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IN CONSIDERATION OF AN ULTRAPROCESSING TAX

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Luke S. Kastenhuber*

I. INTRODUCTION

Governments have long used taxation as a tool to mitigate undesirable behavior. The United States federal government imposes excise taxes on items such as alcohol, tobacco, indoor tanning, and motor fuel,¹ while state governments impose excise taxes of their own on various products.² Taxes like those on motor fuel are designed to raise revenue for highway repair and maintenance,³ but “sin taxes” like those imposed on tobacco seek to curb consumption rather than raise revenue.⁴ These taxes are sometimes referred to as “Pigouvian taxes,” named after Arthur C. Pigou, who posited that taxation could be used to force producers to internalize negative externalities whose harmful consequences they would otherwise escape.⁵

This Note considers the proposal to enact a Pigouvian-style excise tax on ultraprocessed foods (UPFs), which this Note refers to as the Ultraprocessing Tax (UPT).⁶ UPFs are not “real food” but rather are food

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¹ I.R.S. Tax Tip 2020-133, An Overview of Excise Tax (Oct. 7, 2020), <https://www.irs.gov/newsroom/an-overview-of-excise-tax>.

² See, e.g., *STATE System Excise Tax Fact Sheet*, CTRS. FOR DISEASE CONTROL & PREVENTION (Feb. 28, 2024), <https://www.cdc.gov/statesystem/factsheets/excisetax/ExciseTax.html> [hereinafter *STATE System*].

³ *Gas Tax*, TAX FOUND., <https://taxfoundation.org/taxedu/glossary/gas-tax/> (last visited Apr. 9, 2024).

⁴ *STATE System*, *supra* note 2.

⁵ Victor Fleischer, *Curb Your Enthusiasm for Pigovian Taxes*, 68 VAND. L. REV. 1673, 1675 (2015); see ARTHUR C. PIGOU, *THE ECONOMICS OF WELFARE* 172, 192–93 (4th ed. 1932).

⁶ See, e.g., Pourya Valizadeh & Shu Wen Ng, *Promoting Healthier Purchases: Ultraprocessed Food Taxes and Minimally Processed Foods Subsidies for the Low Income*, AM. J. PREVENTIVE MED. (Apr. 2, 2024), <https://doi.org/10.1016/j.amepre.2024.02.019>.

formulations often modified by chemical processes and cosmetic additives and then assembled into ready-to-consume, hyperpalatable food products.⁷ Many studies have linked the consumption of UPFs to obesity, sickness, and mental illness that currently plague American society and risk causing a health crisis.⁸ Clearly, something must be done, and the question considered here is whether enacting the UPT is the thing to be done.

Ultimately, this Note concludes that nontax measures are better suited to address the UPF-driven health crisis. While the UPT is well-intentioned, its complexity makes it impractical to design, implement, and enforce. Part II details the impending health crisis facing Americans and the role that UPFs play in it. Part III addresses the legal background and structure of excise taxes generally, Pigouvian taxes particularly, and the role of market salience in behavioral taxation. Part IV theorizes on the structure and mechanics of the UPT. Part V analyzes the efficacy of the UPT when compared to nontax measures. And Part VI concludes.

II. THE PROBLEM

The problem is not hard to see if you visit a local grocery store: Americans are seemingly larger, sicklier, and perhaps more mentally unstable than at any time before. And your eyes would not be deceiving you—the evidence shows a half-century-long unbroken trend of deteriorating health, and it places much of the blame on poor diet.

A. *Americans Are Sick*

Noncommunicable diseases (NCDs) account for eighty-nine percent of deaths in the United States⁹ and seventy-four percent of deaths worldwide.¹⁰

⁷ Carlos A. Monteiro et al., *Ultra-Processed Foods: What They Are and How to Identify Them*, 22 PUB. HEALTH NUTRITION 936, 939 (2019) [hereinafter *What They Are*].

⁸ CARLOS AUGUSTO MONTEIRO ET AL., FOOD & AGRIC. ORG. OF THE UNITED NATIONS, ULTRA-PROCESSED FOODS, DIET QUALITY, AND HEALTH USING THE NOVA CLASSIFICATION SYSTEM 22–32 (2019), <https://www.fao.org/3/ca5644en/ca5644en.pdf> [hereinafter NOVA CLASSIFICATION SYSTEM].

⁹ Simiao Chen et al., *The Macroeconomic Burden of Noncommunicable Diseases in the United States: Estimates and Projections*, 13 PLOS ONE e0206702, at 2 (2018).

¹⁰ *Noncommunicable Diseases*, WORLD HEALTH ORG. (Sept. 16, 2022), <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>.

These “diseases of affluence” do not spread (or “communicate”) from infection, but rather they result from unhealthy behaviors such as poor diet, physical inactivity, tobacco use, and alcohol abuse.¹¹ Poor diet, in particular, leads to metabolic risk factors like overweight and obesity that increase the risk of complications due to noncommunicable disease.¹²

Over the past sixty years, Americans have become more overweight and obese at alarming rates. As indicated in table 1, more than seventy percent of Americans are now overweight and more than forty percent are obese.¹³

Table 1. Rates of Overweight and Obesity: 1960–2018

Americans Age 20–74	Overweight (BMI ≥ 25)	Obese (BMI ≥ 30)	Severely Obese (BMI ≥ 40)
1960–1962	44.9	13.4	0.9
1971–1974	47.2	14.5	1.3
1976–1980	47.1	15.0	1.4
1988–1994	55.8	23.2	3.0
1999–2000	64.5	30.9	5.0
2001–2002	65.6	31.2	5.4
2003–2004	66.3	32.9	5.1
2005–2006	67.3	35.1	6.2
2007–2008	67.9	34.3	6.0
2009–2010	68.8	36.1	6.6
2011–2012	68.6	35.3	6.6
2013–2014	70.1	38.2	8.1
2015–2016	71.0	40.0	8.0
2017–2018	73.1	42.8	9.6

¹¹ *Non-Communicable Diseases in the Americas: All Sectors of Society Can Help Solve the Problem*, PAN AM. HEALTH ORG., <https://www.paho.org/hq/dmdocuments/2011/paho-policy-brief-1-En-web1.pdf> (last visited Apr. 9, 2024).

¹² *Noncommunicable Diseases*, *supra* note 10.

¹³ Cheryl D. Fryar et al., *Prevalence of Overweight, Obesity, and Severe Obesity Among Adults Aged 20 and over: United States 1960–1962 Through 2017–2018*, NAT’L CTR. FOR HEALTH STAT. 1, 5 (2020). There is some overlap among the columns in the table: The “overweight” column includes those classified as “overweight” as well as those classified as “obese” or “severely obese.” The “obese” column includes those classified as “obese” as well as those classified as “severely obese.”

In 1990, no state in the union had an obesity rate greater than fifteen percent.¹⁴ By 2000, twenty-three states had obesity rates between twenty and twenty-four percent, but no state had a rate greater than twenty-five percent.¹⁵ By 2010, however, thirty-six states had obesity rates greater than twenty-five percent, and no state had an obesity rate less than twenty percent.¹⁶ Twelve states had obesity rates equal to or greater than thirty percent.¹⁷ While some states have been affected more than others, every state has been affected significantly.¹⁸

This excess weight contributes to NCDs like Type 2 diabetes, which now afflicts thirty-five million Americans¹⁹ and could affect ninety-eight million more Americans who struggle with prediabetes.²⁰ No longer do we refer to Type 2 diabetes as “adult-onset diabetes,” because the disease now impacts children at increasing rates.²¹ Even fatty liver disease, a condition once reserved for the drinking adult, now plagues nearly ten percent of America’s youth.²²

NCDs disproportionately affect the poor and socially disadvantaged. Studies show that socially disadvantaged people get sicker and die sooner than moderate- and higher-income earners, in significant part due to

¹⁴ *Obesity Trends Among U.S. Adults Between 1985 and 2010*, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/obesity/downloads/data/obesity-trends-map_1985-2010.pdf (last visited Apr. 9, 2024).

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.* (Alabama, Arkansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Oklahoma, South Carolina, Tennessee, Texas, and West Virginia).

¹⁸ *Id.*

¹⁹ *Type 2 Diabetes*, CTRS. FOR DISEASE CONTROL & PREVENTION (Apr. 18, 2023), <https://www.cdc.gov/diabetes/basics/type2.html>.

²⁰ *Diabetes Fast Facts*, CTRS. FOR DISEASE CONTROL & PREVENTION (Apr. 4, 2023), <https://www.cdc.gov/diabetes/basics/quick-facts.html>.

²¹ *Diabetes in Children and Teens*, MEDLINEPLUS (Aug. 6, 2018), <https://medlineplus.gov/diabetesinchildrenandteens.html>.

²² Elizabeth L. Yu & Jeffrey B. Schwimmer, *Epidemiology of Pediatric Nonalcoholic Fatty Liver Disease*, 17 *CLINICAL LIVER DISEASE* 196, 196 (2021), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8043694/>.

unhealthy dietary practices.²³ Many lower-income Americans find themselves abandoned in “food deserts”—geographic areas where few options exist for securing fresh meat and produce.²⁴ In 2015, 39.4 million Americans lived in low-income and low-access areas, and nineteen million of them had limited access to a supermarket or grocery store.²⁵ Instead, these residents must find their daily nutrition at fast-food chains and “C-stores,”²⁶ which typically sell only UPFs. Poor, predominantly Black neighborhoods appear to be at greater risk, “fac[ing] double jeopardy with the most limited access to qualify food.”²⁷

The social and financial costs of the NCD epidemic are staggering. Studies estimate obesity-related medical costs at between \$173 billion²⁸ and \$210 billion,²⁹ which account for nearly twenty-one percent of all U.S. national health expenditures (in 2008 U.S. dollars).³⁰ Obesity-related absenteeism from work costs the nation between \$3.38 billion and \$6.38

²³ *Noncommunicable Diseases*, *supra* note 10.

²⁴ *Food Deserts in the United States*, ANNIE E. CASEY FOUND. (Feb. 13, 2021), <https://www.aecf.org/blog/exploring-americas-food-deserts>. See generally PAULA DUTKO ET AL., U.S. DEP’T OF AGRIC., CHARACTERISTICS AND INFLUENTIAL FACTORS OF FOOD DESERTS (2012), https://www.ers.usda.gov/webdocs/publications/45014/30940_err140.pdf.

²⁵ ALANA RHONE ET AL., U.S. DEP’T OF AGRIC., LOW-INCOME AND LOW-SUPERMARKET-ACCESS CENSUS TRACTS, 2010–2015, at 12 (2017), <https://www.ers.usda.gov/webdocs/publications/82101/eib-165.pdf?v=9619.6>.

²⁶ “C-stores” is short-hand for “convenience stores.”

²⁷ Kelly M. Bower et al., *The Intersection of Neighborhood Racial Segregation, Poverty, and Urbanicity and Its Impact on Food Store Availability in the United States*, 58 PREVENTIVE MED. 33, 33 (2014).

²⁸ *Consequences of Obesity*, CTRS. FOR DISEASE CONTROL & PREVENTION (July 15, 2022), <https://www.cdc.gov/obesity/basics/consequences.html>.

²⁹ John Cawley & Chad Meyerhoefer, *The Medical Care Costs of Obesity: An Instrumental Variables Approach*, 31 J. HEALTH ECON. 219, 227 (2012).

³⁰ *Id.*

billion per year³¹—unwelcome news for a social system that relies on contributions from the young to provide financial support for the old.³²

Obesity also affects the U.S. military. More than one in three young adults are too heavy to serve in the military,³³ and of those who meet the weight requirements, only three in four engage in activity levels that adequately prepare them for basic training.³⁴

In addition to the physical ailments, Americans' mental health continues to deteriorate. In 2022, twenty-one percent of American adults—equivalent to over fifty million Americans—reported experiencing a mental illness.³⁵ Nearly five percent reported having serious thoughts of suicide, and sixteen percent of youth reported suffering from at least one major depressive episode.³⁶ Mental illness can be caused by many factors—social, biological, and environmental. But evidence shows that nutrition can be a significant factor as well.³⁷

B. Ultraprocessed Foods Contribute to Sickness

UPFs make up sixty percent of the average American's energy intake.³⁸ UPFs are not “real food”; they are food formulations often modified by chemical processes and cosmetic additives and then assembled into ready-to-consume, hyperpalatable food products.³⁹ Examples include soft drinks,

³¹ *Consequences of Obesity*, *supra* note 28.

³² The Chief Actuary of the Social Security Administration warns that the Social Security trust funds are set to exhaust by 2037. See Stephen C. Goss, *The Future Financial Status of the Social Security Program*, 70 SOC. SEC. BULL. 111, 111 (2010).

³³ *Consequences of Obesity*, *supra* note 28.

³⁴ *Id.*

³⁵ MADDY REINERT, MENTAL HEALTH ALL., *THE STATE OF MENTAL HEALTH IN AMERICA 2023*, at 8 (2022), <https://mhanational.org/sites/default/files/2023-State-of-Mental-Health-in-America-Report.pdf>.

³⁶ *Id.*

³⁷ See *infra* note 54 and accompanying text.

³⁸ Eurídice Martínez Steele et al., *Ultra-Processed Foods and Added Sugars in the U.S. Diet: Evidence from a Nationally Representative Cross-Sectional Study*, 6 *BMJ OPEN* e009892, at 1 (2016).

³⁹ *What They Are*, *supra* note 7, at 939.

potato chips, breakfast cereals, and dessert confectioneries, among countless others.

The term “ultraprocessed” was first introduced by Professor Carlos Monteiro in 2009 as part of the NOVA food classification system, and it has become increasingly accepted in the medical community.⁴⁰ The NOVA system reimagines the food pyramid and the USDA “MyPlate”⁴¹ diagram that classifies food based on source (i.e., fruits, vegetables, grains, meat, dairy, and oils). Instead, the NOVA system classifies food into four groups based on the degree of processing: (1) unprocessed or minimally processed foods; (2) processed culinary ingredients; (3) processed foods; and (4) ultraprocessed foods.⁴²

Group 1 unprocessed foods are edible parts of plants and animals to which no degree of processing has been applied.⁴³ Examples include fresh fruits, vegetables, and meat. Minimally processed foods have been altered by minimal industrial processing, such as to remove inedible parts, but from which no natural nutrition has been taken away and to which none has been added.⁴⁴ Examples include cut vegetables, sliced meat, and steel cut oats.

Group 2 processed culinary ingredients are derived from Group 1 foods or nature and are used to prepare Group 1 foods.⁴⁵ These foods contain concentrated amounts of fat, sugar, and/or salt and are not ordinarily consumed on their own. Examples include salt, sugar, butter, and cooking oil.

Group 3 processed foods typically result from applying Group 2 processed culinary ingredients to Group 1 unprocessed or minimally

⁴⁰ On PubMed.gov, the term appeared in only twenty medical papers from 2009 to 2014. However, since 2015, the term has appeared in more than 1,368 papers, including in 423 papers in 2022 alone. See the PubMed.gov search engine at <https://pubmed.ncbi.nlm.nih.gov/?term=ultra-processed>.

⁴¹ The USDA has now swapped out the pyramid for a plate. See *MyPlate*, U.S. DEP’T OF AGRIC., myplate.gov (last visited Apr. 10, 2024).

⁴² *What They Are*, *supra* note 7, at 937.

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.*

processed foods to enhance palatability or durability.⁴⁶ Such processing ordinarily can be done in one's own kitchen. Examples range from the simple act of adding salt or sugar to plants or meats to the more complex process of baking a loaf of bread.

Group 4 ultraprocessed foods are formulations of ingredients combined with the use of sophisticated equipment and technology.⁴⁷ Both the ingredients and the technology are foreign to the ordinary kitchen. Ingredients may include high-fructose corn syrup, hydrogenated seed oils, or "mechanically separated meat," and may also include cosmetic additives like emulsifiers, antifoaming agents, and "natural flavors" derived from a series of artificial processes.⁴⁸

Numerous studies link UPF consumption to obesity and obesity-related diseases such as cardiovascular disease, Type 2 diabetes, cancer,⁴⁹ and cognitive impairment.⁵⁰ UPFs are typically energy-dense; high in sugar and unhealthy fats; and low in protein, vitamins, and minerals.⁵¹ They often induce high glycemic responses and create a gut environment that promotes diverse forms of inflammatory disease.⁵² They also have been linked to mental health issues, such as depression and anxiety.⁵³

One paper reviewed forty-three studies and found that thirty-seven studies associated UPF intake with at least one adverse health outcome, including overweight, obesity, cancer, Type 2 diabetes, cardiovascular

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ See *The Flavorists: Tweaking Tastes and Creating Cravings*, 60 MINUTES: CBS NEWS (Nov. 27, 2011, 8:15 PM), <https://www.cbsnews.com/news/the-flavorists-tweaking-tastes-and-creating-cravings-27-11-2011/>; see also Roni Caryn Rabin, *Are "Natural" Flavors Really Natural?*, N.Y. TIMES (Feb. 5, 2019), <https://www.nytimes.com/2019/02/01/well/eat/are-natural-flavors-really-natural.html>.

⁴⁹ NOVA CLASSIFICATION SYSTEM, *supra* note 8, at 22–32.

⁵⁰ Ashley A. Martin & Terry L. Davidson, *Human Cognitive Function and the Obesogenic Environment*, 136 PHYSIOLOGY & BEHAV. 185, 185 (2015).

⁵¹ *What They Are*, *supra* note 7, at 936.

⁵² *Id.*

⁵³ See Melissa M. Lane et al., *Ultra-Processed Food Consumption and Mental Health: A Systematic Review and Meta-Analysis of Observational Studies*, 14 NUTRIENTS 1 (2022).

disease, irritable bowel syndrome, depression, and all-cause mortality.⁵⁴ No study reported an association between UPF intake and *beneficial* health outcomes.⁵⁵

Another paper reviewed twenty studies that linked UPF consumption to “risk of all-cause mortality, overall cardiovascular diseases, coronary heart diseases, cerebrovascular diseases, hypertension, metabolic syndrome, overweight and obesity, depression, irritable bowel syndrome, overall cancer, postmenopausal breast cancer, gestational obesity, adolescent asthma and wheezing, and frailty.”⁵⁶

UPFs are intentionally addictive. They promote overconsumption through hyperpalatability, satiety suppression, and possible disruption of the gut-brain reward signaling, which together produce addiction-like effects on the consumer. Since 1970, U.S. food companies have reengineered many of their UPF products to become more palatable.⁵⁷ Hyperpalatable foods contain unnatural amounts of salt, sugar, and/or fat, and artificial enhancers like “natural flavors” that boost a food’s palatability and drive overconsumption.⁵⁸ Food items are four times more likely to be hyperpalatable in 2018 than the same food items were in 1988.⁵⁹ And now nearly seventy percent of the American food supply consists of hyperpalatable foods.⁶⁰

UPFs suppress feelings of satiety in relative proportion to the degree to which the food has been processed.⁶¹ The reduced feeling of satiety,

⁵⁴ Leonie Elizabeth et al., *Ultra-Processed Foods and Health Outcomes: A Narrative Review*, 12 NUTRIENTS 1 (2020).

⁵⁵ *Id.*

⁵⁶ Xiaojia Chen et al., *Consumption of Ultra-Processed Foods and Health Outcomes: A Systematic Review of Epidemiological Studies*, 19 NUTRITION J. 1 (2020).

⁵⁷ See generally Saron Demeke et al., *Change in Hyper-Palatable Food Availability in the US Food System over 30 Years: 1988–2018*, 26 PUB. HEALTH NUTRITION 182 (2022), <https://pubmed.ncbi.nlm.nih.gov/35581172/>.

⁵⁸ *Id.* at 186.

⁵⁹ *Id.* at 182.

⁶⁰ *Id.* at 188.

⁶¹ Anthony Fardet, *Minimally Processed Foods Are More Satiating and Less Hyperglycemic Than Ultra-Processed Foods: A Preliminary Study with 98 Ready-to-Eat Foods*, 7 FOOD & FUNCTION 2338,

combined with the elevated level of palatability, results in a higher risk of metabolic illness.⁶² Minimally processed foods, by contrast, are more satiating and less hyperglycemic than ultraprocessed foods.⁶³ Indeed, one is far less likely to desire more food after consuming a whole-food meal than an ultraprocessed meal.⁶⁴

UPFs are likely engineered to have supernormal appetitive properties that may result in pathological eating behavior.⁶⁵ One paper theorizes that UPFs compromise the fidelity of the gut-brain signaling mechanism that regulates food reinforcement.⁶⁶ Modern processed food is engineered to be as irresistible as possible and offers flavors and nutrients in doses and combinations that humans have never encountered before.⁶⁷ Higher doses may increase reinforcement and drive the addictive potential of UPFs.⁶⁸ Evidence continues to build that the nutritional content—or lack thereof—of UPFs is not accurately conveyed from the gut to the brain, so the brain desires more food even though the gut is full.⁶⁹ Another study similarly hypothesizes that excessive intake of the “Western diet” impairs the frontally mediated executive functions, compromising food-intake regulation.⁷⁰ Indeed, UPFs

2338, 2344 (2016) (“[T]he more food is processed, the higher the glycemic response and the lower its satiety potential. . . . These results show a clear link between the degree of processing, the satiating potential and the glycemic impact of foods, which is in agreement with previous literature.”).

⁶² *Id.* at 2338–39.

⁶³ *Id.* at 2338.

⁶⁴ *Id.* at 2344.

⁶⁵ Kevin D. Hall et al., *Ultra-Processed Diets Cause Excess Calorie Intake and Weight Gain: An Inpatient Randomized Controlled Trial of Ad Libitum Food Intake*, 30 CELL METABOLISM 67, 68 (2019).

⁶⁶ Dana M. Small & Alexandria G. DiFeliceantonio, *Processed Foods and Food Reward*, 363 SCI. 346, 346 (2019).

⁶⁷ *Id.*

⁶⁸ *Id.* at 346–47.

⁶⁹ *Id.* at 347.

⁷⁰ Martin & Davidson, *supra* note 50, at 190.

display pharmacokinetic properties that may parallel those of abusive drugs.⁷¹

Though food companies avoid describing their products as “addictive,” they openly admit to making them “craveable” or “snackable.”⁷² At Coca-Cola, for example, loyal customers are sometimes referred to as “heavy users.”⁷³ Jeffrey Dunn, the former president of Coca-Cola Americas, resigned in part after seeing the addictive effect that Coke had on America’s youth.⁷⁴ While at Coke, Dunn became aware that Coke’s addictive formula was no accident but rather the engineered balance of “sensory-specific satiety,” a flavor balance in which the product is tasty enough to grab the consumer but forgettable enough to keep him from tiring of it.⁷⁵ In the end, the question for Coke executives was, “How can we drive more ounces into more bodies more often?”⁷⁶

The combination in UPFs of hyperpalatability, low satiety, and possible disruption of the gut-brain reward signaling create an addictive food environment that may result in pathological eating behavior.⁷⁷

C. Only a Small Portion of Multinational Corporations Dominate the Food Market

A handful of powerful multinational corporations dominate the market for eighty percent of grocery items⁷⁸ in which they compete with each other

⁷¹ Erica M. Schulte et al., *Which Foods May Be Addictive? The Roles of Processing, Fat Content, and Glycemic Load*, 10 PLOS ONE e0117959, at 16 (2015), <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0117959>.

⁷² MICHAEL MOSS, *SALT SUGAR FAT: HOW THE FOOD GIANTS HOOKED US* 336 (Kindle ed., 2013).

⁷³ *Id.* at 150.

⁷⁴ *Id.* at 138.

⁷⁵ *Id.* at 144–45.

⁷⁶ *Id.* at 150.

⁷⁷ Hall et al., *supra* note 65, at 68.

⁷⁸ Nina Lakhani et al., *Revealed: The True Extent of America’s Food Monopolies, and Who Pays the Price*, THE GUARDIAN (July 14, 2021), <https://www.theguardian.com/environment/ng-interactive/2021/jul/14/food-monopoly-meals-profits-data-investigation> (“[A] few powerful transnational

for shelf space and “stomach share.”⁷⁹ Four firms or fewer control at least fifty percent of the market for seventy-nine percent of the groceries.⁸⁰ In addition, four multinational corporations now control eighty percent of the beef processing market and seventy percent of the pork processing market.⁸¹ In the retail arena, four companies now control sixty-five percent of the retail grocery store market.⁸² Through dozens of mergers and acquisitions, the food industry has reshaped itself into an oligarchy that uses its consolidated power to aggressively market its products to vulnerable consumers and lobby politicians to turn a blind eye.

D. Food Companies Aggressively Market UPFs to Children and Minority Consumers

Food oligarchs aggressively market their most unhealthy food choices to consumers, particularly children and minority Americans. Food and alcohol advertising accounts for sixteen percent of the total mass media advertising market, second only to the automotive industry.⁸³ As indicated in table 2, one study analyzed the \$7 billion of food advertising expenditures made in 1997 and found that food companies spent only two percent of their advertising budget on fruit, vegetables, and grains, while dedicating the vast majority of their resources to promoting convenience foods, sugary snacks, booze, and soda.⁸⁴

companies dominate every link of the food supply chain: from seeds and fertilizers to slaughterhouses and supermarkets to cereals and beers.”).

⁷⁹ MOSS, *supra* note 72, at 7, 315.

⁸⁰ Lakhani et al., *supra* note 78. For example, Coca-Cola, PepsiCo, and Keurig Dr. Pepper control ninety-three percent of the soft drink market; General Mills, Kellogg Company, and Post Holdings control seventy-three percent of the breakfast cereal market; and Abbott Laboratories, Reckitt Benckiser, and Nestlé control eighty-five percent of the baby formula market and eighty-two percent of the baby food market. *Id.*

⁸¹ *Id.* (Cargill, JBS, Tyson, and National Beef).

⁸² *Id.* (Walmart, Costco, Kroger, and Ahold Delhaize).

⁸³ Anthony E. Gallo, *Food Advertising in the United States*, in AMERICA’S EATING HABITS: CHANGES AND CONSEQUENCES 173, 174 (1999).

⁸⁴ *Id.* at 173, 178.

Table 2. Food Advertising in 1997

Advertising spending (1997)	\$ million	Percent
Prepared, convenience foods	1,563	22.1
Confectionery and snacks	1,095	15.5
Alcoholic beverages	1,082	15.3
Soft drinks and bottled water	702	9.9
Cooking products and seasoning	675	9.5
Beverages	625	8.8
Dairy products and substitutes	505	7.1
Baked goods	408	5.8
Meat, poultry, and fish	210	3.0
Fruit, vegetables, grains, and beans	159	2.2
General promotions	50	0.8
Total	7,074	100.0

Food-industry marketing targets children and minorities. An FTC report revealed that food companies spent more than \$1.6 billion marketing to children and adolescents in 2006, with \$870 million directed specifically to children under twelve years old.⁸⁵ The companies use various techniques to reach children, from traditional television advertising, to showing movie characters on cereal boxes, to online “advergames” that prominently feature the companies’ food products.⁸⁶

Fast food restaurants maintain policies not to directly market to youth under age twelve,⁸⁷ but studies suggest they stray from that policy.⁸⁸ In 2019, the top 274 fast-food restaurants spent \$5 billion in total advertising, ninety-

⁸⁵ FED. TRADE COMM’N, *MARKETING FOOD TO CHILDREN AND ADOLESCENTS: A REVIEW OF INDUSTRY EXPENDITURES, ACTIVITIES, AND SELF-REGULATION* 7 (2008).

⁸⁶ *Id.* at 40 (“In some cases, the games were designed so that consumption of the food product by the game’s characters was an objective for players.”).

⁸⁷ MOSS, *supra* note 72, at 152 (quoting Todd Putman, former lieutenant to Jeffrey Dunn at Coca-Cola: “Magically, when they would turn twelve, we’d suddenly attack them like a bunch of wolves.”).

⁸⁸ *See generally* UCONN RUDD CTR. FOR FOOD POL’Y & OBESITY, *FAST FOOD ADVERTISING: BILLIONS IN SPENDING, CONTINUED HIGH EXPOSURE BY YOUTH* (2021), <https://media.ruddcenter.uconn.edu/PDFs/FACTS2021.pdf> [hereinafter UCONN RUDD CTR.].

one percent of which was TV advertising.⁸⁹ Children and adolescents viewed on average about 800 fast-food TV advertisements per year, or more than two per day.⁹⁰ Ninety-eight percent of these food advertisements seen by children were for products high in fat, sugar, and/or sodium.⁹¹ The top three categories of food products advertised on programs seen by children were candy and snacks, high-sugar cereal, and fast food.⁹² Despite pledges to introduce healthier menu items, fast food companies devote six times more advertising time to value- and meal-bundles than to healthy options.⁹³

In 1977, the Federal Trade Commission (FTC) attempted to limit advertising to children, particularly in response to tooth decay thought to be largely due to sugary cereals.⁹⁴ The FTC found that the average American child watches 20,000 TV ads between the ages of two and eleven and views four ads promoting sugar four times every half hour—or seven times when fast food is included.⁹⁵ One commercial claimed that breakfast was “‘no fun’ without a particularly heavily sugared brand of cereal.”⁹⁶ Another promoted fruit-flavored cookies over real fruit by showing a fruit peddler abandoning his stock after being introduced to cookies.⁹⁷ In response, the industry spent \$16 million to disqualify the report and defeat the proposal.⁹⁸

Food companies also target junk-food advertisements to people of color,⁹⁹ particularly by promoting value- and meal-bundle deals on Spanish-

⁸⁹ *Id.* at 26.

⁹⁰ *Id.* at 18.

⁹¹ Hye-Jim Paek, *Characteristics of Food Advergimes That Reach Children and the Nutrient Quality of the Foods They Advertise*, 24 EMERALD 63, 65 (2014).

⁹² *Id.*

⁹³ UCONN RUDD CTR., *supra* note 88, at 7.

⁹⁴ MOSS, *supra* note 72, at 111–12.

⁹⁵ *Id.* at 115.

⁹⁶ *Id.* at 116; *see id.* at 116–17.

⁹⁷ *Id.* at 117.

⁹⁸ *Id.* at 113.

⁹⁹ Dakota Kim, *A Constant Barrage: US Companies Target Junk Food Ads to People of Color*, THE GUARDIAN (Nov. 11, 2022, 6:05 PM), <https://www.theguardian.com/environment/2022/nov/11/junk-food-marketing-children-of-color>.

language and Black-targeted TV programs.¹⁰⁰ From 2012 to 2019, fast food companies increased their advertising on Spanish-language TV by thirty-three percent.¹⁰¹ Taco Bell in particular increased its Spanish-TV spending by 2,068%.¹⁰² Compared to white youth, Black children and teens saw ninety percent more ads for Popeyes, Papa John's, and Burger King.¹⁰³

Not only do food companies aggressively market their unhealthy foods, they sometimes play fast-and-loose with the truth. In 2005, PepsiCo was sued and agreed to remove “real fruit juice” from the labels on its Tropicana Peach Papaya drink because the drink did not contain any actual peach or papaya.¹⁰⁴ In 2007, Kraft was sued for deceptive marketing and agreed to remove “natural fruit drink” and “no artificial flavors” from its Capri Sun drink product, backing away from its erroneous position that high-fructose corn syrup made the drink derived from “natural fruit.”¹⁰⁵ In 2008, Sara Lee had to clarify that the “whole grain goodness” in its Soft & Smooth bread was really only thirty percent whole grain.¹⁰⁶ In 2009, Kellogg Company agreed to settle FTC charges that its advertising claims touting Frosted Mini-Wheats as “clinically shown to improve kids’ attentiveness by nearly 20%” were false and violated federal law.¹⁰⁷ In 2010, Kellogg settled another deceptive advertising case by agreeing to remove claims that Rice Krispies cereal

¹⁰⁰ UCONN RUDD CTR., *supra* note 88, at 7.

¹⁰¹ *Id.*

¹⁰² *Id.* at 33.

¹⁰³ *Id.* at 39.

¹⁰⁴ *PepsiCo to Change Tropicana’s Labels*, NBC NEWS (Aug. 11, 2005, 8:37 PM), <https://www.nbcnews.com/id/wbna8918571>; *see* MOSS, *supra* note 72, at 373.

¹⁰⁵ MOSS, *supra* note 72, at 177–80. Food manufacturers refer to the juice-from-concentrate process as “stripped juice,” in which they remove nearly all of the fruit’s fiber and vitamins and leave a product that is essentially pure sugar; in doing this, they can attempt to market the product as “Made from Real Fruit!” *Id.* at 178.

¹⁰⁶ Mike Hughlett, *Sara Lee Settles Bread Flap: Soft & Smooth Label to Say: 30% Whole Grains*, CHI. TRIB. (July 22, 2008, 1:00 AM), <https://www.chicagotribune.com/news/ct-xpm-2008-07-22-0807210316-story.html>.

¹⁰⁷ *Kellogg Settles FTC Charges That Ads for Frosted Mini-Wheats Were False*, FED. TRADE COMM’N (Apr. 20, 2009), <https://www.ftc.gov/news-events/news/press-releases/2009/04/kellogg-settles-ftc-charges-ads-frosted-mini-wheats-were-false>.

boosts a child's immune system.¹⁰⁸ In 2021, Post Holdings settled for \$15 million and removed claims that its most sugary cereals were “natural,” “less processed,” “wholesome,” or contained “no high fructose corn syrup.”¹⁰⁹

And the list goes on and on.¹¹⁰ These lawsuits should prompt Congress to consider regulation as consumers take food-industry marketing with a grain of salt.¹¹¹

E. Food Companies Aggressively Lobby Lawmakers to Defeat Tax Attempts

Food oligarchs use their consolidated power to fight lawmaker attempts to regulate or tax. When Philadelphia proposed a 1.5-cents-per-ounce tax on sugary beverages, food companies responded with \$10.6 million to kill the proposal.¹¹² Food companies met Oakland, California,¹¹³ and New York City¹¹⁴ with millions more when those cities proposed similar regulations. The industry even spent nearly \$6 million fighting USDA regulations that would require that more than a mere quarter-cup of tomato paste be sufficient to meet the school-lunch vegetable requirement.¹¹⁵

¹⁰⁸ MOSS, *supra* note 72, at 132; see *FTC Investigation of Ad Claims That Rice Krispies Benefits Children's Immunity Leads to Stronger Order Against Kellogg*, FED. TRADE COMM'N (June 3, 2010), <https://www.ftc.gov/news-events/news/press-releases/2010/06/ftc-investigation-ad-claims-rice-krispies-benefits-childrens-immunity-leads-stronger-order-against>.

¹⁰⁹ *\$15 Million Settlement in Post Cereal Lawsuit*, NAT'L L. REV. (Mar. 1, 2021), <https://www.natlawreview.com/article/15-million-settlement-post-cereal-lawsuit>.

¹¹⁰ John F. Zabriskie, *June 2022 Food and Beverage Review: Litigation*, NAT'L L. REV. (June 7, 2022), <https://www.natlawreview.com/article/june-2022-food-and-beverage-review-litigation>.

¹¹¹ See *infra* text accompanying notes 195–97.

¹¹² Holly Otterbein, *The Beverage Lobby Spent \$10.6 Million to Kill the Soda Tax—and Failed*, PHILA. MAG. (Aug. 2, 2016, 1:05 PM), <https://www.phillymag.com/citifed/2016/08/02/soda-tax-spending-lobbying/>.

¹¹³ Darwin BondGraham, *Big Soda Is Spending Big Money Against Oakland Sugary Beverage Tax Proposal*, E. BAY EXPRESS (Aug. 10, 2016), <https://eastbayexpress.com/big-soda-is-spending-big-money-against-oakland-sugary-beverage-tax-proposal-2-1/>.

¹¹⁴ Anahad O'Connor, *Coke and Pepsi Give Millions to Public Health, Then Lobby Against It*, N.Y. TIMES (Oct. 10, 2016), <https://www.nytimes.com/2016/10/10/well/eat/coke-and-pepsi-give-millions-to-public-health-then-lobby-against-it.html>.

¹¹⁵ Ron Nixon, *School Lunch Proposals Set Off a Dispute*, N.Y. TIMES (Nov. 2, 2011), <https://www.nytimes.com/2011/11/02/us/school-lunch-proposals-set-off-a-dispute.html>.

Leaked emails from Coca-Cola from 2015–2016 reveal that the food industry engages in “coalition-building” to defeat state and local regulatory measures, including in the cities of Philadelphia, New York, San Francisco, Oakland, Richmond, and Watsonville.¹¹⁶ The industry also built coalitions to fight soda-tax measures in Connecticut and West Virginia, a GMO-labeling bill in New York, and a recycling bill in Iowa.¹¹⁷ But the soda tax proposal in Philadelphia captured the industry’s special attention:

Our industry, grocers, retailers, Teamsters, and many others launched the “Philadelphians Against the Grocery Tax.” Through the use of this coalition and an aggressive earned and paid media strategy that included print, digital, radio, and television, there was a significant shift in public attitudes away from initial majority support for the discriminatory tax.¹¹⁸

The leaked emails detail many more strategies and targets of food-industry lobbying efforts to defeat state and local food regulation.¹¹⁹

F. The Problem Summarized

Americans are sick, UPFs contribute to that sickness, and food oligarchs aggressively market UPFs to vulnerable consumers and lobby lawmakers to turn the other way. Clearly, we have a problem. Parts IV and V analyze whether the answer to that problem is a Pigouvian-style excise tax on UPFs. But Part III first discusses the legal background and structure of excise taxation in general.

¹¹⁶ Kyle Pfister, *Leaked: Coca-Cola’s Worldwide Political Strategy to Kill Soda Taxes*, MEDIUM (Oct. 14, 2016), <https://medium.com/cokeleak/leaked-coca-colas-worldwide-political-strategy-to-kill-soda-taxes-9717f361fb04>. For copies of the emails, see *DC Leaks Coca-Cola Emails*, U.C.S.F. LIBR., <https://www.industrydocuments.ucsf.edu/food/collections/coca-cola-emails/> (last visited Apr. 11, 2024).

¹¹⁷ Pfister, *supra* note 116.

¹¹⁸ *Id.* (reporting the email sent on June 8, 2016, from Sandra Grace of the American Beverage Association).

¹¹⁹ *See generally id.*

III. LEGAL BACKGROUND AND STRUCTURE OF EXCISE TAXATION

The UPT would be an excise tax levied on UPFs. Unlike some excise taxes, like the motor fuel tax, the UPT would not serve the primary purpose of raising revenue but instead would be aimed at discouraging UPF consumption.¹²⁰ This Part explores the basic structure of an excise tax before discussing the specifics of a Pigouvian tax and the concept of market salience. Part IV, which follows, discusses the UPT structure specifically, and Part V analyzes its efficacy.

A. Excise Taxes Generally

1. The Tax Base(s)

The starting point for any excise tax is determining what the tax base should be. The tax base may either be based on quantity (“specific”) or price (“ad valorem”).¹²¹ For a Pigouvian tax the primary purpose of which is to reduce consumption, the tax base should serve as a proxy for the social cost that lawmakers seek to mitigate. Because the social cost typically is more closely associated with the quantity produced rather than the price charged, quantity makes a better proxy—and thus a better tax base—for building an excise tax.

Alcohol excise taxes provide one example of a quantity-based excise tax. There, lawmakers impose a tax based on alcohol-by-volume (ABV) rather than price.¹²² This way, a five percent ABV beer selling for \$5 is taxed no differently than a five percent ABV beer selling for \$4. Consumers cannot avoid the tax simply by opting for the cheaper beer, nor can producers avoid it by using cheaper ingredients. The social harm is not tied to the price but rather to the strength and quantity of the product.

Sports betting presents one exception to the quantity-based rule, as lawmakers tax sports betting based on bet size rather than bet frequency.¹²³ But this exception really just follows the rule. Bet size more closely

¹²⁰ See *supra* text accompanying notes 2–5.

¹²¹ Ulrik Boesen, *Excise Tax Application and Trends*, TAX FOUND. (Mar. 16, 2021), <https://taxfoundation.org/research/all/federal/excise-taxes-excise-tax-trends/>.

¹²² *Id.*

¹²³ *Id.*

approximates the harm sought to be mitigated, so bet size makes a proper tax base for an excise tax. Lawmakers care less about how many bets the gambler makes than whether one of his bets might force him into a second mortgage. For this reason, lawmakers tax a single bet of \$10,000 more harshly than a series of bets adding up to a lesser amount.

A second principle is that the tax base should exclude substitute goods. Because the primary purpose of the excise tax is to discourage consumption of the target product, the tax should avoid disturbing less harmful substitutes.¹²⁴ Vaping products, for example, were brought to market, in part, to be a less harmful substitute for tobacco products.¹²⁵ Evidence suggests that taxing vaping products might incentivize former smokers to revert back to cigarettes.¹²⁶ A properly designed excise tax will avoid impacting the favored alternative.

2. The Tax Rate(s)

As with the tax base, the tax rate is determined mostly with respect to the negative externality sought to be internalized. A tax rate assessed against a quantity-based tax base should be either automatically indexed or periodically adjusted for inflation to avoid tax-base erosion.¹²⁷ A tax rate that applies against a price-based tax base does not necessarily call for inflation adjustment, as inflation-caused price changes will be reflected in the tax base itself.

To avoid imposing an excessive overall tax burden on businesses, lawmakers should consider other federal, state, and local taxes. All fifty states plus the District of Columbia impose their own excise taxes, and forty-five states plus the District of Columbia impose a general sales tax.¹²⁸ Lawmakers should determine whether the good or service sought to be taxed is already being taxed at the state or local level and, if so, should consider

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ *Id.* For example, the motor fuel tax has not been indexed to inflation and, as a result, has lost real value over time.

¹²⁸ KATHERINE LOUGHEAD, TAX FOUND., FISCAL FACT NO. 598: SALES TAXES ON SODA, CANDY, AND OTHER GROCERIES, 2018, at 5 (2018), <https://taxfoundation.org/sales-taxes-on-soda-candy-and-other-groceries-2018/>.

adjusting the proposed excise tax rate accordingly. Lawmakers should further review current taxes affecting business, such as corporate income taxes, and determine whether the excise tax should be reduced in light of the current corporate-tax environment.

3. When to Levy the Tax

An excise tax should be levied early in the value chain and preferably at the manufacturer level. Assessing the tax early places the compliance burden on the entity—typically the manufacturer—that is creating the negative externality. Further, taxing the manufacturer and not the retailer lowers the cost of regulatory administration by limiting the number of entities against which an agency must enforce and collect the tax.

4. How to Allocate the Revenue

Excise-tax revenue should first be allocated to cover the cost of administering and enforcing the tax to ensure that the regime is revenue neutral. From there, the revenue should be allocated to programs and policies that further the purpose for which the tax was enacted. For example, alcohol tax revenue could be allocated to sobriety programs, cigarette tax revenue to tobacco cessation programs, and motor fuel tax revenue to cover the cost of infrastructure maintenance.

B. Pigouvian Taxes

A Pigouvian tax is a specific type of excise tax the primary purpose of which is not to raise revenue but rather to discourage undesirable behavior.¹²⁹ To illustrate a basic Pigouvian tax, imagine a factory that produces a widget at a cost of five dollars but also emits smoke pollution during its production process.¹³⁰ The pollution causes one dollar per widget of external harm to persons and property around the factory.¹³¹ To force the factory to internalize the cost, the government imposes on a one dollar per widget excise tax.¹³²

¹²⁹ Fleischer, *supra* note 5, at 1675.

¹³⁰ *Id.* at 1683–84.

¹³¹ *Id.* at 1684.

¹³² *Id.*

Prices increase as a result, leading to decreased production and a new market equilibrium.¹³³

Victor Fleischer emphasizes that this type of Pigouvian taxation is optimal “only when (1) the harm is (or is properly analogized to) global pollution, and where the harm does not vary significantly based on the source, or (2) the variation in marginal social cost is easily observed and categorized, as with traffic congestion charges.”¹³⁴ A Pigouvian tax may well work for global pollution because the harm can be precisely measured (at least in theory) by the amount of carbon emitted, and thus, a relatively uniform tax can be levied upon the activity regardless of who or what produces it.¹³⁵

An optimal Pigouvian tax imposes a levy that approximates the harm (or social cost) being produced. So, an activity that causes more social cost should be taxed more heavily than an activity that causes less.¹³⁶ If the social cost varies among producers, then necessarily the tax should vary to account for these differences, or else it risks underincluding the big producers and overincluding the small ones.¹³⁷ For these reasons, Fleischer argues—and this Note agrees—that a Pigouvian tax should be employed only against an activity in which “the variation is small and normally distributed”—in other words, where each actor within the activity produces approximately the same amount and magnitude of harm.¹³⁸ As we will see with the UPT, such variances quickly lead to administrative complications and compliance issues that likely render the tax unworkable.¹³⁹

In addition, Pigouvian taxes do not work when there is low elasticity of demand for the product.¹⁴⁰ If there is low demand elasticity, then consumers

¹³³ *Id.*

¹³⁴ *Id.* at 1673.

¹³⁵ *Id.* at 1691–92.

¹³⁶ *Id.* at 1678.

¹³⁷ *Id.* at 1680.

¹³⁸ *Id.* at 1679–80.

¹³⁹ *See infra* Part V.

¹⁴⁰ Fleischer, *supra* note 5, at 1702–03.

continue to purchase the product even at a higher price. This may explain why food taxes are generally ineffective at curbing consumption of unhealthy foods because people who consume those foods tend to be addicted to them.¹⁴¹

C. Tax Salience

For a Pigouvian tax to be effective, it likely must have high market salience. Salience refers to “the extent to which taxpayers account for the costs imposed by taxation when the taxpayers make decisions or judgments.”¹⁴² In other words, as taxpayers become more aware of the tax, they are more likely to adjust their economic behavior and purchase substitute items that are less heavily taxed. Researchers have observed this behavior in grocery shoppers who “spotlight” sales taxes—that is to say, the customers avoid items for which the sales tax is separately displayed but continue to purchase items for which the sales tax is included in the total.¹⁴³ Accordingly, increased market salience can impact consumer behavior and possibly distort economic decision-making.

David Gamage and Darien Shanske argue that this distortion, among other reasons, is why lawmakers generally should try to reduce the market salience of taxation.¹⁴⁴ Market players should make decisions based on the economics of the situation, and once they start to deviate from that, their decisions become economically inefficient. The authors acknowledge the particular relevance of market salience with respect to Pigouvian taxes but nonetheless propose that offsetting tax-rate adjustments can be used to reduce market salience while retaining the desired effect of the Pigouvian tax.¹⁴⁵

¹⁴¹ *Id.* at 1703; *see supra* text accompanying notes 58–78.

¹⁴² David Gamage & Darien Shanske, *Three Essays on Tax Salience: Market Salience and Political Salience*, 65 TAX L. REV. 19, 23 (2011).

¹⁴³ *Id.* at 27.

¹⁴⁴ *Id.* at 21.

¹⁴⁵ *Id.* at 72–73 (“For example, imagine that a tax on pollution can be made less market salient such that polluters would perceive only one-half of the tax. In this example, making the appropriate tax-rate adjustments would require doubling the rates of the pollution tax.”).

It is worth noting, however, that the authors place emphasis on preserving the revenue-raising potential of low-market-salience taxation.¹⁴⁶ In the context of many Pigouvian taxes, including the UPT, revenue raising is not a primary concern, and therefore, this Note assumes that high market salience is the preferred status for the UPT.

IV. THE UPT AND ITS MECHANICS

Part III discussed the general framework of excise taxation, and now Part IV uses that framework to construct the potential UPT.

A. The UPT Tax Bases

As with most other excise taxes, the UPT's tax base would be based on quantity rather than price and should serve as a proxy for the harm to be avoided. In the pollution context, CO₂ emissions are the harm to be avoided, so the quantity of emissions serves as the base for the tax. In the UPF context, the harm to be avoided is the processing itself, so the tax base would be the degree to which the food is processed. As a result, foods more heavily processed would generate a larger tax base and thus be more heavily taxed.

“Processing” is a function of both degree and type. Degree refers to the amount of processing, and type refers to the use of some ingredients that are more (or less) harmful. For example, with respect to degree, Flamin’ Hot Cheetos¹⁴⁷ are more heavily processed than Lay’s Classic Potato Chips¹⁴⁸ and thus would be subject to a heavier UPT levy. With respect to type, Coca-Cola

¹⁴⁶ *Id.* at 73.

¹⁴⁷ *CHEETOS Crunchy FLAMIN’ HOT Cheese Flavored Snacks*, CHEETOS, <https://www.cheetos.com/products/cheetos-crunchy-flamin-hot-cheese-flavored-snacks> (last visited Apr. 6, 2024) (reporting ingredients of enriched corn meal (corn meal, ferrous sulfate, niacin, thiamin mononitrate, riboflavin, folic acid), vegetable oil (corn, canola, and/or sunflower oil), flamin’ hot seasoning (maltodextrin [made from corn], salt, sugar, monosodium glutamate, yeast extract, citric acid, artificial color [red 40 lake, yellow 6 lake, yellow 6, yellow 5], sunflower oil, cheddar cheese [milk, cheese cultures, salt, enzymes], onion powder, whey, whey protein concentrate, garlic powder, natural flavor, buttermilk, sodium diacetate, disodium inosinate, disodium guanylate), and salt).

¹⁴⁸ *LAY’s Classic Potato Chips*, LAY’S, <https://www.lays.com/products/lays-classic-potato-chips> (last visited Apr. 6, 2024) (reporting ingredients of potatoes, vegetable oil (canola, corn, soybean, and/or sunflower oil), and salt).

made with high-fructose corn syrup (HFCS) would be taxed more heavily than Coca-Cola made with cane sugar, because HFCS is generally thought to be more harmful than cane sugar.¹⁴⁹

Of course, this all presumes that consensus can be reached as to what constitutes an unacceptable degree or type of processing. It is generally agreed that added sugar offers no nutritional benefit,¹⁵⁰ especially when it takes the form of HFCS, but what about sodium? Once blamed as the cause of high blood pressure, salt is now viewed as an element in disease prevention.¹⁵¹ What about artificial dyes? The FDA currently recognizes nine dyes as safe for human consumption¹⁵² but has barred dozens of others.¹⁵³ Does it matter that the European Union requires conspicuous warning labels for the FDA-approved Red #40, Yellow #5, and Yellow #6 dyes,¹⁵⁴ or that consumer advocates and researchers argue for the complete ban of all artificial dyes?¹⁵⁵

¹⁴⁹ This Note assumes that result for purposes of illustration. For the scientific data, see Xiang Li et al., *The Effect of High-Fructose Corn Syrup v. Sucrose on Anthropometric and Metabolic Parameters: A Systematic Review and Meta-Analysis*, 9 FRONTIERS IN NUTRITION 1013310, at 4, 6 (2022) (concluding that HFCS is associated with higher inflammation markers but cautions for the need of further study).

¹⁵⁰ *Know Your Limit for Added Sugars*, CTRS. FOR DISEASE CONTROL & PREVENTION (Jan. 13, 2022), https://www.cdc.gov/healthyweight/healthy_eating/sugar.html.

¹⁵¹ Masoud Mokhtari & Hamide Vahid, *Salt and Its Role in Health and Disease Prevention from the Perspectives of Iranian Medicine and Modern Medicine*, 41 IRANIAN J. MED. SCIS. 58, 58 (2016).

¹⁵² *Color Additives Questions and Answers for Consumers*, U.S. FOOD & DRUG ADMIN. (Dec. 14, 2023), <https://www.fda.gov/food/food-additives-petitions/color-additives-questions-and-answers-consumers> (Blue #1, Blue #2, Green #3, Orange B, Citrus Red #2, Red #3, Red #40, Yellow #5, and Yellow #6).

¹⁵³ *Color Additive Status List*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/industry/color-additive-inventories/color-additive-status-list> (Dec. 14, 2023).

¹⁵⁴ All three of which are found in Flamin' Hot Cheetos. *CHEETOS*, *supra* note 147; see Jillian Wilson, *These Food Ingredients Are Banned in Europe but Allowed in the U.S.*, HUFFINGTON POST (Sept. 13, 2022), https://www.huffpost.com/entry/food-ingredients-banned-europe-united-states-additives_1_63124ed2e4b0fc6bd23b64e7 (“[T]he EU requires that foods containing certain synthetic food dyes bear a warning label stating ‘may have an adverse effect on activity and attention in children.’”).

¹⁵⁵ SARAH KOBYLEWSKI & MICHAEL F. JACOBSON, CTR. FOR SCI. IN THE PUB. INT., *FOOD DYES: A RAINBOW OF RISKS*, at vi (2010), <https://www.cspinet.org/sites/default/files/media/documents/resource/food-dyes-rainbow-of-risks.pdf> (“The FDA should ban food dyes, which serve no purpose other than a cosmetic effect”); see Sunday N. Okafor et al., *Assessment of the Health Implications of Synthetic and Natural Food Colourants—A Critical Review*, 4 U.K. J. PHARM. & BIOSCIENCES 8 (2016)

Other additives present additional questions. Flavor enhancers like monosodium glutamate (MSG)¹⁵⁶ and maltodextrin¹⁵⁷ have rather dubious health effects, and artificial sweeteners have been linked to Type 2 diabetes and obesity.¹⁵⁸ Synthetic preservatives might do more harm than good.¹⁵⁹ And “natural flavors” are just artificial flavors with better marketing.¹⁶⁰

As a Pigouvian tax, the UPT would need to account for each of these scenarios to determine the tax base for a particular UPF. To reiterate, the tax base must approximate the harm associated with the product. Assuming that consensus could be reached as to the harm associated with the foregoing ingredients—including added sugar, sodium, food dyes, flavor enhancers, synthetic preservatives, and natural flavors—numerical values would need to be assigned to each ingredient to quantify the harm. For example, if we were to determine that food dyes are more harmful than added sugar, we would tax UPFs containing food dyes more heavily than UPFs containing added sugar. If the UPF contained two food dyes instead of one, we would tax it twice as much because the harm presumably is twice as great. If the UPF contains both food dyes and added sugar, the tax base would grow to reflect the greater harm.

(“[F]ood and drug regulatory agencies of various countries should rise up and ban food dyes, which serve no purpose other than a cosmetic effect . . .”).

¹⁵⁶ Kamal Niaz et al., *Extensive Use of Monosodium Glutamate: A Threat to Public Health?*, 17 EXCLI J. 273, 277 (2018) (“While MSG probably has huge benefits to the food industry, the ubiquitous use of this food-additive could have negative consequences for public health.”).

¹⁵⁷ Denise L. Hofman et al., *Nutrition, Health, and Regulatory Aspects of Digestible Maltodextrins*, 56 CRITICAL REVS. IN FOOD SCI. & NUTRITION 2091, 2091 (2015) (“Exchanging unprocessed starch with maltodextrins may lead to an increased glycemic load and therefore post meal glycaemia, which are viewed as less desirable for health. Apart from beneficial food technological properties, its use should accordingly also be viewed in light of this.”).

¹⁵⁸ Mohammadreza Askari et al., *Ultra-Processed Food and the Risk of Overweight and Obesity: A Systematic Review and Meta-Analysis of Observational Studies*, 44 INT’L J. OBESITY 2080, 2089 (2020).

¹⁵⁹ Studies have linked butylated hydroxytoluene (BHT) to lung cancer and butylated hydroxyanisole (BHA) to carcinogen promotion. See, e.g., Gabriel Hocman, *Chemoprevention of Cancer: Phenolic Antioxidants (BHT, BHA)*, 20 INT’L J. BIOCHEMISTRY 639, 648–49 (1988) (“They may cause damage to different tissues such as the lung (BHT) or the liver, or even act as tumor-promoting substances (BHT, BHA). . . . [But n]either BHA nor BHT are overtly toxic to humans or animals.”).

¹⁶⁰ See *The Flavorists*, supra note 48; see also Rabin, supra note 48.

As we can see, the process of determining the UPT tax base gets very complicated, very quickly. And this is only step one in constructing the excise tax.

B. The UPT Tax Rates

Once we determine the tax base, we must figure the appropriate tax rate or schedule of rates. The primary purpose of the UPT, and thus the driving factor in determining the tax rate, is to make healthy food choices more financially desirable compared to unhealthy ones. This requires an intricate economic analysis, only the basic principles of which this Note will address.

First, lawmakers must estimate (a) the cost of administering and enforcing the UPT and allocate revenue for this purpose and (b) the amount of revenue needed to make healthy food choices desirable, in light of the corresponding increased cost of purchasing UPT-covered food products. The combined revenue allocations (a) and (b) represent the total revenue needed to meet the UPT's goals.

The revenue allocated to incentivizing healthy food choices can take various forms. First, lawmakers may grant UPT credits to food manufacturers who produce Group 1 unprocessed or minimally processed foods. Group 2 culinary ingredients and Group 3 processed foods should be tax-neutral, neither subject to the tax nor eligible for the credit. Second, lawmakers can provide more generous SNAP incentives for consumers to purchase unprocessed or minimally processed foods.¹⁶¹ Third, lawmakers can boost existing programs that offer grants and provide rewards to schools that provide healthy school meals.¹⁶²

C. When to Levy the Tax

Once the tax base and tax rate are determined, the next issue is when—and on whom—to levy the UPT. According to the IRS, federal excise taxes

¹⁶¹ See, e.g., Courtney Shupert, *Seattle Encourages Citizens to Kick the Can in Passing Soda Tax*, TAX FOUND. (June 13, 2017), <https://taxfoundation.org/seattle-encourages-citizens-kick-can-passing-soda-tax/>.

¹⁶² *Healthy Meals Incentives*, U.S. DEP'T OF AGRIC., <https://www.fns.usda.gov/cnp/healthy-meals-incentives> (Nov. 27, 2023).

may be imposed at the time of (1) import, (2) sale by the manufacturer, (3) sale by the retailer, or (4) use by the manufacturer or consumer.¹⁶³

Manufacturers generally pay federal excise taxes semimonthly and file Form 720 quarterly,¹⁶⁴ though different filing requirements exist for alcohol and tobacco excise taxes.¹⁶⁵ The alcohol excise tax attaches “as soon as this substance is in existence as such.”¹⁶⁶ The tobacco excise tax generally attaches at the time of removal of the tobacco products from the bonded premises,¹⁶⁷ though the tax can be transferred to another manufacturer if the product is moved to the bonded premises of another manufacturer.¹⁶⁸

Like most federal excise taxes on manufacturers, including those imposed on alcohol¹⁶⁹ and tobacco producers,¹⁷⁰ the UPT will be levied on the manufacturer of the food article. This ensures that the manufacturer, rather than the downstream retailer, bears the burden of filing forms and computing payment. Moreover, the early imposition limits the number of tax filers and thus streamlines administration and enforcement of the system.

Like with alcohol and tobacco excise taxes, which are not reported on the general Form 720 excise tax return, the UPT also would need its own form and filing requirements. Proper design and administration likely would require coordination between the IRS, FDA, and USDA, and may require that the subject manufacturer make filings with multiple agencies.

¹⁶³ I.R.S. Tax Tip 2020-133, *supra* note 1.

¹⁶⁴ *Id.* at 39–40.

¹⁶⁵ Alcohol and tobacco excise tax returns and payments are made through the Alcohol and Tobacco Tax and Trade Bureau. See *TTB Regulated Industries*, U.S. DEP’T OF TREASURY: ALCOHOL & TOBACCO TAX & TRADE BUREAU, <https://www.ttb.gov/> (last visited Apr. 14, 2024).

¹⁶⁶ I.R.C. § 5001(b).

¹⁶⁷ *Id.* § 5703(a)(2), (b)(1).

¹⁶⁸ *Id.* §§ 5703(a)(2), 5704(b).

¹⁶⁹ *Id.* § 5005(a) (“The distiller or importer of distilled spirits shall be liable for the taxes imposed thereon by section 5001(a)(1).”).

¹⁷⁰ *Id.* § 5701.

D. How to Allocate the Revenue

Once the tax base, tax rate, and time to levy have been determined, the final factor is how to allocate the revenue. To ensure that the UPT is at least deficit-neutral, revenue should first be allocated to covering the costs of agency staffing and system administration. From there, revenue can be allocated to producer tax credits and consumer programs designed to make Group 1 unprocessed or minimally processed foods more price competitive. Tax credits also can be made available to grocers who open locations in “food deserts”¹⁷¹ and bring fresh meat and produce to underserved populations who desperately need real nutrition.

Revenue allocation inextricably intertwines with tax rate considerations. As the tax rate increases, so does the price of the affected food products, achieving the goal of making Group 4 UPFs relatively less price competitive. In addition, as the tax rate increases, the revenue generated may also increase, but as economists will point out, some of the revenue increase may be offset by fewer sales of the now-costlier food products. Since the objective of Pigouvian taxation is to reduce consumption, lawmakers would need to explore other revenue sources outside of the UPT model if they wanted to finance tax credits for consumers or producers of unprocessed foods.

V. ANALYZING THE UPT AGAINST NONTAX PROPOSALS

A. UPT Under the Microscope

While well-intentioned, the UPT reveals more than just the occasional rodent hair when placed under a microscope.¹⁷² Enacting a federal food tax, especially one that attempts to approximate the harm of processing, creates inordinate complexity. The first issue is whether the harm can be approximated at all. The NOVA classification system operates on the premise that the more a food is processed, the more harmful is its health

¹⁷¹ See *supra* note 25 and accompanying text.

¹⁷² See Mansur Shaheen, *The Gross Stuff Legally Allowed in Your Favorite Food by the FDA: Five Rat Hairs in a Jar of Peanut Butter, 30 Insect Limbs in a Chocolate Bar and Rodent Droppings in Popcorn*, DAILY MAIL (Dec. 1, 2022), <https://www.dailymail.co.uk/health/article-11486395/FDA-allows-10mg-animal-poop-coffee-four-rodent-hairs-peanut-butter.html>.

impact. So, for the UPT to be an effective Pigouvian tax, its tax base must increase to reflect the greater degree of processing.

But the tax base must also increase to reflect certain types of processing. For example, HFCS is thought to be more detrimental to health than added sugar (sucrose).¹⁷³ As such, a UPT designed to approximate the harm would more heavily tax an item with four grams of added HFCS than one with four grams of added sucrose. Similar debates can arise with respect to artificial dyes,¹⁷⁴ preservatives,¹⁷⁵ and other ingredients.

Even if the harm can be approximated, the question becomes whether any governmental body is qualified to do it. The UPT begets complexity in design, implementation, enforcement, and compliance. First, Congress likely does not possess the expertise to craft legislation that effectively identifies food ingredients that cause harm and then categorizes those ingredients by degree of harm. Even if Congress could delegate some of that authority, it would need to involve multiple agencies. The FDA and/or USDA would promulgate rules interpreting which food ingredients are covered by the tax and how to make the UPT appropriately salient to consumers. And the IRS would coordinate its rules with those of the food agencies to announce how and when companies would comply and pay the new tax.

Philadelphia ran into design problems when it enacted a much simpler excise tax on sugar-sweetened beverages (SSBs).¹⁷⁶ First, the tax base used the wrong proxy—instead of taxing soda on a sugar-per-volume basis, the city taxed it on a liquid-per-volume basis, meaning that a sixteen-ounce bottle with thirty grams of sugar was taxed more heavily than a twelve-ounce bottle

¹⁷³ Li et al., *supra* note 149, at 4, 6.

¹⁷⁴ KOBYLEWSKI & JACOBSON, *supra* note 155, at 3–4 (finding that Yellow #5 is potentially more genotoxic than the other approved food dyes).

¹⁷⁵ Himadri Pandey & Sanjay Kumar, *Butylated Hydroxytoluene and Butylated Hydroxyanisole Induced Cyto-Genotoxicity in Root Cells of Allium Cepa L.*, 7 HELIYON e07055, at 6 (2021) (discussing the cytotoxicity and genotoxicity of preservatives BHT and BHA); *see supra* note 161 and accompanying text.

¹⁷⁶ Courtney Shupert & Scott Drenkard, *Soda Tax Experiment Failing in Philadelphia Amid Consumer Angst and Revenue Shortfalls*, TAX FOUND. (Aug. 3, 2017), <https://taxfoundation.org/research/all/state/philadelphia-soda-tax-failing/>.

with forty grams of sugar.¹⁷⁷ Second, the tax rate was too high—by taxing soda at twenty-four times the rate of beer, the city unwittingly incentivized consumers to switch to alcohol, a higher-calorie alternative.¹⁷⁸ Finally, city residents could easily skirt the tax by buying soda elsewhere and bringing it back in town.¹⁷⁹ For this reason, a successful UPT would likely require federal implementation.

But that does not mean that federal implementation guarantees success. To the contrary, the UPT is far more complex than the failed Philadelphia SSB tax, and it cuts against Fleischer’s argument of Pigouvian-tax optimality.¹⁸⁰ The UPT will vary significantly based on source, in that food producers will be taxed differently based on the degree and type of their processing. And the amount of harm resulting from the different degrees and types of processing will not be easily observed and categorized. So, while on their face UPFs seem like prime targets for Pigouvian taxation—they create negative health externalities that are not felt by the food companies that market them—their complexity makes their negative effects difficult to categorize and quantify. And experience seems to back up this conclusion—food and soda taxes usually do not accomplish their goals of improving health.¹⁸¹

Even if the UPT could be implemented and enforced, the tax would regressively hit low-income and minority consumers. Tax incidence suggests that consumers will bear at least some of the excise tax burden placed on a product, even though the producer may be the one who legally pays the tax.¹⁸² Given food-industry marketing tactics, it is likely that UPFs disproportionately impact low-income and minority consumers, so that a tax on UPFs will be borne disproportionately by those consumers.¹⁸³ Providing

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ See *supra* note 136 and accompanying text.

¹⁸¹ See Fleischer, *supra* note 5, at 1704–06.

¹⁸² See JOEL SLEMROD & JON BAKIJA, TAXING OURSELVES: A CITIZEN’S GUIDE TO THE DEBATE OVER TAXES 111–33 (5th ed. 2017) (discussing tax incidence of various federal taxes). Those who bear the burden of an excise tax may include the consumers, producers, and employees of the producer.

¹⁸³ See *supra* text accompanying notes 87–105.

a tax credit, funded by UPT revenues, to make healthier options more affordable may ease the burden initially. But the UPT, as a Pigouvian tax, is designed to reduce consumption of UPFs and thus will generate fewer revenues over time. If the tax works as planned, there will be no revenue with which to fund the tax credit. And this assumes that low-income and minority consumers are not living in “food deserts” and actually have healthier options available to them.¹⁸⁴ If they are living in food deserts, then the tax credit cannot even work in theory, notwithstanding its practical complications.

Finally, there is the question of whether we want Congress to tax food in the first place. Most states avoid taxing groceries, likely for political and equitable reasons.¹⁸⁵ Because constituents tend to have much more confidence in their state officials than their federal representatives,¹⁸⁶ reasoned speculation suggests that a federal tax on food would be even less popular than a state or local tax on food.

The nature of UPFs make them a poor target for Pigouvian taxation. The UPT would be exceedingly difficult to design, let alone implement and enforce. It likely would hit low-income and minority consumers disproportionately and be very unpopular. So, the UPT is not an encouraging solution. But a few nontax options do exist.

B. The Preferability of Nontax Solutions

Though the UPT likely is not a viable option, other important nontax solutions exist to address the worsening health crisis. First, Congress and the USDA should recalibrate the current program of farm subsidies. Most direct federal subsidies to farmers are for crops like corn, soybeans, and wheat, and

¹⁸⁴ See *supra* note 25 and accompanying text.

¹⁸⁵ Thirty-seven states do not impose a sales tax on groceries. ERIC FIGUEROA & JULIETTE LEGENDRE, CTR. ON BUDGET & POL’Y PRIORITIES, STATES THAT STILL IMPOSE SALES TAXES ON GROCERIES SHOULD CONSIDER REDUCING OR ELIMINATING THEM 1 (2020), <https://www.cbpp.org/sites/default/files/atoms/files/3-16-06sfp3.pdf>.

¹⁸⁶ PEW RSCH. CTR., AMERICANS’ DISMAL VIEWS OF THE NATION’S POLITICS 34, 38 (2023), https://www.pewresearch.org/wp-content/uploads/sites/20/2023/09/PP_2023.09.19_views-of-politics_REPORT.pdf (reporting approval ratings of fifty-six percent for local elected officials, fifty-one percent for state governors, and forty-one percent for members of Congress—with a twenty-six percent approval rating for Congress overall).

not for livestock or fruits and vegetables.¹⁸⁷ Corn, soy, and wheat also make up three of the most common ingredients in UPFs.¹⁸⁸ So, if Congress were to enact the UPT, it would be taxing the very crops that it most heavily subsidizes. A better solution would be to rethink how and why we incentivize the production of crops that make UPFs cheap and ubiquitous.¹⁸⁹

Second, Congress or the Department of Justice should consider the antitrust concerns presented by a few oligarchs dominating the food market.¹⁹⁰ One wonders whether these food companies actively promote the “illusion of choice.”¹⁹¹ If you are in the mood for cookies, you could buy Oreos or Chips Ahoy, or if you are in the mood for crackers, you could snag some Ritz, Triscuit, Wheat Thins, or Belvita. So many options, all ultraprocessed, and all produced by the same company—Mondelez International.¹⁹² This concentration of power squashes competition and leaves health-conscious consumers with few options. If the federal government wishes to encourage the consumption of healthy foods, it should consider breaking up the food oligarchs that push cheap UPFs.

Third, Congress or the relevant agency should consider regulating how UPFs are advertised, particularly to children and minorities.¹⁹³ In Europe, a coalition of health, consumer, and family organizations has called on the European Union to adopt legislation that would protect children from the “widespread, ubiquitous, and insidious” marketing of UPFs.¹⁹⁴ Similar

¹⁸⁷ CHRIS EDWARDS, CATO INST., BRIEFING PAPER NO. 162, CUTTING FEDERAL FARM SUBSIDIES 1 (2023), <https://www.cato.org/sites/cato.org/files/2023-08/briefing-paper-162.pdf>.

¹⁸⁸ *What They Are*, *supra* note 7, at 937.

¹⁸⁹ Other reasons exist to rethink our current subsidy framework, which arguably aids the wealthy, distorts the economy, facilitates scandal, and harms the environment. *See* EDWARDS, *supra* note 187, at 2–4.

¹⁹⁰ Lakhani et al., *supra* note 78.

¹⁹¹ Jeff Desjardins, *The Illusion of Choice in Consumer Brands*, VISUAL CAPITALIST (July 21, 2016), <https://www.visualcapitalist.com/illusion-of-choice-consumer-brands/>.

¹⁹² *Our Brands*, MONDELEZ INT’L, <https://www.mondelezinternational.com/our-brands/> (last visited Apr. 15, 2024).

¹⁹³ *See supra* text accompanying notes 84–113.

¹⁹⁴ Katy Askew, *EU “Must Legislate” on Unhealthy Marketing for Kids: Industry “Self-Regulation Is Not Working,”* FOOD NAVIGATOR EUROPE (Nov. 10, 2021), <https://www.foodnavigator.com/Article/>

legislation in the United States would likely be met with First Amendment challenges, so Congress would have to consider the extent of its reach under commercial-speech precedent.¹⁹⁵ But one can argue that if Congress can regulate the advertising of tobacco, it can regulate the advertising of UPFs as well.¹⁹⁶

Finally, Congress should give due attention to its constituents by prioritizing their health above the interests of the powerful food lobby.¹⁹⁷ This seems obvious, but it bears stating out loud. If Congress prioritizes health over wealth, it will be more engaged to pursue the nontax measures previously discussed.

VI. CONCLUSION

This Note acknowledges and emphasizes the impending health crisis America faces if it does not fix its diet. The problem arises, at least in part, from the overconsumption of hyperpalatable yet nutrient-deficient ultraprocessed foods. To address the problem, some consumer advocates have proposed a Pigouvian-style excise tax on these foods. This Note recognizes the advocates' good intentions but concludes that the tax likely would not accomplish their stated goals.

First, the UPT might not work even in theory because of the difficulty in determining the proper tax base. For a Pigouvian tax to succeed, the tax base must serve as a proxy for the harm to be avoided—in this case, the degree to which the food has been processed. This results in a moving-target tax base for which legislators attempt to assign numerical values to various degrees and types of processing to represent the amount of harm caused by the processing. This task may be infeasible to accomplish even in theory. Second, even if the UPT works in theory, it likely would not work in practice. Its design, implementation, and enforcement present nearly insurmountable

2021/11/10/EU-must-legislate-on-unhealthy-marketing-for-kids-Industry-self-regulation-is-not-working.

¹⁹⁵ See *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n*, 447 U.S. 557, 566 (1980) (finding that if commercial speech is neither unlawful nor misleading, it can be prohibited only if the regulation is no more extensive than necessary to achieve a substantial government interest).

¹⁹⁶ See *Advertising and Promotion*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/tobacco-products/products-guidance-regulations/advertising-and-promotion> (Jan. 30, 2020).

¹⁹⁷ See *supra* text accompanying notes 114–21.

complexities for legislators and regulators, as well as producers who must comply with it. Finally, even if the UPT could work in theory and in practice, it would present political and equitable challenges. The new federal tax on food likely would be very unpopular, and it would disproportionately impact low-income and minority consumers.

While the UPT is likely not a viable option, nontax solutions do exist. Congress could recalibrate its federal food subsidies, break up the food oligarchy, or regulate junk-food marketing to children and minorities. Any of these measures—or a combination of them—would be a step in the right direction.