

MENDING BROKEN HEARTS: REGULATORY RESPONSE TO AMERICA’S HEART DISEASE EPIDEMIC

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INTRODUCTION

In 2021, my 45-year-old, marathon running, active and seemingly healthy husband, Zach, had a massive, widowmaker heart attack. His left anterior descending artery was 100% blocked, which required two stents to restore blood flow to the heart.¹ Zach had consistently exercised—waking up at 4:30 a.m. six days a week to run and lift weights. He counted his calories and made sure he was eating plenty of protein as he had been instructed by both his primary care physician (“PCP”) and his fitness trainer. He diligently went to his PCP each year for a physical exam. He drank plenty of water. He never smoked or drank alcohol. He had no family history of heart disease. He was not obese or diabetic. He did not have high blood pressure or cholesterol. He did not seem a prime candidate for a heart attack. And yet, he had the worst type of heart attack—a heart attack with a 12% survival rate if experienced outside the hospital, which his was.² Fifty percent of men who survive a heart attack eventually die from a heart attack, and 24% of those deaths occur within the first year following a heart attack.³ Zach was determined not to be one of the 50% of men who die from a subsequent heart attack. He asked his cardiologist what he should be doing to prevent that. “Take these drugs, eat right, exercise, and hope for the best,” his cardiologist told him. Zach was not satisfied, and he went to three other cardiologists hoping for more concrete advice. Specifically—what does “eat healthy” mean, especially “heart healthy.” Some gave general guidance—“eat a well-balanced diet and avoid fatty foods,” but what does “well-balanced diet” mean? The answer to that question could potentially save some of the over “700,000 people [who] die of heart disease each year in the United States.”⁴

* This Comment is dedicated to my husband, Zach. Thank you for not dying and leaving me to raise these kids alone. They would eat me alive.

1. *Widowmaker Heart Attack*, CLEVELAND CLINIC, <https://my.clevelandclinic.org/health/diseases/24507-widowmaker-heart-attack> (Dec. 6, 2022).

2. *Heart and Vascular Health. What Is a Widowmaker Heart Attack?*, UPMC HEALTHBEAT, <https://share.upmc.com/2019/02/widowmaker/> (Sept. 2, 2022).

3. Wendy E. Parmet, *The Impact of Law on Coronary Heart Disease: Some Preliminary Observations on the Relationship of Law to “Normalized” Conditions*, 30 J. L. MED. & ETHICS 608, 609 (2002).

4. *Heart Disease Facts*, U.S. CTRS. FOR DISEASE CONTROL AND PREVENTION (May 15, 2024), <https://www.cdc.gov/heart-disease/data-research/facts-stats>.

This Comment examines the public and private health actions necessary to reduce heart disease. Section I provides the history and current state of heart disease, including the root causes of heart disease—primarily nutrition. Section II addresses the history of the American Farm Bill and its catastrophic results. It suggests measures Congress should take and changes that should be made to the bill. Section III addresses agribusiness lobbyists and their ability to sway both public opinion and Congress. It suggests changes that should be made to lobbyist funded research and reliance on that research. Lastly, while acknowledging that only implementing private health care changes is ineffective, Section IV addresses the private health care changes that should be taken to help reduce instances of heart disease.

I. BACKGROUND

Cardiovascular disease is the umbrella term used to include all diseases that affect the heart or blood vessels.⁵ Heart disease is a type of cardiovascular disease and is the umbrella term used to include all diseases of the heart.⁶ The most common type of heart disease is coronary heart disease,⁷ which is also known as ischemic heart disease or coronary artery disease.⁸ When most people talk about heart disease, they are typically referring to coronary heart disease.⁹ Coronary heart disease exists when the arteries leading to the heart narrow and restrict blood supply to the heart muscle.¹⁰ The narrowing of the artery creating a blockage is typically caused by buildup of plaque called atherosclerosis.¹¹ If the plaque buildup completely blocks the artery, the heart muscle cells die—this is a heart attack; otherwise known as myocardial infarction.¹²

Although the United States contains just 5% of the global population, American hospitals account for 50% of the world's angioplasty and bypass procedures—treatments for heart attacks and coronary artery blockages.¹³ Angioplasty is a procedure in which cardiovascular surgeons place a long narrow tube, also known as a stent, inside a blocked artery to open it and allow blood flow to the heart.¹⁴ If the artery is unable to support a stent, cardiovascular surgeons

5. *Know the Difference Cardiovascular Disease, Heart Disease, Coronary Heart Disease*, NAT'L HEART LUNG & BLOOD INST., <https://www.nhlbi.nih.gov/sites/default/files/publications/FactSheetKnowDiffDesign2020V4a.pdf> (last visited Oct. 2, 2024) [hereinafter *Know the Difference*].

6. *Id.*

7. *Id.*

8. *Silent Ischemia and Ischemic Heart Disease*, AM. HEART ASS'N, <https://www.heart.org/en/health-topics/heart-attack/about-heart-attacks/silent-ischemia-and-ischemic-heart-disease> (Dec. 5, 2022).

9. *Know the Difference*, *supra* note 5.

10. *Silent Ischemia and Ischemic Heart Disease*, *supra* note 8.

11. *Know the Difference*, *supra* note 5.

12. *Id.*

13. CALDWELL B. ESSELSTYN, JR., PREVENT AND REVERSE HEART DISEASE 8 (2008).

14. *Angioplasty and Stent Placement for the Heart*, JOHN HOPKINS MED., <https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/angioplasty-and-stent-placement-for-the-heart> (last visited Oct. 2, 2024).

perform coronary artery bypass surgery, which, as its name suggests, bypasses the original artery creating a new path.¹⁵

“In the United States, someone has a heart attack every 40 seconds,”¹⁶ which equates to 805,000 heart attacks a year.¹⁷ Heart disease is the leading cause of death in the United States¹⁸ and has been since 1950.¹⁹ Autopsy studies performed on American adults who died in car crashes show that 90% of them have some degree of coronary heart disease.²⁰ “Cardiovascular diseases are the leading cause of death globally”²¹ and kill more people “than all forms of cancer combined.”²² Dr. Joel Fuhrman, director of research for the Nutritional Research Foundation, contends the only reason cardiovascular disease does not kill even more people is because “some other diet-related disease kills them first.”²³ Heart disease takes no prisoners and “is the leading cause of death for men, women, and people in most racial and ethnic groups in the United States.”²⁴ Additionally, heart disease is the leading cause of permanent disability.²⁵

One of the first questions Zach’s cardiologist asked him following his heart attack was “do you have a family history of heart disease?” If an individual has a first-degree relative (e.g., father, mother, or sibling) who has had a heart attack at a young age (under the age of 55 for men and under the age of 65 for women), that individual has a statistically higher risk of developing heart disease.²⁶ If an individual has a first-degree relative that has high blood pressure, diabetes, or high cholesterol, that individual is more likely to be genetically predisposed to cardiovascular disease.²⁷ But, family history is just one piece of the puzzle.²⁸ Dr. Caldwell B. Esselstyn, founder of the Esselstyn Heart Disease Program at the Cleveland Clinic, argues “coronary artery disease is preventable, and that even after if it is underway, its progress can be stopped” by “abandoning the toxic American diet and maintaining cholesterol levels well below those historically recommended by health policy experts.”²⁹

15. *Coronary Artery Bypass Surgery*, MAYO CLINIC (Jan. 20, 2024), <https://www.mayoclinic.org/tests-procedures/coronary-bypass-surgery/about/pac-20384589>.

16. *Heart Disease Facts*, *supra* note 4.

17. *Id.*

18. *Id.*

19. *Heart Disease Deaths*, U.S. CTRS. FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/nchs/has/topics/heart-disease-deaths.htm> (Aug. 5, 2023).

20. JOEL FUHRMAN, *THE END OF HEART DISEASE* 13 (2016).

21. *Cardiovascular Diseases (CVDs)*, WORLD HEALTH ORG. (June 11, 2021), [https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)).

22. FUHRMAN, *supra* note 20, at 1.

23. *Id.* at 13.

24. *Heart Disease Facts*, *supra* note 4.

25. Parmet, *supra* note 3.

26. *Family Matters: Understanding Genetic Risk for Heart Disease*, UNIV. CHI. MED. (Aug. 3, 2020), <https://www.uchicagomedicine.org/forefront/heart-and-vascular-articles/understanding-genetic-risk-for-heart-disease>.

27. *Id.*

28. *Id.*

29. ESSELSTYN, JR., *supra* note 13, at 4.

Although doctors may disagree on which diet is the best diet, most agree a healthy diet is vital and that the standard American diet “damages the heart in almost every single person who eats it.”³⁰ “[U]nhealthy diets, high blood pressure, and high serum cholesterol are the top three contributors to deaths from heart attacks.”³¹ “There is unequivocal experimental, epidemiological, and clinical evidence demonstrating a correlation between diet and increased risk of cardiovascular disease (“CVD”)”³² and doctors estimate that “nutritional factors may be responsible for approximately 40% of all CVD.”³³ In the seminal study, the INTERHEART study, more than 90% “of all myocardial infarctions were attributed to preventable environmental factors with nutrition identified as one of the important determinants of CVD.”³⁴ A 2018 study published in the *Journal of American Medical Association* “found that a poor diet—defined as one relatively high in calories but lacking adequate nutrients—was *the* leading risk factor for premature death in the United States.”³⁵ To put a fine point on it, Dr. Xinyao Liu of Central South University, Changsha, China estimates that “more than six million deaths [worldwide] could be avoided [annually] by reducing intake of processed foods, sugary beverages, trans and saturated fats, and added salt and sugar.”³⁶

In the debate of nature versus nurture, doctors acknowledge that genes play a role in determining whether an individual will be susceptible to a heart attack, but Dr. Fuhrman states that “almost all Americans develop heart disease, regardless of genetics”³⁷ and studies show “[i]f you’re overweight, smoke, have a nutrient-poor diet or don’t exercise, then no matter how good your family history is, these lifestyle factors will negatively impact your health in the long term.”³⁸ As Dr. Esselstyn put it, “[g]enetics loads the gun, lifestyle pulls the trigger.”³⁹ The Atherosclerosis Risk in Communities Study, conducted by epidemiologist Emily A. Hu, illustrated that when participants engaged in one of four healthy diets (Healthy Eating Index-2015, Alternative Healthy Eating Index, 2010, alternate Mediterranean diet, and Dietary Approaches to Stop Hypertension) these partici-

30. FUHRMAN, *supra* note 20, at 13.

31. *Poor Diet Is Top Contributor to Heart Disease Deaths Globally*, EUR. SOC’Y OF CARDIOLOGY (Oct. 16, 2020), <https://www.escardio.org/The-ESC/Press-Office/Press-releases/poor-diet-is-top-contributor-to-heart-disease-deaths-globally>.

32. Paramjit S. Tappia & Heather Blewett, *Nutrition and Cardiovascular Health*, INT’L J. MOLECULAR SCI., March 26, 2020, at 1.

33. *Id.*

34. *Id.*

35. Will Bostwick, *Why Doctors Aren’t Taught Much About Nutrition*, TEX. MONTHLY (Feb. 24, 2023), <https://www.texasmonthly.com/news-politics/ut-southwestern-medical-school-culinary-medicine-nutrition/> (emphasis added); see *The State of US Health, 1990-2016: Burden of Diseases, Injuries, and Risk Factors Among US States*, 319 J. AM. MED. ASS’N 1444, 1451 (2018) (showing, in Figure 2, dietary risks as the leading risk factor for death in the United States in 2016).

36. *Poor Diet Is Top Contributor to Heart Disease Deaths Globally*, *supra* note 31.

37. FUHRMAN, *supra* note 20, at 13.

38. *Family Matters: Understanding Genetic Risk for Heart Disease*, *supra* note 26.

39. Bob Curley, *Healthy Lifestyle May Offset Effects of Life-Shortening Genes by More Than 60%*, MED. NEWS TODAY (Apr. 30, 2024), <https://www.medicalnewstoday.com/articles/healthy-lifestyle-may-offset-effects-of-life-shortening-genes-by-more-than-60>.

pants showed a 21-34% reduction in cardiovascular disease mortality risk.⁴⁰ Even if doctors cannot agree on how much of an individual's heart disease risk depends on their genes versus their lifestyle, most agree that lifestyle is a significant factor.⁴¹ Despite this understanding, Americans are dying of heart disease more than any other cause.⁴² In the middle of a global pandemic, COVID-19 was merely the third leading cause of death in the United States, following both cancer and heart disease.⁴³ In 2020, deaths attributed to COVID-19 reached 345,323, compared to the 690,882 deaths attributed to heart disease.⁴⁴ In the United States, "[o]ne person dies every 33 seconds from cardiovascular disease."⁴⁵

The United States treats heart disease as a private issue between patient and doctor, focusing on diagnosing individuals that are high risk for the disease and then cautioning them to "modify, treat or control most risk factors to lower [their] risk, by focusing on [their] lifestyle habits or, if needed, taking medicine."⁴⁶ But heart disease is a public health crisis.⁴⁷ Because heart disease is viewed as a private issue between a patient and their doctor, and one of the main causes of heart disease is lifestyle choices, heart disease is often stigmatized.⁴⁸ Those who are obese are frequently accused of making "bad" health choices.⁴⁹ This stigmatization is then justified as motivation to encourage the individual to adopt healthier behaviors.⁵⁰ When Zach had his heart attack, many well-intending friends and acquaintances asked what he was doing wrong. They were trying to avoid a similar fate, but in the process, they were looking for reasons to disqualify themselves from a risk of heart attack. This stigmatization and privatization leads "both the public health community and medical research field [to] have generally approached the disease from a clinical/individualistic orientation."⁵¹ Additionally, the few public health measures that have been taken to address the heart disease epidemic have only exacerbated the problem.

Privatizing health care is not working. Tasking individuals with the onus of researching and implementing a "healthy" diet to reduce heart disease is largely ineffective. This Comment will address the necessary changes the United States government must take to effectively lower heart disease.

40. Eric Graber, *ASN Journals Explore the Links Between Nutrition and Heart Disease*, AM. SOC'Y FOR NUTRITION (Feb. 24, 2022), <https://nutrition.org/asn-journals-explore-the-links-between-nutrition-and-heart-disease/>.

41. *Id.*

42. FUHRMAN, *supra* note 20, at 1.

43. Farida B. Ahmad & Robert N. Anderson, *The Leading Causes of Death in the US for 2020*, 325 J. AM. MED. ASS'N 1829, 1829 (2021).

44. *Id.*

45. *Heart Disease Facts*, *supra* note 4.

46. Parmet, *supra* note 3, at 611.

47. *See generally* FUHRMAN, *supra* note 20.

48. Parmet, *supra* note 3, at 611.

49. *See generally* Rebecca M. Puhl & Chelsea A. Heuer, *Obesity Stigma: Important Considerations for Public Health*, 100 AM. J. PUB. HEALTH 1019 (2010).

50. *Id.*

51. Parmet, *supra* note 3, at 610.

II. FARM BILL SUBSIDIES: THE ROOT OF THE PROBLEM

A. *The History of Farm Bill Subsidies*

After World War I, crop prices in the United States plummeted as European demand for American produce dropped.⁵² By the time the Great Depression hit in 1929, crop prices were less than a third of what they had been a decade prior.⁵³ President Roosevelt, as part of the New Deal, passed the first farm bill, the Agricultural Adjustment Act of 1933 (“the Bill”).⁵⁴ It paid farmers to limit production of certain crops and subsidized growing other crops.⁵⁵ The goal was to both “provide financial support to farmers and nutritious food to an ailing population.”⁵⁶ When the Bill was enacted, the American people were suffering from hunger and malnourishment.⁵⁷ In response to that food scarcity, small riots and hunger marches were common.⁵⁸ The dietary needs of the people in 1933, consequently, were essential fats and sugar to thwart hunger and starvation.⁵⁹ The Bill responded to that need by encouraging farmers to grow commodity crops that would provide necessary fats and sugars.⁶⁰ As a result, the subsidies went primarily to “farmers of corn, wheat, soy, rice, and cotton.”⁶¹

In 1938, Congress enacted the first permanent farm legislation, the Agricultural Adjustment Act of 1938, which created the modern farm bill (the “Farm Bill”), and has been renewed every five to six years.⁶² The current iteration of the Farm Bill, established in 2018, was originally set to expire at the end of 2023.⁶³ However, on November 16, 2023, President Biden signed into law H.R. 6363, which extended the 2018 Farm Bill to September 30, 2024 to allow more time to consider changes to the Farm Bill that address the current needs of the American people.⁶⁴ Because of congressional inaction, the one-year extension expired on September 30, 2024 at midnight. At the time this Comment was published, no

52. Michael X. Heiligenstein, *A Brief History of the Farm Bill*, SATURDAY EVENING POST (Apr. 17, 2014), <https://www.saturdayeveningpost.com/2014/04/a-brief-history-of-the-farm-bill/>.

53. *Id.*

54. *Id.*

55. *Id.*

56. Andrea Freeman, *The 2014 Farm Bill: Farm Bill Subsidies and Food Oppression*, 38 SEATTLE U. L. REV. 1271, 1277 (2015).

57. *See Americans React to the Great Depression*, LIBR. OF CONG., <https://www.loc.gov/classroom-materials/united-states-history-primary-source-timeline/great-depression-and-world-war-ii-1929-1945/americans-react-to-great-depression/> (last visited Oct. 2, 2024).

58. *Id.*

59. Freeman, *supra* note 56, at 1277.

60. *Id.*

61. *Id.*

62. Agricultural Adjustment Act of 1938, 7 U.S.C. § 1281; Heiligenstein, *supra* note 52.

63. *See generally* Agricultural Improvement Act of 2018, Pub. L. No. 115-334, 132 Stat. 4490.

64. *Farm Bill*, U.S. DEP’T OF AGRIC., <https://www.fsa.usda.gov/programs-and-services/farm-bill/index> (last visited Aug. 26, 2024); Further Continuing Appropriations Act of 2024, Pub. L. 118-22, § 102, 137 Stat. 112114-15 (2023).

further action occurred.⁶⁵ The United States Department of Agriculture (“USDA”) is the agency that administers the Farm Bill.⁶⁶ It is comprised of “twenty-nine agencies that cover topics spanning from agriculture to nutrition.”⁶⁷ Congress passes the Farm Bill with support from both the House and the Senate, it is approved by the President, and then it is passed on to the USDA to administer and facilitate.

Since 1933, Congress has written and passed eighteen farm bills.⁶⁸ The purpose of the Farm Bill is to provide a predictable “opportunity for policymakers to comprehensively and periodically address agricultural and food issues.”⁶⁹ Because the Farm Bill determines which crops the government will financially support, the Farm Bill influences “which crops U.S. farmers produce, crop prices, and which products distributors sell.”⁷⁰ By extension, the Farm Bill directly and indirectly influences the food choices available, and therefore consumed, by the American people.

B. The Current Farm Bill Subsidizes the Wrong Foods

The food that is making Americans sick is not an unfortunate byproduct of capitalism, but instead an intentional act of Congress wherein “the ‘price of a typical fast food meal would triple if not subsidized.’”⁷¹ Because the Farm Bill determines which crops are produced in the United States “the Farm Bill and the demands it makes on the USDA... make it extremely difficult for most people to eat in accordance with the national nutritional recommendations.”⁷² Although the nutritional needs of the American people have drastically changed in the eighty-six years since Congress implemented the Farm Bill, Congress has not responded to those changes and has continuously subsidized corn, wheat, and soy.⁷³

Because the Farm Bill subsidizes certain commodities, these commodities are often grown in amounts that exceed demand.⁷⁴ Take corn for example—the Farm Bill subsidies ensured that farmers grew more corn than consumers need.⁷⁵ Additionally, the process used to grow corn in these excessive amounts made much of the corn unusable for human consumption, resulting in the creation of high-

65. See Jessica Domel, *Farm Bill Expiration Underlines Need for New Legislation, Disaster Assistance*, TEX. FARM BUREAU (Oct. 2, 2024), <https://texasfarmbureau.org/farm-bill-expiration-underlines-need-for-new-legislation-disaster-assistance/>.

66. Freeman, *supra* note 56, at 1273.

67. Alyson Waite, Note, *United States Farm Policy Reform in Supporting Dietary Diversity and Combating Monocropping*, 54 U. TOL. L. REV. 327, 329 (2023).

68. *Id.* at 330.

69. Renée Johnson & Jim Monke, *Farm Bill Primer: What Is the Farm Bill?*, CONG. RSCH. SERV., <https://crsreports.congress.gov/product/pdf/IF/IF12047> (Oct. 18, 2024).

70. Waite, *supra* note 67, at 330.

71. Reed Troutman, *Health Food Advocacy and the National School Lunch Program*, 40 J. L. & EDUC. 383, 389 (2011).

72. Freeman, *supra* note 56, at 1272-73.

73. *Id.* at 1279-80.

74. *Id.* at 1280.

75. *Id.*

fructose corn syrup.⁷⁶ Then, because the USDA is tasked with administering the Farm Bill, it promoted the products that contain high-fructose corn syrup such as sugary drinks, cereal, and canned goods.⁷⁷ These foods containing high-fructose corn syrup became the foods offered in school lunches and government nutrition programs. “Since 1970, daily calories from corn sweetener have increased 359%.”⁷⁸ By subsidizing, over-producing, and then promoting these commodities crops, Congress is funding and distributing the foods that are making Americans sick.

The USDA publishes a Dietary Guidelines for America (the “DGA”) every five years, intended as a resource for health professionals nationally.⁷⁹ It is the cornerstone for federal nutrition programs.⁸⁰ The DGA focuses on an individual’s diet over time and not food in isolation.⁸¹ According to the DGA, “[r]esearch shows that the ongoing pattern of an individual’s eating habits has the greatest impact on their health.”⁸² The current DGA for 2020-2025 is 149 pages long and has a section titled “Limit Foods and Beverages Higher in Added Sugars, Saturated Fat, and Sodium, and Limit Alcoholic Beverages.”⁸³ It advises limiting sugars and fats to less than 15% total calories consumed per day.⁸⁴ However, the USDA, as administrator of the Farm Bill, has a significant stake in promoting the products the government subsidizes, including high-fructose corn syrup made from the excess growth of corn.⁸⁵

Although one of the foundational goals of the Farm Bill is to “provide... nutritious food to an ailing population,”⁸⁶ no Farm Bill has ever directly subsidized the growth of fruits and vegetables.⁸⁷ To meet the DGA’s dietary goals of two servings of fruit and vegetables a day, “farmers would need to devote thirteen million more acres to fruits and vegetables, which they are unlikely to do absent subsidies.”⁸⁸ The DGA encourages adults to limit the saturated fats they consume and to pay particular attention to the foods that are the top sources of saturated fat, such as burgers, tacos, and hot dogs.⁸⁹ Yet the cost of these foods, particularly fast food, is artificially low in large part because they contain “most of the subsidized

76. *Id.*; see generally Tony C. Dreibus & Jesse Newman, *U.S. Farmers Are Up to Their Ears in Corn*, WALL ST. J. (Aug. 17, 2014), <http://www.wsj.com/articles/u-s-farmers-are-up-to-their-ears-in-corn-1408318910>.

77. Kiyah J. Duffey & Barry M. Popkin, *High-Fructose Corn Syrup: Is This What’s for Dinner?*, 88 AM. J. OF CLINICAL NUTRITION 1722S, 1722S (2008).

78. Freeman, *supra* note 56, at 1282.

79. *Dietary Guidelines for Americans 2020-2025*, U.S. DEP’T OF AGRIC. vii (Dec. 20, 2020), https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf [hereinafter *Dietary Guidelines*].

80. *Id.* at viii.

81. *Id.*

82. *Id.* at 6.

83. *Id.* at i.

84. *Id.* at 37.

85. Freeman, *supra* note 56, at 1280.

86. *Id.* at 1277.

87. *Id.* at 1281.

88. *Id.* at 1282.

89. *Dietary Guidelines*, *supra* note 79, at 44.

commodities: corn (primarily in the form of sweeteners), soybeans (in oils), wheat, meat, and dairy.”⁹⁰

Every five years, Congress has an opportunity to readdress and focus on the current dietary needs of the American people, yet it has continued to subsidize the same foods since 1933, which was a time “when the government sought to promote weight gain by facilitating the highest intake of calories possible.”⁹¹ Currently, obesity is “the most serious health problem in the U.S. today,”⁹² with approximately 42% of adults classified as obese⁹³ and just over 9% are severely obese.⁹⁴ Severe obesity, formerly known as morbid obesity, is “[a] serious health condition that results from an abnormally high body mass that is diagnosed by having a body mass index (BMI) greater than 40 kg/m², a BMI of greater than 35 kg/m² with at least one serious [o]besity-related condition, or being more than 100 pounds over ideal body weight[.]”⁹⁵ Obesity-related conditions include:

All-cause mortality (early death), high blood pressure (hypertension), high or low LDL cholesterol, and high levels of triglycerides (dyslipidemia), type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and breathing problems, many types of cancers, lower quality of life, mental illness such as clinical depression, anxiety and other mental disorders, body pain and difficulty with physical functioning.⁹⁶

Nineteen percent of children aged two to nineteen are obese, affecting fourteen and a half million children and adolescents.⁹⁷ Childhood obesity is one of the “most serious public health challenges of the 21st century,”⁹⁸ yet Congress continues to subsidize the foods that cause obesity and has never subsidized foods that would likely reduce it.⁹⁹ The national “medical care costs of obesity are estimated to be \$147 billion per year.”¹⁰⁰ The direct medical costs for an obese individual are

90. Freeman, *supra* note 56, at 1285.

91. *Id.* at 1279.

92. *Id.* at 1278.

93. *Adult Obesity Facts*, U.S. CTRS. FOR DISEASE CONTROL AND PREVENTION (May 14, 2024), https://www.cdc.gov/obesity/php/data-research/adult-obesity-facts.html?CDC_AAref_Val=https://www.cdc.gov/obesity/data/adult.html.

94. *Id.*

95. Anna Welcome, *Shifting from “Morbid Obesity” to “Class III Obesity”*, OBESITY MED. ASS’N. (Apr. 6, 2023), <https://obesitymedicine.org/shifting-from-morbid-obesity-to-class-iii-obesity/>.

96. *How Overweight and Obesity Impacts Your Health*, U.S. CTRS. FOR DISEASE CONTROL AND PREVENTION (Jan. 4, 2024), <https://www.cdc.gov/healthy-weight-growth/food-activity/overweight-obesity-impacts-health.html>.

97. *Childhood Obesity Facts*, U.S. CTRS. FOR DISEASE CONTROL AND PREVENTION (Apr. 2, 2024), https://www.cdc.gov/obesity/php/data-research/childhood-obesity-facts.html?CDC_AAref_Val=https://www.cdc.gov/obesity/data/childhood.html.

98. *Noncommunicable Diseases: Childhood Overweight and Obesity*, WORLD HEALTH ORG. (Oct. 19, 2020), <https://www.who.int/news-room/questions-and-answers/item/noncommunicable-diseases-childhood-overweight-and-obesity>.

99. Freeman, *supra* note 56, at 1281.

100. Sarah A. Roache et al., *Big Food & Soda Versus Public Health: Industry Litigation Against Local Government Regulations to Promote Healthy Diets*, 45 FORDHAM URB. L. J. 1051, 1055 (2018).

roughly \$1,723 more than those of a normal weight person.¹⁰¹ Not included in those direct costs are the indirect costs of absenteeism, lower wages, higher insurance premiums, and lack of productivity.¹⁰² Instead of “solving our most pressing public health issues, farm subsidies exacerbate them.”¹⁰³

C. *Farm Bills Disproportionately Disadvantage Marginalized Communities*

The more a farmer produces, the more subsidies they are eligible to receive.¹⁰⁴ As a result, the wealthiest 10% of farmers receive 75% of the Farm Bill’s subsidies.¹⁰⁵ This favoring of big agribusiness disadvantages small local farmers making it harder for them to survive.¹⁰⁶ The USDA, in its role as facilitator of the Farm Bill, uses federal nutrition programs to increase the sale of commodity items.¹⁰⁷ Specifically, the

USDA’s need to promote the sale of subsidized commodities through secondary markets leads it to use federal nutrition programs to increase those markets. For example, individuals can use food stamps to buy soda but not necessities such as soap or diapers [or fruits and vegetables].¹⁰⁸

Another way the Farm Bill has a disparate impact on marginalized communities is rooted in simple economics. Because subsidizing food inevitably makes the subsidized foods relatively inexpensive, they are the foods that are “the most prudent selections for low-income individuals.”¹⁰⁹ Individuals can stretch both their dollar and their federal nutrition benefits by purchasing less expensive, subsidized foods that are also, unfortunately, low in nutritional value.¹¹⁰ This “ensure[s] that foods high in fat and sugar became the most affordable for and accessible to impoverished communities, setting in motion government and individual preferences for consumption of these foods, even after the country’s foremost nutritional problem shifted from hunger to obesity.”¹¹¹

The food disparity between those living above the poverty line and thus not requiring federal nutritional assistance and those below the poverty line, requiring nutritional assistance, is even more prevalent during times of inflation. Food prices rose just under 10% in 2022 due to inflation,¹¹² widening the gap between Ameri-

101. *Id.*

102. *Id.*

103. Freeman, *supra* note 56, at 1280.

104. *Id.* at 1273.

105. *Id.* at 1283-84.

106. Madeleine Ngo, *Large Farmers Received Millions in Insurance Subsidies, Report Says*, N.Y. TIMES (Dec. 4, 2023), <https://www.nytimes.com/2023/12/04/us/politics/crop-insurance-report.html>.

107. Freeman, *supra* note 56, at 1277-78.

108. *Id.* at 1284.

109. *Id.*

110. *Id.*

111. *Id.* at 1278.

112. *Summary Findings Food Price Outlook, 2024 and 2025*, U.S. DEP’T OF AGRIC., <https://www.ers.usda.gov/data-products/food-price-outlook/summary-findings/> (Sept. 25, 2024).

cans who can afford healthy choices and Americans that have no choice but to eat what is subsidized.

The USDA and Farm Bill disproportionately affect those who participate in federal nutrition programs. These programs include Supplemental Nutrition Assistance to Women and Children (“WIC”), the food stamp program (the Supplemental Nutrition Assistance Program or “SNAP”), and government funded school lunch. Because the food choices available through federal nutrition programs are largely comprised of the subsidized commodities, and those subsidized commodities are the least expensive food choices, they are the foods feeding America’s most vulnerable.¹¹³ One of the items found on a school lunch plate is Kraft Heinz Lunchables.¹¹⁴ Created in 1988 by the parent company, Philip Morris, and marketed to busy mothers, Lunchables contained so much fat and sodium that one Philip Morris executive joked that the healthiest thing in the Lunchables was the napkin.¹¹⁵

Another way food subsidies disproportionately affect marginalized communities is by exacerbating food deserts. Alarming, approximately twenty-three and a half million people live in food deserts.¹¹⁶ A food desert is defined by the USDA as low-income areas that lack supermarkets and grocery stores.¹¹⁷ Areas with high levels of poverty are more likely to be food deserts¹¹⁸ and individuals living in food deserts are more likely to be obese.¹¹⁹ “[O]besity disproportionately affects individuals classified as... those with limited resource” and “[a] common factor uniting individuals disproportionately affected by obesity is their lack of convenient access to healthy food options.”¹²⁰

Because fruits and vegetables are typically sold primarily in grocery stores, and food deserts lack grocery stores, those living in a food desert often lack access to fresh produce options within their community.¹²¹ Additionally, because food deserts are low-income areas, people that live in food deserts often “lack vehicle access, are more than a quarter mile from the nearest supermarket and [as a result] do not have access to nutritious food.”¹²² Food purchases in these areas primarily consists of food purchased at either the neighborhood corner store or fast food

113. Freeman, *supra* note 56, at 1273.

114. *How Lunchables Ended up on School Lunch Trays*, WASH. POST (Oct. 20, 2023), <https://www.washingtonpost.com/podcasts/post-reports/how-lunchables-ended-up-on-school-lunch-trays/>.

115. Marc Lallanilla, *How Big Tobacco Created American’s Junk Food Diet and Obesity Epidemic*, N.Y. POST (Sept. 26, 2023, 4:51 PM), <https://nypost.com/2023/09/26/big-tobacco-created-our-junk-food-diet-and-obesity-epidemic/>.

116. *Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences*, U.S. DEP’T OF AGRIC. iii, https://www.ers.usda.gov/webdocs/publications/42711/12716_ap036_1_.pdf (Sept. 3, 2009, 10:23 AM).

117. Paula Dutko et al., *Characteristics and Influential Factors of Food Deserts*, U.S. DEP’T OF AGRIC. 1 (Aug. 2012), https://www.ers.usda.gov/webdocs/publications/45014/30940_err140.pdf.

118. *Id.* at iii.

119. Rebecca Lee, Note, *Quenching Food Deserts: Rethinking Welfare Benefits to Combat Obesity*, 25 S. CAL. REV. L. & SOC. JUST. 241, 243 (2016).

120. *Id.*

121. Ryelle Seymour, Comment, *Food Deserts Are Ripe for Business*, 44 B.C. ENV’T AFFS. L. REV. 421, 422 (2017).

122. *Id.* at 421.

restaurants.¹²³ Also, “[t]hese [corner] stores raise their profit margins even higher by imposing a ‘ghetto tax’ on consumers who cannot afford to shop elsewhere, exploiting the absence of supermarkets in economically depressed neighborhoods.”¹²⁴ As a result, “the lack of nutritious options in [corner] stores and limited transportation options force individuals in food deserts to subsist on a diet that is nutritionally deficient.”¹²⁵ The Farm Bill disproportionately affects marginalized individuals by creating and exacerbating food deserts through the act of subsidizing nutritiously deficient commodities instead of their more nutritious counterparts.

D. *Transparency and Honesty Solve Many of the USDA’s Problems*

The USDA’s current stated purpose is to “help keep America’s farmers and ranchers in business.”¹²⁶ This is a far cry from the USDA established by President Lincoln in 1862 as “the People’s Department.”¹²⁷ The USDA’s ties to big agribusiness and wealthy farmers do not protect people—it harms them. Since 2014, the identity of all farm subsidy recipients has been unknown.¹²⁸ Prior to 2014, recipient’s identities were transparent and “a considerable number of billionaires” were Farm Bill subsidy recipients.¹²⁹

Because the Farm Bill extension has been punted until after the 2024 presidential election, Congress has another chance to right its past wrongs by adopting a Farm Bill that serves the American people and not agribusiness. Farm Bill subsidies should subsidize fruit and vegetables—the foods all doctors agree contain optimal nutrition. Unhealthy foods are not naturally less expensive, they are artificially less expensive. Healthy foods could be less expensive, but it would require Congress to subsidize nutrient dense foods rather than nutrient deficient foods.

III. THE FOOD AND BEVERAGE INDUSTRY INTENTIONALLY MISLEADS THE PUBLIC

A. *Unhealthy Food Kills More People Than Cigarettes*

Dr. Ashkan Afshin, medical doctor and professor of health metric science at the University of Washington, worked with the university’s Institute for Health Metrics and Evaluation program to conduct the Global Burden of Disease research

123. *Id.* at 422.

124. Freeman, *supra* note 56, at 1286.

125. Seymour, *supra* note 121.

126. *Our Agency*, U.S. DEP’T OF AGRIC., <https://www.usda.gov/our-agency> (last visited Aug. 29, 2024).

127. *About the U.S. Department of Agriculture*, U.S. DEP’T OF AGRIC., <https://www.usda.gov/our-agency/about-usda> (last visited Aug. 29, 2024).

128. Freeman, *supra* note 56, at 1271; 7 U.S.C. §§ 1281-1407 (2024).

129. Freeman, *supra* note 56, at 1271 (revealing past Farm Bill recipients including the cofounder of Microsoft, Paul Allen, members of the House and Senate, celebrity Bruce Springsteen, and President Jimmy Carter).

project.¹³⁰ The study showed that a bad diet has worse health implications than smoking.¹³¹ Unhealthy eating is responsible for eleven million deaths per year globally¹³² compared to smoking nicotine, which is responsible for seven million deaths per year globally.¹³³ One of the reasons sugar kills so many people is because it is so addictive. Most research involving the addictive nature of sugar has been done with animals.¹³⁴ Research on rats demonstrated that when “forced to choose between sugar and drugs of abuse (e.g., cocaine), they exhibit a greater preference for the sugar, even when they were physiologically dependent on the drug.”¹³⁵ University of Michigan psychology professor Ashley Gearhardt led a study to determine the addictive qualities of ultra-processed foods (“UPFs”) and found “[t]he combination of refined carbohydrates and fats often found in UPFs seems to have a supra-addictive effect on brain reward systems, above either macronutrient alone, which may increase the addictive potential of these foods.”¹³⁶ Foods found in nature tend to naturally have either more carbohydrates or fats but not high levels of both.¹³⁷ But UPFs have disproportionately higher levels of both carbohydrates and fats.¹³⁸ The combination of high levels of both carbohydrates and fats triggers a rush of dopamine followed by a sudden drop-off resulting in an endless cycle of craving, getting a fix, and crashing—similar to that of someone who is addicted to alcohol or drugs.¹³⁹ The addictive nature of food is one of many reasons Dr. Esselstyn says that moderation kills.¹⁴⁰

The creation of UPFs was not an unfortunate byproduct of a changing food demographic in America, but rather a concerted effort to engineer junk food loaded with fat, carbohydrates, and sodium in combinations that are irresistible because they trigger the brain’s reward system.¹⁴¹ When the government began to regulate the tobacco industry in the 1960s, big tobacco simply became big agribusiness.¹⁴² Philip Morris transformed its business model from Marlboro Man cigarettes in the

130. Allison Aubrey, *Bad Diets Are Responsible for More Deaths than Smoking*, *Global Study Finds*, NPR (April 3, 2019, 6:31 PM), <https://www.npr.org/sections/thesalt/2019/04/03/709507504/bad-diets-are-responsible-for-more-deaths-than-smoking-global-study-finds>.

131. *Id.*

132. Lauren Steussy, *Bad Diets Now Kill More People Than Cigarettes: Study*, N.Y. POST, <https://nypost.com/2019/04/04/bad-diets-now-kill-more-people-than-cigarettes-study/> (Apr. 4, 2019, 11:32 AM).

133. Hannah Ritchie & Max Roser, *Smoking*, OUR WORLD IN DATA, <https://ourworldindata.org/smoking> (Nov. 2023).

134. Ashley Gearhardt et al., *If Sugar Is Addictive... What Does It Mean for the Law*, 41 J. L. MED. & ETHICS 46, 47 (2013).

135. *Id.*

136. Ashley Gearhardt et al., *Social, Clinical, and Policy Implications of Ultra-Processed Food Addiction*, 383 BRIT. MED. J., Oct. 9, 2023, at 1, 1.

137. *Id.* at 2.

138. *Id.*

139. *Id.*

140. See generally ESSELSTYN, JR., *supra* note 13.

141. Tera L. Fazzino et al., *US Tobacco Companies Selectively Disseminated Hyper-Palatable Foods into the US Food System: Empirical Evidence and Current Implications*, 119 ADDICTION 62, 63 (2023).

142. *Id.*

1960s to Kraft and General Foods in the 1980s through its acquisition of Kraft Foods and General Foods.¹⁴³ At the same time, R.J. Reynolds transformed its business structure from Camel cigarettes to Nabisco.¹⁴⁴ R.J. Reynolds took the flavors used in cigarettes and created “foods” with these flavors and then rebranded itself as a “flavor business.”¹⁴⁵ The chemicals used to flavor cigarettes were redirected to the creation of popular foods such as Kraft Mac & Cheese, Jello-O, Kool-Aid, and Oscar Mayer hot dogs.¹⁴⁶ “Tobacco conglomerates that used colors, flavors and marketing techniques to entice children as future smokers transferred these same strategies to sweetened beverages when they bought food and drinks companies starting in 1963.”¹⁴⁷ These foods were specifically engineered by tobacco companies to be addictive.¹⁴⁸ Kraft, General Foods, and Nabisco used their “decades of extensive scientific research into flavorings, chemical additives and colorings that were used to market cigarettes” and utilized that same knowledge to market food products to the American people.¹⁴⁹ These companies specifically targeted busy mothers and impressionable children.¹⁵⁰ Even if one desires to eat healthy, “[f]ood preferences are... resistant to change because the food industry has invested millions in perfecting the exact measurements and proportion of sugar, salt, and fat that will render a food addictive.”¹⁵¹

B. *The USDA Must Part Ways with Lobbyist Funded Research*

The food and beverage industry has funded scientific research for decades and uses this research to sway public opinion and downplay the adverse health effects of its products.¹⁵² The Sugar Association, the self-proclaimed scientific voice of the sugar industry,¹⁵³ “paid Harvard scientists to publish a paper on the relationship between sugar, fat, and heart disease” in 1967.¹⁵⁴ The fact that the

143. *Kraft’s Philip Morris Connection*, ABC NEWS (June 13, 2001, 4:51 PM), <https://abcnews.go.com/Business/story?id=88088&page=1>.

144. *R.J. Reynolds Makes \$4.9-Billion Offer to Buy Nabisco Brands*, L.A. TIMES (June 3, 1985, 12:00 AM), <https://www.latimes.com/archives/la-xpm-1985-06-03-fi-5701-story.html>.

145. Anahad O’Connor, *Many of Today’s Unhealthy Foods Were Brought to You by Big Tobacco*, WASH. POST (Sept. 19, 2023, 6:00 AM), <https://www.washingtonpost.com/wellness/2023/09/19/addiction-foods-hyperpalatable-tobacco/>.

146. *Id.*

147. Stanton A. Glantz, *Cigarette Giants Bought Food Companies, Used Cartoon Characters, Colors, Flavors to Boost Sales of Sweetened Beverages*, U. CAL. S.F. CTR. FOR TOBACCO CONTROL RSCH. & EDUC. (Mar. 15, 2019), <https://tobacco.ucsf.edu/cigarette-giants-bought-food-companies-used-cartoon-characters-colors-flavors-boost-sales-sweetened-beverages>.

148. Fazzino et al., *supra* note 141, at 63.

149. *Id.*

150. *Id.*

151. Andrea Freeman, *Transparency for Food Consumers: Nutrition Labeling and Food Oppression*, 41 AM. J. L. & MED. 315, 321 (2015).

152. Roache et al., *supra* note 100, at 1064.

153. *Your Resource for All Things Sugar*, THE SUGAR ASS’N, <https://www.sugar.org/> (last visited Oct. 3, 2024).

154. Roache et al., *supra* note 100, at 1064.

Sugar Association paid for this research was not disclosed until it was unearthed in 2017 buried deep in the Harvard archives.¹⁵⁵

The Sugar Association worked closely with Harvard scientists to publish a report that minimized the link between sugar and heart health and instead emphasized the link between fat and heart health.¹⁵⁶ The research concluded “there was ‘no doubt’ that the only dietary intervention required to prevent CHD [coronary heart disease] was to reduce dietary cholesterol and substitute polyunsaturated fat for saturated fat in the American diet.”¹⁵⁷ This finding is in stark contrast to the Harvard scientists notes disclosed in 2017 directly linking sucrose, a form of sugar, to coronary heart disease.¹⁵⁸ The research was not conducted to fully delve into the link between sugar and coronary heart disease but, rather, was bought and paid for by The Sugar Association to protect its market share.¹⁵⁹ The Sugar Association even won a public relations award in 1976 for “influencing the public opinion on the health effects of sugar consumption.”¹⁶⁰ And it worked. A low-fat diet was one of the most popular diets for years due in part to the massive public marketing funded by the Sugar Association.¹⁶¹

One of the Harvard scientists who authored the paper, D. Mark Hegsted, later became the head of nutrition at the USDA and used his role in the USDA to draft the federal government’s dietary guidelines.¹⁶² The DGA did not introduce a quantitative limit to sugar consumption until 2016.¹⁶³ When the DGA finally recommended limiting sugar consumption in 2016, it received harsh criticism from the Sugar Association that claimed the guidelines were not scientifically sufficient.¹⁶⁴ Alternatively, health advocates argued the guideline needed to go further,¹⁶⁵ stating “instead of straightforward recommendations not to eat processed food or drink soda, the recommendations suggest eating less sugar and limiting saturated fat.”¹⁶⁶ These advocates argued that the watered-down recommendations are the result of food industry pressures.¹⁶⁷

155. Denise Webb, *Sugar Industry Cover-Up?*, TODAY’S DIETITIAN, January 2017, at 20, 20.

156. Roache et al., *supra* note 100, at 1064.

157. Cristin E. Kearns et al., *Sugar Industry and Coronary Heart Disease Research: A Historical Analysis of Internal Industry Documents*, 176 J. AM. MED. ASS’N INTERNAL MED. 1680, 1682 (2016).

158. *Id.* at 1681.

159. *Id.* at 1680.

160. Roache et al., *supra* note 100, at 1064.

161. Allison Aubrey, *Why We Got Fatter During the Fat-Free Food Boom*, NPR (Mar. 28, 2014, 3:27 AM), <https://www.npr.org/sections/thesalt/2014/03/28/295332576/why-we-got-fatter-during-the-fat-free-food-boom>.

162. Roache et al., *supra* note 100, at 1064-65.

163. *New Dietary Guidelines Suggest Limits on Sugar, Saturated Fat, Sodium, but Experts Criticize Omissions*, HARV. T.H. CHAN SCH. OF PUB. HEALTH, <https://www.hsph.harvard.edu/news/hsph-in-the-news/new-dietary-guidelines-suggest-limits-on-sugar-saturated-fat-sodium-but-experts-criticize-omissions/> (last visited Oct. 3, 2024).

164. Seymour, *supra* note 121, at 428.

165. *Id.*

166. *Id.*

167. *Id.* at 428-29.

The food and beverage industry continues to fund research to sway public opinion and influence Congress.¹⁶⁸ Unsurprisingly, studies subsidized by the food and beverage industry are “five times more likely to find no positive association between consumption of sugary drinks and weight gain or obesity than studies that reported no industry funding or conflicts of interest.”¹⁶⁹ Not only does the food and beverage industry downplay the connection between an unhealthy diet and heart disease, it helped fund the Global Energy Balance Network (disbanded in 2015), which blamed obesity-related health problems on lack of exercise rather than diet.¹⁷⁰

In response to these studies, the unhealthy and addictive nature of subsidized commodities is downplayed, the DGA softens warnings instead of giving concrete and plain language guidelines, and Farm Bill subsidies have not responded to the health needs of the American people. Health advocates contend “[p]olicymaking committees should consider giving less weight to food industry-funded studies, and [should] include mechanistic and animal studies as well as studies appraising the effect of added sugars on multiple CHD [coronary heart disease] biomarkers.”¹⁷¹

C. *The USDA Must Part Ways with Agribusiness Lobbyists*

In 2023, agribusiness spent \$175.81 million lobbying in the United States.¹⁷² Critics of the American Beverage Association (the “ABA”) and sugar lobbyists in general point out that:

The ABA has lobbied against any government action... that might raise the cost of soda production and marketing or discourage consumption... [including] against nutrition labeling, packaging standards, fair labor standard, the exclusion of sodas from food assistance programs and school meals, limitations on franchises, quotas on sugar, container deposit laws, and restrictions on television advertising to children, among other issues.¹⁷³

Because sugar was historically expensive to extract from the sugar cane plant, it was consumed sparingly.¹⁷⁴ And although the Sugar Association has conducted zero scientific studies to evaluate the health risks associated with sugar consumption, it claims “[s]ugar has been an important ingredient in people’s diets for centuries and the subject of countless studies. When the full body of science is evaluated during a major review of scientific literature, experts continue to

168. Roache et al., *supra* note 100, at 1065.

169. *Id.*

170. *Id.* at 1064.

171. Kearns et al., *supra* note 157, at 1683.

172. *Total Lobbying Expenses in the United States in 2023, by Sector (in Million U.S. Dollars)*, STATISTA (July 5, 2024), <https://www.statista.com/statistics/257368/total-lobbying-expenses-in-the-us-by-sector/>.

173. Roache et al., *supra* note 100, at 1062.

174. Barbara L. Atwell, *Is Sugar the New Tobacco? How to Regulate Toxic Foods*, 22 ANNALS HEALTH L. 138, 149 (2013).

conclude that sugars intake is not a causative factor in any disease, including obesity.”¹⁷⁵ In 2003 the World Health Organization (“WHO”) was set to suggest limiting the intake of sugar to less than 10% of the calories consumed daily when the Sugar Association lobbied so extensively that the statement was replaced with the weak recommendation to eat sugar in moderation.¹⁷⁶ It would take another thirteen years for the DGA to issue its first quantitative limit on the daily consumption of sugar.¹⁷⁷

The dairy industry has also successfully lobbied to include dairy as a part of the American diet.¹⁷⁸ Despite knowing that humans do not need to consume dairy, and that most dairy is unhealthy for human consumption, it is still a food group recommended in the DGA.¹⁷⁹ The DGA states “[h]ealthy dietary patterns feature dairy”¹⁸⁰ and “[m]ost individuals would benefit by increasing intake in dairy in fat-free or low-fat form.”¹⁸¹ Similarly, the National Cattlemen’s Beef Association has also lobbied to keep beef a part of the American diet and within the recommended DGA.¹⁸² Agribusiness lobbyists are concerned with quarterly profits, not the health consequences of consuming the foods recommended by lobbyists.¹⁸³ And the government responds.¹⁸⁴ Instead of informing Americans that sugars and fats are harmful and that humans should limit dairy and meat, the USDA has softened the language in an attempt to pacify corporate lobbyists—and the effect is damaging.¹⁸⁵ According to Dr. Esselstyn, the USDA gives strange and impractical advice.¹⁸⁶

USDA recommendation: “Keep total fat intake between 20 to 35 percent of calories, with most fats coming from sources of polyunsaturated and monounsaturated fat, such as fish, nuts, and vegetable oils.”

This recommendation is of major concern. In effect, your government is suggesting a level of fat consumption that cannot arrest vascular disease and—quite the contrary—has actually been shown to promote it.¹⁸⁷

Dr. Esselstyn cautions that giving the USDA the responsibility of issuing the public’s health guidelines is like inviting Al Capone to prepare one’s taxes.¹⁸⁸ Rather than clearly stating to the public the foods that are inconsistent with a high

175. *Id.* at 150.

176. *Id.*

177. *Dietary Guidelines*, *supra* note 79, at 41.

178. Atwell, *supra* note 174, at 148.

179. *Id.*; *Dietary Guidelines*, *supra* note 79, at 18.

180. *Dietary Guidelines*, *supra* note 79, at 33.

181. *Id.*

182. Atwell, *supra* note 174.

183. *Id.* at 150.

184. *Id.* at 149.

185. ESSELSTYN, JR., *supra* note 13, at 60-62.

186. *Id.* at 61.

187. *Id.*

188. *Id.* at 62.

level of health, the USDA balks and softens the blow.¹⁸⁹ This is done both to appease lobbyists and out of some notion that adhering to a healthy diet is simply too difficult for Americans.¹⁹⁰ To maintain its integrity, the USDA must part ways with lobbyist funded research.¹⁹¹

D. Congress Should Pass Sugar Taxes and Implement Warning Labels

In addition to parting ways with agribusiness, Congress should impose a national tax on unhealthy food items, often labeled a snack tax, sugar tax, or soda tax.¹⁹² The WHO recommends such a tax and concludes that “[s]uch taxes lead to more than proportional reductions in... consumption and net reductions in caloric intake, and thus contribute to improving nutrition and reduction overweight, obesity and NCDs [noncommunicable diseases].”¹⁹³ Philadelphia was the first city to impose a soda tax in 2016.¹⁹⁴ The Philadelphia City Council voted on the tax and it passed 13-4 in large part due to Philadelphia Mayor, Jim Kenney, touting the financial benefits of such a tax.¹⁹⁵ However, the tax received pushback from the ABA, and the city was sued on the grounds that the tax was preempted by Pennsylvania state law.¹⁹⁶ The city of Philadelphia eventually won the suit, and a few other cities have been successful as well. In 2012 “the New York City Board of Health adopted the ‘Portion Cap Rule,’ which prohibited the sale of sugary drinks in containers larger than sixteen ounces.”¹⁹⁷ These victories have not been without heavy opposition from the ABA. Between 2009 and 2015, the beverage industry spent more than \$15 million in New York State campaigning against the Portion Cap Rule and other nutrition-related initiatives.¹⁹⁸ Snack taxes have had varied success, but the cities that have successfully passed a snack tax have done so through “careful design, law-making processes, implementation, and evaluation.”¹⁹⁹

Although not yet as successful as snack taxes, some cities have attempted warning labels for certain foods and drinks.²⁰⁰ Health advocates argue that UPFs need tobacco-style warning labels.²⁰¹ Currently at a Kroger in Toledo, Ohio, a large sign hangs over the cigarette display and reads, “A Federal Court Has Ordered Philip Morris USA & R.J. Reynolds Tobacco to State: All cigarettes cause cancer,

189. *Id.* at 63.

190. *Id.*

191. *See* Kearns et al., *supra* note 157, at 1683.

192. *See generally* Roache et al., *supra* note 100.

193. *Id.* at 1060.

194. *Id.* at 1070.

195. *Id.*

196. *Williams v. City of Phila.*, 164 A.3d 576, 580-82 (Pa. Commw. 2017).

197. Roache et al., *supra* note 100, at 1067.

198. *Id.* at 1062.

199. *Id.* at 1088.

200. *Id.* at 1078.

201. Andrew Gregory, *Ultra-Processed Foods Need Tobacco-Style Warnings, Says Scientist*, THE GUARDIAN (June 26, 2024), <https://www.theguardian.com/global/article/2024/jun/27/ultra-processed-foods-need-tobacco-style-warnings-says-scientist>.

lung disease, heart attacks and premature death—lights, low tar, ultra lights, and naturals. There is no safe cigarette.”²⁰² In 2015, San Francisco attempted to become the first United States city to pass legislation requiring soda companies place a warning label on their products that read: “WARNING: Drinking beverages with added sugar(s) contributes to obesity, diabetes, and tooth decay.”²⁰³ The San Francisco warning label was eventually blocked by a federal appeals court because it lacked public demand.²⁰⁴ “Public demand for public health measures is key to their adoption and their ongoing political sustainability.”²⁰⁵

Public demand for change is nearly impossible if the public lacks the requisite knowledge. By relying on research funded by the Sugar Association, the USDA is beholden to agribusiness and this conflict-of-interest results in inaccurate findings. Additionally, the DGA is misleading and confusing. Further complicating the issue by blaming individuals for their lifestyle diseases, there is “little incentive for the state to intervene to heal the ill, first because it is wrong to spend the money of good (skinny, healthy) taxpayers to correct the mistakes and weaknesses of (fat, sick) would-be freeloaders.”²⁰⁶ By not recognizing that heart disease is a public health issue and instead “identify[ing] health outcomes as the product of an individual’s good or bad choices” no effective change has been made.²⁰⁷ Although the bulk of this Comment is directed toward changes that should be made to public health laws, there are some private health measures that can and should be implemented to effectively lower heart disease.

IV. THE PRIVATIZATION OF PUBLIC HEALTH

A. *Doctors Are Ill Equipped to Solve the Heart Disease Epidemic*

“Public health is ‘what we as a society, do collectively to assure the conditions to be healthy.’”²⁰⁸ It examines what makes people sick and how to prevent it.²⁰⁹ Public health focuses on preventing disease as opposed to treating it.²¹⁰ Conversely, the United States health care system focuses on treating individual patients once they are already sick with little focus on preventative

202. *Starting July 1, Tobacco Companies Must Post Signs About Health Risks of Smoking at About 220,000 Stores Across U.S. – Signs Stem from 2006 Racketeering Verdict Against Companies*, CAMPAIGN FOR TOBACCO-FREE KIDS (June 30, 2023), https://www.tobaccofreekids.org/press-releases/2023_07_01_tobacco-racketeering-verdict-corrective-statements.

203. *Am. Beverage Ass’n v. City & Cnty. of S.F.*, 916 F.3d 749, 753 (9th Cir. 2019); Roache et al., *supra* note 100, at 1078.

204. Roache et al., *supra* note 100, at 1087.

205. *Id.*

206. Freeman, *supra* note 56, at 1289-90.

207. *Id.* at 1289.

208. SCOTT BURRIS ET AL., *THE NEW PUBLIC HEALTH LAW* 9 (2d ed. 2022).

209. *Id.*

210. *Id.* at 10.

health.²¹¹ The healthcare system is set up to reinforce treating sickness, not preventing it,²¹² because the end goal is financial gain.²¹³

Doctors and hospitals get paid for treating some immediate, identifiable malady—most often by running tests, performing procedures, or administering drugs. Those are the treatments that insurance companies are set up to pay for. There's little, if any, financial incentive for doctors to keep patients from getting sick in the first place.... Nutrition is not really reimbursable.²¹⁴

Alternatively, reimbursement for medical care in the West remains largely focused on treating illness, so doctors rarely dedicate significant time to disease prevention during patient encounters.²¹⁵

In America, patients rarely discuss nutrition with their doctors because doctors seldom broach the subject.²¹⁶ This is not only because the system is not set up to reimburse doctors for their time spent discussing nutrition, but also because doctors do not know how to provide nutritional information beyond the basics.²¹⁷ “Inadequate instruction during medical school, residency and other additional training is a primary reason for this dearth of expertise according to the American Heart Association.”²¹⁸ When patient Matthew Albin was diagnosed with celiac disease in 2010 his doctor advised him to adopt a gluten-free diet.²¹⁹ Matthew was not given a referral to a dietician or even a handout.²²⁰ His doctor had no advice other than “no gluten.”²²¹ Years ago, my PCP informed me that my body mass index, a tool some practitioners use to gauge healthy weight, was too high.²²² When I asked my doctor to refer me to a dietician he told me to search Google.

On average, medical students “spend less than 1% of lecture time learning about diet.”²²³ “The National Academy of Sciences... has advised that medical students should receive a minimum of 25 hours of nutrition education—compared to, for example, roughly 100 hours they might typically get of cardiology

211. *Id.* at 36.

212. Lloyd Minor, *Why Medical Schools Need to Focus More on Nutrition*, WALL ST. J. (Oct. 10, 2019, 3:37 PM), <https://www.wsj.com/articles/why-medical-schools-need-to-focus-more-on-nutrition-01570736240>.

213. Bostwick, *supra* note 35.

214. *Id.*

215. *Id.*

216. *Id.*

217. *How Much Does Your Doctor Actually Know About Nutrition?*, AM. HEART ASS'N (May 3, 2018), <https://www.heart.org/en/news/2018/05/03/how-much-does-your-doctor-actually-know-about-nutrition>.

218. *Id.*

219. Bostwick, *supra* note 35.

220. *Id.*

221. *Id.*

222. *BMI Frequently Asked Questions*, U.S. CTRS. FOR DISEASE CONTROL AND PREVENTION (June 28, 2024), https://www.cdc.gov/bmi/faq/?CDC_AAref_Val=https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html.

223. Jessica Fu, *If Food Is Medicine, Why Isn't It Taught at Medical Schools?*, THE COUNTER (Oct. 14, 2019, 8:00 AM), <https://thecounter.org/medical-schools-lack-nutritional-education/>.

instruction—but only 29 percent of medical schools met that modest goal” in a 2015 study.²²⁴ A report published by the Harvard Food Law and Policy Clinic found that, on average, medical school students in the United States spend less than 1% of lecture time learning about diet because “[n]either the federal government, which provides a significant chunk of funding to medical schools, nor accreditation groups—which validate them—enforce any minimum level of diet instruction.”²²⁵ The disparity of nutrition education for medical doctors goes back decades, even though diet has been tied to almost half the deaths from stroke, heart disease, and Type 2 diabetes.²²⁶ The American healthcare system does not approach heart disease from a public health standpoint.²²⁷ It treats the individual in clinical and individualistic orientation.²²⁸ But it does not treat the individual prior to a heart attack—it waits until after a person has had a heart attack to intervene even though the survival rate for certain types of heart attacks (e.g., the widowmaker) is only 12% if it occurs outside the hospital.²²⁹

Two months prior to Zach’s heart attack, he ran a five-mile race. During the race, he began having chest pains and labored breathing. At one point, running became too difficult and he finished the race walking. As an experienced runner, he knew this was not normal, but the pain stopped an hour after the race, and he chalked it up to a hot day. He continued, though, to have chest pains when running. Zach, a self-diagnosed hypochondriac, immediately made an appointment with his PCP. His PCP ordered a panel of bloodwork and, although his bloodwork was within the normal range, he was referred to a cardiologist. A nurse practitioner working with the cardiologist performed an electrocardiogram (“EKG”), a painless test used to record the electrical signals of the heart and detect heart problems.²³⁰ A week later, his cardiologist had Zach perform a nuclear stress test to evaluate how well his heart was pumping blood.²³¹ These are the two most common diagnostic measures used by health care professionals to determine whether one has coronary heart disease.²³² Zach was told that what he was experiencing was not cardiac, and was likely heartburn (even though it seemed to be only exercise induced). His heart was in peak condition. Zach continued bugging both his PCP and his cardiologist, and the cardiologist told him to try taking Tums and Prilosec. Not once did these doctors discuss his nutrition. His cholesterol was within normal ranges and he did not have a family history of heart disease. Had to be heartburn, right?

Wrong. On October 16, 2021, almost two months after the chest pains began, I came home and found Zach sitting at the table sweating profusely in an intense

224. Bostwick, *supra* note 35.

225. Fu, *supra* note 223.

226. *How Much Does Your Doctor Actually Know About Nutrition?*, *supra* note 217.

227. Parmet, *supra* note 3, at 610.

228. *Id.* at 611.

229. *Heart and Vascular Health. What is a Widowmaker Heart Attack?*, *supra* note 2.

230. *Electrocardiogram (EKG)*, CLEVELAND CLINIC, <https://my.clevelandclinic.org/health/diagnostics/16953-electrocardiogram-ekg> (May 13, 2022).

231. *Exercise Stress Test*, AM. HEART ASS’N, <https://www.heart.org/en/health-topics/heart-attack/diagnosing-a-heart-attack/exercise-stress-test> (Aug. 15, 2023).

232. *Id.*

amount of pain. But because he had been told it was not cardiac and likely just heartburn, he refused to go to the hospital. He waited five hours until the pain became unbearable, then he allowed me to drive him to the hospital. We did everything we were supposed to. We were using the American healthcare system as it is intended to be used, and it failed us. The current American healthcare system fails hundreds of thousands of Americans every year. By not treating heart disease from a preventative standpoint, 805,000 Americans suffer a heart attack each year²³³ and 695,547 of those heart attacks resulted in death in 2022.²³⁴

B. *Reading Labels Is Not the Solution*

With the privatization of healthcare, the United States has put the onus of one's health on the individual. Individuals are required to eat healthy and to figure out what that means with little to no help from their healthcare professionals. Most health care professionals are unaware themselves what it means to "eat healthy." When tasked with helping their patients, health advocates continually inform the public to check their food labels and even diagram how to decipher the label.²³⁵ But labels are confusing, and public health advocates argue that "[t]ransparency for consumers through nutrition labeling should be the last, not the first, step in a transformative food policy that would reduce dramatic health disparities and raise the United States to the health standards of other nations with similar resources."²³⁶

In 2016, Congress implemented a new food labeling regulation requiring nutrition labels for all food for human consumption.²³⁷ In 2018, Congress required all chain restaurants to post calories for menu items.²³⁸ But research shows this had "little or no impact on consumer choice and health" for a myriad of reasons.²³⁹ First, labels are confusing, often misleading, and difficult to decipher.²⁴⁰ Dr. Esselstyn explains that the Food and Drug Administration allows food manufacturers to label a food as having zero fat per serving if each serving contains a half a gram of fat or less.²⁴¹ Under this system, manufacturers can simply manipulate the serving size and label a food as having zero fat.²⁴² Second, "[m]ost consumers do not use nutrition labeling to ameliorate their food choices."²⁴³ Even when consumers make healthy choices, like choosing a sandwich over a burger, they often offset

233. *Heart Disease Facts*, *supra* note 4.

234. *Heart Disease*, U.S. CTRS. FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/nchs/fastats/heart-disease.htm> (Apr. 26, 2024).

235. *Understanding Food Nutrition Labels*, AM. HEART ASS'N, <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/nutrition-basics/understanding-food-nutrition-labels> (Aug. 3, 2023).

236. Freeman, *supra* note 151.

237. *Changes to the Nutrition Facts Label*, U.S. FOOD & DRUG ADMIN. <https://www.fda.gov/food/food-labeling-nutrition/changes-nutrition-facts-label> (Mar. 28, 2024).

238. *Menu Labeling Requirements*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/food/food-labeling-nutrition/menu-labeling-requirements> (Dec. 13, 2023).

239. Freeman, *supra* note 151, at 318.

240. *Id.* at 320.

241. ESSELSTYN, JR., *supra* note 13, at 72.

242. *Id.*

243. Freeman, *supra* note 151, at 316.

that healthy choice with an unhealthy item such as a milkshake as a reward for choosing the healthy sandwich.²⁴⁴ And lastly, many people simply cannot make food choices based on the nutrition label.²⁴⁵ Low-income consumers' food choices are based on affordability and availability and not nutritional information.²⁴⁶ Children are the most vulnerable and have the least say in terms of available food options. "Individuals with low socioeconomic status (SES) bear a disproportionate share of the coronary heart disease (CHD) burden, and CHD remains the leading cause of mortality in low-income US counties."²⁴⁷ Research shows that nutrition labels facilitate better choices only for middle class and high-income consumers, "the Whole Foods shoppers who already engage in healthy eating habits."²⁴⁸

C. *A Public Policy Solution to Private Healthcare*

Doctors are vital to the prevention, diagnosis, and treatment of heart disease and therefore should meet a federally mandated minimum standard of diet and nutrition courses in medical school. The House of Representatives passed the McGovern Resolution with bipartisan support in May 2022.²⁴⁹ If voted on by Congress and signed into law by the President, the resolution will, among other things, establish a federally mandated minimum standard of nutrition courses for medical students.²⁵⁰ Additionally, because "[t]axpayer dollars fund most physician residencies in the United States through Medicare,"²⁵¹ residency funding should be dependent on compliance with these federally mandated nutrition standards. Residency programs that do not meet the minimum standards should not receive Medicare funding. Also, because Medicare is the national insurance program for aging Americans, it incurs the highest percentage of cost for diet-related diseases.²⁵² Research shows that required nutrition training would be an effective way for Congress to trim its Medicare bills or reallocate that money to a better use.²⁵³

Having an informed doctor will not help patients who do not have the means or ability to acquire the food recommended. In 2021, Medicaid spent approximately \$80.6 billion (\$38.1 billion net) on outpatient prescription drugs.²⁵⁴ That

244. *Id.* at 318.

245. *Id.* at 316.

246. *Id.*

247. Rita Hamad et al., *Association of Low Socioeconomic Status with Premature Coronary Heart Disease in US Adults*, 5 J. AM. MED. ASS'N. CARDIOLOGY 899, 899 (2020).

248. Freeman, *supra* note 151, at 318.

249. See H.R. Res. 1118, 117th Cong. (2021–2022).

250. *Id.*; *McGovern Resolution on Nutrition Education in Medical Schools Passes House*, JIM MCGOVERN (May 17, 2022), <https://mcgovern.house.gov/news/documentsingle.aspx?DocumentID=398867>.

251. Fu, *supra* note 223.

252. *Id.*

253. *Id.*

254. Chris Park, *Trends in Medicaid Drug Spending and Rebates*, MEDICAID & CHIP PAYMENT & ACCESS COMM'N 16 (Oct. 27, 2022), https://www.macpac.gov/wp-content/uploads/2022/10/07_Trends-in-Medicaid-Drug-Spending-and-Rebates-Chris.pdf.

money would be better allocated toward food prescriptions. Food prescription programs have popped up across the country, and they incentivize SNAP participants to buy fresh fruit and vegetables at farmers' markets.²⁵⁵ Additionally "non-profit organizations have launched medically-tailored meal services for people suffering from diet-related diseases."²⁵⁶ Both the meal programs and the "food prescriptions" are helpful, but unless implemented on a much larger scale they cannot keep up with the number of diet-related illnesses and deaths. The federal government should, as part of the Affordable Care Act, add a food prescription benefit to health care plans allowing all participants to utilize this benefit.

CONCLUSION

Solving the heart disease epidemic in America requires a multifaceted approach. Public health preventative measures should be taken, including subsidizing only healthy foods such as fruits and vegetables and stopping the subsidization of unhealthy commodity crops. The USDA must run independent of the pressures from agribusiness and their lobbyists. The DGA should be founded on sound research that is not funded by agribusiness. Additionally, it is imperative the DGA outline, in plain language, the healthy foods the American public needs to not only survive but thrive. Other preventative measures such as food prescriptions, warning labels on dangerously unhealthy foods, and snack taxes would go a long way toward helping to solve the heart disease epidemic. Lastly, doctors need a minimum amount of nutrition training to help prevent, treat, and reverse heart disease in their patients. Compliance with this training should be mandatory and government funding should be withheld in cases of noncompliance. Heart disease is not inevitable. The deaths attributed to heart disease can be greatly reduced, but it will require a concerted effort on the part of the American government and the American people.

255. Fu, *supra* note 223.

256. *Id.*