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GUEST EDITORIAL

Dentists and sugary drinks

A call to action

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Inhabitants of the United States consume sugar, particularly in the form of sugar-sweetened beverages (SSBs), at an alarming rate. SSBs are a leading cause of dental cavities,¹ obesity, and type II diabetes.² SSBs include soft drinks, sports drinks, energy drinks, fruit drinks, flavored milk, and other beverages that contain added caloric sweeteners. In the United States, SSB consumption has reached epidemic proportions, with the average American now consuming a whopping 50 gallons per person per year,³ the second highest consumption rate in the world (after Mexico), equivalent to approximately 1.5 cans of soda per person per day.

SSBs are the leading source of added sugar in the American diet.⁴ Besides having no nutritional value, SSBs displace healthier beverage options. They are cheap and readily available, and they are one of the most widely advertised products, particularly to children, adolescents, and low-income groups. The last thing they offer is “happiness and choice.”

The United States is in the midst of an obesity epidemic. Americans are among the most overweight and obese population in the world. Today, over two-thirds (69%) of all Americans older than 20 years are overweight, and just over one-third (35%) are obese.⁵ It is the duty of all health professionals to act to reduce these frightening rates.

SSBs have a damaging impact on a population’s health, particularly for children and adolescents, and especially their teeth. Dental cavities are the most prevalent chronic disease in the United States and are a significant cause of health inequalities. There is a strong link between the amount and frequency of sugar consumed and dental cavities. The primary cause of dental cavities is a diet high in sugar, and the primary source of sugar in children’s diets is sugary drinks. These are products that we should prevent our children and youth from drinking.

The World Health Organization (WHO) recently released a draft guideline recommending that daily sugar intake should ideally be just 5% of total energy intake, and at the most less than 10% of total energy intake.⁶ This effectively cuts their earlier recommended amount in half and was based on the totality of the evidence linking sugar to tooth decay and obesity. Others have called for an even lower maximum sugar intake, noting that the burden of dental cavities can be eliminated if sugar intakes are limited to less than 3% of energy intake.⁷

For adults, the WHO recommendation equates to a maximum of 6 teaspoons of sugar per day, and for children just 3 teaspoons. Consuming just 1 can of soda (which contains 9 teaspoons of sugar) will tip an adult over the limit for the day. Shockingly, a can of soda contains 3 days’ worth of sugar for a child. A 20-ounce bottle of soda contains approximately 16

teaspoons of sugar—more than 5 days' worth of sugar for a child. For each extra can of SSB consumed per day, the likelihood of a child becoming obese increases by 60%.⁸ Just one can. The number 1 selling item in US supermarkets is soda.⁹

It is vital that members of the dental professional do not succumb to the influence of the sugar industry. It is unfortunate that in 2003 the American Academy of Pediatric Dentistry received \$1 million from the Coca-Cola Company.¹⁰ A few months later, the academy stated that “scientific evidence is not clear on the exact role that soft drinks play in terms of children’s oral disease.” This contradicts their previous statement that “consumption of sugars in any beverage can be a significant factor that contributes to dental caries.”¹¹ Fortunately, the academy now states that “frequent ingestion of sugars and other carbohydrates (eg, fruit juices, acidic beverages) and prolonged contact of these substances with teeth are particular risk factors in the development of caries.”¹²

As oral health professionals, we see the damage that SSBs cause our patients on a daily basis, and we are thus in an ideal position to advocate for change, both to our patients and to policy makers. It is our duty to do all that we can to raise awareness of the dangers of these drinks. At the local level, we can discuss the dangers of SSBs with our patients and place sugar chart posters in the waiting room. When prescribing oral liquid medications, we can specify sugar-free varieties, as highlighted by Donaldson and colleagues in this issue of *The Journal*.¹³ We can also take a keen interest in what our patients’ current sugar intake is and to advise them on reducing their overall sugar consumption.¹⁴ On the policy front, we can lobby for the adoption of SSB-free hospitals,¹⁵ city councils,¹⁶ schools, and sports facilities. Local activism can make a difference, community by community.

Importantly, we and our professional organizations can target politicians to encourage them to implement taxation measures on SSBs, advertisement bans, sponsorship bans, and measures to limit availability of SSBs, particularly in schools and child care facilities.¹⁷

A fine example occurred recently. Voters in the city of Berkeley, CA, overwhelmingly voted for a 1-cent-an-ounce tax on sugary drinks. This was despite the soda industry’s spending an unprecedented \$2.4 million trying to defeat the proposal.¹⁸ The Berkeley Dental Society should be congratulated for backing the proposal, which ensured that Berkeley became the first US city to pass a law taxing sugary drinks. Now it is up to all of us to follow their excellent lead.

Consumption of SSBs is out of control. Children and adolescents in particular are being harmed, and we need to implement measures to safeguard their health. In the interests of children everywhere, all nations need to treat the issue seriously. It is a leadership issue. The response to SSBs needs to follow that of tobacco and alcohol, where legislation and regulation are vital policies to curb their use. Dentists must act. ■ <http://dx.doi.org/10.1016/j.adaj.2014.11.023>

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