Med, 2008)
- **Dental caries (**WHO 2014**)**

S.D. Promote Disease Regardless of Weight

IS

?

Fructose nonessential molecule

- Liver converts to lipid => atherosclerosis and fatty liver
- Metabolites =>insulin resistance => DM2
- Elevates uric acid and raises blood pressure
- What is the safe threshold?

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SD Promote Obesity, CHD and DM2

<u>WHO 2014:</u>

- Reduce intake of free sugars throughout life
- Limit free sugar to less than 10% of daily calories (250 men and 200 women)
- 15 tsp for men and 12 tsp for women
- Consider limiting to less than 5%

Free Sugars are Everywhere

66% of processed foods in Canada contain added sugar (CMAJ 2016) (Nutrients 2016)

Table 2. Types of free sugar ingredients (FSI) identified in the FLIP 2013 database of Canadian prepackaged foods and beverages, by descending order of use (n = 15,259).

Type	Examples [1]	n (% Foods with FSI) [2]
Sugar (sucrose), dried and granulated	sugar, sucrose, brown sugar, cane sugar, pure sugar cane, pure cane sugar, raw cane sugar, powdered sugar, golden sugar, golden cane sugar, granulated cane sugar, granulated sugar cane juice, beet sugar, refined cane sugar, icing sugar, dried sugar cane juice, demerara sugar, light brown sugar, refinery syrup powder, invert sugar, evaporated cane juice, evaporated cane juice crystals, evaporated milled sugar, milled cane sugar, evaporated sugar cane juice, caster sugar, coarse sugar, turbinado sugar, natural cane sugar, turbinado cane sugar, white sugar, whole cane sugar, yellow sugar, dehydrated cane juice, dehydrated cane sugar, natural evaporated cane juice, confectioner's sugar, fondant sugar, raw sugar, evaporated cane sugar, dehydrated cane syrup, dark brown sugar	7517 (49.3%)
Glucose	glucose, glucose solids, glucose syrup, dextrose, dextrose anhydrous, dextrose syrup, anhydrous dextrose, dried glucose syrup, dextrin syrup	2939 (19.3%)
Corn syrup	corn syrup, corn syrup powder, corn syrup solids, high maltose corn syrup, dried corn syrup extract, glucose-fructose, caramelized glucose-fructose, corn malt syrup, fructose- glucose, glucose-fructose syrup, corn sweetener	1626 (10.7%)
Fruit juice	concentrated fruit juice, fruit juice, fruit juice concentrates, fruit juice from concentrate	1202 (7.9%)
High-fructose corn syrup [3]	high fructose corn syrup, sugar/glucose-fructose, sugar/fructose-glucose, sugar and/or glucose-fructose, sugar and/or fructose-glucose	873 (5.7%)
Molasses	molasses, dehydrated molasses, powdered refiner's molasses, black molasses, blackstrap molasses, dried molasses, refiner's molasses, cane juice molasses, dry blackstrap molasses, dry molasses, fancy molasses, fancy molasses powder, cooking molasses, molasses granules, molasses powder, molasses solids	706 (4.6%)
Honey	honey, liquid honey, amber honey, pasteurized honey, honey granules, honey powder, honey solids, creamed honey, dried honey, granulated honey, raw honey, buckwheat honey, dried honey powder, dry honey, white honey	625 (4.1%)
Sugar (sucrose) syrups [4]	cane sugar syrup, sucrose syrup, dried cane syrup, cane syrup, cane refiner's syrup, refined sugar syrup, burnt sugar syrup, invert cane syrup, golden syrup, refiner's syrup, invert sugar syrup, caramel, caramel sugar syrup, caramel syrup, evaporated cane syrup, liquid invert sugar, liquid sugar, liquid sucrose, evaporated cane juice syrup, sugar cane syrup, treacle	514 (3.4%)

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Free Sugars are Everywhere

- Added free sugars account for 11-13% of the calories Canadians consume (Nutrients 2014)
- A single 355 ml can of pop contains 9 tsp of free sugar (vs max of 12 – 15 tsp)
- SD contain little (juice) to no nutrition (SSB)
- Sugary drinks are the single largest contributor of added sugar to the diet of Canadians

Simplest way to reduce free sugar intake is to reduce SD consumption

Canadian Sugary Drink Intake, 2015

NON-DIET POP
FRUIT JUICES & DRINKS
FLAVOURED MILK
FLAVOURED WATERS

ENERGY DRINKS
SPORTS DRINKS
SWEETENED TEA AND COFFEES
DRINKABLE YOGHURT

444 ml/day (SALES)

Canadian average

578 ml/day

Youth 9 -18 years

504 ml/day

Adults 19-30 years

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SOURCE: JONES AC, VEERMAN JL. HAMMOND D. THE HEALTH AND ECONOMIC IMPACT OF A TAX ON SUGARY DRINKS IN CANADA. MARCH 2017.

25 Year Health and Economic Impact

Sugary Drinks

Sugar Sweetened Beverages

- More than one million Canadians being overweight and more than three million becoming obese
- Up to 1 million cases of type 2 diabetes
- 300,000 Canadians with CVS disease
- 100,000 cases of cancer
- Almost 40,000 strokes
- Sugary drinks will be responsible for over 63,000 premature deaths

- 30% less if 100% fruit juice excluded
- 600,00 DM2
- 180,000 CVS disease
- 38,000 deaths

SOURCE: JONES AC, VEERMAN JL. HAMMOND D. THE HEALTH AND ECONOMIC IMPACT OF A TAX ON SUGARY DRINKS IN CANADA. MARCH 2017.

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25 Year Health and Economic Impact

Sugary Drinks

Total Health Care Costs 2015 to 2041 (CAD)

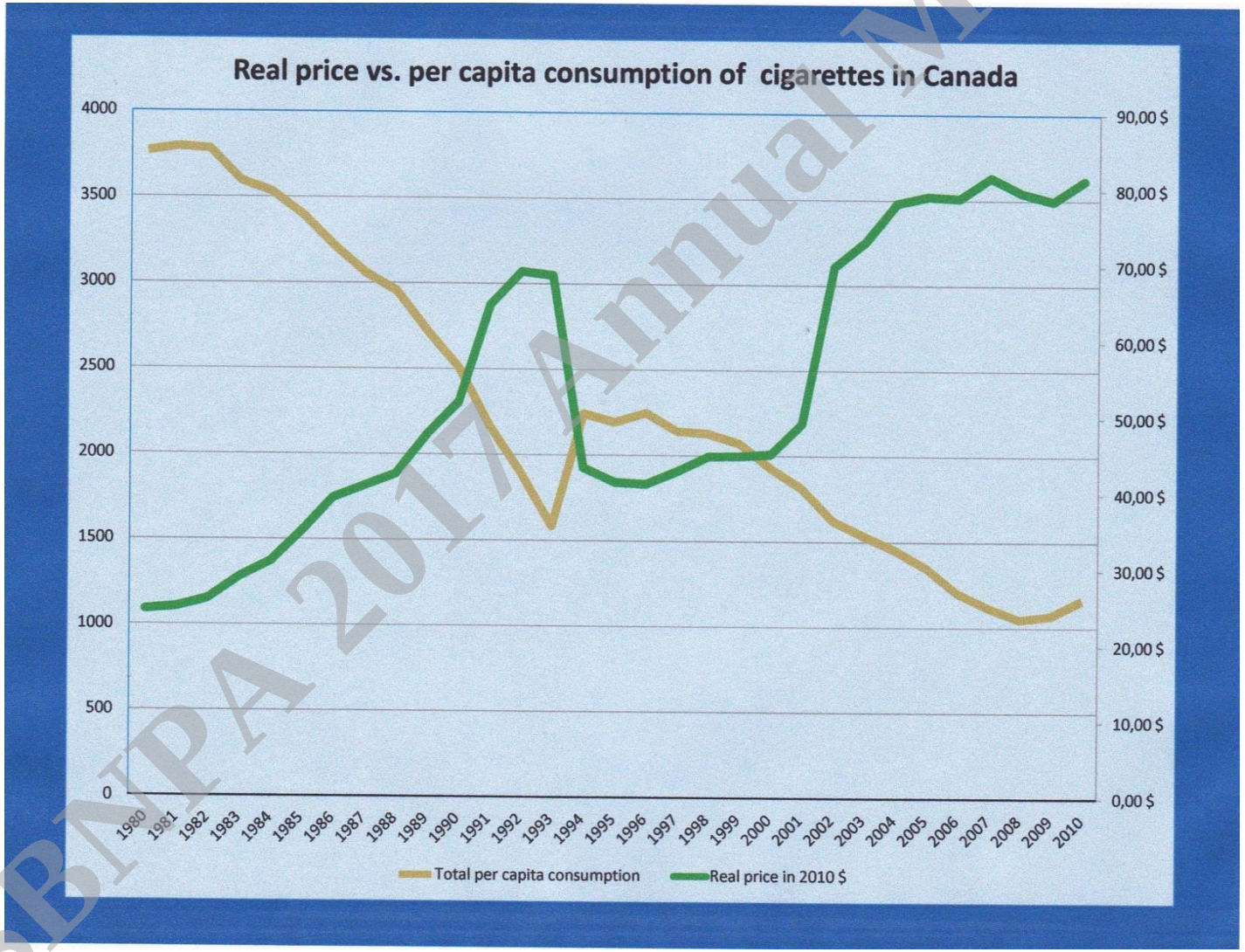
$50.6 billion

Sugar Sweetened Beverages

$33.7 billion

SOURCE: JONES AC, VEERMAN JL. HAMMOND D. THE HEALTH AND ECONOMIC IMPACT OF A TAX ON SUGARY DRINKS IN CANADA. MARCH 2017.

Why Talk Tax? : Because Price Matters



What Would a Tax Achieve?

- Excise tax preferred over sales tax as price differential obvious at the shelf vs at checkout
- Canadian constitution dictates only federal government can implement excise tax, provinces can implement sales tax
- Tax would discourage consumption, reduce disease burden, capture societal cost and provide funds for health promotion

What Would a Tax Achieve?

20% Excise Tax on Sugary Drinks (2015-2040)

- Prevent 700,000+ cases of overweight and obesity
- 215,000 Type 2 diabetes cases
- 60,000 Ischemic heart disease cases
- 20,000 cancer cases
- $11 billion in direct healthcare cost savings
- $43 billion in annual revenue

SOURCE: JONES AC, VEERMAN JL. HAMMOND D. THE HEALTH AND ECONOMIC IMPACT OF A TAX ON SUGARY DRINKS IN CANADA. MARCH 2017.

Progress and Challenges of SD Taxation in British Columbia

- British Columbia has Provincial Sales Tax which currently exempts SD
- In 2016 and 2017 the all party Select Standing Committee on Finance and Government Services recommended that government “explore the implementation of a tax on sugar-sweetened beverages …”
- No progress as of yet

Progress and Challenges of SD Taxation in Canada

- WHO has called upon member states to consider taxing SD
- Canadian Cancer Society, CDPAC, Childhood Obesity Foundation, Diabetes Canada, Dietitians of Canada and Heart and Stroke Foundation have all called upon federal government to implement an excise tax on SSB/SD
- Canadian Senate has recommended that the federal government enact an excise tax on SD
- NWT has announced intent to tax SD

Progress and Challenges of SD Taxation in Canada

- Not a priority of Federal government at this time
  - Concern that focus on SD unjustified
  - Limited public awareness of problem
  - Concern re job losses – minimal at worst
  - Regressive taxation
    - SD are not essential items
    - Healthier thirst quencher/hydration sources available for free – water
    - In Canada the highest level of support for SSB taxation was in lowest income group
    - SD tax would be progressive as low income groups disproportionately affected by obesity and type 2 diabetes (esp first nations)=> fund health promotion
    - Evidence SD tax does not increase household expenditures as families switch to non taxed beverages

Next Steps Towards Enacting Taxation of SD in Canada

- Continue informing new provincial government of need to lift the PST exemption on SD
- Create formal coalition of NGOs dedicated to promote SD taxation in Canada
- Increase public and government awareness of:
  - health effects of SD and associated costs
  - utility of taxation
  - limited impact on employment
  - progressive not regressive nature of SD taxation