

**IN THE COMMONWEALTH COURT OF PENNSYLVANIA**

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Docket Nos. 2077, 2078 CD 2016

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LORA JEAN WILLIAMS, et al.  
*Plaintiffs-Appellants,*

v.

CITY OF PHILADELPHIA and FRANK BRESLIN, in his official capacity as  
Commissioner of the Philadelphia Department of Revenue,  
*Defendants-Appellees.*

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**BRIEF OF AMERICAN HEART ASSOCIATION, AMERICAN  
CANCER SOCIETY CANCER ACTION NETWORK, AMERICAN  
MEDICAL ASSOCIATION, CHANGELAB SOLUTIONS, FOOD TRUST,  
HEALTHY FOOD AMERICA, MOMSRISING.ORG, NATIONAL  
ALLIANCE FOR HISPANIC HEALTH, NATIONAL ASSOCIATION OF  
CHRONIC DISEASE DIRECTORS, NATIONAL ASSOCIATION OF  
COUNTY AND CITY HEALTH OFFICIALS, NATIONAL  
ASSOCIATION OF LOCAL BOARDS OF HEALTH, NOTAH BEGAY III  
FOUNDATION, PENNSYLVANIA MEDICAL SOCIETY,  
PHILADELPHIA COUNTY MEDICAL SOCIETY, AND PUBLIC  
HEALTH LAW CENTER AS *AMICI CURIAE*  
IN SUPPORT OF APPELLEES**

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On appeal from the December 19, 2016 Orders of the Court of Common  
Pleas of Philadelphia County, No. 01452

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## **STATEMENT OF INTEREST OF *AMICI CURIAE***

*Amici* are nonprofit organizations dedicated to the public health of all persons. Given their expertise in both health sciences and public policy, *amici* submit this brief to inform the Court about the devastating health consequences caused by the overconsumption of sugar-sweetened beverages (SSBs). Scientific evidence links SSBs to increased risk of heart disease, type 2 diabetes, obesity, dental caries, and various other diseases. Philadelphia, suffering from these very public health problems, acted within its authority in placing a nonduplicative tax on the distribution of a truly dangerous product. The decision of the Court of Common Pleas should be affirmed.

### **INTRODUCTION AND SUMMARY OF ARGUMENT**

A 12-ounce can of cola has over 8 teaspoons of sugar in it.<sup>1</sup> The large quantities of sugar in soda, and in other beverages covered by the City of Philadelphia's distribution tax, have led to dramatic public health problems. Despite the sugar industry's effort to undermine and confuse the science, the evidence is now unequivocal: Sugar-sweetened beverages (SSBs) can increase risks for heart disease, type 2 diabetes, obesity, tooth decay, and other health problems plaguing Philadelphia and the country at large.

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<sup>1</sup> Rachel K. Johnson, et al., *AHA Scientific Statement, Dietary Sugars Intake and Cardiovascular Health*, *Circulation*, 1017 (2009), at <http://bit.ly/2lrLLnk>; National Institutes of Health, *Parent Tips: How Much Sugar and Calories Are in Your Favorite Drink?*, at <http://bit.ly/29ZIUA6>.

Though there are certainly unhealthy foods as well, SSBs—by delivering “empty calories”—have played an outsized role in harming public health. Nearly two-thirds of youth and half of adults in the U.S. consume SSBs each day,<sup>2</sup> and Philadelphians now consume on average half a liter a day<sup>3</sup>—well above the FDA and American Heart Association’s recommended limits for added sugars.<sup>4</sup> Today, heart disease is the leading cause of death in the world and in the United States.<sup>5</sup> And the obesity “epidemic” is “among the most burdensome” public health issues facing the country, threatening (for the first time) this generation with shorter longevity than the last.<sup>6</sup>

Given the toll that SSBs have taken on the health of Philadelphians, it is unsurprising that the City decided to tax their distribution. And given that taxes on

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<sup>2</sup> Asher Rosinger et al., Centers for Disease Control & Prevention, Nat’l Center for Health Stat. Data Brief No. 271, *Sugar-sweetened Beverage Consumption Among U.S. Youth, 2011–2014* (2017); Asher Rosinger et al., Centers for Disease Control & Prevention, Nat’l Center for Health Stat. Data Brief No. 270, *Sugar-sweetened Beverage Consumption Among U.S. Adults, 2011–2014* (2017).

<sup>3</sup> City of Philadelphia, Public Health Dep’t, Sugar Sweetened Beverages and You, <http://bit.ly/1VI9pYe> (last visited Mar. 8, 2017).

<sup>4</sup> A 20-ounce bottle of soda by itself exceeds the FDA’s recommended daily limit of 50 grams of added sugars. Susan Mayne, U.S. Food & Drug Admin., *Putting Added Sugars Into Context for Consumers*, FDA Voice, July 24, 2015, at <http://bit.ly/2ID9Cut>. Rachel K. Johnson, chair of the AHA’s nutrition committee, recommends that SSBs should be limited to 36 ounces or 450 calories per week. American Heart Association, *Added Sugars Add to Your Risk of Dying from Heart Disease*, at <http://bit.ly/2gFz5qs> (last visited Mar. 8, 2017).

<sup>5</sup> American Heart Association, *Heart Disease and Stroke Statistics 2017 At-a-Glance*, Jan. 25, 2017, at <http://bit.ly/2meNnRe>.

<sup>6</sup> U.S. Dep’t of Health and Human Servs., *The Surgeon General’s Call To Action To Prevent and Decrease Overweight and Obesity 2001* xi, 1 (2001).

products or transactions that have negative externalities are a historic tool that governments use to raise revenue for the public good, it is unsurprising that the Court of Common Pleas upheld its validity. Alexander Hamilton, for example, cited fiscal and health justifications for imposing a tax on whiskey shortly after the American Revolution.<sup>7</sup> These taxes are a well-established tool of local and federal governments alike; they are just new to soda.<sup>8</sup>

Despite this long history, and the lower court's sound analysis of the City's taxing authority, the plaintiffs attempt to paint the City's basic tax on the distribution of a harmful product as an unlawful power-grab preempted by state law. But it is their position (and their *amici*'s) that would upset the balance of state and local governance. Their legal theory would invalidate not only this tax, but potentially many other taxes and *nontax* initiatives that further public health and welfare by encouraging citizens to reduce their consumption of unhealthy products. Such arguments, if adopted, would tie the City's hands when it comes to public health. This Court should reject them.

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<sup>7</sup> Brenda Yelvington, *Excise Taxes in Historical Perspective*, in *TAXING CHOICE: THE PREDATORY POLITICS OF FISCAL DISCRIMINATION* 33, 33 (William F. Shughart II ed., 1997) (“[T]he consumption of ardent spirits particularly, no doubt very much on account of their cheapness, is carried on to an extreme, which is truly to be regretted, as well in regard to the health and the morals, as to the economy of the community.”) (quoting Alexander Hamilton, *THE REPORTS OF ALEXANDER HAMILTON* 34 (Jacob E. Cooke ed., 1964)).

<sup>8</sup> Though this *amicus* brief focuses only on sugar-sweetened beverages, the City acted within its authority in also including artificially sweetened beverages within its distribution tax.

## ARGUMENT

### **I. Sugar-sweetened beverages are associated with increased risk of heart disease, type 2 diabetes, obesity, and other chronic diseases harming the health of Philadelphians.**

Recently discovered internal documents from key players in the sugar industry reveal that the industry has attempted to obfuscate the science concerning the harms of sugar consumption, “derail[ing] the discussion about sugar for decades.”<sup>9</sup> Starting in the 1960s, “a sugar trade association not only paid for but also initiated and influenced research expressly to exonerate sugar as a major risk factor for coronary heart disease.”<sup>10</sup> A recent investigation reported that the beverage industry paid millions of dollars to fund research minimizing the link between SSBs and obesity.<sup>11</sup> Indeed, the sugar industry’s efforts have been deemed “reminiscent of tactics used by the tobacco industry, which enlisted experts to become ‘merchants of doubt.’”<sup>12</sup>

But there is no longer any doubt. Scientific studies, including meta-analyses

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<sup>9</sup> Anahad O’Connor, *How the Sugar Industry Shifted Blame to Fat*, N.Y. TIMES, Sept. 12, 2016, at <http://nyti.ms/2c5GXmW>; see also Anahad O’Connor, *Coca-Cola Funds Scientists Who Shift Blame for Obesity Away From Bad Diets*, N.Y. TIMES, Aug. 9, 2015, at <http://nyti.ms/1KZUZ4e>.

<sup>10</sup> Marion Nestle, *Food Industry Funding of Nutrition Research: The Relevance of History for Current Debates*, 176 JAMA INTERN. MED. 1685, 1685 (2016), at <http://bit.ly/2fOiZ1T> (citing Cristin E. Kearns et al., *Sugar Industry and Coronary Heart Disease Research: A Historical Analysis of Internal Industry Documents*, 176 JAMA INTERN. MED. 1680 (2016), at <http://bit.ly/2fOiZ1T>).

<sup>11</sup> *Id.* at 1685.

<sup>12</sup> O’Connor, *Coca-Cola Funds Scientists Who Shift Blame*, *supra* n.9 (quoting prominent nutrition professor Barry Popkin).

of randomized controlled trials and large-cohort longitudinal studies, demonstrate that sugar—and specifically SSBs—are a key culprit harming the health of Philadelphians and people across the nation. Specifically, the scientific studies demonstrate that consumption of SSBs is associated with increased risk of heart disease, type 2 diabetes, obesity, tooth decay, and myriad other health problems. Indeed, despite questions raised by the beverage industry, a recent review concluded that it is now established by “compelling” scientific evidence “that SSB intake is causally related to increased risk of obesity.”<sup>13</sup> And the connection between SSBs and poor health outcomes has been recognized by the U.S. Surgeon General,<sup>14</sup> the CDC, FDA, every other pertinent agency of the federal government, and by a broad consensus of national and international public health organizations, including *amici*.<sup>15</sup>

Philadelphia, unfortunately, has some of the highest rates of heart disease, type 2 diabetes, and obesity among the nation’s largest cities.<sup>16</sup> It is no wonder then that the City chose to single out those profiting from the distribution of SSBs to

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<sup>13</sup> Frank Hu, *Resolved: There Is Sufficient Scientific Evidence That Decreasing Sugar-Sweetened Beverage Consumption Will Reduce the Prevalence of Obesity and Obesity-Related Diseases*, 14 OBESITY REV. 606, 612 (2013), at <http://bit.ly/2lhrrnx>.

<sup>14</sup> The United States Surgeon General has placed “reduc[ing] consumption of sodas and juices with added sugars” high on the list of changes needed to improve the nation’s health. See *The Surgeon General’s Vision for a Healthy and Fit Nation, Fact Sheet*, at <http://bit.ly/2huBqVa>.

<sup>15</sup> Hu, *supra* n.13, at 612.

<sup>16</sup> Philadelphia Dep’t of Public Health, *2015 Community Health Assessment* (Sept. 2015), at slide 96, 100, 104, at <http://bit.ly/2hpJ0nW>.

offset these harms and raise revenue for the public good.

**A. Scientific evidence demonstrates the causal link between consumption of sugar-sweetened beverages and obesity.**

The evidence is clear. The overconsumption of SSBs is a causal factor—and one of the most important factors—in our country’s obesity epidemic.

**1. *The Studies.*** “All lines of evidence consistently support the conclusion that the consumption of sweetened beverages has contributed to the obesity epidemic.”<sup>17</sup> Specifically, the strong link between SSB consumption and weight gain “meets all key criteria commonly used to evaluate causal relationships in epidemiology.”<sup>18</sup> As the 2015 Dietary Guidelines Advisory Committee (DGAC)—the federal government’s foremost advisory body on nutrition—concluded, there is “[s]trong and consistent evidence . . . that intake of added sugars from food and/or sugar-sweetened beverages [is] associated with excess body weight.”<sup>19</sup>

The evidence comes from the most respected types of scientific studies. *First*, randomized controlled trials demonstrate that SSB consumption leads to weight gain. Randomized controlled trials are considered the gold standard of scientific evidence because they take two similar groups of individuals and evaluate the

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<sup>17</sup> Gail Woodward-Lopez et al., *To What Extent Have Sweetened Beverages Contributed to the Obesity Epidemic?* 14 PUB. HEALTH NUTR. 499, 499 (2010), at <http://bit.ly/2h08PtZ>.

<sup>18</sup> Hu, *supra* n.13, at 612.

<sup>19</sup> U.S. Dep’t of Agriculture, *Scientific Report of the 2015 Dietary Guidelines Advisory Committee* [DGAC Report], Part D, Ch. 6, at 20, at <http://bit.ly/1MxhpbX>.

impact of randomly changing just one variable between the two groups—here, the consumption of SSBs. “[C]ontrolled trials provide consistent evidence that increasing or decreasing intake of dietary sugars [particularly liquid sugars] . . . is associated with corresponding changes in body weight.”<sup>20</sup> For example, in a randomized trial involving more than 600 children, modestly decreasing SSB intake was found to reduce the number of overweight and obese children after one year.<sup>21</sup> The same is true for adults. An 18-month randomized controlled study of 810 adults demonstrated that “a reduction in liquid calorie intake was significantly associated with weight loss at both 6 and 18 months.”<sup>22</sup> Critically, this study demonstrated that SSBs had a greater impact on weight gain (and loss) than solid calorie intake.<sup>23</sup>

*Second*, large prospective cohort studies—which track a population over time—further demonstrate “a link between SSB consumption and development of obesity.”<sup>24</sup> As a review by Harvard experts concluded, “Findings from well-

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<sup>20</sup> Lisa Te Morenga et al., *Dietary Sugars and Body Weight: Systematic Review and Meta-Analyses of Randomised Controlled Trials and Cohort Studies*, 346 BRIT. MED. J. e7492, at 5 (2012), at <http://bit.ly/2h9W94a>.

<sup>21</sup> Janet James et al., *Preventing Childhood Obesity by Reducing Consumption of Carbonated Drinks: Cluster Randomised Controlled Trial*, 328 BRIT. MED. J. 1237, 1238 (2004).

<sup>22</sup> Liwei Chen et al., *Reduction in Consumption of Sugar-Sweetened Beverages Is Associated with Weight Loss: The PREMIER Trial*, 89 AM. J. CLINICAL NUTRITION 1299, 1304 (2009).

<sup>23</sup> *Id.*

<sup>24</sup> Vasanti S. Malik et al., *Sugar-Sweetened Beverages and Weight Gain in Children and Adults*, 98 AM. J. CLINICAL NUTRITION 1084, 1084 (2013), at <http://bit.ly/2h0pD3P>.

powered prospective cohorts have consistently shown a significant association . . . between SSB consumption and long-term weight gain and risk of type 2 diabetes.”<sup>25</sup> For example, looking at data over a 20-year period, researchers observed that a higher “baseline consumption” of SSBs “was associated with a significant increase in the risk of incident high [waist circumference].”<sup>26</sup> Significantly, “[t]he associations observed in this study . . . remained after control[ling] for total calories from foods and inclusion of major food groups.”<sup>27</sup> That is, among the population studied for 20 years, even controlling for the *sheer volume* of calories, those who consumed more calories from beverages had more weight gain, “suggesting an independent effect of the caloric beverages.”<sup>28</sup>

*Lastly*, meta-analyses confirm the contribution of SSBs to weight gain and obesity. Meta-analyses are an important scientific tool because they aggregate the results from a wide range of studies to paint a picture of the research conclusions overall. These meta-analyses point in the same direction: SSBs increase the risk for obesity. One study using World Health Organization (WHO) meta-analysis methodology found strong evidence that “intake of free sugars or sugar sweetened

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<sup>25</sup> Hu, *supra* n.13, at 606.

<sup>26</sup> Kiyah J. Duffey et al., *Drinking Caloric Beverages Increases the Risk of Adverse Cardiometabolic Outcomes in the Coronary Artery Risk Development in Young Adults (CARDIA) Study*, 92 AM. J. CLINICAL NUTRITION 954, 956 (2010).

<sup>27</sup> *Id.* at 958.

<sup>28</sup> *Id.*

beverages is a determinant of body weight.”<sup>29</sup> Another high-quality meta-analysis concluded: “Overall, results from our review support a link between the consumption of sugar-sweetened beverages and the risks of over-weight and obesity.”<sup>30</sup> And a recent analysis of the literature by the American Heart Association similarly found that “[h]igher SSB and added sugars intake has been strongly linked to excess weight gain and an increased risk of obesity” in children and adolescents.<sup>31</sup>

**2. Causation Explained.** Two interrelated mechanisms explain why consumption of SSBs increases the risk of obesity. The first is simple—“Soda is made up solely of empty calories.”<sup>32</sup> Research has confirmed that beverages satisfy hunger less than solid foods of the same caloric value, so those who consume SSBs don’t get full, and then don’t compensate by correspondingly reducing their calorie intake from solid foods.<sup>33</sup> The result—overall caloric intake is simply higher.

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<sup>29</sup> Te Morenga et al., *supra* n.20, at 1, 5, 7.

<sup>30</sup> Vasanti S. Malik et al., *Intake of Sugar-Sweetened Beverages and Weight Gain: A Systematic Review*, 84 AM. J. CLINICAL NUTRITION 274, 282 (2006).

<sup>31</sup> Miriam Vos et al., *Added Sugars and Cardiovascular Disease Risk in Children*, 134 CIRCULATION 439, at 8 (2016).

<sup>32</sup> Jill Reedy & Susan M. Krebs-Smith, *Dietary Sources of Energy, Solid Fats, and Added Sugars among Children and Adolescents in the United States*, 110 J. AM. DIETETIC ASSOC. 1477, 1483 (2010), at <http://bit.ly/2hknxP>.

<sup>33</sup> Doreen DiMiglio & Richard Mattes, *Liquid Versus Solid Carbohydrate: Effects on Food Intake and Body Weight*, 24 INT’L J. OBESITY & RELATED METABOLIC DISORDERS 794 (2000), at <http://bit.ly/2hkAdUg>; Julie E. Flood-Obbagy & Barbara J. Rolls, *The Effect of Fruit in Different Forms on Energy Intake and Satiety at a Meal*, 52 APPETITE 416 (2009), at <http://bit.ly/2hpi6G>.

Indeed, scientific studies “provide clear and consistent evidence that people do not compensate for the added energy they consume in soft drinks by reducing their intake of other foods, resulting in increased total energy intakes.”<sup>34</sup>

But there is a second reason that SSBs lead to obesity. “Not only do people fail to compensate for the energy consumed in soft drinks, but there is also some evidence that the increase in energy intake associated with soft drink consumption is even greater than what can be accounted for by the beverages alone, suggesting that food energy intake is also higher.”<sup>35</sup> In other words, scientists have found that for many people—in particular for overweight populations—sugary drinks actually stimulate cravings to eat *more*.<sup>36</sup> Through either of these mechanisms, SSB consumption results in an overall increase in calories consumed, thereby leading to weight gain.<sup>37</sup>

To be sure, SSBs are not the only culprits in the obesity epidemic. But there is still reason to be particularly concerned with the outsized role that SSBs play in

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<sup>34</sup> Lenny R. Vartanian et al., *Effects of Soft Drink Consumption on Nutrition and Health: A Systematic Review and Meta-Analysis*, 97 AM. J. PUB. HEALTH 667, 669 (2007).

<sup>35</sup> *Id.* at 669.

<sup>36</sup> Alessio Moneleone et al., *Responses of Peripheral Endocannabinoids and Endocannabinoid-Related Compounds to Hedonic Eating in Obesity*, 55 EUR. J. NUTRITION 1799, 1800 (2016), at <http://bit.ly/2hplXWf>; Miguel Alonso-Alonso et al., *Food Reward System: Current Perspectives and Future Research Needs*, 73 NUTRITION REV. 296, 296-98 (2015), at <http://bit.ly/2hpwu3R>.

<sup>37</sup> Vasanti S. Malik et al., *Sugar-Sweetened Beverages and Risk of Metabolic Syndrome and Type 2 Diabetes*, 33 DIABETES CARE 2477, 2482 (2010), at <http://bit.ly/2gGrrMD>; An Pan & Frank B. Hu, *Effects of Carbohydrates on Satiety: Differences Between Liquid and Solid Food*, 14 CURRENT OPINION IN CLINICAL NUTRITION & METABOLIC CARE 385 (2011), at <http://bit.ly/2ggPAx6>.

harming public health. For one thing, the evidence supporting the association between sweetened beverage intake and excess weight is stronger than for any other single type of food or beverage.<sup>38</sup> Other high-sugar solid foods may at least fill one up in a way that non-viscous beverages don't, so they don't contribute to weight gain with the same magnitude. And SSBs like soda and others subject to Philadelphia's tax provide no or little nutritional benefit other than energy and water. Rather, drinking just one SSB per day is associated with an 80% increased risk for women of developing diabetes and a 55% increased risk of obesity for children.<sup>39</sup>

Another reason it makes sense to focus on SSBs is that they are widely consumed and have a correspondingly disproportionate role in the obesity crisis. SSBs by themselves now compose 39% of all added sugar intake in the American diet; by some calculations they are the largest source of calories of any food group,<sup>40</sup> and they are the largest source of added sugar in the American diet.<sup>41</sup> Soda, specifically, “provides the average 12- to 19-year-old boy with about 15

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<sup>38</sup> Woodward-Lopez et al., *supra* n.17, at 505.

<sup>39</sup> Matthias B. Schulze et al., *Sugar-Sweetened Beverages, Weight Gain, and Incidence of Type 2 Diabetes in Young and Middle-Aged Women*, 292 J. AM. MED. ASS'N 927, 927 (2004); Te Morenga et al., *supra* n.20, at 5.

<sup>40</sup> U.S. Dep't of Agriculture and U.S. Dep't of Health & Human Serv., *Dietary Guidelines for Americans 2015-2020*, 55, Fig. 2-10 (2015), at <http://bit.ly/2fqJsNN>. The FDA concurs. See 81 Fed. Reg. 33742, 33803 (May 27, 2016) (“sugar-sweetened beverages ... are the primary source of added sugars in the American diet”); Hu, *supra* n.13, at 606.

<sup>41</sup> AHA, *Added Sugars Add to Your Risk of Dying from Heart Disease*, *supra* n.4.

teaspoons of refined sugars a day and the average girl with about 10 teaspoons a day.”<sup>42</sup> “Those amounts roughly equal the government’s recommended limits for teens’ sugar consumption from *all* foods.”<sup>43</sup> And “[c]onsumption is particularly high among African-Americans, Hispanics and low-income individuals—the groups with disproportionately high prevalence of obesity and obesity-related chronic diseases.”<sup>44</sup>

Given the ubiquity of SSBs in the American diet, “a simple analysis of national (US) dietary intake data found that the increase in sweetened beverage intake accounted for 43% of the per capita increase in total energy intake and therefore most likely contributed to at least one-fifth of the weight gained over the time period when obesity rates were increasing most rapidly.”<sup>45</sup> Quite simply, SSBs have played a disproportionate role in the obesity epidemic.

**3. *The Health Effects of Obesity.*** It is difficult to overstate the harmful health consequences associated with obesity. As “a multisystem condition,”<sup>46</sup>

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<sup>42</sup> Michael F. Jacobson, Center for Science in the Public Interest, *Liquid Candy: How Soft Drinks Are Harming Americans’ Health* iv (2005), at <http://bit.ly/2gGsEUd>.

<sup>43</sup> *Id.*

<sup>44</sup> Hu, *supra* n.13, at 607 (citing National Health and Nutrition Examination Survey (NHANES) 2005-08); *see also* Rosinger et al., *Sugar-sweetened Beverage Consumption Among U.S. Adults* *supra* n.2, at 3.

<sup>45</sup> Woodward-Lopez et al., *supra* n.17, at 505.

<sup>46</sup> S. Jay Olshansky et al., *A Potential Decline in Life Expectancy in the United States in the 21st Century*, 352 *NEW ENG. J. MED.* 1138, 1139 (2005).

obesity is associated with and contributes to a wide range of pernicious health problems, ultimately “manifest[ing] itself in premature death and disability, in health care costs, in lost productivity, and in social stigmatization.”<sup>47</sup>

A systematic review of epidemiological literature concluded that higher body mass indexes and waist circumferences—two of the key markers of obesity—are associated with a wide range of health problems, including cardiovascular disease and type 2 diabetes.<sup>48</sup> Other studies confirm that being overweight or obese is a “major risk factor[] for” other noncommunicable diseases such as osteoarthritis, gall stones, fatty liver disease, and psychological disorders.<sup>49</sup> Obesity is also clearly associated with an increased risk of cancer development and recurrence, as well as decreased risk of survival, for many cancers.<sup>50</sup> For example, obesity increases the risk of cancers of the female breast (postmenopausal), colon and rectum, kidney, and pancreas, among others.<sup>51</sup> Indeed, obesity is second only to tobacco use as a

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<sup>47</sup> U.S. Dep’t of Health and Human Servs., *supra* n.6, at 1.

<sup>48</sup> Daphne P. Guh et al., *The Incidence of Co-Morbidities Related to Obesity and Overweight: A Systematic Review and Meta-Analysis*, 9 BMC PUB. HEALTH 88 (2009).

<sup>49</sup> Ivana Vucenik & Joseph P. Stains, *Obesity and Cancer Risk: Evidence, Mechanisms, and Recommendations*, 1271 ANNALS N.Y. ACAD. SCI. 37, 38 (2012); *see also* Lauren Rossen & Eric Rossen, OBESITY 101 (2012).

<sup>50</sup> Lawrence H. Kushi et al., American Cancer Society 2010 Nutrition and Physical Activity Guidelines Advisory Committee, *American Cancer Society guidelines on nutrition and physical activity for cancer prevention*, 62 CA: CANCER J. CLINICIANS 30, 34 (2012).

<sup>51</sup> Béatrice Lauby-Secretan et al., *Body Fatness and Cancer — Viewpoint of the IARC Working Group*, 375 NEW ENG. J. MED. 794, 796 (2016).

risk factor for cancer.<sup>52</sup>

These negative health effects manifest from an early age. Obese children are more likely to develop type 2 diabetes, asthma, and heart disease.<sup>53</sup> And obesity in childhood can have lifelong health effects, even for those who maintain healthy weights later. In a national study of obesity in adolescents, researchers found that 49% of overweight and 61% of obese adolescents had at least one risk factor for cardiovascular disease—particularly important, given the “growing evidence” that “risk factors present during childhood may persist into adulthood.”<sup>54</sup> A separate study of the effects of obesity in adolescent women found that a high body mass index during adolescence “remained predictive of premature death,” even after controlling for weight during adulthood.<sup>55</sup>

For many in the medical and public health community, the outlook of the obesity epidemic is grim. Obesity has, on net, “been shown to have a substantial negative effect on longevity, reducing the length of life of people who are severely

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<sup>52</sup> Kushi et al., *supra* n.50, at 30; *see also* Nicholas Bakalar, *Obesity Is Linked to At Least 13 Types of Cancer*, N.Y. TIMES (Aug. 24, 2016) (quoting Dr. Graham Colditz), at <http://nyti.ms/2bGbAwZ>.

<sup>53</sup> Centers for Disease Control & Prevention, *Childhood Obesity Causes & Consequences*, at <http://bit.ly/2hbrX65> (last visited Mar. 8, 2017).

<sup>54</sup> Ashleigh L. May et al., *Prevalence of Cardiovascular Disease Risk Factors Among US Adolescents, 1999-2008*, 129 PEDIATRICS 1035, 1039 (2012).

<sup>55</sup> Rob M. van Dam et al., *The Relationship between Overweight in Adolescence and Premature Death in Women*, 145 ANNALS INTERNAL MED. 91, 95-96 (2006).

obese by an estimated 5 to 20 years.”<sup>56</sup> In a special report in the *New England Journal of Medicine*, a group of public health experts made a stark prediction: “From our analysis of the effect of obesity on longevity, we conclude that the steady rise in life expectancy during the past two centuries may soon come to an end.”<sup>57</sup> Given the critical role that SSBs have had in this epidemic, and the toll that obesity takes on our communities, a tax on distribution is but one reasonable response.

**B. Scientific studies demonstrate that the overconsumption of sugar-sweetened beverages can increase risk of cardiovascular disease, type 2 diabetes, tooth decay, and myriad other chronic health conditions.**

Unfortunately, the deleterious consequences of overconsuming SSBs don’t stop at obesity and its attendant harms. What is perhaps less popularly known is that SSBs are contributing to the risk of heart disease, type 2 diabetes, and other problems *even for those who do not gain weight*.

**1. Coronary Heart Disease.** Heart disease is the leading cause of death in the United States for both men and women. Approximately 2,200 Americans die *every day* from heart disease, stroke, or another form of cardiovascular disease—an average of one every 40 seconds.<sup>58</sup> Nearly half of African-American adults have

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<sup>56</sup> Olshansky, *supra* n.46, at 1140.

<sup>57</sup> *Id.* at 1138.

<sup>58</sup> AHA, *Heart Disease and Stroke Statistics 2017 At-a-Glance*, *supra* n.5.

some form of cardiovascular disease.<sup>59</sup> The American Heart Association calculates that the direct and indirect costs of cardiovascular diseases and stroke cost more than \$316.1 billion in health expenditures and lost productivity each year.<sup>60</sup>

Again, the science demonstrates the link between SSBs and heart disease. A 2014 study in *JAMA Internal Medicine* concluded that there was a “significant association between SSB consumption and risk of CVD [(cardiovascular disease)] mortality.”<sup>61</sup> A 2012 study that followed 40,000 men for two decades found that those in the top quartile of soft drink consumption—drinking several cans of sugary beverages per week—had a 20% higher risk of having a heart attack or dying from a heart attack than men who rarely consumed sugary drinks.<sup>62</sup> The risks have been demonstrated for women too.<sup>63</sup>

Importantly, “the contribution of BMI [(body mass index)] did not fully explain the association between SSB intake and [coronary heart disease]”; even when controlling for weight, an unhealthy diet, or lifestyle factors, SSB

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<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> Quanhe Yang et al., *Added Sugar Intake and Cardiovascular Diseases Mortality Among US Adults*, 174 *J. AM. MED. ASS’N INTERNAL MED.* 516, 521, 523 (2014).

<sup>62</sup> Lawrence de Koning et al., *Sweetened Beverage Consumption, Incident Coronary Heart Disease, and Biomarkers of Risk in Men*, 125 *CIRCULATION* 1735, 1737 (2012).

<sup>63</sup> Teresa T. Fung et al., *Sweetened Beverage Consumption and Risk of Coronary Heart Disease in Women*, 89 *AM. J. CLINICAL NUTRITION* 1037, 1040 (2009).

consumption was still “associated with a higher risk of” coronary heart disease.<sup>64</sup> Research also has confirmed links between SSBs and high blood pressure (hypertension), even after controlling for body weight.<sup>65</sup> The science leads to one basic conclusion: Excess consumption of SSBs can be bad for your heart.

**2. Type 2 Diabetes.** The science is likewise unequivocal that excess SSB consumption is associated with a greater risk of type 2 diabetes.<sup>66</sup> Reviewing the relevant research, the DGAC concluded that there was “strong” evidence—its highest grade—demonstrating “that higher consumption of added sugars, especially sugar-sweetened beverages, increases the risk of type 2 diabetes among adults.”<sup>67</sup> Experts estimate that there is an “excess risk of 26%”—or more—for type 2 diabetes associated with higher consumption of SSBs.<sup>68</sup> The evidence “meet[s] the key . . . criteria to establish a causal relationship between SSB consumption and risk of [type 2 diabetes].”<sup>69</sup>

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<sup>64</sup> *Id.* at 1037, 1040.

<sup>65</sup> Liwei Chen et al., *Reducing Consumption of Sugar-Sweetened Beverages Is Associated with Reduced Blood Pressure: A Prospective Study among United States Adults*, 121 CIRCULATION 2398 (2010).

<sup>66</sup> Hu, *supra* n.13, at 612-13.

<sup>67</sup> DGAC Report, *supra* n.19, Part D, Ch. 6, at 20, 22.

<sup>68</sup> Vasanti S. Malik et al., *Sugar-Sweetened Beverages and Risk of Metabolic Syndrome and Type 2 Diabetes*, 33 DIABETES CARE 2477, 2480 (2010).

<sup>69</sup> Hu, *supra* n.13, at 613; see also An Pan et al., *Plain-Water Intake and Risk of Type 2 Diabetes in Young and Middle-Aged Women*, 95 AM. J. CLINICAL NUTRITION 1454 (2012) (citing Nurses’ Health Study II), at <http://bit.ly/2geXmCA>; Lawrence de Koning et al., *Sugar Sweetened and Artificially Sweetened Beverage Consumption and Risk of Type 2 Diabetes in Men*, 93 AM. J. CLINICAL NUTRITION 1321 (2011), at <http://bit.ly/2h9ZyzM>.

Critically, scientists have demonstrated a relationship between SSB consumption and type 2 diabetes risk independent of weight gain. Because these drinks have “high amounts of rapidly absorbable carbohydrates, such as various forms of sugar and high-fructose corn syrup,” they contribute to a “high dietary glycemic load (GL), leading to inflammation, insulin resistance, and impaired  $\beta$ -cell function.”<sup>70</sup> The result: SSBs “remained significantly associated with an increased risk of diabetes” even when controlling for BMI and overall caloric intake.<sup>71</sup> Body mass index accounts for only about half of the excess risk of type 2 diabetes.<sup>72</sup> A recent meta-analysis of 17 cohort studies found that consuming just one additional SSB daily was associated with a 13% increased risk of diabetes, even after adjusting for BMI.<sup>73</sup>

Given the amount of SSBs consumed (and their link to type 2 diabetes) it perhaps should come as no surprise that an American today has an estimated 2 in 5 chance of developing diabetes in his or her lifetime.<sup>74</sup> If he or she is Hispanic or

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<sup>70</sup> Vasanti S. Malik et al., *Sugar-Sweetened Beverages, Obesity, Type 2 Diabetes Mellitus, and Cardiovascular Disease Risk*, 121 CIRCULATION 1356, 1356 (2010).

<sup>71</sup> Schulze et al., *supra* n.39, at 931.

<sup>72</sup> Malik et al., *Sugar-Sweetened Beverages and Risk of Metabolic Syndrome*, *supra* n.68, at 2482, 2481.

<sup>73</sup> Vasanti S. Malik & Frank B. Hu, *Fructose and Cardiometabolic Health: What the Evidence From Sugar-Sweetened Beverages Tells Us*, 66 J. AM. COLL. CARDIOLOGY 1615, 1619 (2015), at <http://bit.ly/2h15r1K>.

<sup>74</sup> Centers for Disease Control & Prevention, *Now, 2 Out of Every 5 Americans Expected to Develop Type 2 Diabetes During their Lifetime*, at <http://bit.ly/1JUmH06>.

African-American, the odds are around 1 in 2.<sup>75</sup> Already about 23.4 million Americans have been diagnosed with diabetes (more than 9 percent of the adult population).<sup>76</sup> And the rates are growing. Approximately 34 percent of American adults have pre-diabetes.<sup>77</sup> The consequences can be as severe as vision loss or limb amputation. About 73,000 Americans with diabetes underwent amputations in 2010 alone.<sup>78</sup> (For comparison: as of 2012, the total number of U.S. military personnel to undergo amputations as a result of the wars in Iraq and Afghanistan was 1,572.<sup>79</sup>)

**3. Dental caries.** In thinking about health impacts, oral health and dental care is often overlooked. But dental caries (i.e., cavities) is actually the single most prevalent chronic disease in the United States, affecting 42% of children, 59% of adolescents, and 92% of adults;<sup>80</sup> rates among Hispanics and African Americans

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<sup>75</sup> *Id.*

<sup>76</sup> AHA, *Heart Disease and Stroke Statistics 2017 At-a-Glance*, *supra* n.5.

<sup>77</sup> *Id.*

<sup>78</sup> Nat'l Center for Chronic Disease Prevention & Health Promotion, *National Diabetes Statistics Report, 2014* 6 (2014), at <http://bit.ly/1mDQj2g>.

<sup>79</sup> David Wood, *U.S. Wounded In Iraq, Afghanistan Includes More Than 1,500 Amputees*, HUFFINGTON POST, Nov. 7, 2012, at <http://huff.to/1GETNgS>.

<sup>80</sup> Nat'l Institute of Dental and Craniofacial Research, *Dental Caries (Tooth Decay)*, at <http://bit.ly/2hdPmGG> (last visited Mar. 8, 2017).

are even higher.<sup>81</sup> The link between SSBs and dental caries is not complicated. “Sugars are undoubtedly the most important dietary factor in the development of dental caries.”<sup>82</sup> And the primary source of sugar in the American diet is “sugary drinks.”<sup>83</sup> Even after controlling for socioeconomic factors and behavioral attributes (like the use of fluoride toothpaste), studies show that the more SSBs one drinks, the higher the likelihood of dental caries.<sup>84</sup>

**C. Philadelphia is plagued by chronic diseases caused by overconsumption of sugar-sweetened beverages.**

Philadelphians face the negative public health consequences stemming from SSBs every day. To be sure, these problems are not unique to Philadelphia; but Philadelphia unfortunately leads the way—with some of the worst public health outcomes among large cities for heart disease, diabetes, obesity, and other diseases caused by SSBs. The numbers are staggering:

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<sup>81</sup> Bruce A. Dye et al., Centers for Disease Control & Prevention, Nat’l Center for Health Stat. Data Brief No. 197, *Dental Caries and Tooth Loss in Adults in the United States, 2011–2012* (May 2015), at <http://bit.ly/2h1ICeh>.

<sup>82</sup> Aubrey Sheiham & W. Phillip James, *A New Understanding of the Relationship Between Sugars, Dental Caries and Fluoride Use*, 17 PUB. HEALTH NUTRITION 2176, 2176 (2014), at <http://bit.ly/2gFXQma>; see also Aubrey Sheiham & W. Phillip James, *Diet and Dental Caries: The Pivotal Role of Free Sugars Reemphasized*, 94 J. DENTAL RES. 1341, 1341 (2015), at <http://bit.ly/2h8tJV7>.

<sup>83</sup> Rob Beaglehole, *Dentists and Sugary Drinks: A Call to Action*, 146 J. AM. DENTAL ASS’N 73 (2015), at <http://bit.ly/2gg2aaI>.

<sup>84</sup> Eduardo Bernabé et al., *Sugar-Sweetened Beverages and Dental Caries in Adults: A 4-Year Prospective Study*, 42 J. DENTISTRY 952, 955-56 (2014).

- *Consumption.* Philadelphians drink about 60 million gallons of SSBs each year (about ½ liter per person per day).<sup>85</sup>
- *Heart disease.* Philadelphia has the highest premature cardiovascular mortality rate of the ten largest cities in the country,<sup>86</sup> and the highest rate of hypertension.<sup>87</sup>
- *Diabetes:* Philadelphia has the highest rate of adult diabetes of the ten largest cities in the country.<sup>88</sup>
- *Obesity.* “Approximately 67.9% of adults in the city and approximately 41% of youth aged 6-17 are overweight or obese. Additionally, nearly 70% of youth in North Philadelphia, the majority of whom are black or Hispanic, are overweight or obese, which is nearly double the obesity and overweight rate for youth in the United States.”<sup>89</sup> That leaves Philadelphia with the highest rate of obese adolescents among the ten largest cities in the country.<sup>90</sup> Consistent with national trends, the rates of childhood obesity are decreasing in Philadelphia but remain at epidemic proportions.<sup>91</sup>

There is no doubt, then, that the distribution of SSBs—a key contributor to each of these diseases—has harmed the health of Philadelphia’s communities. The costs are often measured monetarily by government spending on health care and

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<sup>85</sup> City of Philadelphia, *Sugar Sweetened Beverages and You*, *supra* n.3.

<sup>86</sup> Philadelphia Dep’t of Public Health, *2015 Community Health Assessment*, *supra* n.16, at slide 96.

<sup>87</sup> *Id.* at slide 100.

<sup>88</sup> *Id.* at slide 104.

<sup>89</sup> Centers for Disease Control and Prevention, *Communities Putting Prevention to Work, Philadelphia, Pennsylvania: Obesity and Tobacco Control* (2013), at <http://bit.ly/2gGSUO9>.

<sup>90</sup> Philadelphia Dep’t of Public Health, *Overview of Chronic Disease and Healthy Eating and Active Living Indicators for Philadelphia Adults and Children* 5 (May 5, 2011), at <http://bit.ly/2haHfe0>.

<sup>91</sup> *Id.* at 4.

associated costs, or by tax revenue decreases from lost wages and inefficiency.<sup>92</sup> But the costs of poor health are more than monetary. For the City, the harms include lost productivity and innovation. More importantly, the disability, suffering, and premature death associated with the overconsumption of SSBs touches Philadelphia's families and reduces the vibrancy of the community as a whole. A tax on the distribution of a product leading to so much harm helps the City mitigate these negative externalities and provide for the public good.

## **II. The industry's arguments, if adopted, would thwart the City's basic ability to govern for the public's health and welfare.**

The plaintiffs' and their *amici's* arguments against the distribution tax have far-reaching implications beyond this case. If the Court adopts their views, it would not only block this law but also severely curb the City's ability to govern—through taxes and an array of other municipal tools—to advance the City's public health and welfare. Like the lower court, this Court should reject these arguments.

*First*, the plaintiffs' overbroad reading of the Sterling Act would severely limit the City's ability to raise revenue by imposing basic, nonduplicative taxes on harmful products or transactions. Such taxes are a basic tool of governing, used by

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<sup>92</sup> By one estimate, the United States spent approximately \$147 per year on medical costs related to obesity—10 percent of all medical spending. Eric A. Finkelstein, et al., *Annual Medical Spending Attributable To Obesity: Payer- And Service-Specific Estimates*, 28 HEALTH AFFAIRS w822, w822 (2009). The burden of this additional care falls particularly hard on taxpayer-funded programs. *Id.*

local governments in the United States since our founding.<sup>93</sup> Governments, at the federal, state, and local levels, typically tax harmful products and transactions for one, or multiple, of the following reasons: (1) to raise revenue; (2) to account for negative externalities caused by the unhealthy product; and (3) to influence consumer behavior.<sup>94</sup>

The plaintiffs argue that Philadelphia cannot use this basic tool of governance because its tax on distribution, as it “operates in the real world,” increases the price of a product upon which the Commonwealth already imposes a retail tax.<sup>95</sup> Specifically, the plaintiffs maintain that because some of their distributors have decided to pass the tax on to their retailers, and some of those retailers have decided to raise the price of covered beverages, the distribution tax is *duplicative* of the State’s retail tax, and hence barred by the Sterling Act. But—as the Common Pleas Court recognized—that is not the law. Pennsylvania courts’ Sterling Act jurisprudence does not invite this *Palsgraf*-type analysis to figure out whether a local tax might, based on the independent decisions of multiple

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<sup>93</sup> Jonathan Cummings, *Obesity and Unhealthy Consumption: The Public-Policy Case for Placing a Federal Sin Tax on Sugary Beverages*, 34 SEATTLE U. L. REV. 273, 288 (2010).

<sup>94</sup> *Id.* at 288, 293. The potential for the distribution tax to influence consumer behavior is not discussed here. If the distribution tax were to lead to an increase in the price of SSBs it could (depending on the amount and other factors) have an influence on consumer behavior. See Steven Gortmaker et al., CHOICES Project at Harvard T.H Chan School of Public Health, *Brief: Cost-effectiveness of a Sugar-Sweetened Beverage Excise Tax in Philadelphia, PA* (2016), at <http://bit.ly/1TAKgyG>. But the existence of a “pass-through” effect is not legally relevant to the Sterling Act analysis, so *amici* do not address it here. See Defs’ MIS of POs, at 22.

<sup>95</sup> Br. of Appellants, at 1, 11, 21.

intervening actors, touch upon the same subject matter as a state tax. Under plaintiffs’ analysis, private actors, not state and local governments, control the legality of a taxation scheme. And that analysis could preclude all sorts of local taxes that are critical to a city’s budget and ability to address public health and may eventually increase the prices of products already taxed by the State.

By contrast, as the Common Pleas Court recognized, taxes by the Commonwealth and local governments are allowed even on the same subject matter as long as they have a different “operation or incidence,”<sup>96</sup> such as applying at different points in the stream of commerce.<sup>97</sup> That’s for good reason. The Sterling Act largely guarantees municipalities the authority to impose any taxes on products, transactions, persons, or property, except if they are “subject to a State tax.” 53 P.S. § 15971(a). The plaintiffs would deem any local tax—no matter how different from the state tax—duplicative (and preempted) just because private actors may subsequently decide to raise the price of a good “subject to a State tax.” Under that reading, the exception would swallow the rule. And cities like Philadelphia would be severely curtailed in their ability to raise revenue with a basic tax to govern for the public good.

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<sup>96</sup> *Commonwealth v. National Biscuit Co.*, 136 A.2d 821, 825-26 (Pa. 1957).

<sup>97</sup> *Blair Candy Co. v. Altoona Area Sch. Dist.*, 613 A.2d 159, 161-62 (Pa. 1992) (“It is clear that whatever else the [local] cigarette [excise] tax is, it is *not* a sales tax” and therefore not barred by the Sterling Act.)

*Second*, the implied preemption argument sweeps even broader, implicating the City’s policy decisions beyond taxation. The plaintiffs and their *amici* argue that the City’s distribution tax is preempted because it is an “obstacle” to the “purpose” of the Pennsylvania sales tax—which is raising revenue for the Commonwealth. Their argument is that the City’s distribution tax will increase price of covered beverages, leading to less consumption and less revenue from the State’s tax, thereby undermining the State’s ability to “pass a state budget every year.”<sup>98</sup> According to plaintiffs and their *amici*, any local tax is preempted when it is *designed* to deter transactions on which the Commonwealth relies for revenue.<sup>99</sup> This argument, again, overreaches.

Adopting this rationale would invalidate myriad local *nontax* measures designed to curb the use of unhealthy products—like SSBs—that the Commonwealth taxes. Philadelphia has not only imposed a distribution tax, but has also undertaken a series of public health measures to reduce the overconsumption of SSBs. For example, “the Philadelphia school district forbids the sale of sugary beverages in schools and limits their availability in public vending

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<sup>98</sup> Brief of *Amici Curiae* State Senator Anthony Williams, et al., at 3. 10-12.

<sup>99</sup> Br. of Appellants, at 22 (tax preempted because a “core objective” is reducing consumption of taxed beverages); *Amici Curiae* Brief of NFIB, et al, at 7 (tax preempted because “[i]t will undermine Pennsylvania’s sales tax revenue collections, and indeed is expressly designed to do so.”).

machines.”<sup>100</sup> The City also “provides financial incentives for corner stores to highlight healthy foods” through signs that suggest drinking water and remind customers how much exercise it will take to work off the calories in a can of soda.<sup>101</sup> And the City sends educators into public school classrooms to teach children about nutrition.<sup>102</sup> “Philadelphia, which also has one of the country’s strictest menu-labeling laws, for two years ran radio and television ads encouraging parents to think twice about serving sugary drinks to their children.”<sup>103</sup> Undoubtedly, all these measures are *designed* to deter purchases of SSBs—and reports already show they’re working (even if the consumption level is still much higher than health officials recommend).<sup>104</sup> Under the plaintiffs’ and their *amici*’s view, all these measures would be barred because they make it harder for the State to pass its budget. Such a result would be absurd.

*Lastly*, the plaintiffs’ SNAP arguments fail for similar reasons. The plaintiffs argue that the City’s tax is “imposed directly on the sale of many beverages that may be purchased with federal food stamps,” decreasing the overall buying power of SNAP recipients, and thereby frustrating the Commonwealth’s efforts to

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<sup>100</sup> Margot Sanger-Katz, *The Decline of ‘Big Soda’*, N.Y. TIMES, Oct. 2, 2015, at <http://nyti.ms/1L8ZEQa>.

<sup>101</sup> *Id.*

<sup>102</sup> *Id.*

<sup>103</sup> *Id.*

<sup>104</sup> *Id.*

“guarantee its compliance with federal standards.”<sup>105</sup> The tax, of course, is *not* “imposed directly” on the sale of beverages. So the premise of the plaintiffs’ argument must rest on the notion that any City law that even “indirectly” increases the costs of SNAP purchases—and thereby “decreases beneficiaries’ ability to purchase covered [items]”—violates the SNAP program.<sup>106</sup> Yet under that logic, any local regulations that indirectly lead to an increase in the cost of SNAP products would be preempted. An updated building code, a health care coverage requirement, a real estate tax increase, an increase in the minimum wage, and many other local governance measures would be preempted because the costs of such measures could be passed on to consumers through higher grocery prices, decreasing the purchasing power of SNAP recipients. Such local governance measures have never been viewed as violating SNAP (or the State’s implementation of the federal program). No court has adopted such a sprawling argument that would hamstring basic public health measures.

## **CONCLUSION**

*Amici* respectfully request that the Court affirm the trial court’s decision.

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<sup>105</sup> Br. of Appellants, at 28, 30-31.

<sup>106</sup> *Id.* at 30.

Respectfully submitted,

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## **CERTIFICATE OF COMPLIANCE**

I certify that this brief complies with Pa. R.A.P. 531(b)(3) because it includes 6,994 words, calculated using the word count feature of Microsoft Word 2011, excluding the parts expected by Pa. R.A.P. 2135(b).

*s/Michael J. Quirk*  
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## ADDENDUM

This addendum describes *amici* nonprofit organizations and their wealth of expertise on public health and governance matters. *Amici* include:

The **American Heart Association** is a voluntary health organization that, since 1924, has been devoted to saving people from heart disease and stroke—the two leading causes of death in the world. AHA teams with millions of volunteers to fund innovative research, fight for stronger public health policies, and provide lifesaving tools and information to prevent and treat these diseases. The Dallas-based association with local offices in all 50 states, as well as in Washington, D.C. and Puerto Rico, is the nation’s oldest and largest voluntary organization dedicated to fighting heart disease and stroke.

The **American Cancer Society Cancer Action Network**—the nonprofit, nonpartisan advocacy affiliate of the American Cancer Society—supports evidence-based policy and legislative solutions designed to eliminate cancer as a major health problem. ACS CAN works to encourage government officials to make fighting cancer a top national priority. ACS CAN gives ordinary people extraordinary power to fight cancer with the training and tools they need to make their voices heard.

The **American Medical Association** is the largest professional association of physicians, residents, and medical students in the United

States. Additionally, through state and specialty medical societies and other physician groups seated in its House of Delegates, substantially all U.S. physicians, residents, and medical students are represented in the AMA's policy making process. The objectives of the AMA are to promote the science and art of medicine and the betterment of public health. AMA members practice in every medical specialty area and in every state, including Pennsylvania. The AMA joins this brief on its own behalf and as a representative of the Litigation Center of the American Medical Association and the State Medical Societies. The Litigation Center is a coalition of the AMA and the medical societies of each state, plus the District of Columbia, whose purpose is to represent the viewpoint of organized medicine in the courts.

**ChangeLab Solutions** is a national nonprofit organization that creates innovative laws and policies to ensure everyday health for all, whether that's providing access to affordable, healthy food and beverages, creating safe opportunities for physical activity, or ensuring the freedom to enjoy smokefree air and clean water. ChangeLabs Solutions addresses all aspects of a just, vital, and thriving community, such as food, housing, child care, schools, transportation, public safety, jobs, and the environment. It creates and helps implement legal and policy solutions designed to increase access to nutritious food while reducing

consumption of unhealthy foods, including SSBs and other foods that include large amounts of added sugars.

The **Food Trust** is a Philadelphia-based nonprofit organization working to ensure that everyone has access to affordable, nutritious food and information to make healthy decisions. Since 2008, The Food Trust has partnered with the Philadelphia Health Department and hundreds of corner store operators to help corner stores stock and sell healthier products like water and 100% fruit juice.

**Healthy Food America** is a national nonprofit organization based in Seattle, Washington, that acts on science to drive change in food policy and industry practice in order to prevent chronic diseases caused by poor nutrition. HFA focuses on reducing added sugar in the American diet. To that end, HFA tracks and translates the latest research for policymakers and advocates, and provides technical assistance to communities pursuing sugar-reduction policies, including sugary-drink taxes and warning labels.

**MomsRising.org** is an on-the-ground and online grassroots organization of more than a million people who are working to increase family economic security, decrease discrimination against women and moms, and build a nation where businesses and families can thrive. MomsRising is working for paid family and medical leave, affordable, high-quality childcare and early learning, and an end to the wage and hiring discrimination that penalizes so many others.

MomsRising also advocates for access to healthy food for all kids, health care for all, earned sick days, and breastfeeding rights so that all children can have a healthy start. Established in 2006, MomsRising and its members are organizing and speaking out to improve public policy and to change the national dialogue on issues that are critically important to America's families.

The **National Alliance for Hispanic Health** (the Alliance) is the nation's foremost science-based source of information and trusted advocate for the best health outcomes for all. The Alliance member network represents thousands of Hispanic health providers across the nation providing services to more than 15 million each year, and national organization members delivering services to over 100 million annually, making a daily difference in the lives of Hispanic families and communities. The Alliance, a nonprofit organization, is dedicated to environments that support the well-being of community residents. As such, the Alliance has filed legal briefs and provided policy support to its members to ensure that local government is able to enact public health policies that foster community well-being, including sugar-sweetened beverage (SSB) taxes and other policies.

The **National Association of Chronic Disease Directors** is a nonprofit public health organization committed to serving the chronic disease directors of each state and U.S. jurisdiction. Founded in 1988, NACDD connects more than 6,000 chronic disease practitioners to advocate for preventive policies

and programs, encourage knowledge sharing, and develop partnerships for health promotion. Since its founding, NACDD has been a national leader in mobilizing efforts to reduce chronic diseases and their associated risk factors through state and community-based prevention strategies.

The **National Association of County and City Health Officials** is a national organization representing the nation's 2,800 local public health departments. Many local health departments are actively engaged in programs aimed at reducing chronic, preventable illnesses. NACCHO supports efforts that protect and improve the health of all people and all communities by promoting national policy, developing resources and programs, seeking health equity, and supporting effective local public health practice and systems. NACCHO supports efforts to address the epidemic of obesity and chronic disease by lowering consumption of sugar-sweetened beverages.

The **National Association of Local Boards of Health** is the national voice for local boards of health. Uniquely positioned to deliver technical expertise in governance, leadership, and board development, NALBOH is committed to strengthen good governance where public health begins—at the local level. For over 20 years, NALBOH has been engaged in establishing this significant voice for local boards of health on matters of national public health policy. In line with its

commitment to public health, NALBOH supports healthy food policies, including reducing the overconsumption of sugar-sweetened drinks.

The **Notah Begay III Foundation** is a national nonprofit organization dedicated to reducing Native American childhood obesity and type-2 diabetes. NB3 Foundation works nationally, investing in evidence-based, community-driven, and culturally-centered programs that promote healthy weight, healthy nutrition, and physical activity. Native American children, in particular, have been disproportionately affected by obesity. In NB3 Foundation's home state of New Mexico, for example, 50% of Native third-graders are either overweight or obese, according to the New Mexico Department of Health. Through grant making, research, evaluation, direct programming, and policy advocacy, NB3 Foundation invests in and works closely with tribes and Native-led organizations across the country that are exploring promising new practices, expanding proven methods, conducting community-based research, and evaluating impact. NB3 Foundation also works with Voices for Healthy Kids, a joint initiative of the American Heart Association and the Robert Wood Johnson Foundation, to help all children grow up at a healthy weight. Included among the strategies is reducing the consumption of SSBs and increasing the consumption of healthy beverages among children ages 0–8.

The **Pennsylvania Medical Society** is a Pennsylvania nonprofit corporation that represents physicians of all specialties. It is the Commonwealth's largest physician organization. PAMED's mission is to be the voice of Pennsylvania's physicians, advancing quality patient care and the ethical practice of medicine, and advocating for the patients they serve. For more than 165 years, PAMED has engaged in efforts to advance public health, public policy, medical science, education, and ethics. PAMED regularly participates as *amicus curiae* in cases raising important health care issues. PAMED policy supports obesity awareness and prevention efforts, as well as healthy living initiatives.

The **Philadelphia County Medical Society** has been representing physicians for more than 168 years as they treat patients, advance science, maintain the standards of the profession, and protect the public health. The Society is a professional membership organization of more than 3,600 physicians who live or work in the City of Philadelphia. The Society has a tradition of activism on behalf of practitioners and patients. The Society has been working to battle obesity and continues to be involved in efforts to increase public awareness of the causes and management of heart disease, diabetes, and obesity.

The **Public Health Law Center** uses the law to improve America's health. A public interest, nonprofit affiliate of the Mitchell Hamline School of Law, Minnesota's largest law school, the Center is home to the nation's largest team of

attorneys and law students helping community leaders reduce tobacco use, improve the nation's diet, and encourage physical activity. The Center has prepared publications on policy options for regulating sugary drinks, worked to remove sugary drinks from hospitals, provided technical assistance and training to communities considering taxation of sugary drinks, analyzed the beverage taxing authority of municipalities in the fifty states, and studied the ineffectiveness of self-regulation of food and beverage advertising. The Center has filed more than forty briefs as *amicus curiae* in the highest courts of the land.