

## Taxing Sugar Sweetened Beverages to Improve Public Health: Policy Action in Hawai'i

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### Introduction

Following national trends, rates of overweight and obesity in Hawai'i have increased dramatically over the past two decades.<sup>1</sup> Today, over 20% of Hawai'i's adults and almost 15% of its youth are obese, while an additional 34% of adults and 14% of youth are overweight.<sup>2</sup> Obesity is not only a major health issue, but is also an important economic concern. Annual obesity-related medical costs in Hawai'i are estimated to be \$470 million.<sup>3</sup>

The consumption of sugar-sweetened beverages (SSB) is a known contributor to the development of overweight and obesity, especially in children and adolescents.<sup>4</sup> SSB are defined as "beverages which contain added naturally-derived caloric sweeteners such as sucrose (table sugar), high-fructose corn syrup, or fruit juice concentrates."<sup>5</sup> SSB include sodas, sweet teas and coffees, juice drinks, and energy drinks.<sup>6</sup> Consumption of SSB may contribute to weight gain through a number of pathways, including the fact that calories consumed in soda are less satiating than calories from solid food and because consumption of SSB can potentially change taste preferences towards less healthy options.<sup>5</sup>

According to the CDC, SSB consumption accounts for 12%-13% of the energy intake for adolescents aged 14 to 17 years in the United States, and an estimated 7% of the energy intake for all Americans.<sup>7</sup> The highest consumption rates of SSB are seen in racial and ethnic minorities, groups that also have increased rates of obesity.<sup>8</sup> A population-level decrease in SSB consumption thus has the potential to decrease not only obesity rates in general, but also to reduce youth obesity in particular. Reduction in SSB consumption could potentially help to decrease some racial/ethnic health disparities.

### SSB Tax Legislation

Monetary "penalties," such as an increase in bottling fees and taxes on SSB, have been promoted as policy options to decrease SSB consumption.<sup>4,5</sup> Research suggests that these can be important tools in the effort to reduce overweight and obesity.<sup>4,5</sup> While a number of states currently have small taxes on sodas, these taxes are believed to be too small to make an impact in consumption patterns.<sup>5</sup> A report on SSB tax policies by the Yale Rudd Center stated that implementing larger taxes

on SSB can achieve at least two overarching goals.<sup>4</sup> One is to significantly decrease SSB consumption, especially by children and adolescents who are typically more price sensitive than adults. The second is to obtain significant funds for state health efforts by earmarking these SSB tax revenues for public health programs.<sup>4</sup> Several analyses have demonstrated specific potential benefits of a SSB tax which include decreased consumption of SSB in schools,<sup>9</sup> improved health outcomes and decreased costs associated with diabetes,<sup>10</sup> and revenue generation for municipalities.<sup>11</sup> Dr. Thomas Frieden, the Director of the US Centers for Disease Control and Prevention, has stated: "A tax of 1 cent an ounce on sugar-sweetened beverages—about a 10 percent price increase on a twelve-ounce can—would likely be the single most effective measure to reverse the obesity epidemic."<sup>12</sup>

The use of legislation to increase the cost of an unhealthy item as an impetus to change individuals' negative health behaviors has been used successfully in the recent past, especially towards changing smoking patterns.<sup>13</sup> In Washington State, between 1990 and 2009, six separate tobacco tax increases were implemented, ranging from \$0.01 to \$0.60. After all but one of the increases, the percentage of adults smoking in Washington decreased the following year.<sup>14</sup> Overall, in the United States between 1970 and 2011, the average taxes on a pack of cigarettes increased from \$0.18 to \$2.35.<sup>15</sup> During the same time frame the percentage of adults that reported they were smokers decreased from 37.4% to 18.9%.<sup>15</sup> While tobacco taxes are not the only reason for the dramatic reduction in smoking rates in the US in recent decades, tobacco tax policy initiatives have been highly effective. Though SSB and tobacco consumption differ in several important ways,<sup>5</sup> similar taxes on SSB are expected to be an important strategy in comprehensive efforts to reduce SSB consumption.<sup>16</sup>

### History of SSB Legislation in Hawai'i

Based on this evidence base, a growing number of states (eg, Mississippi, Vermont, and Hawai'i), and cities (eg, Richmond, CA; Philadelphia, PA) have proposed laws that would increase the cost of SSB.<sup>17,18</sup> While the proposed policies vary in some aspects, all measures have had the dual goals of increasing fund-

ing for health priorities along with decreasing SSB consumption. Despite considerable policy action, none of these policies have yet passed into law in the United States.<sup>4</sup> However, in several other countries (eg, Denmark, France, Samoa), bills imposing a fee on SSB have passed into law.<sup>19,20</sup>

In Hawai'i specifically, a number of bills have been proposed to increase the costs of SSB. None of these bills has made it through the full legislative process, which includes three readings in the relevant committees, passage in both houses, and the governor's signature. However, these SSB taxes have been active policy options, receiving considerable attention by the press and lawmakers.<sup>21</sup>

In 2010, SB 2238, the first bill addressing the taxation of SSB in Hawai'i, was introduced by Senator Gary Hooser. Upon implementation it would have imposed an additional general excise tax on SSB.<sup>22</sup> An excise tax is "imposed on the beverage or syrup manufacturer, in contrast to a sales tax that is imposed on the retail purchase price."<sup>19</sup> Excise taxes are considered an attractive option for taxing SSB as they increase the base price of the product (unlike a sales tax, which is imposed at the point of purchase, once the consumers has likely decided to buy the product) and because they are easier to enforce and collect.<sup>19</sup> Revenues generated by SB 2238 were to be remitted to the department of education to fund K-12 education programs.<sup>22</sup> This bill was short lived and only passed first reading.

SSB fees were again addressed during Governor Neil Abercrombie's 2011 State of the State address, in which he suggested a penny-per-ounce tax on SSB. That same year a group of seven senators led by Senator Rosalyn Baker introduced SB 1179, which proposed levying a SSB tax and appropriating all monies collected to the children's health promotion special fund.<sup>23</sup> The accompanying bill in the House, HB 1216, was introduced by Representative Chris Lee. Also in 2011, HB 1188 was introduced by Representative Calvin Say. It proposed a fee of 10 cents to SSB less than or equal to 12 fluid ounces and 25 cents to those greater than 12 ounces, with revenues to go to the Hawai'i State Department of Health.<sup>24</sup> All three bills were deferred and carried over to the 2012 session.

In 2012 two new bills, SB 3019 and SB 2480, were introduced. They proposed a SSB tax with any generated revenues to be appropriated to community health centers and trauma center special funds.<sup>25,26</sup> SB 2480 also earmarked funds to the John A. Burns School of Medicine Medical loan forgiveness program.<sup>26</sup> Neither bill made it out of the Senate and the three bills from 2011 were deferred yet again. During the 2012 session the Hawai'i's Childhood Obesity Prevention Task Force (HCR No 21 H.D.1) was created.<sup>3</sup> The group's final report to the legislature recommended a bill to include a fee of \$1.28 per gallon for distributors of sugary beverages with all revenue earmarked for the prevention of childhood obesity and early childhood health as one of its 12 recommendations.<sup>3</sup>

### **2013 SSB Legislation in Hawai'i**

In January 2013, Senate bill 646 was introduced by Senators Josh Green, Russell Ruderman, Clarence Nishihara, and Maile

Shimabukuro and Senate bill 1085 was introduced by Senator Donna Mercado Kim. Both bills proposed to address childhood obesity through raising the cost of SSB, syrups, and powders.<sup>27,28</sup> SB 646 sought to do this through a penny-per-ounce sales tax whereas SB 1085 proposed a fee of \$1.28 per gallon for bottled sugar-sweetened beverages, syrups, and powder sold to a distributor, functioning similarly to an excise tax.<sup>27,28</sup> The bills also differed on where the prospective revenues would be appropriated. SB 646 assigned the revenue to community health centers and trauma system special funds whereas SB 1085, after the amendments of SD1, proposed establishing The Obesity and Chronic Disease Prevention Special Fund and through this fund appropriated the revenues to the Department of Health.<sup>28</sup> In February 2013, SB 646 was deferred in the Health Committee. A hearing for SB 1085 was held on February 15, 2013 and passed by the Health Committee. After passing second reading, SB 1085 was not read in the Ways and Means committee and was tabled until the next legislative session.

### **Opposition to SSB Legislation**

Opponents of SSB tax legislation are comprised of national and local-level interest groups, large and small businesses, and some concerned citizens. This well-funded and organized opposition to SSB taxation uses creative and integrative strategies to block such proposals in Hawai'i and elsewhere.<sup>29,30</sup> Table 1 presents some of the arguments against SSB fee legislation in Hawai'i from recent testimony and debates. These arguments echo the larger arguments used nationally regarding SSB taxes.<sup>31</sup>

The American Beverage Association (ABA) is a trade association which represents and communicates the interests of the non-alcoholic beverage industry. The ABA strongly opposes any form of SSB taxation and has contributed to the efforts of numerous groups to counter the efforts of public health advocates to establish an SSB tax at the city or state levels. Considerable funds are spent on these efforts. "They're successful the old fashioned way. They pay for it." was the statement of the mayor of Philadelphia after the beverage lobby's victory over a proposed SSB tax in that city.<sup>30</sup> According to the Center for Science in the Public Interest, between 2009 and 2012, the ABA spent over \$70 million dollars on lobbying and advertisements opposing SSB taxation across the United States.<sup>29</sup> In Hawai'i, according to the Hawai'i State Ethics Commission Organization's Expenditures and Contributions report, the ABA spent \$26,980.67 toward lobbying efforts during the first 58 days of 2013.<sup>32</sup>

Opponents of SSB taxation have commonly used the practice of "astroturfing" to shield financial connections and create an environment of seemingly widespread "grassroots" support that masks the role of the industry funding.<sup>30</sup> Astroturf groups, such as "Americans Against Food Taxes" and the "Community Coalition Against Beverage Taxes," appear to be disinterested parties that serve the public interest.<sup>33</sup> The following example from the Center for Health Media & Policy at Hunter College<sup>34</sup> describing the website (<http://www.nofoodtaxes.com>) demonstrates the techniques of such groups:

**Table 1. Testimony and Responses Concerning Recent SSB Legislation in Hawai'i\***

<b>Against SSB Tax</b>	
Individual	<p>"I can hardly believe what I am reading in this bill. The federal government subsidizes sugar growers and this bill is going to tax sugar. This seems to me to be a double tax on the poor taxpayers. Especially when just about every drink has sugar in it. This bill would better be served by banning High Fructose Corn Syrup as that probably has more of an impact on health." – <i>Personal Testimony</i><sup>38</sup></p> <p>"Anything is harmful when consumed in excess even water can kill you if you drink too much of it. While obesity is harmful and everyone knows it. It is not the governments place to tell me how to live my life if I'm not infringing on others rights or breaking a criminal law. There are far too many taxes on commodities as it is already and we must look into more responsible spending of our current tax dollars rather than dreaming up a new tax every time we want to try another program." – <i>Personal Testimony</i><sup>38</sup></p> <p>"Obesity has nothing to do with how much sugar content is in a beverage or in the food we eat. It is up to the individual (in an adult case) and or the parents /guardians to portion out the amount one consumes. You can go out and purchase a 1000 calorie drink but it doesn't mean you have to consume the entire thing in one sitting and if you do, it is at your own free will.... Only the poor &amp; weak minded are the ones who want to shift the blame onto other things in life when in fact it is ourselves to blame." – <i>Personal Testimony</i><sup>38</sup></p> <p>"It's also not fair to tax people who drink sugary drinks who are not obese. I drink these drinks everyday, but I'm still under 10% bodyfat. This because of my exercise lifestyle and other food choices and not because I don't drink soda. I think educating children and parents as early as possible is the key, not taxing people who are already struggling in this economy today." – <i>Personal Testimony</i><sup>38</sup></p>
Large Business	<p>"I am opposed to SB646. We at already at a major disadvantage being an independently owned and operated small business on Maui. I do not have the resources to take on anymore additional accounting and reporting. It has already strained my operation with the current deposit and container fee requirements. Even worse when you raised the container fee half of a cent. Do any of you realize how difficult it is to administer a half of a cent on uneven sales?" – <i>Michael Nobriga, Maui Soda &amp; Ice Works, Ltd.</i><sup>43</sup></p> <p>"I work for ITO EN (USA) Inc, which has been doing business in Hawai'i since 1987. We are still only one of a handful of local beverage manufacturers and distributors in Hawai'i. Our factory is located in Kalihi (Senator Chun-Oakland's district) and we employ 68 workers, some of them live in this district...A tax as steep as a penny per ounce or even a penny per teaspoon of sugar is unfair and overly harsh to our industry. What other grocery item receives a tax or fee that potentially amounts to 22% of the consumer's dollar? Our industry already has been singled out for bottle and deposit fees on containers, yet lawmakers still want to add another tax/fee..." – <i>Wendy Chuck, Human Resource Manager, ITO EN (USA) Inc.</i><sup>38</sup></p>
Industry Organization	<p>"The Grocery Manufacturers Association (GMA) and its more than three hundred members respectfully oppose SB646 and SB1085 because it will do nothing to fight obesity and its selective taxation is arbitrary, discriminatory, regressive and largely unpopular amongst voters." – <i>Grocery Manufacturers Association</i><sup>44</sup></p> <p>"The legislature must stop taxing groceries. It is the most unfair and regressive way to fill the budget deficit.... Please don't pass on the tab for items that should be included in the state budget to the food and beverage industry." – <i>Luaren Zirbel, Executive Director, Hawai'i Food Industry Association</i><sup>39</sup></p> <p>"Obesity is a Complex Problem with No Simple Solution... Common sense tells us—and science proves for us—that taxes do not make people healthier. Making smart, educated decisions about diet and exercise do that... The Public Opposes Discriminatory Taxes on Beverages... The beverage industry is taking bold action to do its part to help address obesity." – <i>David Thorp, Senior Director of Government Affairs, American Beverage Association (ABA) in Washington, D.C.</i><sup>38</sup></p>
<b>For SSB Tax</b>	
Individual	<p>"As a pediatrician who has been working on the Waianae Coast for the past 24 years, I have witnessed the increase in overweight and obese children. Most of these overweight children will become overweight adults, which increases all the complications that are associated with obesity, especially type 2 diabetes and early cardiac disease. We are seeing these complications at younger and younger ages.... In my practice over 41% of the pediatric patients are overweight. 50% of the teenagers are obese.... We need to make it cheaper to eat healthier by creating a price difference between sugar-sweetened beverages and lower calorie, healthier drinks. Research has predicted that consumption of sugar-sweetened beverages would decline 8-10% in response to a 10% increase in price." – <i>Personal Testimony</i><sup>45</sup></p> <p>"My take on this SSB tax policy act is for the good health of all children. They are the vulnerable ones who are limited in their ability to understand good health and proper nutrition...It is so important to pass this bill. Yes, this may not solve the obesity problem in children all together, but this may take a different approach to prevention, preventing the increase of consumption, and hopefully its availability to children." – <i>Personal Testimony</i><sup>38</sup></p> <p>"Reducing consumption of SSB has been shown to reduce weight and weight gain. Increasing the price of SSB has the potential to reduce consumption of these beverages. It's time we really started to put our focus on prevention. As someone recently asked; "Do we want to pay now or later for our health?" I vote NOW! And urge you to do the same." – <i>Personal Testimony</i><sup>38</sup></p>

Table 1. Testimony and Responses Concerning Recent SSB Legislation in Hawai'i* (continued)	
Organizations	<p>"Research shows the very strong association between added sugar in the diet and obesity and many chronic diseases. Sugar sweetened beverages (SSB) are the single largest contributor to calorie intake in the United States.... Hawai'i's children have among the highest rate of dental cavities in the nation. Research shows that SSB weakens tooth enamel and increases the likelihood of tooth decay." – <i>Dean Jerris Hedges on behalf of Deans and Directors of College of Health Sciences and Social Welfare, UH Manoa</i><sup>38</sup></p> <p>"Obesity is a major risk factor in certain types of cancer. According to the American Cancer Society's 2012 Guidelines on Nutrition and Physical Prevention, obesity is clearly associated with increased risks of the following cancer types: Adenocarcinoma of the Esophagus; Pancreas; Colon and rectum; Breast (after menopause); Endometrium (lining of the uterus); Kidney; and Gallbladder. Obesity may also be associated with increased risk of cancer of the liver, non-Hodgkin lymphoma, multiple myeloma, cancer of the cervix, cancer of the ovary, and aggressive prostate cancer. This bill alone will not reduce obesity. However, it is part of a statewide strategy that also includes an emphasis on physical activity, healthy diets, healthy lifestyles, and the institutionalization of wellness in workplaces and community organizations. The concept of taxing sugar-sweetened beverages is new, but the tax system has long been used to encourage desirable behavior and to discourage undesirable behavior. Consider tax credits for photovoltaic systems and tax deductions for mortgage interest on homes, as well as special taxes that are assessed on cigarettes and alcohol." – <i>American Cancer Society, Cancer Action Network</i><sup>38</sup></p> <p>"The Department of Education supports SB 1085. Obesity prevention programs will promote the development of healthy children that contribute to school readiness, healthy lifestyle, and a successful future." – <i>Kathryn S. Matayoshi, Superintendent of Education</i><sup>38</sup></p>
Neutral	<p>"We make no comment on the tax but are providing information on sugar- sweetened beverages. We appreciate the committee efforts to reduce obesity by encouraging people to consume less sugar, in this case in soft drinks.... Sugar sweetened beverages, especially soda, fruit drinks and sports drinks contain excess sugar and calories without contributing any health benefits. We recommend 0 sugary drinks and suggest drinking low fat milk or water as an alternative." – <i>Phyllis Dendle, Kaiser Permanente</i><sup>38</sup></p> <p>"QHS [Queen's Health System] takes no position on the fee but is supportive of the overall efforts by the Hawaii Obesity Prevention Task Force." – <i>Paula Yoshioka, Senior Vice President for The Queen's Health Systems</i><sup>38</sup></p>

\*From testimony concerning the two SSB bills proposed in Hawai'i in 2013 (SB 646 and SB 1085) unless otherwise noted.

"At first glance, it looks like a grassroots movement of everyday people concerned about 'big government' and the 'difficulty of feeding a family in today's economy.' The link in the middle... takes you to a slickly produced television commercial that aired in heavy rotation on stations in New York State where a soda tax was proposed. In the ad, a 'concerned mother' posing as just a concerned citizen, talks directly to the camera and engages her assumed audience in a shared sense of outrage at the intrusion of big government imposing more taxes on hard-working families.... The text on this website says that Americans Against Food Taxes is a 'coalition of concerned citizens – responsible individuals, financially strapped families, small and large businesses in communities across the country' who opposed a government-proposed tax on food and beverages, including soda, juice drinks, and flavored milks. However, the real membership is the world's largest food and soft drink manufacturers and distributors, including the Coca-Cola Company, Dr. Pepper-Royal Crown Bottling Co., PepsiCo, Canada Dry Bottling Co. of New York, the Can Manufacturers Institute, 7-Eleven Convenience Stores, and Yum! Brands."<sup>34</sup>

One of the most vociferous opponents of SSB taxation/fees in Hawai'i specifically is the Hawai'i Beverage Tax coalition, which was established shortly after Governor Abercrombie's State of the State speech in 2011. The Hawai'i Beverage Tax coalition represents approximately 2,300 individuals and 340 businesses across the state<sup>35</sup> and effectively uses social media, such as Facebook and Twitter, to express discontent with proposed legislation. Although the organization's website purports that "No Hawai'i Beverage Tax is a coalition of individuals, families, businesses and community organizations in our state...."<sup>36</sup> the domain name for the coalition's website is registered through godaddy.com to the American Beverage Association in Washington, DC. Similar "grassroots" coalitions and websites have been established with the help of the ABA in nearly every community where soda tax legislation has been

proposed, including Chicago, Baltimore, Texas, Philadelphia, Rhode Island, Kansas, Oregon, and Illinois.<sup>37</sup>

The aggregated efforts of individuals and organizations were effective in developing a coherent message that was communicated to the Hawai'i legislature in 2013 through various means. In particular, members of the opposition cited several key concerns with the proposed legislation using written testimony. A common concern among those opposed to SSB taxes involved the complex nature of the link between SSB consumption and obesity. Opponents of the legislation expressed that SSB were either unfairly singled out as a key contributor to obesity and/or that taxation of SSB may not solve the obesity problem due to its multifaceted nature.<sup>37</sup>

Written testimony by organizations also focused on the impact of an SSB tax on business, including small, local businesses. There were concerns about the potential economic impact, costs associated with implementation, and loss of local jobs.<sup>38</sup> In contrast, written testimony by individuals appeared to be more concerned with the concept of taxation. Some feared that an SSB tax could lead to increased taxation in other areas.<sup>38</sup> Others called attention to the federal government subsidies which sugar growers receive and considered the beverage fee "double taxation." Opponents of SB 646 specifically expressed their displeasure with the proposed use of any revenue. They believed that revenues should be designated for programs or institutions which directly fight obesity, rather than toward Community Health Centers and Trauma Centers.<sup>37</sup> Individual testimony also focused on taxation, government interference with personal choice, the potentially regressive nature of the tax, and the need for personal responsibility in making healthy decisions.<sup>38</sup>

## Support for SSB Legislation

There are also many supporters of an SSB tax, including legislators, public health professionals, the Department of Health, and clinicians. Table 1 also presents arguments made for SSB fee legislation in Hawai'i in February 2013. Additional testimony was provided by the Governor, several state departments such as Health, Public Safety, Human Resources Development, and Education, as well as Child and Family Services, the Healthcare Association of Hawai'i, Hawai'i Association of Independent Schools, students, health care providers, and private citizens. Most of the testimony supporting SSB legislation in Hawai'i emphasized the urgent need to halt the personal and economic consequences of obesity and its associated health risks in our state, particularly among children and racial/ethnic groups that have been particularly impacted by these health issues. They also noted the potential promise of this approach to both reduce consumption and to provide monies for public health. Several examples of testimony noted that an SSB tax appears to be favored by the public. In a recent poll in Hawai'i, two-thirds of residents polled were supportive of an SSB fee to fund programs aimed at decreasing childhood obesity.<sup>39</sup> Of note, some key health and business organizations remained neutral on this issue and provided testimony to this effect. Some of these examples are also presented in Table 1.

## Next Steps

At the conclusion of the 2013 Hawai'i Legislative Session, SB 1085 was the SSB bill that had made it the farthest through legislative committees, suggesting it to have the greatest legislative traction. SB 1085 will still be alive in the 2014 Legislative Session. While it stalled in Senate Ways and Means Committee this session, that Committee's Chairman, Senator David Ige, was quoted as saying, "We decided that we won't be moving forward with the soda fee this year. Of course, it's always in play for next year."<sup>40</sup> To ensure that the bill moves out of the Senate and crosses over to the House next year, or that a similar bill is passed, support must be built among both elected officials and the general public.

Stakeholders who want a SSB tax/fee bill to pass are planning to undertake multiple efforts to build support and to attempt to overcome industry lobbying. Emphasizing the bill's intent to use the funds generated for childhood obesity prevention and how that will benefit the state population is an important component of those efforts. Also, as May Okihiro, a local pediatrician and obesity expert, notes: "An important next step against a better resourced beverage industry will be to strengthen and utilize existing coalitions and relationships in order to make the voice of children and families, who value health and wellness, loud and clear." (M. Okihiro, personal communication, July 2, 2013). The Childhood Obesity Prevention Task Force, established by Governor Abercrombie, will also continue its efforts to reach out to partners across all sectors. The Hawai'i State Department of Health, Healthy Hawai'i Initiative, will also play a key role in educating the public about why consumption of SSB is a public health issue and providing nutrition education about the

detrimental impact of drinking SSB (L. Irvin, personal communication, April 11, 2013). Because 2014 is an election year, demonstrating public support for the bill may be especially critical to encourage legislators to vote for it.

## Conclusions

SSB taxation, particularly as part of a comprehensive policy approach to combat obesity, holds promise to reduce SSB consumption and to ultimately improve public health in the US.<sup>4</sup> However, its immediate political future is unclear in Hawai'i and elsewhere. Political scientists suggest that policy options often must undergo a "softening up" process in which once radical ideas, become increasingly acceptable over time.<sup>41</sup> This process, however, can take a considerable amount of time.<sup>41</sup> After several years of introduction in legislatures and city halls, the SSB tax is becoming more familiar to policy makers and the public. However, a "sin tax" on sugar is still a relatively novel political idea and SSB taxes confront a well-organized opposition that includes both large industries with deep pockets (eg, Coca Cola, Pepsi) as well as sympathetic local businesses (eg, Waiialua Soda Works, Ball Hawai'i Can Plant) with important economic concerns and strong community ties.<sup>21,42</sup> Yet the urgency of the need to address the health consequences of obesity and the unhealthy US diet is clear to both supporters and opponents of specific SSB-related bills.<sup>38</sup> For the sake of public health, effective, comprehensive, and innovative policies to address this issue must be implemented now.

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