TAMING AMERICA'S SUGAR RUSH: A TRAFFIC-LIGHT LABEL APPROACH

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Excess added sugar negatively impacts health and can lead to a litany of problems, such as diet-related chronic diseases, e.g., diabetes, cancer, heart disease, and obesity, costing Americans millions in rising medical bills each year. Even more, new studies reveal that individuals with these underlying chronic diseases are at a higher risk of complications from COVID-19 and other viruses compared to those who are deemed healthy. And yet added sugars are difficult to avoid because unlike naturally occurring sugars found in fruits, vegetables, and milk, these sweeteners are added during food processing and preparation.

The problem is that while consumers base their first impressions on the nutritional quality of a product by looking at the front of the package, there is no federal regulation or standard for food manufacturers to quickly communicate added sugar risks to consumers on the front of the package. The new Food and Drug Administration's Nutritional Fact Panel regulations require food manufacturers to disclose sugar content only on the back of the food package, leaving the front of the package for catchy brand advertising. The food industry takes advantage of this regulatory gap, using unregulated phrases like "just a tad sweet," "sorta sweet," "lightly sweetened," and "slightly sweet," to peddle their foods as low in sugar when they are actually high in added sugar. Angered by this, consumers are filing lawsuits against food and beverage companies for misleading claims and false advertising. Federal regulators could act upon misleading claims, but instead they remain silent as the food industry profits from the added sugars in nearly 80% of the approximately 600,000 foods in the marketplace.

This Article presents a timely, new labeling solution to address this problem: a mandatory, colorful traffic-light indicator on the front of the package, warning consumers of high nutritional content—i.e., an indicator of high fat, salt, sugar, or added sugar content—similar to one used in the United Kingdom. The new label

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also responds to two additional and pressing trends: (1) the rise in demand for regulating the consumption of sugar-sweetened beverages in the United States, evidenced by a growing number of local taxes and warning labels; and (2) the rise in demand for regulating the consumption of unhealthy foods generally, evidenced by warning labels and plain-packaging approaches in Chile and other countries. This Article uniquely examines mandatory front-of-package labeling in the context of tobacco regulation to gauge food industry response to a traffic-light labeling approach. Using comparative law, this Article presents an accurate and thorough discussion of the legal challenges a new label will encounter in domestic court, arbitral tribunals, e.g., the Bilateral Investment Treaty, Philip Morris v. Australia claim, and multilateral courts, e.g., the World Trade Organization, Australia Tobacco Plain Packaging claim.

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INTRODUCTION: SURROUNDED BY HIDDEN SUGARS

In January 2020, several plaintiffs filed a legal complaint against The Coca-Cola Company alleging that they were misled into believing that Honest Tea beverages labeled as "Just a Tad Sweet" were low in sugar and calories. Of note, the product's Nutrition Facts Panel ("NFP"), located on the back or the side of the food package, describes the bottle as containing 15 grams of added sugar, representing 30% of one's daily value of added sugar. The plaintiffs' claims—consumer protection, misrepresentation, breach of express and implied warranty, fraud, and unjust enrichment—are based on the view that "Just a Tad Sweet" misrepresents the amount of sugar in the food, causing confusion and risk to those

^{1.} Complaint at 2–3, Batchelor v. Coca-Cola Co., No. 7:20-cv-00594 (S.D.N.Y. Jan. 23, 2020), https://www.classaction.org/media/batchelor-v-the-coca-cola-company.pdf.

trying to reduce their sugar intake. The problem is that food manufacturers are only required to list added sugar on the NFP, rather than on the most influential part of the package—the front-of-package ("FOP") label. Federal rules only require that manufacturers place two things on the FOP label: the name of the food and the net quantity. The rest is purely advertising. This lawsuit, and others like it, highlight how the food industry takes advantage of regulatory gaps to mislead consumers about added sugars in their foods.

Over the past decades, global diets have shifted away from traditional foods toward high-sugar foods. In the United States, the average American consumes more packaged foods and more sugary beverages than 50 years ago. And these unhealthy foods have become more abundant, proliferating in supermarket shelves, vending machines, schools, and convenience stores.² Sugar consumption worldwide has tripled over the past 50 years,³ confirmed by data from the 2016 National Health and Nutrition Examination Survey, showing that Americans are eating and drinking too much sugar⁴ (on average 152 pounds annually in 2001).⁵ But total sugars are not the only concern. In 2014, the National Institutes of Health cautioned that excess sugar consumption in America contributes to the obesity epidemic, noting that much "of the sugar we eat isn't found naturally in food but is *added* during processing or preparation."⁶

The U.S. Food and Drug Administration ("FDA"), which regulates 80% of the food and beverage products consumed in this country, distinguishes between: (1) *naturally* occurring sugars found in many nutritious foods and beverages; and (2) *added* sugars or sugar added to foods and beverages for taste, texture, and preservation. Examples of naturally occurring sugars are found in foodssuch as fruit

^{2.} See Shifting the Balance: Getting the Private Sector to Favour Nutritious, Affordable and Accessible Diets, FOOD & AGRIC. ORG. (Apr. 18, 2018), http://www.fao.org/news/story/en/item/1118441/icode/.

^{3.} See John S. Yudkin, Pure, White and Deadly 8–14 (2d ed. 1986) (noting the evolution of the human diet focusing on our shift from proteins and fats toward carbohydrates, starches, and sugars); see also Marion Nestle, What to Eat 320–21 (2006) (noting the huge increase in sugar consumption between 1980 and 2004 during which time the consumption of high-fructose corn syrup doubled); Stephanie Strom, U.S. Cuts Estimate of Sugar Intake, N.Y. Times (Oct. 26, 2012), https://www.nytimes.com/2012/10/27/business/us-cuts-estimate-of-sugar-intake-of-typical-american.html (noting a USDA study reporting per capita sugar consumption at 76.7 pounds/year). See generally Jeff O'Connell, Sugar Nation: The Hidden Truth Behind America's Deadlest Habit and the Simple Way to Beat it (2010) (noting that human diets have focused more on palatability than nutrition).

^{4.} See Shanthy A. Bowman et al., U.S. Dep't of Agric., Dietary Data Brief No. 24, Added Sugars in Adults' Diet: What We Eat in America, NHANES 2015–2016 (2019), https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/DBrief/24_Sources_of_Added_Sugars_in_Adults'_Diet_2015-2016.pdf.

^{5.} See Off. of Comms., U.S. Dept. of Agric., Agriculture Fact Book 2001-2002, at 20 (2001).

^{6.} Nat'l Insts. of Health, *Sweet Stuff: How Sugars and Sweeteners Affect Your Health*, NIH NEWS IN HEALTH 1 (Oct. 2014) (emphasis added), https://newsinhealth.nih.gov/sites/nihNIH/files/2014/October/NIHNiHOct2014.pdf.

^{7.} See Food Labeling: Revision of the Nutritional and Supplement Facts Labels, 81 Fed. Reg. 33,742, 33,799 (May 27, 2016) (to be codified at 21 C.F.R. pt. 101).

and milk (fructose and lactose). The category of added sugars comprises hundreds of ingredient names—from familiar table sugar to unfamiliar treacle and sucrovert—that are added to foods or beverages during processing or preparation. These hundreds of added sugars fall into two groups. Nutritive sweeteners add calories to one's diet; some examples include natural sugars, such as table sugar, brown sugar, honey, and fruit juice, as well as chemically manufactured sugars, such as high-fructose corn syrup. Non-nutritive sweeteners do not have calories and include "high-intensity sweeteners" (also known as "artificial sweeteners"), which are sweeteners many times sweeter than table sugar. Examples include saccharin, aspartame, sucralose, and less known, acesulfame potassium, neotame, and advantame. Added sugars can also include enzymes containing compounds that functionally substitute for added sugar.

Importantly, in contrast to their naturally occurring counterparts, added sugars do not contain fiber to counteract the fructose in the food (leading to weight gain when consuming added sugars). Given their many names, added sugars remain hidden in the ingredient list of most packaged and prepared foods, ranging from sodas, energy drinks, and sports drinks to bread, salad dressing, and tomato sauce. In fact, an estimated 80% of the approximately 600,000 processed food products on the market contain not only naturally occurring sugar but also various forms of added sugars.

- 8. Interactive Nutrition Facts Label, U.S. FOOD & DRUG ADMIN., https://www.accessdata.fda.gov/scripts/interactivenutritionfactslabel/ (last visited Sept. 15, 2020).
- 9. Margot Sanger-Katz, *You'd Be Surprised at How Many Foods Contain Added Sugar*, N.Y. TIMES (May 21, 2016), https://www.nytimes.com/2016/05/22/upshot/it-isnt-easy-to-figure-out-which-foods-contain-sugar.html.
- 10. Additional Information About High-Intensity Sweeteners Permitted for Use in Food in the United States, U.S. Food & DRUG ADMIN., https://www.fda.gov/food/food-additives-petitions/additional-information-about-high-intensity-sweeteners-permitted-use-food-united-states; see also European Food Safety Auth., Protocol for the Scientific Opinion on the Tolerable Upper Intake Level of Dietary Sugars, EFSA J. 6 (July 12, 2018), https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2018.5393 (giving a definition that was first applied in the United States Dietary Guidelines for Americans (USDA/HHS 2000), and then adopted by the Institute of Medicine (2005), the European Food Safety Authority, and European countries (Nordic Council of Ministers)).
- 11. *High-Intensity Sweeteners*, U.S. FOOD & DRUG ADMIN., https://www.fda.gov/food/food-additives-petitions/high-intensity-sweeteners (last updated May 19, 2014).
 - 12. 21 C.F.R. § 101.60(c)(2)(iii) (2020).
 - 13. See YUDKIN, supra note 3, at 13.
- 14. See William Dufty, Sugar Blues 151 (1975); Yudkin, supra note 3, at 13 (explaining that some foods, such as fruits, have natural vitamins and do not present the same health concerns). See generally Robert H. Lustig et al., The Toxic Truth About Sugar, 482 Nature 27 (2012), https://www.nature.com/articles/482027a.pdf.
- 15. Monica Eng, Anti-Sugar Doctor Robert Lustig Talks More About What's Wrong with the American Diet, Chi. Trib. (Jan. 17, 2013), https://www.chicagotribune.com/dining/ct-xpm-2013-01-17-chi-food-policy-robert-lustig-dishes-on-low-carb-obama-toxic-sugar-juice-and-more-20130117-story.html.

Increased sugar consumption, coupled with a decrease in overall caloric needs, has increased the percentage of calories coming from sugars and has made it much more difficult to meet nutrient needs. "The brain is dependent on sugar as its main fuel," and glucose levels are closely linked to brain functions, such as thinking, memory, and learning. While the brain needs glucose, a growing number of independent studies show that excess sugar consumption can damage brain health, impair psychological well-being, and lead to chronic, noncommunicable health diseases like heart disease, cancer, diabetes, and obesity. Obesity, defined as abnormal or excessive fat accumulation, affects roughly 42% of adults in the United States and is a major risk factor for diabetes, cardiovascular diseases, and cancer. Childhood obesity rates, meanwhile, have doubled (in some cases, tripled) in developed countries over the past 30 years. Research confirms that sugar is

16. Scott Edwards, *Sugar and the Brain*, HARV. MED. SCH., https://neuro.hms.harvard.edu/harvard-mahoney-neuroscience-institute/brain-newsletter/and-brain-series/sugar-and-brain (last visited July 15, 2020).

^{17.} *Id.* (noting a 2012 UCLA study linking fructose consumption with cell aging, and a 2009 University of Montreal and Boston College study linking excess glucose consumption to memory and cognitive deficiencies).

^{18.} See generally Quanhe Yang et al., Added Sugar Intake and Cardiovascular Diseases Mortality Among U.S. Adults, 174 JAMA: INTERNAL MED. 516, 516 (2014).

^{19.} See Obesity and Overweight, World Health Org., https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight (last visited Aug. 28, 2020); see also Craig M. Hales et al., Ctrs. for Disease Control & Prevention, NCHS Data Brief No. 360, Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017–2018 (2020).

^{20.} CYNTHIA L. OGDEN ET AL., U.S. DEP'T OF HEALTH AND HUMAN SERVS., DATA BRIEF NO. 82, PREVALENCE OF OBESITY IN THE U.S., 2009–2010, at 1–3 (2012), http://www.cdc.gov/nchs/data/databriefs/db82.pdf (noting that obesity increases the risk of a number of health conditions including hypertension, adverse lipid concentrations, and type 2 diabetes); *Obesity and Overweight, supra* note 19; *Obesity*, WORLD HEALTH ORG., https://www.who.int/topics/obesity/en/ (last visited July 24, 2020) (explaining that a crude measure of obesity is the body mass index ("BMI"), a person's weight (in kilograms) divided by the square of his/her height (in meters), and that a BMI of 30 or more is considered obese while a BMI equal to or more than 25 is considered overweight); *see also U.S. & World Population Clocks*, U.S. Census Bureau, https://www.census.gov/popclock/ (last visited Aug. 1, 2020); *ACS Demographic and Housing Estimates: 2010*, U.S. Census Bureau, https://data.census.gov/cedsci (last visited July 24, 2020) (nearly 80 million minors, 234 million adults).

^{21.} See generally Mercedes de Onis et al., Global Prevalence and Trends of Overweight and Obesity Among Preschool Children, 92 Am. J. CLINICAL NUTRITION 1257 (2010).

addictive, like nicotine or cocaine, by making users dependent,²² and processed foods with added sweeteners and fats demonstrate the greatest addictive potential.²³

With added sugars gaining attention as a public health risk, federal regulators responded in 2016 by passing new regulations to require food manufacturers to disclose added sugar content, but only on the NFP (typically found on the side or the back of a food package). The FDA, through the Food Drug and Cosmetics Act ("FDCA"),²⁴ regulates nutritional labeling on food products. The final rule revising the NFP, which goes into effect in January 2020,²⁵ mandates a line for added sugars (under carbohydrates) and a recommended percentage Daily Value ("%DV") derived from the U.S. Dietary Guidelines for Americans for added sugar intake.²⁶ Before this label change, different types of sugars were lumped into a "total sugars" line on the NFP. For example, many fruit yogurts contain sugars from three sources: (1) lactose from milk; (2) natural sugars from fruit; and (3) added sugars. Before the new labeling rule, these were reported as one figure under total sugars; the new labels distinguish added sugars to help people understand exactly how much they are consuming based on how much they should be eating.²⁷ This

- 22. See Nicole M. Avena et al., Evidence for Sugar Addiction: Behavioral and Neurochemical Effects of Intermittent, Excessive Sugar Intake, 32 Neuroscience & BIOBEHAVIOR REV. 20, 32 (2008) (summarizing strong evidence of sugar dependence in an animal model); see also Carlo Colantuoni et al., Evidence that Intermittent, Excessive Sugar Intake Causes Endogenous Opioid Dependence, 10 OBESITY RES. 478, 486 (2002) (noting "[r]epeated, excessive intake of sugar created a state in which an opioid antagonist caused behavioral and neurochemical signs of opioid withdrawal . . . suggesting that the rats had become sugar-dependent"); Eliza L. Gordon et al., What is the Evidence for "Food Addiction?" A Systematic Review, 10 NUTRIENTS 477, 477 (2018) (providing evidence that suggests processed foods with added sweeteners and fats have the greatest addictive potential): BA Gosnell & AS Levine. Reward Systems and Food Intake: Role of Opioids, 33 INT'L J. OBESITY S54, S54 (2009): Victor Mangabeira et al., Sugar Withdrawal and Differential Reinforcement of Low Rate (DRL) Performance in Rats, 139 PHYSIOLOGY & BEHAV. 468, 468 (2015) ("[C]onfirming the parallel effects of addictive drugs and sugar and suggesting an increase in impulsivity as a consequence of sugar deprivation.").
- 23. See Gordon et al., supra note 22, at 490–91 (noting the addictiveness of processed foods with added sweeteners and fats: eating sugar signals the brain and activates reward pathways, causing a surge of dopamine and serotonin, also causing the prefrontal cortex to release hormones that trigger remembering the experience, and explaining that during the sugar crash, there is a dopamine and serotonin deficit, causing moodiness and depression similar to reactions induced by addictive opioids and nicotine).
 - 24. 21 U.S.C. §§ 301–399i (2018).
- 25. See Industry Resources on the Changes to the Nutrition Facts Panel, U.S. FOOD & DRUG ADMIN., https://www.fda.gov/food/food-labeling-nutrition/industry-resources-changes-nutrition-facts-label (last updated Mar. 26, 2020) (providing compliance dates).
- 26. See Food Labeling: Revision of the Nutrition and Supplemental Facts Labels, 81 Fed. Reg. 33,742, 33,748 (May 27, 2016) (to be codified at 21 C.F.R. pt. 101).
- 27. See id. at 33,744; see also Side-by-Side Comparison, U.S. FOOD & DRUG ADMIN., https://www.fda.gov/media/97999/download (last visited July 19, 2020) (showing new label compared to old label).

new label change has the potential to improve dietary intake and reduce diet-related chronic disease.²⁸

With numerous studies pronouncing added sugar a public health risk, the new NFP regulation fails to communicate this risk to consumers in a quick and easy format. While national and global nutritional indicators were used to develop the guidelines for added sugar disclosure, in the end, the thresholds (high versus low) and presentation requirement (information panel versus front of package) are among the most conservative in the world. The NFP recommends that no more than 10%of daily calories come from added sugar based on a 2,000-calorie diet (this equals 50 grams or 200 calories per day).²⁹ A few other countries aimed for lower daily amount values of 4.5% to 6.5% of total daily calories (25 grams or 100 calories per day for women and 150 for men).³⁰ Despite the voluminous literature showing that consumers base their first impressions on the nutritional quality of a product by looking at the front of the package, the FDA required presentation on the informational panel and not the front of the package.³¹ As will be discussed, some countries use these thresholds for their FOP labeling in addition to NFP labeling.³² In Europe, the principal food regulatory agency, the European Food Safety Authority ("EFSA"), allows each European member country to establish its own dietary guideline for added sugar,³³ but highlights that the European food industry

^{28.} See Inst. of Med., Examination of Front-of-Pack Nutrition Rating Systems and Symbols: Phase 1 Report (2010), https://doi.org/10.17226/12957; see also Standing Comm. on Health, Can. House of Commons, Healthy Weights and Healthy Kids 14 (2007), https://www.ourcommons.ca/Content/Committee/391/HESA/Reports/RP2795145/hesarp07/hesarp07-e.pdf; Lynn Stockley, European Heart Network, Review of 'Front-of-Pack' Nutrition Schemes (2007), https://www.5aldia.org/datos/60/PDF_8_5370.pdf.

^{29.} See Shanthy A. Bowman et al., U.S. Dep't of Agric., Dietary Data Brief No. 18, Added Sugars Intake of Americans: What We Eat in America, NHANES 2013—2014 (2017), https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/DBrief/18_Added_Sugars_Intake_of_Americans_2013-2014.pdf; see also Anne Kavanagh, Sugar's Sick Secrets: How Industry Forces Have Manipulated Science to Downplay the Harm, UCSF MAGAZINE (Dec. 26, 2018), https://www.ucsf.edu/news/2018/12/412916/sugars-sick-secrets-how-industry-forces-have-manipulated-science-downplay-harm (noting that Americans eat substantially more sugar than recommended at about 17 teaspoons a day instead of the recommended 12 teaspoons maximum).

^{30.} See Rachel K. Johnson et al., Dietary Sugars Intake and Cardiovascular Health: A Scientific Statement from the American Heart Association, 120 CIRCULATION 1011, 1016–17 (2009).

^{31.} See, e.g., Melissa G. Bublitz et al., Why Did I Eat That? Perspectives on Food Decision Making and Dietary Restraint, 20 J. Consumer Psychol. 239, 251 (2010); Judith A. Garretson & Scot Burton, Effects of Nutrition Facts Panel Values, Nutrition Claims, and Health Claims on Consumer Attitudes, Perceptions of Disease-Related Risks, and Trust, 19 J. Pub. Pol'y & Marketing 213, 224 (2000); John C. Kozup et al., Making Healthful Food Choices: The Influence of Health Claims and Nutrition Information on Consumers' Evaluations of Packaged Food Products and Restaurant Menu Items, 67 J. Marketing 19, 20–26 (2003).

^{32.} See infra Section III.B.

^{33.} See European Food Safety Auth., Scientific Opinion on Establishing Food-Based Dietary Guidelines, EFSA J. 2 (Mar. 25, 2010), https://efsa.onlinelibrary.wiley.com/doi/abs/10.2903/j.efsa.2010.1460.

uses 90 grams as its daily consumption guideline for labeling total sugar content.³⁴ In 2016, five Nordic countries (Sweden, Norway, Denmark, Finland, and Iceland) asked EFSA to develop a European-wide upper-limit of added sugar intake, and EFSA is due to develop one in late 2020.³⁵ Meanwhile, the United Kingdom opted for the 10% added sugar recommendation as a daily reference value on the nutritional panel (equal to that of the United States). But in addition to communicating this risk on the nutrition panel, it also communicates the added sugar risk on the FOP label using a traffic-light labeling system.³⁶

Food labeling has the potential to provide consumers with clear, actionable information to help them make healthy choices and limit their added sugar consumption. As the lawsuits highlight, one problem is that the added sugar risk is not communicated on the front of the package, which is the place where consumers are most likely to look first. The new regulations ask manufacturers to disclose sugar content on the back of the food package but allow the food industry to advertise on the front of the package. The food industry takes advantage of this regulatory gap by using catchy, unregulated, and impliedly "low sugar" claims, like "just a tad sweet," "sorta sweet," "lightly sweetened," and "slightly sweet," to present their foods as low in sugar when they are actually high in added sugar.

Consumers do their best to communicate dissatisfaction with claims they feel mislead them to buy sugary foods at a time when they are trying to select foods with less sugar.³⁷ In California and New York, consumers have filed suits against various food and beverage companies, bringing federal and state law claims regarding added sugars.³⁸ All the while, litigation challenging industry use of other unregulated, implied low-sugar terms, such as "healthy" and "natural," continues.³⁹

^{34.} See European Food Safety Auth., Scientific Opinion of the Panel on Dietetic Products, Nutrition and Allergies on a Request from the Commission Related to the Review of Labelling Reference Intake Values for Selected Nutritional Elements, EFSA J. 3 (May 4, 2009), http://www.efsa.europa.eu/en/efsajournal/doc/1008.pdf.

^{35.} Sugars Opinion Rescheduled to Assess Wealth of Data, European Food Safety Auth. (July 19, 2019), https://www.efsa.europa.eu/en/press/news/190719; see European Food Safety Auth., Scientific Opinion on Dietary Reference Values for Carbohydrates and Dietary Fibre, EFSA J. 1–2 (Mar. 25, 2010), http://www.efsa.europa.eu/en/efsajournal/pub/1462.htm.

^{36.} See generally Sugar: Food Facts Sheet, BRITISH DIETETIC ASSOC., https://www.bda.uk.com/resource/sugar.html (last visited July 19, 2020).

^{37.} During an International Sweetener Colloquium in February 2020, the message was that *sugar avoidance* was a macro trend "that is here to stay and will only increase." *See* Ron Sterk, *Avoidance of Sugar Remains Macro Trend*, FOOD BUS. NEWS (Feb. 28, 2018), https://www.foodbusinessnews.net/articles/11380-avoidance-of-sugar-remains-macro-trend.

^{38.} Casey v. Odwalla, Inc., 338 F. Supp. 3d 284, 290 (S.D.N.Y. 2018); Ries v. Ariz. Beverages USA LLC, 287 F.R.D. 523, 527 (N.D. Cal. 2012); *see* Complaint, *supra* note 1, at 2–3.

^{39.} The FDA does not provide a definition for "natural" but states that it means "that nothing artificial or synthetic (including all color additives regardless of source) has been included in, or has been added to, a food that would not normally be expected to be in that food." *Use of the Term Natural on Food Labeling*, U.S. FOOD & DRUG ADMIN., https://www.fda.gov/food/food-labeling-nutrition/use-term-natural-food-labeling (last

Dissatisfied consumers also press for legislation to tax sugar-sweetened beverages and to place sugar warnings on billboards. The food industry challenges class-action lawsuits, spends enormous amounts of money repealing local tax legislation, and even litigates against other food companies to preserve their market share⁴⁰ as federal regulators delay regulation of FOP claims.

Consumer litigation and other initiatives are symptomatic of a larger problem: there is no standardized way to communicate added sugar risks to consumers on the front of the food package. Federal regulators allow the food industry to self-regulate the nutrition claims they use on the front of the package. These claims mislead consumers and impact vulnerable populations, such as children—the target of much "unhealthy" food advertising despite industry-sponsored reports that claim a high level of observance to voluntary codes. 41 Given the regulatory gaps, the dietary risks associated with added sugars, and the inability of the industry to police itself, regulation is needed to provide more transparency in food labeling.

This Article develops a new FOP labeling solution—a colorful traffic-light indicator for nutritional information—to replace currently used industry nutritional labeling and to provide more effective risk communication for consumers. This symbol would be mandatory for all food manufacturers and would display negative nutritional content, i.e., red indicator used for high fat, salt, or sugar and added sugar content. The new indicator also responds to two pressing trends: (1) the rise in demand for regulating the consumption of sugar-sweetened beverages in the United States, evidenced by a growing number of local taxes and warning labels; and (2) the rise in demand for regulating the consumption of unhealthy foods generally, evidenced by warning labels and plain-packaging approaches in Chile and other countries.⁴²

This Article makes several contributions. This is the first Article to call for a new, mandatory FOP approach to inform consumers of added sugar content, to make more healthful decisions, and to nudge the food industry to reformulate

updated Oct. 22, 2018). The U.S. Department of Agriculture regulates this term for use on meat and dairy products as: "[a] product containing no artificial ingredient or added color and is only minimally processed . . . in a manner that does not fundamentally alter the product." U.S. DEP'T OF AGRIC., MEAT AND POULTRY LABELING TERMS 3 (2011), https://www.fsis.usda.gov/wps/wcm/connect/e2853601-3edb-45d3-90dc-

1bef17b7f277/Meat_and_Poultry_Labeling_Terms.pdf?MOD=AJPERES. Labeling must include a statement explaining the term natural "such as 'no artificial ingredients; minimally processed." *Id.*

- 40. For example, POM Wonderful sued competitor Minute Maid, for selling a pomegranate juice that had more added sugars than claimed—i.e., POM argued that the competitor's juice product was not purely pomegranate juice and could not advertise it as such. POM Wonderful LLC v. Purely Juice, Inc., No. 07-02633, 2008 WL 4222045, at *4–5, *9 (C.D. Cal. July 17, 2008). Juice samples submitted to independent laboratories detected added sugar, showing that the competitor's 100% juice claim on its label was false. *Id*.
- 41. See generally S. Galbraith-Emami & T. Lobstein, The Impact of Initiatives to Limit the Advertising of Food and Beverage Products to Children: A Systematic Review, 14 OBESITY REVIEWS 960 (2013).
 - 42. See infra Section III.B.

foods.⁴³ This Article examines mandatory FOP labeling in another context (tobacco regulation) to gauge food industry response to a traffic-light labeling approach. And using comparative law, this Article presents an accurate and thorough discussion of foreseeable legal challenges that this solution may encounter from big food companies in domestic courts, arbitral proceedings (using Bilateral Investment Treaty claims as seen in the *Philip Morris v. Australia* arbitral proceedings), and in a multilateral setting (using World Trade Organization claims as seen in *Australia—Tobacco Plain Packaging* complaints). Importantly, this Article supports previous studies (such as those by National Academies of Sciences, Engineering and Medicine, and others) that added sugar content should be placed on the front of the food packages⁴⁴ and extends a list of legal studies in public health advocating for added-sugar labeling and a traffic-light, front-of-package system.

The Article proceeds as follows. Part I describes the legal framework of federal labeling rules aimed at curbing sugar consumption. Part II addresses the demand for more added-sugar regulation through taxes, graphic warnings, and symbols. Part III presents a new, traffic-light labeling solution to correct failed industry attempts to self-regulate through voluntary codes. Part IV presents potential legal challenges in domestic and international courts, and Part V concludes.

I. MANDATORY LABELING FOR SUGAR

Sugar is a sweetener; a crop; a functional ingredient; and an ingredient for baking, texturizing, and preserving. Sugar is also the subject of litigation and international disputes. Given that added sugars contribute to the rise of diet-related chronic disease, countries are trying to limit sugar intake. One argument for additional regulation relates to market failure: diet-related chronic disease is a food industry externality. The food industry does not internalize the cost related to the added sugars that they use. Local efforts to curb sugar consumption only go so far; a uniform federal approach is needed to regulate sugar through labelling. This section discusses the baseline of what manufacturers are required to state on food labels generally and what they are required to state regarding sugar.

A. Basic Requirements for Food Labeling

The FDA regulates most packaged foods sold in the United States and has specific requirements for what elements a package must contain and where those elements must be placed. The two display surfaces on packaged goods are the principal display panel (typically, the FOP label) and the informational panel on the right side of the FOP.⁴⁵ The following items must be displayed on the packaging: the name of the food, often called the "standard of identity;" the net quantity of

^{43.} See generally Deborah A. Cohen, Fighting Obesity: Why Chile Should Continue Placing 'Stop Signs' on Unhealthy Foods, RAND BLog (Mar. 19, 2018), https://www.rand.org/blog/2018/03/fighting-obesity-why-chile-should-continue-placing-stop.html.

^{44.} See Shelley McGuire, Front-of-Package Nutrition Rating Systems and Symbols: Promoting Healthier Choices, 3 ADVANCED NUTRITION 332, 332 (2012) (explaining that the Institute of Medicine Phase II report recommends that "added sugars' should be added to the roster of nutritional components included in any front-of-package nutrition rating systems").

^{45. 21} C.F.R. §§ 101.1(a), 101.2(a) (2020).

contents; the nutrition facts; the ingredient and allergen statement; and the name and address of the manufacturer, packer, or distributor. ⁴⁶ Manufacturers can place all required components on the FOP label, or they can use the informational panel. However, two elements *must* go on the FOP label: the name of the product and the net quantity. ⁴⁷ Any nutrient-content claims must conform to certain rules, e.g., the claims can be *displayed on the FOP*, *informational panel*, *or anywhere else on the package*, in a type size not exceeding two times the size of the font used for the name of the product. ⁴⁸ Apart from these details, the basic requirements for food labeling are few, leaving most of the label for advertising. Because most of the label is advertising, what (if anything) constrains manufacturers from making misleading, false, and deceptive claims?

Statutes exist to prevent food manufacturers from making misleading, false, and deceptive claims. The FDA, the Federal Trade Commission ("FTC"), and the U.S. Department of Agriculture ("USDA") share jurisdiction over and enforce nutrient-content and health claims in food advertising made by food-products manufacturers.49 Congress established this regulatory scheme through complementary statutes. Section 5(a) of the Federal Trade Commission Act ("FTCA") prohibits "unfair or deceptive acts or practices," and in the case of food products, §§ 12 and 15 of the FTCA prohibit "any false advertisement" that is "misleading in a material respect." The FDA's authority is embodied in part in § 403(a) of the FDCA which prohibits "labeling [that] is false or misleading in any particular" manner.⁵² Since 1954, the FTC and the FDA have operated under a memorandum of understanding; it provides for the FTC to assume primary responsibility for regulating food-advertising claims of FDA-regulated products, while the FDA takes primary responsibility for regulating food labeling.⁵³ The FTC often relies on an advertiser's compliance with FDA labeling regulations when it determines whether advertising claims are false or deceptive.⁵⁴ The Nutrition

- 46. *Id.* § 101.2(b).
- 47. *Id.* §§ 101.3(a), 101.7(a).
- 48. Id. § 101.13.
- 49. Enforcement Policy Statement on Food Advertising, FED. TRADE COMM'N (May 13, 1994), https://www.ftc.gov/public-statements/1994/05/enforcement-policy-statement-food-advertising.
 - 50. 15 U.S.C. § 45(a)(1) (2018).
 - 51. *Id.* §§ 52(a), 55(a)(1).
- 52. 21 U.S.C. § 343(a)(1) (2018). USDA's authority is derived from the Federal Meat Inspection Act, 21 U.S.C. § 601(n)(1) (2018) (prohibiting labeling of meat or meat products that is "false or misleading in any particular"), and the Poultry Products Inspection Act, 21 U.S.C. § 453(h)(1) (2018) (prohibiting labeling of poultry products that is "false or misleading in any particular").
- 53. U.S. Food & Drug Admin., MOU 225-71-8003, Memorandum of Understanding Between the Federal Trade Commission and the Food and Drug Administration (1971), https://www.fda.gov/about-fda/domestic-mous/mou-225-71-8003 [hereinafter MOU].
- 54. See Formula for Disaster: FTC Sues Gerber for Falsely Advertising Baby Formula as "FDA Approved," CONSUMER PRODUCTS L. BLOG (Nov. 7, 2014), https://www.consumerproductslawblog.com/2014/11/formula-for-disaster-ftc-sues-gerber-for-falsely-advertising-baby-formula-as-fda-approved/.

Labeling and Education Act of 1990 ("NLEA")⁵⁵ amended § 403 of the FDCA and effected broad changes in the regulation of FDA-approved nutrition claims on food labels. Besides requiring nutrition information on virtually all food products, the NLEA directed the FDA to standardize and limit the terms permitted on labels, and allowed only FDA-approved nutrient-content claims and health claims to appear on food labels.⁵⁶ While the NLEA is designed in part to prevent deceptive and misleading claims on labels, Congress also intended that nutrient-content and health claims educate consumers to assist them in maintaining healthy dietary practices.⁵⁷ The NLEA also mandated that the FDA undertake an effort to educate consumers about the new food label and the importance of diet to health.⁵⁸ As noted earlier, the FDA regulates food labeling, while the FTC regulates food advertising. The FTC has said that it is unlikely the Commission will take action under §§ 5 and 12 of the FTCA regarding nutrient-content and health claims if they comply with the FDA's regulations.⁵⁹

The FDCA regulates the labeling of sugar and added sugar as food ingredients ("articles used for food or drink"⁶⁰) and food additives.⁶¹Approval of food additives requires scientists to determine that the additive meets the safety standard of reasonable certainty of no harm under the intended conditions of its use.⁶² Some additives do not require FDA approval before they can be used in food. The FDCA states that "substances that are generally recognized, among experts qualified by scientific training and experience to evaluate their safety as having been adequately shown . . . to be safe under the conditions of their intended use" are

^{55.} Nutrition Labeling and Education Act of 1990, Pub. L. No. 101-535, 104 Stat. 2353 (codified in part at 21 U.S.C. § 343(i), (q) and (r)).

^{56.} *Id.* The NLEA defines a "nutrient content claim" as any claim that expressly or by implication "characterizes the level of any nutrient." 21 U.S.C. § 343(r)(1)(A) (Supp. 1990). A "health claim" is defined as any claim that characterizes the relationship of any nutrient to a "disease or health related condition." *Id.* § 343(r)(1)(B). *See generally* U.S. FOOD & DRUG ADMIN., GUIDANCE FOR INDUSTRY: A FOOD LABELING GUIDE (2013), https://www.fda.gov/media/81606/download (guide for NLEA application to FDA regulated foods).

^{57. &}quot;Health claims supported by a significant scientific agreement can reinforce the Surgeon General recommendations and help Americans to maintain a balanced and healthful diet. Similarly, statements regarding the level of these nutrients in foods will assist Americans in following the Surgeon General's guidelines." HOUSE COMM. ON ENERGY AND COMMERCE, NUTRITION LABELING AND EDUCATION ACT OF 1990, H.R. Doc. No. 101-538, at 9–10 (2d Sess. 1990).

^{58.} Nutrition Labeling and Education Act of 1990, Pub. L. No. 101-535, § 2(c), 104 Stat. 2353 (codified in part at 21 U.S.C. § 343(i), (q) and (r)).

^{59.} See MOU, supra note 53.

^{60. 21} U.S.C. § 321(f) (2018) (defining "food" as: "(1) Articles used for food or drink for man or other animals, (2) chewing gum and (3) articles used for components of any other such article").

^{61.} *Id.* § 321(s) (defining "food additive" as "any substance the intended use of which results or may reasonably be expected to result—directly or indirectly—in its becoming a component or otherwise affecting the characteristics of any food").

^{62.} See Paulette Gaynor, How U.S. FDA's GRAS Notification Program Works, U.S. FOOD & DRUG ADMIN., at n.1 (Feb. 9, 2018), https://www.fda.gov/food/generally-recognized-safe-gras/how-us-fdas-gras-notification-program-works.

excluded from the food additive definition and are termed "generally recognized as safe" ("GRAS").⁶³ Put simply, substances that are GRAS under conditions of their intended use are not food additives and do not require premarket approval by the FDA. For additives that have not been determined as GRAS, a company can either notify the FDA and ask for approval, or it can make an independent GRAS determination with or without notifying the FDA.⁶⁴

Many of the common added sugars, like table sugar (sucrose) and high-fructose corn syrup (made from glucose and fructose), have GRAS status (for now).⁶⁵ Even other non-nutritive sweeteners, like sucralose (found in Stevia-brand sweetener) have been granted GRAS status with some exceptions.⁶⁶

B. The New Nutrition Facts Panel

The NLEA gives the FDA authority to require nutrition labeling on food packaging.⁶⁷ When the FDA developed the NFP, it initially determined that sugar need not be included. But because the FDA received extensive comments questioning this decision, the final regulations included a total, but not added, sugar disclosure requirement.⁶⁸ During the NLEA proceedings, the FDA established a daily reference value for food components to recommend, e.g., fiber, or limit, e.g., saturated fat, but it did not establish a recommended limit for sugar or added sugar.⁶⁹ This changed in 2016 with the introduction of legislation to update the NFP.

Congress passed legislation to update the NFP in 2016, and compliance with the new regulation began in January 2020.⁷⁰ The updated nutrition labeling regulation requires a declaration of added sugars under total sugars and includes a required daily reference value for added sugar.⁷¹ The FDA based its labeling modification on the 2010 Dietary Guidelines, which state that solid fats and added

- 63. *Id.* (internal quotations omitted).
- 64. *Id*
- 65. See 21 C.F.R. § 184.1854(a) (2009); id. § 184.1866 (High Fructose Corn Syrup FDA GRAS approval); see also Lustig et al., supra note 14; High Fructose Corn Syrup Questions and Answers, U.S. FOOD & DRUG ADMIN., https://www.fda.gov/food/food-additives-petitions/high-fructose-corn-syrup-questions-and-answers (last updated Jan. 4, 2018).
- 66. See High-Intensity Sweeteners, U.S. FOOD & DRUG ADMIN. (May 19, 2014), https://www.fda.gov/food/food-additives-petitions/high-intensity-sweeteners.
 - 67. 21 U.S.C. § 343(q)(2)(A) (2010).
- 68. See Jennifer L. Pomeranz, The Bittersweet Truth About Sugar Labeling Regulations: They Are Achievable and Overdue, 102 Am. J. Pub. HEALTH e14, e14 (2012).
- 69. Food Labeling; Reference Daily Intakes and Daily Reference Values, 58 Fed. Reg. 2,206, 2,217, 2,222–23 (Jan. 6, 1993) (to be codified at 21 C.F.R. pt. 101, 104).
- 70. Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 81 Fed. Reg. 33,742, 33,758 (May 27, 2016) (to be codified at 21 C.F.R pt. 101).
- 71. See U.S. Dep't Health & Human Servs., U.S. Food & Drug Admin., Nutrition and Supplement Facts Labels: Questions and Answers Related to the Compliance Date, Added Sugars, and Declaration of Quantitative Amounts of Vitamins and Minerals: Guidance for Industry 4 (2019), https://www.fda.gov/media/117402/download [hereinafter Nutrition and Supplement].

sugars contribute to excess caloric intake.⁷² The updated NFP was developed to provide "updated nutrition information on the label to assist consumers in maintaining healthy dietary practices."⁷³ A more subtle goal is made in the preamble to the proposed rule: "The mandatory declaration of added sugars may also prompt product reformulation of foods high in added sugars like what was seen when transfat labeling was mandated."⁷⁴ The FDA makes the manufacturer responsible for ensuring the validity of the nutrient values stated on a product's label and for determining how to calculate nutrition values required by the NLEA.⁷⁵ The FDA enforces labeling requirements by random sampling and requires values to be accurate within a preestablished percentage.⁷⁶ In the United States, it is illegal to introduce misbranded food into the marketplace, and the FDA is responsible for enforcing this regulation.⁷⁷

Importantly, for the first time in history, the NFP provides a daily reference value for added sugars. This goes farther than the European Union, which only sets a daily reference amount for sugars. The European Commission published a regulation ("Food Information Regulation") in 2013 on the provision of food information to consumers applicable to all member states in the European Union.⁷⁸ This European nutrition-labeling mandate required that prepacked and non-prepacked foods display certain information starting in 2016, and it included a daily reference amount for sugar (90 grams), but it contained nothing specifically for added sugars.⁷⁹

In the promulgation of the final rule, discussed later, the FDA responded to several industry comments on legal issues. 80 The industry challenged the federal rules as compelled commercial speech, but the government contended that the disclosure of factual information in commercial speech is allowed "as long as the disclosure provides accurate, factual information; is not unjustified or unduly

^{72.} U.S. Dep't of Agric. & U.S. Dep't of Health & Human Servs., Dietary Guidelines for Americans 27 (7th ed. 2010), https://health.gov/our-work/food-nutrition/previous-dietary-guidelines/2010.

^{73.} Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 81 Fed. Reg. 33,742, 33,742 (May 27, 2016) (to be codified at 21 C.F.R. pt. 101).

^{74.} Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 79 Fed. Reg. 11,880, 11,904 (Mar. 3, 2014) (to be codified at 21 C.F.R. pt. 101). Reformulation is defined as "the process of altering a food or beverage product's recipe or composition to improve the product's health profile." C. Scott et al., *Food and Beverage Product Reformulation as a Corporate Political Strategy*, 172 Soc. Sci. & Med. 37, 37 (2017).

^{75.} See NUTRITION AND SUPPLEMENT, supra note 71, at 6–7.

^{76.} U.S. FOOD & DRUG ADMIN., supra note 56, at 31.

^{77. 21} U.S.C. § 331(a) (2018).

^{78.} See Council Directive 90/496, 1990 O.J. (L 276) 40, 42 (EC); see also European Parliament and Council Regulation 1169/2011, 2011 O.J. (L 304) 18 (EU); European Parliament and Council Directive 2000/13, 2000 O.J. (L 109) 29 (EC).

^{79.} See Enforcement of EU Food Labeling Law—Are You Ready?, SGS (Sept. 28, 2016), https://www.sgs.com/en/news/2016/09/enforcement-of-eu-food-labeling-law-are-you-ready.

^{80.} Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 81 Fed. Reg. 33,742, 33,758 (May 27, 2016) (to be codified at 21 C.F.R pt. 101).

burdensome; and 'reasonably relate[s]'⁸¹ to a government interest.''⁸² As justification for the particularities of the rule, the FDA conducted four consumer studies to evaluate consumer responses to added-sugar information, and then, it reopened the comment period after it completed the second set of studies.⁸³ The FDA maintains that its authority in this matter derives from the FDCA in accordance with the Administrative Procedure Act ("APA").⁸⁴

The American Heart Association ("AHA") recommended that Americans lower their added sugar intake in 2009⁸⁵ based on new evidence that emerged since their previous scientific statement given in 2002. In the 2009 scientific statement, the AHA observed that U.S. food labels did not, at the time, distinguish between sugars naturally present in food and added sugars. The current U.S. dietary guidelines recommend fewer than 300 calories a day in a 2,000 calorie diet to come from foods that do not contain many nutrients, such as candies, baked goods, and other treats, in which added sugars are traditionally high. The current of the sugars are traditionally high.

At first, the Consumer Brands Association, formerly known as the Grocery Manufacturers Association, opposed the rule, but eventually it supported the final form. The Sugar Association remains opposed to this regulation and has raised concerns over allegedly scapegoating sugar in the battle against excessive caloric consumption. It also argued that the scientific evidence connecting disease to sugar may be lacking, specifically pointing to evidence that links lifestyle choices to disease rather than sugar; however, these studies commissioned by the Sugar

- 81. Zauderer v. Office of Disciplinary Counsel, 471 U.S. 626, 651 (1985).
- 82. Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 81 Fed. Reg. at 33,758 (May 27, 2016) (to be codified at 21 C.F.R pt. 101).
 - 83. *Id.* at 33,751.
 - 84. *Id.* at 33.770 (referencing § 403 of the FDCA as basis for authority).
 - 85. Johnson et al., *supra* note 30, at 1016.
 - 86. Id. at 1012.
 - 87. See generally BOWMAN ET AL., supra note 29.
- 88. See Dan Charles, An 'Added Sugar' Label Is On the Way for Packaged Food, NPR: The Salt (May 20, 2016), https://www.npr.org/sections/thesalt/2016/05/20/478837157/the-added-sugar-label-iscoming-to-a-packaged-food-near-you.
- 89. See The Sugar Association Statement on FDA's 'Added Sugars' Declaration, CISION PR Newswire (May 20, 2016), https://www.prnewswire.com/news-releases/the-sugar-association-statement-on-fdas-added-sugars-declaration-300272636.html.
- 90. See Suzanne P. Murphy & Rachel K. Johnson, The Scientific Basis of Recent US Guidance on Sugars Intake, 78 Am. J. CLINICAL NUTRITION 827S, 830S–32S (2003).
- 91. See Angela D. Liese et al., The Dietary Patterns Methods Project: Synthesis of Findings Across Cohorts and Relevance to Dietary Guidance, 145 J. NUTRITION 393, 393–94 (2015); Jill Reedy et al., Higher Diet Quality Is Associated with Decreased Risk of All-Cause, Cardiovascular Disease, and Cancer Mortality Among Older Adults, 144 J. NUTRITION 881, 881–82 (2014). See generally NAT'L INSTS. OF HEALTH, U.S. DEP'T OF HEALTH & HUMAN SERVS., LIFESTYLE INTERVENTIONS TO REDUCE CARDIOVASCULAR RISK: SYSTEMATIC EVIDENCE REVIEW FROM THE LIFESTYLE WORK GROUP (2013), https://www.nhlbi.nih.gov/sites/default/files/media/docs/lifestyle.pdf.

Association have been decried as biased. ⁹² Several leading studies and books have shown that the sugar industry has hidden vital information on the dangers associated with sugar from the public. ⁹³ One article reviewed 60 studies between 2001 and 2016 that looked at whether sugary drinks contribute to obesity or diabetes. ⁹⁴ Of the 26 studies that found no link, almost all were funded by the sugar-sweetened beverage industry or conducted by people with financial ties to the industry. ⁹⁵ Of the 34 studies that found a link, just 1 was funded by the beverage industry; the rest were independently funded. ⁹⁶ Not only did the sugar industry fund studies to show that there was no link between negative public health outcomes and sugar, but also the industry tried to shift attention from sugar to fat as a culprit. One study showed that the Sugar Research Foundation, which later became the Sugar Association, "recognized as early as 1954 that if Americans adopted low-fat diets [which it later promoted], then per-capita consumption of sucrose would increase by more than one-third."⁹⁷

The original compliance dates for the NFP were established two to three years after the final rule's effective date; however, the date varied depending on the annual sales that a manufacturer reports. 98 The FDA later postponed the compliance dates for the added-sugar portion of the final rule from July 26, 2018, to January 1, 2020, for manufacturers with \$10 million or more in annual sales. 99 For manufacturers with less than \$10 million in annual sales, the compliance date was moved from July 26, 2019, to January 1, 2021. 100 The compliance dates were extended because of a perceived need to give the industry time to update their labels

^{92.} See Anahad O'Connor, How the Sugar Industry Shifted Blame to Fat, N.Y. TIMES (Sept. 12, 2016), http://www.nytimes.com/2016/09/13/well/eat/how-the-sugar-industry-shifted-blame-to-fat.html; see also Maira Bes-Rastrollo et al., Financial Conflicts of Interest and Reporting Bias Regarding the Association Between Sugar-Sweetened Beverages and Weight Gain: A Systematic Review of Systematic Reviews, 10 PLOS MED. 1, 2 (2013).

^{93.} See generally Michael Moss, Salt Sugar Fat: How the Food Giants Hooked Us (2013).

^{94.} See Dean Schillinger et al., Do Sugar-Sweetened Beverages Cause Obesity and Diabetes? Industry and the Manufacture of Scientific Controversy, 165 Annals Internal Med. 895, 895 (2016), https://annals.org/aim/article-abstract/2578450/do-sugar-sweetened-beverages-cause-obesity-diabetes-industry-manufacture-scientific.

^{95.} Id. at 896.

^{96.} *Id*.

^{97.} Elizabeth Fernandez, Sugar Papers Review Industry Role in Shifting National Heart Disease Focus to Saturated Fat, UCSF (Sept. 12, 2016), https://www.ucsf.edu/news/2016/09/404081/sugar-papers-reveal-industry-role-shifting-national-heart-disease-focus.

^{98.} Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 83 Fed. Reg. 19,619, 19,623 (May 4, 2018) (to be codified at 21 C.F.R pt. 101).

^{99.} FDA Extends Nutritional Facts Label Compliance Dates, U.S. FOOD & DRUG ADMIN. (May 3, 2018), https://www.fda.gov/food/cfsan-constituent-updates/fda-extends-nutrition-facts-label-compliance-dates.

^{100.} Food Labeling: Revision of the Nutrition and Supplement Facts Labels; Technical Amendments, 83 Fed. Reg. 65,493, 65,494 (Dec. 21, 2018) (to be codified at 21 C.F.R pt. 101).

and comply with the final rules.¹⁰¹ The FDA issued guidance for industries to further explain its reasoning and remedy certain questions and concerns.¹⁰² Additionally, the FDA stated that it plans to work with manufacturers for the first six months following the compliance date rather than focus on enforcement.¹⁰³

C. Nutrient-Content Claims, Disclosure Statements, Health Claims

Food manufacturers make claims, like "just a tad sweet" and "sorta sweet," on packages of foods that contain high levels of added sugars. Typically, the FDA uses nutrient-content claims, disclosure statements, and health claims to inform consumers about added sugars and close any avenues companies may seek to mislead consumers. The problem is that currently these regulatory avenues are not functioning.

Nutrient-content claims for sugar were developed to prevent consumers from being deceived when the absence (or minimal amount) of sugars does not indicate "a product which is low in calories or significantly reduced in calories." ¹⁰⁴ These regulations set the boundaries of when "[a] claim about the calorie or sugar content of a food may [only] be made on the label."105 The NLEA defines a "nutrient content claim" as any claim that expressly or impliedly "characterizes the level of any nutrient."106 The NLEA also requires that the FDA define certain absolute and relative terms to characterize the level of nutrient in a food. For instance, "Absolute" terms, such as "low," "high," or "lean," define nutritional quality in one serving of a food. 107 "Relative" or similar terms such as "less," "reduced," or "more," are used to compare nutritional quality in one food compared to nutritional quality in another food. ¹⁰⁸ Only these terms or certain synonyms for these defined terms can be used. ¹⁰⁹ The FDCA stipulates that no such claims may be made unless the FDA has defined the claim in regulations and the food meets the requirements of the regulations.¹¹⁰ The problem is that "just a tad sweet" or "sorta sweet" fall outside of the FDAregulated claims because they are not defined by the FDA. Both the FTC and the FDA regulate nutrient-content claims, but the FTC has previously indicated that where a claim is subject to the joint jurisdiction of the FTC and the FDA, it will accord significant deference to the FDA's standards. 111

^{101.} Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 83 Fed. Reg. at 19,622 (May 4, 2018) (to be codified at 21 C.F.R pt. 101).

^{102.} Industry Resources on the Changes to the Nutrition Facts Label, U.S. FOOD & DRUG ADMIN., https://www.fda.gov/food/food-labeling-nutrition/industry-resources-changes-nutrition-facts-label (last updated Mar. 26, 2020).

^{103.} See id.

^{104. 21} C.F.R. § 101.60(c)(1) (2020).

^{105.} *Id.* § 101.60(a).

^{106. 21} U.S.C. § 343(r)(1)(A) (Supp. 1990).

^{107. 21} C.F.R. § 101.13(b) (2020).

^{108.} *Id.* § 101.13(j).

^{109.} *Id.* § 101.13(b)(4). Interested parties may petition FDA to authorize additional synonyms. *Id.* § 101.69(b)(2).

^{110. 21} U.S.C. § 343(r)(2)(A)(i) (2018).

^{111.} See generally In re Thompson Medical Co., 104 F.T.C. 648 (1984).

If the term "just a tad sweet" is not a nutrient-content claim, then the term could be an implied "low sugar" claim. As defined in the FDA regulations:

An implied nutrient content claim is a claim that: (i) [d]escribes the food or an ingredient therein in a manner that suggests that a nutrient is absent or present in a certain amount (e.g., "high in oat bran"); or (ii) [s]uggests that the food, because of its nutrient content, may be useful in maintaining healthy dietary practices and is made in association with an explicit claim or statement about a nutrient (e.g., "healthy, contains 3 grams (g) of fat"). 112

The problem is that "low sugar" claims are also absent from the regulations. While the FDA has defined some nutrient-content claims for sugar, ¹¹³ the FDA has not defined or authorized the claim for "low sugar." The use of a nondefined claim falls under "misbranding." And so, the use of an implied claim that is not defined also misbrands the product. ¹¹⁴ Representations that characterize the level of a nutrient are specifically limited and can only be made in accordance with an authorizing regulation. ¹¹⁵ Because "low sugar" claims have never been authorized, they are prohibited. ¹¹⁶

A "no added sugar," "without added sugar," or "no sugar added" claim may be used only if no amount of sugar is added or no ingredient that "contains sugars that functionally substitute for added sugars is added (e.g., fruit juice)." ¹¹⁷ Ingredients that contain added sugars, such as jam or jelly, also count as added sugars. ¹¹⁸ In addition, the food cannot have been processed to increase the sugar content, such as by the use of enzymes. ¹¹⁹ Finally, the claim may only be made when "the food that it resembles and for which it substitutes normally contains added sugars." ¹²⁰ If the food does not meet the definition of "low calorie" or "calorie reduced," then the label must "direct[] consumers' attention to the nutrition panel for further information on sugar and calorie content." ¹²¹ Meanwhile, "reduced sugar" claims may be made only if the product meets certain requirements and the label includes specific disclosures. ¹²² Because the products listed in many of the implied "low sugar" claims do not claim to have no sugar, the nutrient-content claim of "sugar free" ¹²³ does not apply.

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112. 21 C.F.R. § 101.13(b)(2) (2020).
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^{113.} *Id.* § 101.60(c).

^{114. 21} U.S.C. § 343(r)(2)(A)(i) (2018).

^{115.} Id

^{116.} Food Labeling: Nutrient Content Claims, 58 Fed. Reg. 2,302, 2,303, 2,335 (Jan. 6, 1993) (to be codified at 21 C.F.R pt. 5, 101).

^{117.} *Id.* at 2,326–27.

^{118.} *Id.* at 2,327.

^{119.} Id.

^{120.} *Id*.

^{121.} *Id*

^{122. &}quot;Reduced sugar" claims must have at least 25% less sugars per serving compared to a standard serving size of the traditional variety. *Id.* at 2,350.

^{123.} See 21 C.F.R. § 101.60(c)(1) (2020) (requiring less than 0.5 gram of sugars per reference amount customarily consumed and per labeled serving).

Disclosure statements and health claims do not play a role in helping consumers understand their sugar intake; but they can in the future. A disclosure statement is a warning that high levels of a nutrient are found in the package. There are products that require warning statements, such as shell eggs, unpasteurized fruit, and vegetable juices. 124 When a food bearing a nutrient-content claim contains a macronutrient at a level that is associated with an increased risk of disease or health problems, the food must bear a disclosure statement: "see nutrition information for content" with the blank identifying the nutrient exceeding the specified level. For example, a disclosure statement may state "see nutrition information for sodium content." There is no disclosure statement for sugar, 125 and the FDA should create one.

A "health claim" is defined as any claim that characterizes the relationship of any nutrient to a "disease or health related condition." ¹²⁶ When the NLEA was drafted in 1990, the FDA established criteria for manufacturers to make health claims; that is, manufacturers could not claim that food was healthy if it contained "disqualifying nutrient levels" of total fat, saturated fat, cholesterol, or sodium above levels required to make a health claim. ¹²⁷ Problematically, sugar was not included in these disqualifying criteria, and the FDA should include added sugar in these standards.

In sum, given that the new NFP includes added sugar with a daily reference amount, health claim regulations and disclosure regulations can be modified to include added sugar as a disqualifying nutrient level to trigger disclosure statements. A "low sugar" claim can be defined to prevent implied "low sugar" claims.

II. DEMAND FOR MORE SUGAR REGULATION

Recent litigation suggests that consumers demand more nutritional labeling on the front of the package beyond the mandatory rules governing the NFP and nutrient-content or health claims. Pressure for a consistent federal approach to nutritional labeling comes from both local U.S. regulators who have experimented with local taxes to curb demand for sugar-sweetened beverages and from foreign governments, e.g., Chile, that have experimented with plain-packaging rules to curb demand for unhealthy foods. Each pressure point will be discussed in turn.

A. Taxes

Local government experimentation with taxes and other initiatives to curb added-sugar consumption has been on the rise and with it so have preemptive responses by states. This notable attention to added-sugar consumption provides momentum for a federal approach to address added sugar. FOP nutritional labeling to alert consumers of added sugars is something that can curb added-sugar consumption. Not only do the tax initiatives represent regulatory interest in pursuing

^{124.} *Id.* § 101.17(g)–(h); *see also* NEAL D. FORTIN, FOOD REGULATION 53–54 (2d ed. 2010) (the warning statement for pasteurized juices is, for example: "WARNING: This product has not been pasteurized and, therefore, may contain harmful bacteria that can cause serious illness in children, the elderly, and persons with weakened immune systems").

^{125. 21} C.F.R. § 101.13(h) (2020).

^{126. 21} U.S.C. § 343(r)(1)(B) (Supp. 1990).

^{127. 21} C.F.R. § 101.14(a)(1), (4) (2020).

more nutritional nudges but also the preemption movement against the local taxes and warning labels indicates that a federal approach is preferred to a local, jurisdiction-by-jurisdiction approach.

A number of U.S. jurisdictions currently tax sugar-sweetened beverages ("SSBs") in some form. These taxes can be divided into two broad categories: (1) state-wide taxes that have existed for decades and are disconnected from efforts to combat obesity; and (2) recent taxes, mainly on the city level, explicitly designed to combat obesity. A few states have long-established taxes on SSBs that are disconnected from the modern movement aimed at combatting obesity. In 1951, West Virginia implemented a \$0.01 per serving tax on soda, stipulating that the proceeds be used to fund medical, dentistry, and nursing schools.¹²⁸ In 1987, Tennessee enacted an excise tax on wholesalers of 1.9% of sales derived from bottled soft drinks, with the proceeds to be used for the state highway fund.¹²⁹ In 1992, Arkansas implemented a sales tax of \$20.60 per gallon (\$0.16 per ounce) on soft drinks, with funds directed toward the state match of federal Medicaid funds.¹³⁰ In 2002, Virginia levied an excise tax on wholesalers and distributors, although the amount is so small as to be insignificant (\$7,200 total tax for sales between \$10 million and \$25 million).¹³¹

Recently, taxes on SSBs directly aimed at reducing obesity have been enacted in nine cities, one state, and one tribal jurisdiction. Between 2015 and 2019, SSB taxes have gone into effect in nine U.S. jurisdictions: (1) Berkeley, California (2015);¹³² (2) Philadelphia, Pennsylvania (2017);¹³³ (3) Boulder, Colorado (2017);¹³⁴ (4) Oakland, California (2017);¹³⁵ (5) Albany, California (2017);¹³⁶ (6) Cook County, Illinois (2017, repealed 2017);¹³⁷ (7) Seattle, Washington (2017);¹³⁸ (8) San Francisco, California (2018);¹³⁹ and (9) Washington, D.C. (2019).¹⁴⁰ These taxes are generally targeted at reducing sugar consumption for reasons of public health and are generally imposed as a fixed amount per fluid ounce of soda sold. These amounts range from \$0.01 per ounce to \$0.02 per ounce, with most cities taxing at \$0.01 per ounce. Of the nine cities, only Washington, D.C., taxes as a percentage of the sale price. The D.C. tax is an 8% sales tax on soft drinks compared to a 6% sales tax on other taxable items. Generally, these taxes only apply to beverages sweetened with "caloric sweeteners," such as sugar or high-fructose corn syrup. Two of the cities (Philadelphia and Washington, D.C.) apply the tax to both

- 128. W. VA. CODE ANN. § 11-19-2(1) (West 2020).
- 129. TENN. CODE ANN. § 67-4-402(b)(1) (West 2020).
- 130. ARK. CODE ANN. §§ 26-57-904(a)(3)(A), 26-57-908 (West 2020).
- 131. See VA. CODE ANN. § 58.1-1702 (West 2020).
- 132. Berkeley, Cal., Ordinance 7,388-N.S. (Dec. 18, 2014).
- 133. PHILA., PA., CODE § 19-4103(1) (2016).
- 134. BOULDER, COLO., MUN. CODE § 3-16-2(a) (2017).
- 135. OAKLAND, CAL., CODE ch. 4.52 (2016).
- 136. ALBANY, CAL., MUN. CODE § 4-13 (2016).
- 137. Cook Cnty, Ill., Ordinance 16-5931 (Nov. 10, 2016) (repealed 2017); see also Cook County Board Overwhelmingly Votes to Repeal Soda Tax, CBS CHICAGO (Oct. 11, 2017), https://chicago.cbslocal.com/2017/10/11/sweetened-beverage-tax-repealed/.
 - 138. Seattle, Wash., Ordinance 125,324 (June 6, 2017).
 - 139. S.F., CAL., Bus. & Tax Regs. Code art. 8, § 553(a) (2016).
 - 140. D.C., CODE § 47-2002(a)(8) (2019).

caloric sweeteners and zero-calorie artificial sweeteners. On the state level, Vermont enacted a 6% sales tax on soft drinks in 2015, and the tax included artificially sweetened beverages in an explicit attempt to improve public health. In 2014, the Navajo Nation's "junk food tax" imposed a sales tax of 2% on all food items of "minimal-to-no nutritional value," including soda.

Other jurisdictions have recently proposed taxes on SSBs or have recently defeated such measures. In 2019, Connecticut's Governor included a \$0.015 per ounce state-wide tax in his budget proposal, ¹⁴³ but it was not included in the final budget. ¹⁴⁴ In a 2017 referendum, Santa Fe, New Mexico, voters rejected a \$0.02 per ounce tax. ¹⁴⁵ In 2018, Rhode Island lawmakers unsuccessfully proposed a tax ranging from \$0.01 to \$0.02 per ounce depending on the sugar content of the drink. ¹⁴⁶ In 2019, Massachusetts lawmakers introduced a \$0.01 per ounce tax proposal. ¹⁴⁷

The beverage industry has successfully mobilized against the soda tax movement by framing soda taxes more broadly as taxes on "groceries" and passing state laws restricting the ability of local governments to implement such taxes. In 2018, after several California cities passed soda taxes, the legislature passed a state-wide measure backed by the American Beverage Association prohibiting the imposition of new local taxes on "groceries" until 2030. ¹⁴⁸ A 2017 Michigan law preempts local governments from taxing "food," including soda. ¹⁴⁹ In 2018, an Arizona law was passed requiring local governments to tax all food items (including soda) equally. ¹⁵⁰ In a 2018 ballot initiative, Washington voters approved a measure

- 141. VT. STAT. ANN. tit. 32, §§ 9701(31), 9741(13) (West 2020).
- 142. Council Res. CN-54-14 § 1005, 22nd Council, 4th Year (Navajo Nation 2014).
- 143. See Christopher Keating, A Soda Tax Could Raise \$163M a Year for Connecticut. Opponents Say It Would Be an Unfair Burden on Businesses and Families, HARTFORD COURANT (Apr. 16, 2019), https://www.courant.com/politics/hc-pol-clb-soda-tax-details-20190416-qgtphdglx5h6jegfbwa2e4rnpm-story.html.
- 144. See Christopher Keating, Gov. Ned Lamont, Lawmakers Announce Deal on Two-Year, \$43 Billion Budget, HARTFORD COURANT (May 30, 2019), https://www.courant.com/politics/hc-pol-state-budget-close-20190530-p47e6cvbqjfx3kjidaqnoo6rki-story.html.
- 145. See T.S. Last, Soda Tax Goes Flat in Santa Fe, Albuquerque J. (May 3, 2017), https://www.abqjournal.com/997373/early-returns-are-against-sugary-drinks-tax.html.
 - 146. S. 2196, 2017–2018 Leg., Reg. Sess. (R.I. 2018).
- 147. See Mike Masciadrelli, Massachusetts Considering Taxing Sugary Drinks to Fight Childhood Obesity, WWLP 22 News (Mar. 30, 2019), https://www.wwlp.com/news/health/massachusetts-considering-taxing-sugary-drinks-to-fight-childhood-obesity/.
- 148. A.B. 1838, 2017–2018 Leg., Reg. Sess. (Cal. 2018); see also Alexei Koseff, California Bans Local Soda Taxes Through 2030 to Avert Industry-Backed Initiative, SACRAMENTO BEE (June 29, 2018), https://tinyurl.com/y2fs93ov.
 - 149. H.B. 4999, 99th Leg., Reg. Sess. (Mich. 2017).
 - 150. H.B. 2484, 53rd Leg., 2d Reg. Sess. (Ariz. 2018).

that prevents local governments from taxing groceries.¹⁵¹ In a defeat to the beverage industry, Oregon voters rejected a similar referendum in 2018.¹⁵²

Given that SSBs are a hotly debated topic across the United States, are SSB taxes effective? Taxes on SSBs appear to correlate with modest decreases in consumption. In the United States, only Berkeley and Philadelphia appear to have been studied. Few of the studies measure the effect of the taxes directly using storelevel purchase data (scanner data). Studies based on consumer surveys appear to be more prevalent, but those studies may be less dependable as they rely only on consumer's beliefs about their consumption preferences and habits. Studies using scanner data seem to predict a smaller effect of the taxes, while studies using survey data predict larger effects.

In Berkeley, studies where scanner data is available show that the taxes have at best a modest effect. One such study, using data from stores both in Berkeley and in untaxed control municipalities surrounding Berkeley, found that SSB sales inside of the taxed area decreased by 9.6%. ¹⁵³ However, the decrease was offset in large part as sales outside of the taxed area increased by 6.9%. ¹⁵⁴ In a recent working paper, also using scanner data, there was conflicting evidence that the tax was effective in decreasing SSB consumption. ¹⁵⁵ Other studies in Berkeley have relied on survey data rather than store-level scanner data. In two such studies, SSB consumption in Berkeley decreased significantly. ¹⁵⁶ Another study based on prices collected from stores before and after the imposition of the Berkeley tax found that 43.1% of the tax was passed on to consumers. ¹⁵⁷

In Philadelphia, studies using both scanner data and survey data show larger decreases in SSB consumption but also indicate that the tax may disproportionately impact low-income communities. In a working paper using scanner-level data, the price of SSBs in the taxed area increased by 34%, while

^{151.} Initiative Measure No. 1634 (Wash. 2018), https://www.sos.wa.gov//_assets/elections/initiatives/finaltext_1513.pdf; Julia Belluz, *Coca-Cola and Pepsi's Deceptive Tactic to Stop Soda Taxes Worked in Washington State*, Vox (Nov. 7, 2018), https://www.vox.com/policy-and-politics/2018/11/7/18069890/washington-initiative-1634-results-soda-grocery-tax.

^{152.} See Dirk VanderHart, Oregon Voters Reject Measure to Ban Grocery Taxes, OR. Pub. Broad. (Nov. 7, 2018), https://www.opb.org/news/article/oregon-measure-103-grocery-tax-results/.

^{153.} Lynn D. Silver et al., Changes in Prices, Sales, Consumer Spending, and Beverage Consumption One Year After a Tax on Sugar-Sweetened Beverages in Berkeley, California, US: A Before-and-After Study, PLOS MED., Apr. 18, 2017, at 1–2.

^{154.} *Id*

^{155.} See Christian Rojas & Emily Yucai Wang, UNIV. MASS.: AMHERST, Do Taxes for Soda and Sugary Drinks Work? Scanner Data Evidence from Berkeley and Washington (2017), http://dx.doi.org/10.2139/ssrn.3041989.

^{156.} Jennifer Falbe et al., Impact of the Berkeley Excise Tax on Sugar-Sweetened Beverage Consumption, 106 Am. J. Pub. Health 1865, 1865 (2016); Matthew Lee et al., Sugar-Sweetened Beverage Consumption 3 Years After the Berkeley, California, Sugar-Sweetened Beverage Tax, 109 Am. J. Pub. Health 637, 637 (2019).

^{157.} See John Cawley & David Frisvold, *The Incidence of Taxes on Sugar-Sweetened Beverages: The Case of Berkeley, California* 22 (Nat'l Bureau of Econ. Rsch, Working Paper No. 21,465, 2016), http://www.nber.org/papers/w21465.

demand decreased by 46%.¹⁵⁸ Outside of the tax studies, demand increased by 24%, but the net decrease was still substantial (22%).¹⁵⁹ Studies based on survey data found that the chance of daily soda consumption decreased by 40%, while the "30 day soda consumption frequency was 38% lower."¹⁶⁰ Another survey found that purchases of SSBs decreased by 8.9 fluid ounces per shopping trip on average but also found that Philadelphia residents increased their purchases of SSBs outside of the city.¹⁶¹ A final study found that stores generally pass the tax to customers fully but also found that the pass-through rates were higher in low-income neighborhoods, independent stores, and stores far from the city limits.¹⁶²

Outside of the United States, several countries have shown success with sugar-SSB taxes. ¹⁶³ A nationwide study in Mexico used household store purchase data before and after a 1 peso per liter tax on SSBs and found that SSB purchases decreased by 8.2% on average over two years. ¹⁶⁴ In Europe, SSB taxes have led food and beverage companies to reformulate or alter the recipe or composition of a food or beverage product to improve their health profiles. ¹⁶⁵ Several different approaches to nutritional labeling have taken hold in Europe amidst critique that industry self-regulation used standards too low compared to World Health Organization ("WHO") nutrient-profiling standards. ¹⁶⁶ In the United Kingdom, an SSB tax and a proposed ban on the sale of energy drinks to children are part of a wider set of policies in the U.K. government's 2018 plan of action to combat childhood obesity." The plan sets out the Government's national ambition to halve childhood obesity by 2030 and reduce the childhood obesity gap between the most to least deprived areas. ¹⁶⁷ One component of this plan, the U.K. SSB tax, went into effect in April

158. Stephan Seiler et al., *The Impact of Soda Taxes: Pass-Through, Tax Avoidance, and Nutritional Effects* 30 (Stanford Univ. Graduate Sch. of Bus., Research Paper No. 19-12, 2020), http://dx.doi.org/10.2139/ssrn.3302335.

^{159.} *Id.* at 30–31.

^{160.} Yichen Zhong et al., *The Short-Term Impacts of the Philadelphia Beverage Tax on Beverage Consumption*, 55 Am. J. Prev. Med. 26, 31 (2018).

^{161.} See John Cawley et al., The Impact of the Philadelphia Beverage Tax on Purchases and Consumption by Adults and Children 3 (Nat'l Bureau of Econ. Rsch., Working Paper No. 25052, 2018), http://www.nber.org/papers/w25052.

^{162.} Id. at 26.

^{163.} See Rachel Arthur et al., Sugar Taxes: The Global Picture, FOOD NAVIGATOR (Dec. 18, 2019), https://www.foodnavigator-latam.com/Article/2019/12/18/Sugar-taxes-The-global-picture-in-2019#.

^{164.} See M. Arantxa Colchero et al., In Mexico, Evidence of Sustained Consumer Response Two Years After Implementing A Sugar-Sweetened Beverage Tax, 36 HEALTH AFFAIRS 564, 567 (2017).

^{165.} See Cherry Law et al., The Impact of UK Soft Drinks Industry Levy on Manufacturers' Domestic Turnover, 37 Econ. & Human Biology, May 2020, at 7.

^{166.} See generally Nutrient Profile Model, WHO REG'L OFFICE FOR EUROPE (2015), http://www.euro.who.int/_data/assets/pdf_file/0005/270716/Nutrient-children_web-new.pdf;_Nutrient Profiling: Report of a WHO/IASO Technical Meeting, WORLD HEALTH ORG. (Oct. 4–6, 2010), http://www.who.int/nutrition/topics/profiling/en/ (discussing general aspects of nutrient profiling).

^{167.} U.K. Dep't of Health & Soc. Care, Banning the Sale of Energy Drinks to Children Impact Assessment 6 (2018), https://assets.publishing.service.gov.uk

2018. Unlike previous SSB taxes which were aimed at decreasing consumption of sugary drinks, "the British tax was designed to encourage soda-makers" to alter the recipes for their products by reducing the sugar that they use, otherwise known as "reformulating" their products. ¹⁶⁸ The tax encourages "reformulations" by charging two separate tax rates based on total sugar content. ¹⁶⁹ The lower rate of \$0.06 per serving applies to drinks with roughly 12–19 grams of sugar per 8-ounce can, and the higher tax rate of \$0.08 per serving applies to drinks with more than 19 grams of sugar per can. ¹⁷⁰

Evidence shows that the graduated levy in the United Kingdom has prompted some of the country's largest soda makers to drastically reduce the sugar in their beverage: for instance, Coca Cola changed their recipe for Fanta, and San Pellegrino sodas in the United Kingdom decreased sugar by 40%.¹⁷¹ In addition to these, other sodas like Irn-Bru, Lucozade, and Ribena cut sugar content to levels falling right beneath the level of the lowest tax.¹⁷² Other companies, like Nichols, which makes the popular soda Vimto, are working on shifting their product development efforts to low or no sugar drinks. ¹⁷³ One 2017 British study "modeled what would happen if the soda industry cut sugars by between" 15% and 30% and found such a change would reduce the number of obese adults in Britain by 144,000, resulting in "19,000 fewer annual cases of diabetes." Also in England, the Department of Health and Social Care invited comments on a proposal for banning the sale of energy drinks to children, citing the effects of sugar and caffeine on children as concerns triggering the proposed ban. ¹⁷⁵

/government/uploads/system/uploads/attachment_data/file/736404/impact-assessment-for-banning-the-sale-of-energy-drinks-to-children.pdf.

^{168.} See Caitlin Dewey, Why the British Soda Tax Might Work Better Than Any of the Soda Taxes That Came Before, WASH. POST (Mar. 21, 2018), https://www.washingtonpost.com/news/wonk/wp/2018/03/21/why-the-british-soda-tax-might-work-better-than-any-of-the-soda-taxes-that-came-before-it/.

^{169.} *Id*.

^{170.} *Id*.

^{171.} *Id*.

^{172.} Id.

^{173.} *Id*.

^{174.} Id

^{175.} Ending the Sale of Energy Drinks to Children, Dep't of Health & Soc. Care (Aug. 30, 2018), https://www.gov.uk/government/consultations/ending-the-sale-of-energy-drinks-to-children. See generally U.K. Dep't of Health & Soc. Care, Consultation on Proposal to End the Sale of Energy Drinks to Children (2018), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/73639 8/consultation-on-ending-the-sale-of-energy-drinks-to-children.pdf (requesting comments on: (i) "what products should be included in any restrictions;" (ii) "what age limit a ban should apply to;" (iii) "whether sales of energy drinks from vending machines should be restricted;" and (iv) "whether there are any changes that would be more appropriate than a ban on sales to children or that could be applied as well as a ban"). Scotland, Wales, and Northern Ireland would not be affected by any actions England takes pursuant to the consultation. Id. at 7.

B. Warning Statements

In 2015, San Francisco enacted an ordinance requiring certain advertisements for SSBs to carry a warning. 176 The requirement applies to print ads, billboards, transit, and stadium advertising. The ads are required to carry a warning reading, "WARNING: Drinking beverages with added sugar(s) contributes to obesity, diabetes, and tooth decay" that occupies at least 20% of the advertisement space. Studies show that SSB health warning labels improve parent's understanding of the detrimental effects related to overconsumption of these beverages and lead them to purchase fewer of these beverages for their children 177 Meanwhile, the American Beverage Association challenged the ordinance on the grounds that it placed an undue burden on their speech. After losing in district court, the Beverage Association won a preliminary injunction in the Ninth Circuit. 178

In commercial context, laws compelling disclosures are permitted when the disclosure is: (1) purely factual; (2) noncontroversial; and (3) not unjustified or unduly burdensome. The court held that the requirement that the warning occupy at least 20% of the ad was unjustified because a study presented by the City's expert found that a warning occupying only 10% of the image could be effective. As the goals of the ordinance could possibly be obtained with a smaller warning, requiring that the warning occupy 20% of the ad was unjustifiable. Upon determining that the requirement failed one prong of the *NIFLA* test, the court stopped its analysis without determining whether the warning label was factual and uncontroversial. However, concurring opinions indicated that the warning may have had difficulty clearing those prongs because the ordinance refers to "diabetes" broadly, and sugar consumption has only been linked to type-2 diabetes, not type-1 diabetes.

Though the San Francisco ordinance failed, legislators within California are proposing other bills to enact SSB warnings on packaging. California S.B. 347 is a proposed bill that would require the placement of warning labels directly on SSB containers. ¹⁸⁴ The bill has passed the California Senate in 2019 but faces industry opposition in the State Assembly, causing its sponsor to hold the bill in the Assembly until 2020. ¹⁸⁵ S.B. 347's warning requirements appear to address some of

^{176.} S.F., Cal., Ordinance 100-15 (June 1, 2015) (requiring health warnings on advertisements for certain sugar-sweetened beverages).

^{177.} See, e.g., Christina A. Roberto et al., The Influence of Sugar-Sweetened Beverage Health Warning Labels on Parents' Choices, PEDIATRICS, Feb. 2016, at 1.

^{178.} Am. Beverage Ass'n v. City & County of San Francisco, 916 F.3d 749, 757–58 (9th Cir. 2019).

^{179.} *Id.* at 756 (citing Nat'l Inst. of Family & Life Advocs. v. Becerra, 138 S. Ct. 2361, 2372 (2018)).

^{180.} *Id.* at 756–57.

^{181.} Id.

^{182.} Id

^{183.} *Id.* at 765–66 (Christen, J., concurring in part).

^{184.} S.B. 347, 2019–2020 Leg., Reg. Sess. (Cal. 2019), https://openstates.org/ca/bills/20192020/SB347/.

^{185.} See Patrick McGreevy, How Big Soda Used Its Clout to Stop 5 of 5 California Laws to Regulate Sugary Drinks, L.A. TIMES (July 3, 2019), https://www.latimes.com/politics/la-pol-ca-soda-industry-quashes-bills-20190703-story.html.

the weaknesses in San Francisco's ordinance. The bill would require warnings on beverage containers reading: "STATE OF CALIFORNIA SAFETY WARNING: Drinking beverages with added sugar(s) *may* contribute to obesity, *type 2 diabetes*, and tooth decay." The limitation of the warning to type-2 diabetes, as well as the change from "contributes to" to "may contribute to" makes S.B. 347 less likely to be determined to be nonfactual or controversial, although those issues were not reached by the Ninth Circuit in the *San Francisco* decision.

It is unclear whether the warning would be considered unjustifiable or unduly burdensome. The bill sets the requirements on the size of the text in the warning (1 millimeter for containers 8 ounces and smaller, 2 millimeters for containers between 8 ounces and 1 liter, 3 millimeters for containers 1 liter and larger). The relative proportion of the label occupied by the warning could vary depending on the exact size of the manufacturer's packages and labels. Unlike the San Francisco ordinance, S.B. 347 would require a yellow triangle warning symbol, the same height as the aggregate height of the text comprising the warning. The addition of the yellow warning symbol presents a new variable and thus introduces further uncertainty into the constitutionality of S.B. 347.

California is not the only state to meet resistance to SSB warning bills; legislators in other states have proposed unsuccessful SSB warning bills. SSB labeling bills have been introduced in Hawaii (S.B. 307, 2017), ¹⁸⁹ New York (S.B. 06435, 2016), ¹⁹⁰ and Washington (H.B. 2798, 2016). ¹⁹¹But none of these measures advanced past the early stages of the legislative process. All three of the bills required warning language that was substantially similar or identical to the language required by the San Francisco ordinance and thus might have encountered difficulty clearing the purely factual and noncontroversial requirements had they become law. None required a special warning symbol as CA S.B. 347 does. Only Hawaii's bill specified the size requirements for the warning which were substantially similar to S.B. 347. ¹⁹² New York and Washington merely required that the warning be prominent, conspicuous, and legible. ¹⁹³

C. Graphic Warnings and Symbols

Taxes and labeling are two tools that governments have at their disposal to curb consumer demand of products that hinder public health. Across the globe, another labeling measure, "plain-packaging," has gained popularity to curb the use of another unhealthy product, tobacco. Plain-packaging rules (sometimes called "plain-wrappers" rules), require generic or standardized packaging for a consumer product, whereby all branding (including colors, logos, imagery, and trademarks) is

^{186.} Cal. S.B. 347.

^{187.} *Id*.

^{188.} *Id*.

^{189.} S.B. 307, 29th Leg. (Hi. 2017), https://www.capitol.hawaii.gov/session2017/bills/SB307_.HTM.

^{190.} S.B. 6435, 2015–2016 Leg., Reg. Sess. (N.Y. 2016), https://legiscan.com/NY/text/S06435/2015.

^{191.} H.B. 2798, 64th Leg., 2016 Reg. Sess. (Wash. 2016).

^{192.} Compare S.B. 307, 29th Leg., 2017 Reg. Sess. (Hi. 2017), with Cal. S.B. 347.

^{193.} See N.Y. S.B. 6435; Wash. H.B. 2798.

removed from the FOP label, and manufacturers are permitted to print only the brand name on the pack in a standardized size, font, and color. Sometimes "plain-packaging" rules take the form of graphic warning labels ("GWLs"). Because of their success in curbing the use of tobacco, plain-packaging rules are being considered in curbing sugar consumption. This section traces the development of plain-packaging rules and their deployment in other regulatory contexts.

Countries adopt these rules by relying on academic studies that point to the effects of plain-packaging advertising on consumption.¹⁹⁴ For example, two recent studies in Canada support the case for plain-packaging and graphic-health warnings on alcoholic beverages.¹⁹⁵ One study by the University of Halifax claims that warning labels and plain packaging on alcohol bottles work in dampening consumer interest.¹⁹⁶ The 440 study participants were asked to rate a variety of spirit, wine, and beer bottles with warning labels covering either 50%, 75%, or 90% of the label surface, along with other plain-packaging labels in terms of visual assessment of the products.¹⁹⁷ Results found that lowest ratings were given to products with larger warning labels and those with plain packaging did the best job at focusing participants' attention on the health warning itself. ¹⁹⁸ A second study by Health Canada found that graphic health warnings on alcoholic beverages were the most effective warning labels.¹⁹⁹ This study argued that the prevailing approach of using low-risk drinking guidelines is not enough and that graphic warnings are necessary to address the low level of awareness off the link between alcohol and health.²⁰⁰

Australia made headlines in 2012 when it became the first country in the world to mandate plain packaging for cigarettes.²⁰¹ For several years, Australia remained the only country that had legislated a plain-packaging rule. Recently, more countries are implementing or considering plain-packaging laws on tobacco

^{194.} See, e.g., T. Bollard et al., Effects of Plain Packaging, Warning Labels, and Taxes on Young People's Predicted Sugar-Sweetened Beverage Preferences: An Experimental Study, 13 INT'L J. BEHAV. NUTRITION & PHYS. ACTIVITY, 2016, at 1, 5 https://ijbnpa.biomedcentral.com/track/pdf/10.1186/s12966-016-0421-7.

^{195.} See generally Toward Front-of-Package Nutrition Labels for Canadians, HEALTH CANADA (Nov. 16, 2016), https://www.canada.ca/en/health-canada/programs/front-of-package-nutrition-labelling/consultation-document.html.

^{196.} See generally Mohammed Al-Hamdani & Steven M. Smith, Alcohol Warning Label Perceptions: Do Warning Sizes and Plain Packaging Matter?, 78 J. STUD. ON ALCOHOL & DRUGS 79 (2017).

^{197.} Id. at 82.

^{198.} Id. at 86

^{199.} See generally Toward Front-of-Package Nutrition Labels for Canadians, supra note 195.

^{200.} See generally id.

^{201.} Tobacco Plain Packaging Act 2011 (Cth) s 3 (Austl.); WTO Reaffirms Australia's Tobacco Plain Packaging Measure, U.K. DEP'T OF HEALTH (June 10, 2020), https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/wto-reaffirms-australias-tobacco-plain-packaging-measure ("We were the first country in the world to introduce plain packaging, in 2012.").

products, including France, United Kingdom, New Zealand, Norway, Ireland, Hungary, Canada, Turkey, Singapore, South Africa, and others.²⁰²

In the mid-to-late 2000s, many countries pushed tobacco-labeling legislation forward in an effort to prevent public-health problems related to tobacco. In 2001, Canada became the first country to require GWLs on cigarette packages that cover 50% of the front and 50% of the back, with one side in English and one side in French.²⁰³ Canada also required labeling for various additives and emissions in cigarettes, later banning the words "light" and "mild" from packages. 204 In 2012, Canada implemented stricter rules covering 75% of the front and back of the package. ²⁰⁵ Canada's latest regulations, effective as of November 2019, require only plainly packaged cigarettes with warnings.²⁰⁶ Cigarette companies were given a 90day grace period to comply, after which only plainly packaged cigarettes could be sold.²⁰⁷ Canada has considered labeling individual cigarettes.²⁰⁸ Mexico, meanwhile, began implementing GWLs in 2010, introducing additional health warnings over the following two years.²⁰⁹ The warnings must cover 30% of the front and 100% of the back of each package.²¹⁰ Although the discussion regarding plain packaging has largely been limited to tobacco products, plain packaging is unlikely to remain a "tobacco-only" problem.211

^{202.} See Int'l Trademark Assoc., INTA Legislation & Regulation Latin America & Caribbean Subcommittee Report on Plain Packaging in Latin America, (2016), https://www.inta.org/wp-content/uploads/public-files/advocacy/committee-reports/Plain-Packaging-in-LATAM-Report-September-2016.pdf [hereinafter Report on Plain Packaging in Latin America]; see also Legislation & Regulation, Tobacco Labeling Res. Centre, https://tobaccolabels.ca/healthwarningsinfo/legislation.

^{203.} Tobacco Products Information Regulations, SOR/2000-272 (Can.); Canada, TOBACCO LABELLING RES. CENTRE, https://tobaccolabels.ca/countries/canada/.

^{204.} Canada, supra note 203.

^{205.} Tobacco Products Labeling Regulations (Cigarettes and Little Cigars), SOR/2011-177 (Can.).

^{206.} See Tobacco Products Regulations (Plain and Standardized Appearance), SOR/2019-107 (Can.).

^{207.} *Id.*; see also Adina Bresge, *Plain Cigarette Packs to Hit Shelves as 'Best in the World' Regulations Kick In*, CTV NEWS (Nov. 9, 2019), https://beta.ctvnews.ca/national/business/2019/10/28/1_4658226.html.

^{208.} See Barbara Shoot, Canada is Considering Cancer Warning Labels Printed on Individual Cigarettes, FORTUNE (Oct. 31, 2018), https://fortune.com/2018/10/31/canadacigarettes-cancer-tobacco-warning-labeling/.

^{209.} See Unofficial Translation, Mexico Tobacco Health Warnings Agreement Amendment for September 2011, https://tobaccolabels.s3.ca-central-1.amazonaws.com/uploads/2016/06/Mexico-2011-Tobacco-Health-Warnings-Agreement-Amendment-for-Sept-2011-English.pdf (last visited Aug. 5, 2020); Unofficial Translation, Mexico Tobacco Health Warnings Agreement for 2013, https://tobaccolabels.s3.ca-central-1.amazonaws.com/uploads/2016/06/Mexico-2013-Clarification-of-Tobacco-Health-Warnings-Agreement-for-March-2013-English.pdf (last visited Aug. 5, 2020).

^{210.} *Mexico Americas Region*, CAMPAIGN FOR TOBACCO-FREE KIDS (March 2020), https://www.tobaccofreekids.org/assets/global/pdfs/en/WL_country_Mexico_en.pdf.

^{211.} $See\ generally\ Report\ on\ Plain\ Packaging\ in\ Latin\ America,\ supra\ note\ 202.$

In many countries, the public health community is calling for similar measures for other consumer products, including alcohol, sugary foods and drinks, and pharmaceuticals. Chile is at the forefront for plain-packaging rules as they apply to foods. Chile is one example of a country which has adopted perhaps the widest range of policies in an effort to curb obesity.²¹² Up "[u]ntil the late 1980s, malnutrition was widespread among poor Chileans, especially children," but increased trade and food choice contributed to a rise in obesity, and with it, a series of food marketing regulations. ²¹³ In the present day, "three-quarters of adults are overweight or obese,", and childhood obesity rates are among the world's highest, with more than "half of 6-year-old children overweight or obese." ²¹⁴ Because of rising obesity rates across all age groups, Chile launched graphic health warnings for tobacco in 2006²¹⁵ followed by warnings for foods high in sugar, salt, and fat in 2016.²¹⁶ Figure 1 offers one example of the warning label placed on the front of packaged foods, which denotes "alto en," or in English, "high in sodium," "high in saturated fat," "high in sugar," and "high in calories." Among the many recent food marketing regulations in Chile, one regulation bans the use of animated characters on foods marketed to children. Mars Incorporated has been asked to remove the dancing candies from its M&Ms packaging; Kellogg Inc. has been asked to remove iconic cartoon characters such as Tony the Tiger from Frosted Flakes cereal;²¹⁷ and Nestle has been asked to remove the Nesquick bunny from boxes of Nestlé's Nesquik chocolate powder. Only PepsiCo, the maker of Cheetos, and Kellogg, Inc., the producer of Frosted Flakes, have filed pending cases in domestic Chilean courts, arguing that the regulations infringe on their intellectual property rights.²¹⁸ Meanwhile, there is already evidence that these measures may be changing behaviors. Nearly 40% of Chilean citizens say they use the symbols to help them decide what to buy, and many manufacturers have voluntarily begun to reformulate processed foods to have less sugar, salt, and fat. 219

There is evidence that other countries are considering the Chilean-type warnings. In one Canadian study, participants purchased food and snacks in scenarios involving different levels of sugar taxes and different types of FOP labels. The study included the stop sign labels that Health Canada proposed to warn consumers about high levels of sugar, salt, and saturated fat in prepackaged foods. ²²⁰ The study results indicate that increasing the price with a tax, and advertising

^{212.} See Cohen, supra note 43.

^{213.} Andrew Jacobs, *In Sweeping War on Obesity, Chile Slays Tony the Tiger*, N.Y. TIMES (Feb 7, 2018), https://www.nytimes.com/2018/02/07/health/obesity-chile-sugar-regulations.html; *see also* Cohen, *supra* note 43.

^{214.} Jacobs, supra note 213.

^{215.} See Chile, TOBACCO LABELLING RES. CTR., https://tobaccolabels.ca/countries/chile/ (last visited Aug. 28, 2020).

^{216.} Marcela Reyes et al., *Development of the Chilean Front-of-Package Food Warning Label*, 19(1) BMC PUB. HEALTH 906, 907 (2019).

^{217.} Jacobs, supra note 213.

^{218.} *Id*

^{219.} See Cohen, supra note 43.

^{220.} New Research Suggests Sugar Taxes and Labeling are Effective, MEDICAL XPRESS (May 29, 2019), https://medicalxpress.com/news/2019-05-sugar-taxes-effective.html.

packages with labels showing "high in sugar" lead people to buy snacks and drinks with less sugar, sodium, saturated fat and calories.²²¹ This type of "high in" labeling was implemented in Chile and is being considered in Canada.²²²

The plain-packaging landscape in Latin America has changed since Chile began incorporating food products under plain-packaging rules in 2016. Plain-packaging proposals first appeared in Central and South America in 2008 and continued to appear periodically over the next several years, mostly in private-member bills concerning tobacco in Argentina, Mexico, and Brazil.²²³ These initial proposals did not receive much attention given the region's focus on other regulatory measures, including advertising bans, health warnings, and tax increases. But political developments in the region, coupled with the approval of plain-packaging laws in several European countries and recent court decisions in the United Kingdom, have contributed to a rapid increase in plain-packaging proposals for tobacco in Latin America. Fourteen different plain-packaging proposals have been adopted by Argentina, Brazil, Chile, Ecuador, Mexico, and Panamá.²²⁴

III. A NEW TRAFFIC-LIGHT NUTRITION LABEL SOLUTION

As the spread of diet-related chronic disease encircles the globe, countries are reaching for public-health tools that have worked in the past, e.g., plain-package labeling used to address tobacco use. Given that individuals with underlying dietrelated chronic diseases are at a higher risk of complications from COVID-19 and other viruses compared to those who are deemed healthy, ²²⁵ these approaches to regulate sugar will likely grow in popularity.

Meanwhile, consumer outrage with deceptive and misleading industry advertising—food labels implying that the food is "low in sugar" when the added sugars on the nutritional fact panel reveal quite the opposite—will only continue to escalate. With misleading claims on the rise, a lack of federal government regulation for these claims, and a food industry that is profiting from this inattention, it is time for a consistent federal approach to label added sugar on the front of the package.

Studies show, and experiences suggest, that a simple, color-coded system for labeling packaged foods would increases consumers' attention to the nutritional value of their food choices. While the NFP can be used to curb diet-related chronic disease, there is empirical evidence that FOP labels are seen more often and earlier than the currently mandated NFP and that this benefit is due to its placement on the

^{221.} *Id*.

^{222.} Id.

 $^{223. \}hspace{1.5cm} \textit{See generally} \hspace{1.5cm} \textit{Report on Plain Packaging in Latin America, } \textit{supra} \hspace{1.5cm} \textit{note} \hspace{1.5cm} 202.$

^{224.} Id

^{225.} See Rob Leclerc, Americans Need Better Access to Healthy Food to Lower Risk of Covid-19 Complications, AGFUNDERNEWS (May 7, 2020), https://agfundernews.com/80-of-americans-more-at-risk-of-covid-19-complications-need-access-to-food-that-can-improve-their-metabolic-health.html.

^{226.} See generally Mark W. Becker et al., Front of Pack Labels Enhance Attention to Nutrition Information in Novel and Commercial Brands, 56 FOOD POLICY 76 (2015).

FOP and the design characteristics of the FOP label.²²⁷ Studies also show that labels can not only inform consumers but also reformulate products.²²⁸

A. Correcting Failed Industry Self-Regulation

Nutritional labeling in the United States is a mix of mandatory labeling and industry voluntary measures. As discussed above, the FDA regulates most packaged foods sold in the United States and requires six elements on a food package: name of food; net quantity of contents; nutrition facts; ingredient and allergen statement; and the name and address of the manufacturer, packer, or distributor. ²²⁹ From this list, manufacturers are only required to display the name of the product and net quantity on the FOP label. Sugar content is not displayed on the front but on the side of the package on the ingredient list and the NFP. Manufacturers may display preapproved nutrient-content claims on the FOP label so long as they conform to the FDA requirements. Claims that do not conform to the FDA requirements will trigger enforcement actions either by the FDA for misbranding problems or the FDC for deceptive-labeling practices.

With the front of the package left to industry discretion and advertising, it was only a matter of time before unregulated nutrition claims began to appear on the front of packages. Claims emerged that were company-specific, e.g., Walmart's "Great for You,"230 PepsiCo's "Smart Choices Made Easy," and Kraft's "Sensible Solution"; meanwhile, other claims emerged when companies dropped their individual claims and opted for an industry-wide nutrition claim, like the 2009 "Smart Choices" checkmark.²³¹ One problem with these claims, exemplified in the "Smart Choices" label, is that the food industry develops them to maximize profits, not to signify nutritional quality. Controversy erupted when Lucky Charms Cereal was approved to carry a "Smart Choices" icon, despite its 12 grams (48 calories) of added sugar per serving. This is the same as over 40% of the serving's total calories, and it is a larger proportion than most popular cookie brands use.²³² The controversy

^{227.} Id.

^{228.} S. STORCKSDIECK GENANNT BONSMANN ET AL., EUROPEAN COMM'N., FRONT-OF-PACK NUTRITION LABELLING SCHEMES: A COMPREHENSIVE REVIEW 158 (2020).

^{229. 21} C.F.R. §§ 101.1–9 (2020).

^{230.} See Great For You, WALMART, https://corporate.walmart.com/global-responsibility/hunger-nutrition/great-for-you.

^{231.} See Marion Nestle, Backlash Against "Smart Choices," ATLANTIC (Sept. 24, 2009), https://www.theatlantic.com/health/archive/2009/09/backlash-against-smart-choices /27058/; see also William Neuman, For Your Health, Froot Loops, N.Y. TIMES (Sept. 4, 2009), https://www.nytimes.com/2009/09/05/business/05smart.html (participants included Kellogg's, Kraft, ConAgra, Unilever, General Mills, PepsiCo and Tyson, each paying up to \$100,000/yr. to the program).

^{232.} See Neuman, supra note 231 ("Froot Loops . . . meets the standards set by the Smart Choices Program for fiber and Vitamins A and C, and because it does not exceed limits on fat, sodium, and sugar. It contains the maximum amount of sugar allowed under the program for cereals, 12 grams per serving, which . . . is 41 percent of the product, measured by weight."); see also Mary MacVean, 'Smart Choice' Food Label: A Sign of Nutrition or Marketing?, L.A. TIMES (Sept. 29, 2009), https://www.latimes.com/archives/la-xpm-2009-sep-29-sci-smart29-story.html.

led the FDA to declare that it would create its own FOP nutrition program, but it never did.

Instead, the Centers for Disease Control and Prevention ("CDC") and the FDA sponsored a study by the Institute of Medicine ("IOM"), a program in the National Academies of Sciences, Engineering, and Medicine, to first review the FOP nutrition-rating systems and symbols and to then consider the potential benefits of a single, standardized FOP food-guidance system regulated by the FDA. ²³³ The IOM launched the first phase; however, before it published the results, two leading food industry groups, the Grocery Manufacturers of America ("GMA"), now the Consumer Brands Association, and the Food Marketing Institute ("FMI") developed an FOP voluntary system to preempt the second phase of the study.

In 2010, the "Smart Choices" label was replaced by a new, "Facts-Up-Front" labeling system developed and overseen by the FMI and the GMA with FDA approval.²³⁴ The "Facts-Up-Front" program calls for an FOP display with icons that show four basic nutrients—calories, saturated fat, sodium, and sugars—as a consistent set, and where space is limited, only one icon (calories) may be displayed. In addition to displaying the basic four nutrients, manufacturers may display as many as two "nutrients" from a list of eight: potassium; fiber; vitamin A; vitamin C; vitamin D; calcium; iron; and protein. ²³⁵

The "Facts-Up-Front" program emerged in direct response to an IOM report recommending front labels emphasize nutrients that consumers should limit because of their contribution to diet-related chronic diseases. ²³⁶ However, this industry-developed nutrition labeling program has been criticized for being membership-driven and for allowing manufacturers to select the nutrients they wish to highlight. ²³⁷ Because manufacturers decide how many icons to display (the basic four, the basic four plus two additional nutrients, or one single icon), consumers can be misled by the varying number of nutritional icons displayed on packages. ²³⁸ The FDA, meanwhile, has offered only slight criticism of the program, communicating to the GMA and the FMI that the "Facts-Up-Front" basic icons are nutrient-content claims and are subject to the requirements of the FDCA and the FDA's regulations. Federal regulators expressed concern that some manufacturers would display some but not all of the four basic icons and communicated to the GMA and FMI that the FDA intends to exercise enforcement discretion to ensure that food manufacturers

^{233.} Nestle, supra note 231.

^{234.} About Facts Up Front, FACTS UP FRONT, http://www.factsupfront.org/AboutTheIcons.html (last visited Sept. 10, 2020).

^{235.} Frequently Asked Questions, FACTS UP FRONT, http://www.factsupfront.org/enadmin/FileUploads/Files/67652355-8f36-4db8-b06f-757b9b034023.pdf (last visited Sept. 10, 2020).

^{236.} See Neuman, supra note 231 (notably, the Institute's report discouraged including positive nutrients on the label because they might confuse consumers and encourage manufacturers to fortify foods unnecessarily with vitamins or other ingredients).

^{237.} Id

^{238.} See Christina A. Roberto et al., Facts Up Front Versus Traffic Light Food Labels: A Randomized Controlled Trial, 43 Am. J. Preventive Med. 134, 135 (2012).

were consistently applying the four basic icons on virtually all eligible products. ²³⁹ Despite these concerns, the FDA has not enforced the display of all four basic icons, and the result is that foods in the marketplace display varying numbers of icons. Food manufacturers have been picking and choosing which icons to display (for example, soda manufacturers are told they only need to display calories), and companies can choose what to include or not include on the label, depending on packaging space.²⁴⁰

Several studies point to weaknesses in the "Facts-Up-Front" labeling program itself. While some studies cite that too few icons are displayed, others note that too many are displayed; the greater number of basic icons creates confusion and lowers consumer accuracy in selecting a healthful product.²⁴¹ Another study found that while consumers have a favorable view of the nutritional value of the foods containing "Facts-Up-Front" labels, they underestimate the amounts of saturated fat and sugar, and overestimate the amounts of fiber and protein in foods.²⁴² Sometimes, less-healthy products can seem more healthful by virtue of the information provided on the package front, e.g., a product with high saturated fat may not list this nutrient icon. 243 Another flaw identified in the studies is that the sugar icon does not include added sugar or a percentage value for added sugar, despite those new additions to the NFP. Finally, studies show that the "Facts-Up-Front" display is visually unappealing because it lacks color to catch the consumer's attention and is generally ineffective at communicating the healthfulness of a product. 244

D. Designs for a New Front-of-Package Label

Industry self-regulation has not provided consumers with information they seek to make nutritional decisions. Labels that are informed by rigorous consumer research are likely more effective to inform consumers and promote healthful food choices.245

Given these shortcomings of the "Facts-Up-Front" system, what is a better method for providing nutritional information on the front of the package? There are generally two types of labeling approaches: nutrient-specific and nutrient-summary labels. Within those two distinctions, nutrient-specific labels can be either numeric (similar to "Facts-Up-Front"), color-coded (traffic-light system as seen in the United Kingdom), or warning symbols (Chile). Summary labels can be either simple (like "Healthy Choice" in the United States) or graded (like NuVal in the United States),

^{239.} Letter of Enforcement Discretion to GMA/FMI re "Facts Up Front," U.S. FOOD & DRUG ADMIN. (Dec. 13, 2011), https://www.fda.gov/food/food-labelingnutrition/letter-enforcement-discretion-gmafmi-re-facts-front.

See generally Facts Up Front, Revised Style Guide for Implementers 12 (2012),https://www.fmi.org/docs/health-and-wellness/nk_style_guide_for_implementers-2012.pdf?sfvrsn=2.

^{241.} See, e.g., Roberto et al., supra note 238, at 135.

^{242.} Id. at 140.

^{243.} Id.

^{244.}

See Jennifer L. Pomeranz, Front-of-Package Food and Beverage Labeling: 245. New Directions for Research and Regulation, 40 Am. J Preventive Med. 382, 383 (2011).

as shown by various example in Figure 1. Additionally, Australia and New Zealand launched a health star rating summary label in 2014.²⁴⁶

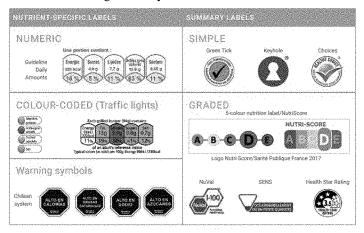


Figure 1: Labeling Approaches Around the Globe

Based on available research and economic theory, this Article recommends an FOP traffic-light nutrition label to be placed on the FOP label displaying serving size, calories, and amount of sugar, added sugar, fat, and salt of the food. The color-coded system uses red (for unhealthy), yellow (for questionable), and green (for healthy). Traffic-light nutrition labels have been introduced as a simple way to indicate the healthiness of a food product, aiming to help consumers make healthier food choices. ²⁴⁷ Traffic lights summarize key nutritional aspects of packaged foods based on information in the NFP, including the amounts and %DV per serving where available. Although a variety of FOP systems have emerged, ²⁴⁸ in the United States, similar FOP displays include calories, %DV for vitamins and minerals, and weight plus %DV for a small set of nutrients (refer to Figure 1 for examples). Unlike the more detailed NFPs appearing on the back of food packages, FOP labels are neither required on packaged foods in the United States nor are their formats regulated. Moreover, FOP labels do not attempt to convey the specific recommendations of the USDA's dietary guidelines for Americans to the same extent as do NFPs.

Warning labels, like a traffic-light nutritional label, nudge consumers toward healthier diets because people tend to pay more attention to negative messages than positive ones.²⁴⁹ Behavioral economists have confirmed the principle of loss aversion, which means people are predisposed to avoid harm rather than seek

^{246.} See, e.g., Cliona Ni Mhurchu, et al., Effects of a Voluntary Front-of-Pack Nutrition Labelling System on Packaged Food Reformulation: The Health Star Rating System in New Zealand, Nutrients, Aug. 2017, at 2, https://www.ncbi.nlm.nih.gov/pubmed/28829380.

^{247.} See Becker et al., supra note 226.

^{248.} *Id*

^{249.} See Ynte K. Van Dam & Janneke de Jonge, *The Positive Side of Negative Labelling*, J. CONSUMER POLICY, Mar. 2015, at 19.

gain.²⁵⁰ Without warning labels, people may react reflexively and select foods that provide immediate pleasure but cause long-term harm. The food environment is increasingly designed with too many stimuli and novel new foods, and an excess of complicated information ends up fostering impulsive and unhealthy choices. To encourage a change in habits, new cues like warning labels and environments conducive to choosing a healthy diet are necessary.

Overall, European studies confirm that consumers prefer simplified information on the front of the package to the more complex nutrition table on the back because simpler FOP nutrition information aids faster decisions. In fact, studies show that consumers can use FOP labels in effectively selecting healthier food options. Studies also show that traffic lights (using colors or words to indicate whether levels of three or four nutrients are high, medium, or low) best communicate nutritional knowledge and label perceptions when compared to the "Facts-Up-Front" system. The FDA exhibited interest in researching the British traffic-light labeling system in 2009, the U.S. food-industry members resisted such a display. State of the confidence of t

The United Kingdom introduced traffic-light labels in 2013, but labels are optional for food manufacturers, and only two-thirds of products in the United Kingdom display them.²⁵⁵ The traffic-light labels indicate the levels of four key nutrients, i.e., fat, sugar, saturates, and salt, commonly contained in processed food, with red indicating a high level, amber a medium level, and green a low level of the respective nutrient. Research findings suggest that traffic-light nutrition labels improve people's accuracy in estimation of foods' healthiness.²⁵⁶ However, findings on the effectiveness of traffic-light nutrition labels in promoting healthy eating are mixed. Whereas some studies suggest that traffic-light labels can encourage healthier eating behavior, ²⁵⁷ other studies do not find any effects of traffic-light

^{250.} See, e.g., Daniel Kahneman et al., Experimental Tests of the Endowment Effect and the Coase Theorem, 98 J. Pol. Econ. 1325, 1326–28 (1990).

^{251.} See, e.g., Lisa M. Soederberg Miller et al., Misunderstanding of Front-Of-Package Nutrition Information on U.S. Food Products, PLOS ONE, Apr. 29, 2015.

^{252.} Roberto et al., *supra* note 238, at 139–40.

^{253.} See Background Information on Point of Purchase Labeling, U.S. FOOD & DRUG ADMIN., https://www.fda.gov/food/food-labeling-nutrition/background-information-point-purchase-labeling (last updated Jan. 4, 2018).

^{254.} See Becker et al., supra note 226.

^{255.} David Burrows, 'No Credible Evidence' – UK Hits Back at MEPs Over Traffic Light Labels, Food NAVIGATOR (Sept. 9, 2016), https://www.foodnavigator.com/Article/2016/09/09/No-credible-evidence-UK-hits-back-at-MEPs-over-traffic-light-labels.

^{256.} See Jessica Aschemann-Witzel et al., Effects of Nutrition Label Format and Product Assortment on the Healthfulness of Food Choice, 71 APPETITE 63, 72 (2013); Sophie Hieke & Petra Wilczynski, Colour Me In – An Empirical Study on Consumer Responses to the Traffic Light Signposting System in Nutrition Labelling, 15(5) Pub. Health Nutrition 773, 779 (2012); Roberto et al., supra note 238.

^{257.} See Kevin Balcombe et al., Traffic Lights and Food Choice: A Choice Experiment Examining the Relationship Between Nutritional Food Labels and Price, 35 FOOD POL'Y 211, 218–19 (2010); Lillian Sonnenberg et al., A Traffic Light Food Labeling Intervention Increases Consumer Awareness of Health and Healthy Choices at the Point-of-

labels on sales or consumption of healthy food.²⁵⁸ Studies done in Canada,²⁵⁹ Australia,²⁶⁰ Germany,²⁶¹ and a few done in the United States²⁶² all conclude that traffic-light food labels work in providing consumers with information to make healthier choices. The latest 2020 study using 173 Austrian subjects compared the "Facts-Up-Front" system with a traffic light system and found that the traffic-light system was more effective than the "Facts-Up-Front" in communicating the perceived healthfulness of the product.²⁶³ Subjects were presented with the amount of sugar contained in products on labels with or without traffic-light colors, and the results suggested that the traffic-light labels (using the U.K. Food Standards Agency traffic label) helped participants differentiate between the healthiness of products with different sugar levels.²⁶⁴

Studies have also found that consumers perceived products with FOP symbols as more healthful and lower in negative nutrients and that these symbols failed to help consumers discriminate between healthier and less healthy food choices. One experimental study used 3,000 Canadians to test consumer responses to different FOP symbols on a frozen meal. His study also showed that absent an NFP, consumers perceived products with FOP symbols to have higher nutritional quality. Another study showed that consumers perceive Canadian products carrying FOP nutrition claims to have a "healthier" profile than their

Purchase, 57 Preventative Med. 253, 256 (2013); Anne Thorndike et al., Traffic-Light Labels and Choice Architecture: Promoting Healthy Food Choices, 16 Am. J. Preventive Med. 143, 148 (2014).

258. See, e.g., Gary Sacks et al., Impact of Front-of-Pack "Traffic-Light" Nutrition Labelling on Consumer Food Purchases in the UK, 24 HEALTH PROMOTION INT'L 344, 351 (2009); Gary Sacks et al., Impact of "Traffic-Light" Nutrition Information on Online Food Purchases in Australia, 35 Austl. & N.Z. J. Pub. Health 122, 125 (2011); Michael Seward & Derek Soled, Unintended Consequences in Traffic-Light Food Labeling: A Call for Mixed Methods in Public Health Research, 68 J. Am. C. Health 465, 465–66 (2019); Michael Seward et al., A Traffic-Light Label Intervention and Dietary Choices in College Cafeterias, 106 Am. J. Pub. Health 1808, 1812–14 (2016).

- 259. See Teri Emrich et al., Traffic-Light Labels Could Reduce Population Intakes of Calories, Total Fat, Saturated Fat, and Sodium, 12 PLOS 2, 1, 6 (2017); see also Samantha Goodman et al., The Impact of Adding Front-of-Package Sodium Content Labels to Grocery Products: An Experimental Study, 16 Pub. Health Nutrition 383, 389 (2012).
- 260. See Bridget Kelly et al., Cancer Council, Front-of-Pack Food Labelling: Traffic Light Labelling Gets the Green Light (2008).
- 261. See Kornelia Hagen, Nutritional Information: Traffic Light Labelling is the Best Way to Reach Consumers, 6 Deutches institut für Wirtschaftsforschung Wkly. Rep. 141, 150–51 (2010).
- 262. See Sue McGreevey, How 'Traffic Light' Labels Promote Healthier Eating, HARV. GAZETTE (Oct. 17, 2013), https://news.harvard.edu/gazette/story/2013/10/how-traffic-light-labels-promote-healthier-eating/.
- 263. See Sonja Kunz et al., Beyond Healthiness: The Impact of Traffic Light Labels on Taste Expectations and Purchase Intentions, FOODS, Jan. 28, 2020, at 1, 12.
 - 264. *Id.* at 4, 12.
 - 265. See id. at 12.
- 266. See Beatriz Franco-Arellano et al., Examining the Nutritional Quality of Canadian Packaged Foods and Beverages with and without Nutrition Claims, NUTRIENTS, July 2018, at 2–3.
 - 267. See id.

counterparts without such claims even if those counterparts are not nutritionally inferior. 268

Policies such as informational campaigns and nutritional labeling are policies that are tailored for rational actors. ²⁶⁹ This is especially prevalent for food marketed to children in which a character adorns a high-sugar product and a health claim appeases a parent who might otherwise be hesitant to purchase the product.²⁷⁰ Given the research on the successes with traffic-light labeling, the FDA could follow the IOM's recommendation to require the food industry to display added sugars with nutritional information on the front of the package.²⁷¹ This first recommendation would require rulemaking since the FDCA only requires the name of the product and net quantity from manufacturers on the front label. However, with local jurisdictions adopting sugar sweetened beverage taxes, and some states preempting them, there is a market failure. Moreover, with some countries adopting plain packaging for unhealthy foods and many others adopting traffic-light labeling, there is an impetus for regulation in this area. A mandatory policy is not as palpable as a voluntary policy, but voluntary efforts have not worked. There is consumer interest in this area, and there is precedent for rulemaking, given that the federal government is only beginning to implement the NFP legislation. Finally, industry may see it in its best interest to support a consistent regulation rather than having to continually draft an improved label. In the end, a traffic-light nutrition label could potentially force companies to compete with each other even more and force reformulation of packaged foods.

Other policy options are possible, but they will not solve the larger problem that added-sugar risk communication through industry self-regulation is failing, and a lack of federal regulation hinders more efficient and effective communication on the front of the food package. The following is a list of solutions that may temporarily ease the symptoms: (1) the FDA collaborating with the food industry to develop a traffic-light nutrition label; (2) the FDA defining a "low added sugars" similar to other "low"-nutrient-content claims with a %DV reference value for added sugar found on the NFP; (3) the FDA enforcing misleading information since the updated NFP regulation also established a daily value for added sugars; and (4) the FDA adding a disqualifying level of added sugar for health claims (like those for salt and fat) to eliminate the possibility that foods high in added sugars bear health claims.

IV. POTENTIAL LEGAL CHALLENGES WITH THE NEW LABEL

A traffic-light-indicator label is designed to nudge consumers to more healthful habits and influence companies to reformulate their recipes. When threatened with legislation that will restrict food advertising by limiting influential

^{268.} See id. at 12–13.

^{269.} Peggy J. Liu et al., *Using Behavioral Economics to Design More Effective Food Policies to Address Obesity*, 36 APPLIED ECON. PERSP. & POL'Y 6, 6–7 (2013).

^{270.} See Jennifer Harris et al., Nutrition-Related Claims on Children's Cereals: What Do They Mean to Parents and Do They Influence Willingness to Buy?, 14 Pub. Health Nutrition 2207, 2207–09 (2011).

^{271.} See Shelley McGuire, Front-of-Package Nutrition Rating Systems and Symbols: Promoting Healthier Choices, 3(3) ADVANCES IN NUTRITION 332, 332–33 (2012).

messages on product packaging, labeling, brand advertising, and sponsorship, companies will litigate. Fortunately, the legislative history of the NFP provides guidance on the arguments the food industry may raise.

In the notice and comment period, the FDA defended the added sugar disclosure in the NFP legislation against legal challenge from First Amendment claims raised by the food industry. The food industry may raise similar challenges when faced with a new federal regulation for a traffic-light nutritional labeling, but the fact that the traffic-light indicator may be on the FOP, taking direct advertising space from the brand, raises a new set of legal challenges different from the previous NFP regulation. For this reason, it is helpful to examine other contexts where regulators imposed mandatory labels on the FOP for public health reasons. For instance, the food industry may raise claims similar to those brought by the tobacco industry when countries moved to enact mandatory plain-packaging rules for tobacco that limited the FOP advertising space. The following sections present likely challenges prominent food companies, e.g., Frito Lay, Pepsi, and Coke, may raise against the traffic-light label and their potential for success in domestic courts, arbitration, and World Trade Organization ("WTO") proceedings.

Before continuing, it is worth noting that the food industry is a diverse group of industry participants, and some companies may decide not to litigate, opting instead for a consistent federal labeling approach. Moreover, over the last few years, we have discovered that the food industry is deeply divided on nutrition labeling. In 2018, Danone North America and several other major food companies withdrew from the GMA, citing differences with GMA opposition to the listing of added sugars on the NFP, and other reasons. ²⁷² Mars and Nestlé were two companies that openly disagreed with GMA opposition on these issues. ²⁷³

A. United States Courts

For a glimpse into the arguments which may be raised in the domestic context, we need only look at two sources: (1) challenges brought previously in the NFP legislation; and (2) the current discussion on the new, March 2020 FDA rule imposing plain-packaging graphic warnings on cigarette labels.²⁷⁴

^{272.} See generally Danone, Mars, Nestlé, Unilever Join Forces to Improve U.S. PublicFood Policy, SUSTAINABLE **BRANDS** (July 12. https://www.sustainablebrands.com/news_and_views/walking_talk/sustainable_brands/dano ne_mars_nestle_unilever_join_forces_improve_us_pu; Helena Bottemiller Evich, Food Lobby Group's Rolls Further Contract as Hershey and Cargill Depart, Politico (Jan. 4, 2018), https://www.politico.com/story/2018/01/04/food-lobby-groups-rolls-further-contractas-hershey-and-cargill-depart-324183; Helena Bottemiller Evich & Catherine Boudreau, Snickers Owner Finds Trade Group No Longer Satisfies Its Needs, POLITICO (Dec. 1, 2017), https://www.politico.com/story/2017/12/01/mars-leaves-grocery-manufacturers-association-274632.

^{273.} Evich, supra note 272.

^{274.} See Tobacco Products; Required Warnings for Cigarette Packages and Advertisements, 85 Fed. Reg. 15,638 (Mar. 18, 2020) (to be codified at 21 C.F.R. pt. 1141); see also Press Release, FDA, FDA Proposes New Required Health Warnings with Color Images for Cigarette Packages and Advertisements to Promote Greater Public Understanding

First, similar to the 2016 NFP legislation, the traffic-light-indicator label could be challenged in domestic court using First Amendment protected commercial speech claims. As noted earlier, in the promulgation of the final NFP rule, the FDA responded to a number of industry comments on legal issues.²⁷⁵ Industry challenged the federal rules as compelled commercial speech, but the government contended that the disclosure of factual information in commercial speech is allowed "as long as the disclosure provides accurate, factual information; is not unjustified or unduly burdensome; and 'reasonably relate[s]'²⁷⁶ to a government interest."²⁷⁷ Requiring factual information about the product is allowed under a hybrid Zauderer rational basis test (viewing warnings as compelled disclosures of factual information, rather than restrictions on commercial speech) and four-prong Central Hudson test, 278 which allows broader applications for compelled commercial speech beyond remedying deception.²⁷⁹ Additionally, the FDA stated that the final rule would pass under either the Central Hudson or Zauderer tests. 280 It relied on scientific evidence and consumer studies as rationale for its decisions, although it admitted that there may not be a direct link between the consumption of added sugars and the risk of obesity or heart disease.²⁸¹

In addition, the government maintains that it has a substantial interest in promoting the public health, a goal which it advocates will be furthered through the implementation of the rule. 282 Justifying the particularities of the rule, the FDA conducted four consumer studies to evaluate consumer responses to added sugars information, and in accordance with the Administrative Procedure Act ("APA"), the FDA reopened the comment period after it completed the second set of two studies. 283 The FDA maintained that its authority in this matter derived from the FDCA in accordance with the APA. 284 When the food industry challenges the traffic-light label, the government could use similar arguments and defenses to defeat First Amendment claims.

of Negative Health Consequences of Smoking (Aug. 15, 2019), https://www.fda.gov/news-events/press-announcements/fda-proposes-new-required-health-warnings-color-images-cigarette-packages-and-advertisements-promote (showing pictures of the labels).

275. See Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 81 Fed. Reg. 33,742, 33,758 (May 27, 2016) (to be codified at 21 C.F.R. pt. 101).

276. Zauderer v. Office of Disciplinary Counsel, 471 U.S. 626, 651 (1985).

277. Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 81 Fed. Reg. at 33,758.

278. Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n, 447 U.S. 557, 566 (1980); Colleen Smith, A Spoonful of (Added) Sugar Helps the Constitution Go Down: Curing the Compelled Commercial Speech Doctrine with FDA's Added Sugars Rule, 71 FOOD & DRUG L.J. 442, 444–45 (2016).

279. See Am. Meat Inst. v. U.S. Dep't of Agric., 760 F.3d 18, 21–22 (D.C. Cir. 2014).

280. Food Labeling: Revision of the Nutrition and Supplement Facts Labels, 81 Fed. Reg. at 33,758, 33,761.

281. Id. at 33,760.

282. *Id.* at 33,766.

283. *Id.* at 33,751.

284. *Id.* at 33,770 (stating authority under the FDCA at § 403(q)(2)(A)).

Next, the current discussion on the proposed FDA rule imposing plain-packaging graphic warnings on cigarette labels may reveal arguments and insights that food companies may raise as they fight a mandatory infringement of their FOP advertising space. Since both plain-packaging labels and traffic-light nutrition labels are designed to be mandatory and to occupy FOP space, the fate of one regulation may depend on the fate of the other regulation.

It is helpful to understand a few key points in tobacco labeling history to predict the future of food labeling regulation. In 1996, tobacco was placed under the FDA's jurisdiction, ²⁸⁶ although tobacco did not actually come under the FDA's authority until 2009. ²⁸⁷ The United States passed its first piece of legislation on cigarette labeling in 1965 ²⁸⁸ followed by further tobacco regulations in 1969, ²⁸⁹ 1983, ²⁹⁰ 1984, ²⁹¹ 1986, ²⁹² and 1992. ²⁹³ Starting with Mississippi and Minnesota, by 1996, every state attorney general had filed suit against the big tobacco companies, seeking recovery for the costs to state Medicaid programs for treating tobaccorelated illnesses. While 4 states settled with tobacco companies on their own, the other 46 entered into a settlement: the \$200 billion Master Settlement Agreement which also included restrictions on marketing and advertising, especially to youth. ²⁹⁴

285. See Tobacco Products; Required Warnings for Cigarette Packages and Advertisements, 84 Fed. Reg. 42,754, 42,755 (Aug. 16, 2019) (to be codified at 21 C.F.R. pt. 1141); see also Press Release, FDA, FDA Proposes New Required Health Warnings with Color Images for Cigarette Packages and Advertisements to Promote Greater Public Understanding of Negative Health Consequences of Smoking (Aug. 15, 2019), https://www.fda.gov/news-events/press-announcements/fda-proposes-new-required-health-warnings-color-images-cigarette-packages-and-advertisements-promote (showing pictures of the labels).

286. Food & Drug Admin. v. Brown & Williamson Tobacco Corp., 529 U.S. 120 (2000).

287. Family Smoking Prevention and Tobacco Control Act, Pub. L. No. 111-31, 123 Stat. 1776, 1781 (2009).

288. Federal Cigarette Labeling and Advertising Act, Pub. L. No. 89–92, 79 Stat. 282 (1965).

289. Public Health Cigarette Smoking Act of 1969, Pub. L. No. 91–222, 84 Stat. 87.

 $290.\,$ Alcohol and Drug Abuse Amendments of 1983, Pub. L. No. 98–24, 97 Stat. 175.

291. Comprehensive Smoking Education Act, Pub. L. No. 98–474, 98 Stat. 2200 (1984).

292. Comprehensive Smokeless Tobacco Health Education Act of 1986, Pub. L. No. 99–252, 100 Stat. 30.

293. Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act, Pub. L. No. 102–321, § 202, 106 Stat. 323 (1992).

294. See Master Settlement Agreement (Nov. 23, 1998), https://www.publichealthlawcenter.org/sites/default/files/resources/master-settlement-agreement.pdf; see also Vanessa O'Connell, States Siphon Off Bigger Share of Tobacco Settlement Money, WALL ST. J., Oct. 9, 2003, at A1; Kathleen Pender, State's Schizophrenic Relations With Tobacco, S.F. Chron., Sept. 2, 2003, at B1 (both showing how many states did not use their settlement money in the ways intended and some states have mortgaged their future payments).

The Master Settlement Agreement also expanded access to many tobacco industry documents, which lead to advances in research.²⁹⁵

By 2000, federal regulators had become aware of this public health concern and were ready to propose a different tobacco labeling approach: a plain-package approach. According to the FDA, while cigarette packages have carried health warnings for some time, the warnings did not adequately educate consumers on the health harms of cigarette smoking. Starting with the first cigarette warning 35 years ago in 1966, cigarette packages and advertisements have displayed warnings such as, "SURGEON GENERAL'S WARNING: Smoking Causes Lung Cancer, Heart Disease, Emphysema, and May Complicate Pregnancy." According to research, "today's warnings have become virtually invisible." 298

The *Engle* litigation also signaled a shift in public sentiment. In *Engle I*, the class action including only Florida citizens and residents won their suit, but in *Engle II* the reward was thrown out as excessive and the class decertified.²⁹⁹ Importantly, in *Engle III*, "[w]hen the Florida Supreme Court rejected the \$145 billion award in 2006, it left intact some critical findings of the trial court—that smoking causes diseases, that nicotine is addictive, that cigarettes are defective and dangerous and that tobacco companies concealed the health effects of smoking."³⁰⁰ Although decertification made it more difficult to litigate these issues, the court in *Engle III* allowed jury-determined causation and liability to carry over into the individual cases.³⁰¹ For tobacco companies, these high-value awards, coupled with hundreds of millions of dollars paid in attorneys' fees to defend them, could negatively impact share prices and make shareholders feel the financial price of continued litigation.³⁰²

^{295.} See Pamela M. Ling & Stanton A. Glantz, Why and How the Tobacco Industry Sells Cigarettes to Young Adults: Evidence From Industry Documents, 92 Am. J. Pub. Health 908, 908 (2002).

^{296.} FDA Proposes New Health Warnings for Cigarette Packs and Ads, U.S. FOOD & DRUG ADMIN., https://www.fda.gov/tobacco-products/labeling-and-warning-statements-tobacco-products/fda-proposes-new-health-warnings-cigarette-packs-and-ads (last updated May 1, 2020).

^{297.} Id.

^{298.} Id

^{299.} See Liggett Grp., Inc. v. Engle (Engle I), 853 So. 2d 434, 456–57, 470 (Fla. Dist. Ct. App. 2003); Liggett Grp., Inc. v. Engle (Engle II), 853 So. 2d 434, 440 (Fla. Dist. Ct. App. 2003); see also Jon Vernick et al., Public Health Benefits of Recent Litigation Against the Tobacco Industry, 298 J. Am. Med. Ass'n 86, 87 (2007).

^{300.} Engle v. Liggett Grp., Inc. (Engle III), 945 So. 2d 1246, 1276–77 (Fla. 2006); Jim Loney, Smokers, Tobacco, Both Winners in Early Engle Cases, REUTERS (Aug. 20, 2009), https://www.reuters.com/article/us-tobacco-engle/smokers-tobacco-both-winners-in-early-engle-cases-idUSTRE57J63F20090820.

^{301.} See Engle III, 945 So. 2d at 1276–77.

^{302.} See J.B. Harris, The Florida Bar Journal, Vol. 86, No. 9 (Nov. 2012) at 16, https://www.floridabar.org/the-florida-bar-journal/engle-v-liggett-has-big-tobacco-finally-met-its-match/.

In 2009, Congress passed The Family Smoking Prevention and Tobacco Control Act, which granted the FDA authority to regulate the tobacco industry. ³⁰³ It also would have required GWLs on cigarette packaging, but the GWL requirement was struck down in 2012 by the United States Court of Appeals for the District of Columbia in *R.J. Reynolds Tobacco Co. v. Food & Drug Administration* over First Amendment concerns. ³⁰⁴ That decision has since been overruled in part through the Court's decision in *American Meat Institute v. United States Department of Agriculture*, in which the Court, in an en banc decision, expanded *Zauderer*'s applications beyond cases concerning deception. ³⁰⁵ In contrast, the Court in *R.J. Reynolds* applied the *Hudson* standard, and the FDA developed its new regulation with that stricter standard in mind. ³⁰⁶

The FDA published its final rule in the Federal Register in March 2020, with an effective date 15 months after in June 2021. ³⁰⁷ In its proposed rule, the FDA states that it believes the new warnings would pass under either *Zauderer* or *Hudson* standards. ³⁰⁸ The FDA is proposing GWLs that would cover at least 50% of the front and rear panels. ³⁰⁹ The FDA proposes that no later than five months after the final rule, compliance plans with details on packaging and advertising would have to be submitted. ³¹⁰ There will also be a 30-day grace period, after which manufacturers would be unable to introduce any noncompliant packages. ³¹¹ Eleven GWLs were selected as an implementation of a provision of the Family Smoking Prevention and Tobacco Control Act. ³¹²

To address criticism with the 2009 rule, the United States Department of Health and Human Services' website includes information addressing the very claims upon which the 2009 rule was struck down, including peer-review studies. ³¹³ Each GWL suggested in the new rule includes an image and accompanying text showcasing a particular health risk related to smoking with links to numerous scientific studies showing those health risks, as well as studies that track the lack of awareness within the U.S. population regarding those health risks. The newly proposed rule introduces GWLs with the intention of curbing cigarette use, but to

^{303.} Family Smoking Prevention and Tobacco Control Act, Pub. L. No. 111-31, 123 Stat. 1776 (2009).

^{304.} R.J. Reynolds Tobacco Co. v. Food & Drug Admin., 696 F.3d 1205, 1221–22 (D.C. Cir. 2012).

^{305.} Am. Meat Inst. v. U.S. Dep't of Agric., 760 F.3d 18, 26 (D.C. Cir. 2014) (en banc) (expanding application of Zauderer v. Office of Disciplinary Counsel, 471 U.S. 626 (1985)).

^{306.} R.J. Reynolds Tobacco Co., 696 F.3d at 1217 (applying Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n, 447 U.S. 557 (1980)).

^{307.} Tobacco Products; Required Warnings for Cigarette Packages and Advertisements, 85 Fed. Reg. 15,638 (Mar. 18, 2020) (to be codified at 21 C.F.R. pt. 1141).

^{308.} *Id.* at 15,644, 15,648, 15,671.

^{309.} *Id.* at 15,638.

^{310.} *Id.* at 15,694–95.

^{311.} *Id*

^{312.} *Id.* at 15,638, 15,652.

^{313.} See Tobacco Products, Required Warnings for Cigarette Packages and Advertisements, 84 Fed. Reg. 42,754, 42,757, 42,777–78 (Aug. 16, 2019) (to be codified at 21 C.F.R. pt. 1141).

comply with the First Amendment, it seeks to inform the public about the dangers of lesser-known tobacco-related illnesses and diseases. While many Americans acknowledge the dangers that smoking cigarettes pose to lung health and overall health, the various other specific health risks associated with cigarettes are not as widely known and understood. In the 2006 United States. v. Philip Morris USA, Inc. opinion, a court found big tobacco companies in violation of the RICO Act. 314 A lengthy appeals process followed that culminated in requirements for tobacco companies to make public health statements about their products that accurately portray nicotine and to refrain from the use of certain terms, such as "low tar" to describe their cigarettes.315

Despite these efforts to preclude litigation, the final rule was challenged shortly after in the Eastern District of Texas on April 3, 2020.316 Due to the limitations on court proceedings during the pandemic crisis, a joint motion to postpone the effective date of the rule by 120 days to October 16, 2021, was accepted by the court.³¹⁷ The tobacco companies are urging the court to strike down both the rule and the part of the Family Smoking Prevention and Control Act on graphic warning requirements to prevent further litigation. Although the companies lost this argument in 2012 in the Sixth Circuit, 318 the present case is in the Fifth Circuit. 319 The tobacco companies claim the FDA lacks the statutory authority to do this. The cigarette manufacturers' main arguments include the obsoleteness of the warning. They say that if research shows everyone already knows smoking is dangerous, why do they need to include these warnings? These are the types of arguments that were anticipated and submitted throughout the notice and comment period.

Philip Morris International's CEO has stated publicly that the company, which makes Marlboro cigarettes, is phasing out traditional cigarettes in favor of ecigarettes and other debatably healthier alternatives.³²⁰ With different labeling requirements in so many different countries, it may be more economic to consolidate regulations and take a worldwide approach. Additionally, the corporation is starting to sell life insurance, providing discounts to smokers who quit temporarily or permanently or who switch from traditional cigarettes to a smokeless tobacco

^{314.} United States v. Philip Morris USA, Inc., 449 F. Supp. 2d 1, 51-52 (D.D.C. 2006).

Id. at 28. 315.

R.J. Reynolds Tobacco Co. v. Food & Drug Admin., No. 6:20-cv-00176-JCB, 316. at *3 (E.D. Tex. filed Apr. 3, 2020).

Tobacco Products; Required Warnings for Cigarette Packages and 317. Advertisements; Delayed Effective Date, 85 Fed. Reg. 32,293, 32,294 (May 29, 2020) (to be codified at 21 C.F.R. pt. 1141).

^{318.} See Discount Tobacco City & Lottery, Inc. v. United States, 674 F.3d 509, 569 (6th Cir. 2012).

^{319.} See Order Granting Joint Motion for Entry of Stipulated Order to Postpone Rule's Effective Date and Set Briefing Schedule, R.J. Reynolds Tobacco Co. v. Food & Drug Admin., No. 6:20-cv-00176 (E.D. Tex. May 8, 2020).

Dan MacGuill, Did the Company that Makes Marlboros Announce They Intend to Stop Producing Cigarettes?, SNOPES (Jan. 11, 2019), https://www.snopes.com/factcheck/marlboro-cigarettes-production/.

product.³²¹ The House passed legislation to ban the sale nationwide of certain flavored nicotine pods, although the Senate has not brought it to a vote yet.³²²

The FDA's labeling strategy is not unique. Around the world, 40 countries require warning labels of some kind.³²³ Some regulations already in effect, such as plain packaging, go much further than what the United States is proposing. To this end, while cigarette companies have fought other regulations in court with different labeling requirements in so many different countries, adopting plain packaging is one way for the FDA to consolidate regulations and take a global labeling approach.

B. Arbitral Tribunals and the World Trade Organization

When the United States enacts a federal rule, that rule applies to both domestic and foreign companies, thereby making the U.S. government accountable to challenges from domestic firms (constitutional and other claims in domestic courts noted above) and from foreign countries in either WTO proceedings or Bilateral Investment Treaty ("BIT") proceedings. WTO and BIT complaints are directed at administrative measures enacted by member countries.³²⁴ The trafficlight symbol would be an administrative measure required of all foreign and domestic food companies, according to the international law as found in BITs and the WTO. Foreign-based food companies, like Nestlé (Switzerland) and Danone (France),³²⁵ could challenge this measure in arbitral tribunals by invoking their country membership in a BIT; likewise, these companies could petition their respective home countries to challenge the measure in the WTO by invoking their country membership in the WTO.

Considering possible challenges against a traffic-light label in these global venues, it is useful to examine arguments that countries raised in challenging other measures similar to the traffic-light-labeling measure. This section does not discuss global challenges regarding the last round of regulations on the NFP because of one key distinction between the recommended traffic-light indicator label and the NFP: the traffic-light indicator will appear on the FOP, possibly infringing upon the brand owner's intellectual property. To examine the challenges that the unique FOP placement raises, it is useful to examine the legal claims against rules that have infringed upon FOP space, such as the Australian tobacco control measures.

^{321.} Angelica LaVito, *Tobacco Company Philip Morris Starts Life Insurance Firm that Offers Discounts to Smokers Who Quit*, CNBC (Apr. 23, 2019), https://www.cnbc.com/2019/04/23/tobacco-company-philip-morris-launches-life-insurance-company-reviti.html.

^{322.} Protecting American Lungs and Reversing the Youth Tobacco Epidemic Act, H.R. 2339, 116th Cong. (2020).

^{323.} Macksood Aftab et al., *International Cigarette Labelling Practices*, British Med. J. 368, 368 (1999).

^{324.} See Possible Object of a Complaint — Jurisdiction of Panels and the Appellate Body: The Possibility of Challenging Laws "As Such," WORLD TRADE ORG., https://www.wto.org/english/tratop_e/dispu_e/disp_settlement_cbt_e/c5s5p1_e.htm (last visited July 21, 2020).

^{325.} Food Processing's Top 100, FOOD PROCESSING, https://www.foodprocessing.com/top100/top-100-2018/ (last visited Sept. 5, 2020).

Tobacco control measures, widely known as plain-packaging regulations or regulations aimed at regulating FOP, are also "measures" as falling under and defined by the WTO. While they now appear in 40 countries around the world, they were originally challenged in arbitration proceedings and in the WTO, starting in Australia in 2011. The litigation brought by several countries and different parties took place across several different venues, but ultimately Australia won. The plain-packaging measures were held consistent with international law, making it unlikely that a new, mandatory traffic-light label in the United States would be objectionable. However, there are a few subtle points in which the litigation regarding a traffic-light label would differ.

C. Lessons Learned from Plain-Packaging Litigation

Even while tobacco consumption has been characterized as a global health epidemic,³²⁸ tobacco companies continue to challenge plain-packaging regulations across the globe. With tobacco legislation in 2011, Australia became the first nation to completely restrict tobacco advertising on cigarette packaging,³²⁹ and plain packaging has now progressed across the globe.³³⁰ As noted earlier, plain-packaging measures require generic or standardized packaging for a consumer product; all branding (including colors, logos, imagery, and trademarks) is removed from the FOP, and manufacturers are permitted to print only the brand name on the pack in a standardized size, font, and color.

Foreign-based companies that locate investments in the United States may invoke BIT protection for their investments, enabling them to bring claims against the United States through arbitration.³³¹ For example, in the Australia plain-packaging litigation, to be discussed below, Philip Morris Asia, based in Hong Kong, invoked a 1993 BIT agreement between Hong Kong and Australia to argue that the plain-packaging rules breached foreign investment provisions.³³²

To provide some historical context, packaging—along with logos, mascots, and images—has been characterized as one of the last vehicles for tobacco

^{326.} See McCabe Centre for Law and Cancer, Investment Tribunal Dismisses Philip Morris Asia's Challenge to Australia's Plain Packaging, WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL (May 17, 2016), https://untobaccocontrol.org/kh/legal-challenges/investment-tribunal-dismisses-philip-morris-asias-challenge-australias-plain-packaging/.

^{327.} See id.

^{328.} See The Global Tobacco Epidemic and the Law 1 (Andrew D. Mitchell & Tania Voon eds., 2014).

^{329.} See Genevieve Wilkinson, Tobacco Plain Packaging, Human Rights and the Object and Purpose of International Trade Mark Protection, in The Object and Purpose of Intellectual Property 182 (Suzy Frankel ed., 2019).

^{330.} See generally Aftab et al., supra note 323.

^{331.} See generally Bilateral Investment Treaties, Off. of the U.S. Trade Representative.

https://tcc.export.gov/Trade_Agreements/Bilateral_Investment_Treaties/index.asp visited Aug. 7, 2020). (last

^{332.} McCabe Centre for Law and Cancer, *supra* note 326.

advertising to initiate tobacco consumption, particularly to young people.³³³ The Australian regulations, including the *Tobacco Plain Packaging Act 2011*, the *Trade Marks (Plain Packaging) Act 2011*, and supporting regulations, introduced broad requirements for the packaging of tobacco-related products.³³⁴ Plain-packaging rules are "justified on public health grounds, because the removal of all branding will reduce consumer deception from misleading packaging, will increase the noticeability of health warnings, and will ultimately lead to less smoking."³³⁵ For instance, the *Tobacco Plain Packaging Act 2011* articulates the primary policy concerns of plain-packaging legislation: the protection of public health and the implementation of the WHO Framework Convention on Tobacco Control ("FCTC").³³⁶

Professor Sergio Puig, a leading authority on global plain-packaging tobacco litigation, identifies ten different international institutions that "have seen at least one tobacco case: the European Court of Justice ("ECJ"), ISDS arbitration tribunals under the International Centre for Settlement of Investment Disputes ("ICSID") and the Permanent Court of Arbitration ("PCA"), the Court of Justice of the European Free Trade Association ("EFTA"), the Eritrea-Ethiopia and the Iran-United States Claims Tribunals, the Court of Justice of the Andean Community . . . as well as the WTO, tribunals under its predecessor the General Agreement on Tariffs and Trade ("GATT"), and the Southern Common Market . . . dispute settlement bodies."³³⁷ The claims brought in these international cases can be simplified and organized as issues over: (1) property rights; (2) authority to regulate; (3) discrimination; and (4) unnecessary obstacles to trade.

Australia's plain-packaging rules were challenged in several international venues.³³⁸ In the litigation, tobacco companies argued that the plain-packaging legislation limits advertising and effective use of trademarks in their traditional function to indicate source of origin and associated quality.³³⁹ Plain packaging impacted intellectual property of the owners of tobacco-related products through these limitations on trademarks that would normally be used on packaging.³⁴⁰ The plain-packaging restrictions only permit the use of word marks in prescribed size, font, and color in a designated position on the packet,³⁴¹ and they restrict graphics or device marks.³⁴² Tobacco companies argue that these restrictions on the use of

^{333.} See Tobacco Working Group, Australia: The Healthiest Country by 2020, NAT'L PREVENTATIVE HEALTH TASKFORCE (2009), https://tinyurl.com/y2uk4r8l.

^{334.} *Id*

^{335.} See Report on Plain Packaging in Latin America, supra note 202.

^{336.} See Tobacco Plain Packaging Act 2011 (Cth) s 3 (Austl.).

^{337.} Sergio Puig, *Tobacco Litigation in International Courts*, 57 HARV. INT'L L.J. 383, 392 (2016).

^{338.} Tim K. Mackey et al., Evolution of Tobacco Labeling and Packaging: International Legal Considerations and Health Governance, 103 Am. J. Pub. Health e39, e40 (2013).

^{339.} Id

^{340.} See id. at s 20.

^{341.} *Id.* at s 21.

^{342.} *Id.* at s 20–21.

their trademarks have significant economic consequences.³⁴³ Tobacco-related trademark owners have claimed breach of their rights in domestic constitutional litigation,³⁴⁴ investor–state dispute litigation,³⁴⁵ and in the dispute settlement mechanisms of the WTO.³⁴⁶ Each will be discussed in turn.

First, tobacco related trademark owners claimed breach of their rights in domestic constitutional legislation. In *JT International SA v. Commonwealth* and *British American Tobacco Australasia Ltd. v. Commonwealth*, tobacco companies unsuccessfully argued to the High Court of Australia that the Australian plain-packaging legislation constituted acquisition of their trademark rights by the government, and this was inconsistent with constitutional requirements that the acquisition of property be on just terms.³⁴⁷ The High Court found that the legislation did not acquire the applicants' intellectual property rights so the claim could not be established.³⁴⁸

In the next set of suits, tobacco-related trademark owners claimed devaluation of their intellectual property rights in investor–state dispute settlement.³⁴⁹ To date, the tobacco companies have been unsuccessful in all of the proceedings, showing how international investment law can accommodate public health objectives, but the proceedings in Australia (and later in Uruguay) took several years at considerable expense.³⁵⁰ The first case was an international investment arbitration action commenced by Philip Morris Asia against Australia. Philip Morris Asia argued that changes resulting from plain-packaging legislation deprived them of the value of their investment as it was enacted subsequent to their acquisition of intellectual property rights to tobacco,³⁵¹ inconsistent with the Australia-Hong Kong Bilateral Investment Treaty.³⁵² However, it was found that these rights had been deliberately acquired so as to exploit the investor–state dispute

^{343.} Australia/Hong Kong Investment Agreement for the Promotion and Protection of Investments (*Philip Morris Asia Ltd v Austl*), PCA Case. No. 2012-12, Notice of Arbitration, ¶ 8.3 (Nov. 21, 2011) [hereinafter Notice of Arbitration].

^{344.} See JT Int'l SA v Commonwealth (2012) 250 CLR 1 (Austl.); Brit Am. Tobacco Australasia Ltd v Commonwealth (2012) 250 CLR 1 (Austl.).

^{345.} See Notice of Arbitration, supra note 343.

^{346.} Panel Report, Australia—Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging, WTO Doc. WT/DS435/R, WT/DS441/R, WT/DS458/R, WT/DS467/R (June 28, 2018) [hereinafter Panel Report].

^{347.} JT Int'l SA 250 CLR at 1.

^{348.} *Id*

^{349.} Philip Morris Brands Sàrl v. Uru., ICSID Case No. ARB/10/7, Decision on Jurisdiction, 5–6 (Jul. 2, 2013); Notice of Arbitration, *supra* note 343.

^{350.} COLUMBIA UNIVERSITY, VALE CENTER FOR SUSTAINABLE DEVELOPMENT INVESTOR-STATE REPORT (2017).

^{351.} See Notice of Arbitration, supra note 343, ¶ 48.

^{352.} See Argument: Investment Treaties Violation, TOBACCO CONTROL LAWS, https://www.tobaccocontrollaws.org/litigation/advancedsearch/?subarg=Investment%20Tre aties%20Violation (last visited Aug. 28, 2020) (noting that Philip Morris Asia alleges that, in contravention of the Treaty, Australia has: expropriated its investments; failed to provide its investments fair and equitable treatment; unreasonably impaired its investments; and failed to accord its investments full protection and security).

mechanism.³⁵³ The action ended in interlocutory proceedings that determined bringing the claim under these circumstances constituted an abuse of right under international law.³⁵⁴

During the plain-packaging legislation in the arbitral tribunals and in the WTO case, Australia used several international treaties to justify domestic legislation: the FCTC; the "Right to Health;" the UN International Covenant on Economic, Social, and Cultural Rights ("IECSCR"³⁵⁵); the corresponding "Right to Food;" the UN Convention on the Rights of the Child ("CRC"); and the "Right of the Child." These arguments contributed to Australia's success.

Australia used the right-to-health argument in the investment and WTO proceedings because it was bound by the ICESCR. Australia acknowledged the relevance of the human right to the highest attainable standard of health in explanatory material surrounding plain-packaging legislation. Compliance with the FCTC is an objective of the legislation. The FCTC recognizes both the human right to health and public health imperatives, and these commitments are the most important human rights implicated by plain-packaging legislation. Article 11 of the FCTC requires parties to the treaty to adopt and implement effective packaging and labelling measures within three years of becoming a party, including measures requiring minimum sizing of graphic warnings about the negative health impacts of tobacco on tobacco packaging. The Guidelines to Article 11 were adopted by signatories to assist states to improve the effectiveness of measures related to the packaging and labelling of tobacco-related products. While there is debate about the extent to which the FCTC Guidelines that require states to implement plain

^{353.} Australia/Hong Kong Investment Agreement for the Promotion and Protection of Investments (*Philip Morris Asia Ltd v Austl*), PCA Case. No. 2012-12, Award on Jurisdiction and Admissibility, ¶¶ 585–88 (Dec. 17, 2015).

^{354.} *Id*

^{355.} The United States signed but did not ratify the UN ICESCR. *See* International Covenant on Economic, Social and Cultural Rights, 1977, 993 U.N.T.S. 3.

^{356.} See Explanatory Statement, Tobacco Plain Packaging Act 2011 (Cth) 14 (Austl.).

^{357.} Tobacco Plain Packaging Act 2011 (Cth) s 3 (Austl.).

^{358.} See WHO Framework Convention on Tobacco Control, May 21, 2003, 2302 U.N.T.S. 166; see also World Health Org., Guidelines for Implementation of Article 11 of the WHO Framework Convention on Tobacco Control (2008) [hereinafter Guidelines for Implementation of Article 11].

^{359.} See Shannon Gravely et al., The Impact of the 2009/2010 Enhancement of Cigarette Health Warning Labels in Uruguay: Longitudinal Findings from the International Tobacco Control Survey, 25 British Med. J. 89 (2014); see also David Hammond et al., Pictorial Health Warnings on Cigarette Packs in the United States: An Experimental Evaluation of the Proposed FDA Warnings, 15 NICOTINE & TOBACCO Res. 93, 97 (2012).

^{360.} GUIDELINES FOR IMPLEMENTATION OF ARTICLE 11, *supra* note 358.

^{361.} At its third session in November 2008, the Conference of the Parties ("COP") adopted guidelines for implementation of Article 11 of the WHO FCTC on "Packaging and Labelling of Tobacco Products." *Id.*

packaging constitute binding obligations in international law,³⁶² ICESCR's requirement for states to progressively realize the human right to health for individuals is clear.³⁶³ Committee on Economic Social and Cultural Rights' ("CESCR") General Comment 14 interpreting the right to health identifies tobaccorelated measures as relevant to the right to health.³⁶⁴

Finally, plain packaging gained global attention in 2017 when the WTO upheld Australia's right to impose plain-package label restrictions on the sale of tobacco products. The honduras, Dominican Republic, Indonesia, and Cuba brought WTO suits against Australia in 2012, along with over 40 third-parties or other parties with an interest in this dispute. The four key parties alleged that plain packaging is an unjustifiable encumbrance on the use of trademarks prohibited by Article 20 of the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS"), and an unnecessary obstacle to trade under Article 2.2 of the Agreement on Technical Barriers to Trade ("TBT") given that it is more restrictive than necessary because there is no evidence that such measures actually contribute to the protection of health. The support of the protection of health.

362. See Jonathan Liberman, The Power of the WHO FCTC: Understanding Its Legal Status and Weight, in The Global Tobacco Epidemic and the Law, supra note 328; Chang-fa Lo, Guidelines and Protocols Under the Framework Convention, in The Global Tobacco Epidemic and the Law, supra note 328.

^{363.} International Covenant on Economic, Social, and Cultural Rights, *supra* note 355, at art. 12; Comm. on Econ., Soc. and Cultural Rights, CESR General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12), ¶ 1, U.N. Doc. E/C.12/2000/4 (Aug. 11, 2000).

^{364.} Comm. on Econ., Soc. and Cultural Rights, *supra* note 363, ¶ 51.

^{365.} See Margherita Melillo, Lessons from the WTO Plain Packaging Reports: The Use of the Evidence-Based WHO Framework Convention on Tobacco Control as Evidence in International Litigation, EJIL: TALK! (July 16, 2018), https://www.ejiltalk.org/lessons-from-the-wto-plain-packaging-reports-the-use-of-the-evidence-based-who-framework-convention-on-tobacco-control-as-evidence-in-international-litigation/.

^{366.} Panel Report, *supra* note 346. See generally Integrated Executive Summary of Australia's Submissions, Austl. DEP'T OF FOREIGN AFF. & TRADE (Mar. 23, 2016), http://dfat.gov.au/trade/organisations/wto/wto-disputes/Documents/integrated-executive-summary-aus-submissions-tobacco-plain-packaging-ds435-441-458-467.pdf.

^{367.} Request for Consultations by Honduras, Australia—Certain Measures Concerning Trademarks and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging, WTO Doc. WT/DS435/1 (Apr. 10, 2012) (addressing the WTO violations directly, recognizing that "intellectual property rights are private rights," and defining trademarks as a form of "intellectual property"); see also Agreement on Trade-Related Aspects of Intellectual Property Rights art.1, sec. 2, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299 [hereinafter TRIPS Agreement]. Thus, the denial of trademark rights, including the right to use trademarks and other brand imagery on lawful products, violates TRIPS as well as the Paris Convention, many of whose provisions are incorporated into TRIPS by reference. Specifically, plain and highly standardized packaging likely violates the following provisions: TRIPS Articles 2, 8.1, 15.4, 17, 20, and 26; the Paris Convention Articles 6, 7, and 10; the Technical Barriers to Trade Agreement Article 2.2; and other enactments and treaties intended to protect trademark rights. See Australia—Certain Measures Concerning

Similar to the claims made in the investment arbitration, the complaining parties in the WTO litigation argued that depriving trademarks of the possibility to fulfil their core function of distinguishing products vis-à-vis the end consumer for products is incompatible with key multilateral treaties such as the WTO TRIPS Agreement and regional and national trademark laws. They argued that the impact of plain packaging on trademark owners and consumers is significant because manufacturers can no longer use their valuable intellectual property to signify the origin and quality of their products, and consumers are more likely to be confused and unable to distinguish between competing products. The very core of the trademark property right is compensation when a trademark is confiscated.

Similar to the investment arbitration, Australia justified the impugned provisions citing domestic public health objectives and compliance with the FCTC.³⁶⁹ In the WTO Disputes engaging TRIPS Article 20, Australia's FCTC obligations were identified by the Panel as relevant to its justification for implementing plain-packaging legislation.³⁷⁰ The FCTC's right-to-health obligations can be also be found in the CRC. Arguably, the FCTC interprets rightto-health obligations found in ICESCR that are relevant to health obligations related to the consumption of tobacco.³⁷¹ Compliance with certain obligations in each of these agreements justifies restrictions on trademark rights that can guide treaty interpretation as to the meaning of "unjustifiably" in each of the disputes. Additionally, a key relevant obligation engaged by plain-packaging legislation is Australia's obligation to protect the right to health by taking "all necessary measures to safeguard persons within their jurisdiction from infringements of the right to health by third parties."372 ICESCR includes the failure of states to regulate the activities of corporations that will violate the right to health of others and the failure to protect consumers and workers from activities that are detrimental to health, including marketing and consumption of tobacco.³⁷³ There is well-documented evidence of intentional failure to disclose negative health impacts of tobacco by tobacco companies, which engages additional obligations for states to protect individuals.³⁷⁴ Australia has attempted to address this protection obligation through the plain-packaging legislation.

Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging, WORLD TRADE ORG., https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds467_e.htm (last visited July 24, 2020. See generally Stephanie Nebehay, Australia Says Big Tobacco Aiding WTO Challengers, REUTERS (May 22, 2012), http://www.reuters.com/article/trade-tobacco-idUSL5E8GMHBW20120522.

- 368. See Request for Consultations by Honduras, supra note 367.
- 369. See Austl. Dep't of Foreign Aff. & Trade, supra note 366, \P 9.
- 370. Panel Report, *supra* note 346, ¶ 7.2604.
- 371. See Oscar A. Cabrera & Lawrence O. Gostin, Human Rights and the Framework Convention on Tobacco Control: Mutually Reinforcing Systems, 7 INT'L J.L. IN CONTEXT 285, 292–93 (2011).
 - 372. *Id.* (quoting Comm. on Econ., Soc. and Cultural Rights, *supra* note 363).
 - 373. *Id*

374. See Melissa E. Crow, Smokescreens and State Responsibility: Using Human Rights Strategies to Promote Global Tobacco Control, 29 Yale J. Int'l L. 209, 211 (2004); Carolyn Dresler & Stephen Marks, The Emerging Human Right to Tobacco Control, 28 Hum. Rights Q. 599, 633, 644 (2006).

In sum, according to the 2016 Post-Implementation Review, plain-packaging rules have been successful in smoking cessation in Australia.³⁷⁵ Importantly, Australia was able to justify regulations based on several treaties—treaties that only a select number of countries have joined. In contrast to Australia, the United States does not have international treaties to rely upon to defend mandatory regulations. The United States has signed onto each of these conventions (the FCTC, the IECSCR, and CRC) without ratifying a single one.³⁷⁶ The United States is not obligated to enact any general or specific legislation to protect the "Right of the Child," the "Right to Health," or the "Right to Food." This means that the U.S. government is not bound by international human rights treaties to implement a mandatory nutrition label, nor can it use these treaties to justify the mandatory traffic-label approach.

This is not to say that federal regulators will disregard WHO conventions calling for public health regulation on added sugar. With diet-related chronic diseases accounting for 60% of deaths worldwide and costing millions in rising medical costs, 377 the United States agrees with the WHO recommendations that countries reduce exposure to and marketing of foods that are high in sugar, particularly to children who are vulnerable to advertising.

CONCLUSION

This Article presents a need for more sugar regulation based on public health, arguing for a federal approach to regulating nutritional information found on the front of a food package. In the United States, about 13% of calories consumed by adults come from added sugars, and such sugars make up an even higher percent of children's calories (16%).³⁷⁸ Added sugars are not only pervasive in the food industry, they are a public health risk. New studies also show strong and convincing evidence that individuals with chronic health diseases, e.g., heart disease, obesity, and type 2 diabetes, are at higher risk of complications from COVID-19 compared to those who are deemed healthy.³⁷⁹ The problem is that the food industry's labeling

^{375.} AUSTL. GOV'T DEP'T OF HEALTH, THE POST-IMPLEMENTATION REVIEW: TOBACCO PLAIN PACKAGING 4, 47 (2016) (noting that the 2012 packaging changes have already contributed to the overall decline in smoking prevalence and that over time these impacts will increase).

^{376.} See also Status of Treaties: WHO Framework Convention on Tobacco Control, UN TREATY COLLECTION, https://treaties.un.org/pages /ViewDetails.aspx?src=TREATY&mtdsg_no=IX-4&chapter=9&clang=_en (last updated Aug. 28, 2020) (providing FCTC information). See generally Major International Treaties Has NOTRatified, ADVOCS. FOR https://www.theadvocatesforhumanrights.org/human rights and the united states#Major %20Treaties%20Not%20Ratified%20by%20US (last visited July 24, 2020).

^{377.} The Global Burden of Chronic Disease, WORLD HEALTH ORG., https://www.who.int/nutrition/topics/2background/en/ (last visited July 24, 2020).

^{378.} See U.S. Dept. of Health & Hum. Servs. & U.S. Dept. of Agric., Dietary Guidelines for Americans 2015–2020 (2015), https://health.gov/dietaryguidelines/2015/resources/2015-2020_Dietary_Guidelines.pdf.

^{379.} Evidence Used to Update the List of Underlying Medical Conditions that Increase a Person's Risk of Severe Illness from COVID-19, CTRS. FOR DISEASE CONTROL &

approaches mislead consumers to purchase unhealthy foods with more added sugars than they imagine. This Article argues for a mandatory traffic-light label, such as the traffic-light indicator used in the United Kingdom, to communicate this public health risk in a quick and easy format.

This Article provides several arguments that the FDA can use to support a traffic-light label and to defend it in face of industry challenge in domestic courts and international venues. To preview industry arguments that will undoubtedly arise, the Article examines arguments that have been used to challenge other public health labeling measures in other countries and contexts. Plain-packaging labeling measures were adopted in Australia in 2009 and were successful in curbing tobacco use; importantly, Australia defeated challenges to these measures in domestic courts, arbitral tribunals, and the WTO. Because both plain-packaging labels (regulating tobacco) and traffic-light nutrition labels (regulating added sugar) are designed to be mandatory and to take up FOP space, the fate of traffic-light labeling can be analyzed in the context of tobacco labeling. While a mandatory label is preferred, other recommendations and solutions are presented short of this approach. The FDA may wish to pursue a *voluntary* label as seen in Australia and the United Kingdom.

This Article and the traffic-light label approach are timely, relevant, and provide insight to addressing a global problem. Added sugar is already a global public health concern, and methods to regulate and label added sugars will only become more pressing as trade and food industry consolidation continues to encourage (rather than curb) the proliferation of unhealthy foods. As global trade and consumption of unhealthy food continues, there is an urgent public health need for international standards in this area, particularly given that some developing countries do not have the resources to develop standards of their own. Adopting a traffic-light-indicator symbol would not only correct a market failure in the United States, but it would also convince other countries to adopt FOP regulations to communicate public health risks more effectively and convince the food industry to reformulate their foods.