

WHAT IS AT STEAK IF A NEW STANDARD OF IDENTITY IS NOT CREATED FOR PLANT-BASED MEAT?

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ABSTRACT

Plant-based meat products have changed rapidly in recent years to better resemble and taste like their traditional meat product counterparts. Because these plant-based meats are strikingly similar to conventional

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meat, many consumers want to taste these products or create meals that replace traditional meat sources with plant-based products. This interest in plant-based meats has led restaurants and fast-food chains to incorporate these products into their menus. However, with the growing popularity of plant-based meats, there is concern over what constitutes “meat” and “beef” and whether these plant-based meats should be allowed to fit that definition.

The United States Food and Drug Administration (FDA) is tasked with the regulation of all food products, excluding meat, poultry, and egg products. The FDA does not have any standards of identity in place for what the definition of “meat” or “plant-based meat” is. Instead, the definition of “meat” is provided by the United States Department of Agriculture (USDA), the agency in charge of regulating meat products. The definitions provided for traditional meat by the USDA would subject these current plant-based meats to misbranding provisions and cause them to be pulled from the shelves. The FDA has currently not taken steps to enforce the USDA’s standards of identity and has not created its own standards of identity for how plant-based meats should be labeled.

The beef industry, plant-based meat companies, and consumers have reached out to the FDA and USDA, asking that they further define “meat” and “beef.” The U.S. Cattlemen’s Association filed a petition in 2018 with the USDA asking them to amend their definition of “beef” and “meat” to explicitly exclude plant-based meats so that these products cannot include these terms on their labels. The National Cattleman’s Beef Association, on the other hand, has instead taken to asking the USDA to work with the FDA to start enforcing the USDA’s current standards of identity for meat, which would lead to the misbranding of plant-based meat labels. This petition has garnered a lot of support and a lot of opposition. Further, in 2019, states and Congress began passing or attempting to pass, legislation that prevents plant-based meat companies from labeling their products with the term “meat” or any terms associated with meat. These efforts have led to prompt lawsuits from organizations such as Turtle Island Foods, the producers of Tofurkey.

The FDA should amend its guidelines to create a separate standard of identity for plant-based meats. The FDA has jurisdiction over the labeling of these products, and, since the USDA does not regulate these products, enforcing the standards of identity provided by the USDA would create consumer confusion. Further, there is no evidence that consumers are currently confused by the labeling of the plant-based products they are buying. Changing the terminology that plant-based meats can use on their products might create consumer confusion and prevent the sale of plant-based meats as consumers might not understand what the purpose of the product they are buying is. Also, plant-based

meats are a valid alternative to traditional meat products, so the FDA should address their labeling to prevent these products from being pulled off the shelves.

INTRODUCTION

As Americans continue to learn about how the food they eat affects their health and the environment, their diets have changed to allow for alternatives to the foods traditionally eaten. A common alternative today is the addition of more plant-based foods to replace other foods that could have harmful impacts on the environment and people's health. One common plant-based food is plant-based meat, a product made from plant proteins and fats that is designed as a meat alternative. These products have developed rapidly over the past decade, and now resemble traditional meat in appearance, taste, texture, and nutritional value.¹

Plant-based meats have grown in popularity and are now enjoyed by meat-eaters and non-meat eaters alike.² This rise in popularity has led to a variety of plant-based meat products that can replace almost any traditional meat product. Further, because of the rise in popularity, plant-based meats are now available at the majority of grocery stores and restaurants across America.³

However, this increase in the popularity and availability of plant-based meats has led to a debate over the labeling of plant-based meats. The FDA, the agency in charge of regulating plant-based products, has created no standard of identity for plant-based meats. However, the USDA, the agency tasked with regulating meat, has created standards of identity for all meat products.⁴ The problem is, the standards of identity created for meat products do not allow for the inclusion of plant-based meats in their definition.⁵

The task now is to determine whether the FDA or the USDA should regulate the labeling of plant-based meats, and what standards of identity

1. See Jackie Mansky, *We're Entering a New Age of Plant-Based Meat Today*, SMITHSONIAN MAG. (Apr. 25, 2019), <https://www.smithsonianmag.com/arts-culture/turn-century-meatless-meat-180972042/>.

2. See RJ Reinhart, *Snapshot: Few Americans Vegetarian or Vegan*, GALLUP (Aug. 1, 2018), <https://news.gallup.com/poll/238328/snapshot-few-americans-vegetarian-vegan.aspx>.

3. David Yaffe-Bellany, *The New Makers of Plant-Based Meat? Big Meat Companies*, N.Y. TIMES (Oct. 14, 2019), <https://www.nytimes.com/2019/10/14/business/the-new-makers-of-plant-based-meat-big-meat-companies.html>.

4. U.S. DEP'T OF AGRIC., A GUIDE TO FEDERAL FOOD LABELING REQUIREMENTS FOR MEAT, POULTRY, AND EGG PRODUCTS 28 (2007), available at https://www.fsis.usda.gov/sites/default/files/import/Labeling_Requirements_Guide.pdf [hereinafter *Food Labeling Requirements*].

5. See Jareb A. Gleckel & Sherry F. Colb, *The Meaning of Meat*, 26 ANIMAL L. REV. 75, 96 (2020).

should be used to control the labeling of plant-based meats. Because the FDA is tasked with regulating plant-based products, it should be the agency that regulates the labeling of plant-based meats. Since the FDA does not have current standards of identity for plant-based meats, it would need to create its own or enforce the standards of identity for meat already created by the USDA. If the FDA were to enforce the USDA's standards of identity for meat against plant-based meat producers, so there was only one standard of identity for all products labeled with meat terminology, it would subject plant-based meats to the misbranding provision under section 343 of the Federal Food, Drug and Cosmetic Act ("FD&C Act").⁶ If plant-based meats are considered misbranded, they could be pulled from the market.

Instead, the FDA should create a standard of identity for plant-based meats that is separate from the standard of identities for meat created by the USDA. This new standard of identity would allow for the accurate labeling of plant-based meats with terminology that consumers understand. By creating a new standard of identity, the FDA would promote its values of preventing consumer confusion and protecting public health.⁷ This is because consumers understand that the terminology used on plant-based meat labels is only a descriptive word that describes the shape or purpose of the product; it does not mean that the product contains meat.

Part I of this Note provides a brief history of plant-based meats. Part II focuses on the history of food labeling and how these regulations apply to plant-based meats. Specifically, this section details how the FDA and USDA handle the labeling of food products and how these labeling requirements apply to plant-based meats. Part III covers the current debate surrounding the labeling of plant-based meats and what actions are currently being taken by states, Congress, trade associations, and plant-based meat companies. Finally, Part IV provides the possible regulatory actions the FDA could take for the regulation of plant-based meats and proposes the action the FDA should take of adopting its own standards of identity for plant-based meats.

I. THE HISTORY OF PLANT-BASED MEATS & THEIR RISE IN POPULARITY

While plant-based meats are now considered a part of the American diet, it was not always that way. While the first plant-based meats claimed to resemble meat in appearance and texture, they did not perfectly replicate traditional meat like plant-based meats do today. Instead, the

6. 21 U.S.C. § 343 (2021).

7. *See What We Do*, U.S. FOOD & DRUG ADMIN. (Mar. 28, 2018), <https://www.fda.gov/about-fda/what-we-do>.

first plant-based meat was made from nuts.⁸ Today, plant-based meats are made from a variety of plant proteins and fats that are modified to perfectly have the same taste, appearance, and texture of meat, and in some instances, even bleed like meat. The following section provides additional details on these changes.

A. *The Beginnings of Plant-Based Meat*

Vegetarian alternatives such as tofu and seitan have existed for centuries, but it was not until the nineteenth century that we saw plant-based meats as we think of them today in America: products designed to replicate and replace traditional meat.⁹ These plant-based meats were developed in the nineteenth century because of the growth of the vegetarian movement in America. Sylvester Graham and John Kellogg, who are considered the fathers of vegetarianism, believed that eating a bland meatless diet would protect people's health and morals.¹⁰ However, while Sylvester Graham did invent a number of vegetarian foods, he did not create any products that were designed to replicate meat.¹¹ His protégé, John Kellogg, took a different approach that he believed would encourage the public to live a vegetarian lifestyle.¹² He encouraged vegetarianism by creating the first plant-based meat because he believed having products that replicated meat would encourage more individuals to stop eating meat.¹³

Kellogg got his start by managing the Battle Creek Sanitarium ("San"), a popular health resort in Michigan, that advocated for the vegetarian diet based on his Seventh-Day Adventist principles.¹⁴ Kellogg created an experimental kitchen in the San that developed meat substitutes out of nuts.¹⁵ When the interest in nuts as a meat substitute picked up in popularity, Charles Dabney, the Assistant Secretary to the

8. See Adam Shprintzen, *Looks Like Meat, Smells Like Meat, Tastes Like Meat*, 15 FOOD CULTURE & SOC'Y 113, 115 (2012).

9. See Ernie Smith, *The History of Fake Meat Starts with the Seventh-Day Adventist Church*, ATLAS OBSCURA (Aug. 17, 2015), <https://www.atlasobscura.com/articles/the-history-of-fake-meat-starts-with-the-seventh-day-adventist-church>.

10. Danny Lewis, *American Vegetarianism Has a Religious Past*, SMITHSONIAN MAG. (Aug. 20, 2015), <https://www.smithsonianmag.com/smart-news/american-vegetarianism-had-religious-upbringing-180956346/>. The names Sylvester Graham and John Kellogg may seem familiar, but not for spreading the vegetarian movement in America. Sylvester Graham created the Graham cracker, and John Kellogg created cornflakes; however, both of these products were bland, sugarless versions of how we see them today. *Id.*

11. See *id.*

12. See *id.*

13. See *id.*; see Shprintzen, *supra* note 8, at 115.

14. Lewis, *supra* note 10.

15. Shprintzen, *supra* note 8, at 115.

USDA, reached out to Kellogg.¹⁶ Dabney was interested in “developing a scientifically prepared plant product affording all the essential qualities of beef.”¹⁷ Together they created a total of nine substitutes that they marketed to guests at the San.¹⁸ Two of the more popular products included Nuttose, a mixture of nuts and cereal grains, and Granose, a wheat-based biscuit designed to replicate a filet of beef.¹⁹

In 1889, Kellogg created the Sanitas Nut Food Company to market his plant-based meats.²⁰ The plant-based meats were only available by mail order and in select health food stores, meaning these products were not easy to obtain.²¹ In 1899, Kellogg patented protose, a plant-based meat made from nuts and grains.²² Protose was “advertised as being one of the latest and greatest triumphs of modern discovery . . . so closely resembling meat in appearance, flavor, and texture as almost to deceive an epicure.”²³ The success of protose led other companies to develop their own versions of plant-based meat.²⁴ These nut-based products remained the basis of plant-based meats until the 1970s.²⁵

When Frances Lappé published her book, *Diet for a Small Planet*, in 1971, a new vegetarian revolution began in America.²⁶ This rise in vegetarianism brought about innovations in the plant-based meat industry.²⁷ Companies began to create veggie burgers and other meat alternatives that better replicated the taste and texture of meat compared

16. *Id.* at 116.

17. *Id.*

18. *Id.*

19. *Id.*

20. Mansky, *supra* note 1.

21. Shprintzen, *supra* note 8, at 116.

22. See Mansky, *supra* note 1; see also Deena Prichep, *The Rise of Mock Meat: How Its Story Reflects America's Ever-Changing Values*, NPR (Sep. 2, 2017), <https://www.npr.org/sections/thesalt/2017/09/02/547899191/the-rise-of-mock-meat-how-its-story-reflects-americas-ever-changing-values>; see also WILLIAM SHURTLEFF & AKIKO AOYAGI, HISTORY OF MEAT ALTERNATIVES (965 CE TO 2014): EXTENSIVELY ANNOTATED BIBLIOGRAPHY AND SOURCEBOOK 53 (2014).

23. Shprintzen, *supra* note 8, at 117.

24. See *id.* at 118.

25. See Prichep, *supra* note 22.

26. Elle Hunt, *From Tofu Lamb Chops to Vegan Steak Bakes: The 1,000 Year History of Fake Meat*, THE GUARDIAN (Jan. 12, 2020), <https://www.theguardian.com/lifeandstyle/2020/jan/12/mock-lamb-chops-vegan-steak-bakes-history-fake-meat>; FRANCES LAPPÉ, DIET FOR A SMALL PLANET xxvii–iii, 265, 313 (1971). *Diet for a Small Planet* outlined the environmental impact of meat production and linked meat production to global food scarcity due to ineffective food policy in the United States. *Id.* at xxviii–iii. The book also provided a number of vegetarian recipes for the reader. *Id.* at 265, 313.

27. See Prichep, *supra* note 22.

to Kellogg's protose.²⁸ These products, such as Boca Burgers and Tofurky, improved the taste of plant-based meats, and made them available to the public at large.²⁹ The public had access to these products at grocery stores and was encouraged to buy plant-based meats because they were placed in the freezer section near traditional meat products.³⁰

B. Plant-Based Meats Today

Individuals concerned with their health, the environment, and the ethics of their food have allowed for the steady rise of plant-based meats.³¹ Today, this continued rise in popularity has encouraged plant-based meat companies to further improve the taste, appearance, and variety of their products.³² Two new plant-based meat products have taken the industry by storm—the Beyond Meat Burger and the Impossible Burger.³³ These “burgers” are different from other plant-based meats in that they have the closest resemblance to traditional meat in taste, appearance, and texture and are marketed directly to meat-eaters.³⁴

The rise in plant-based meats is also due to its availability. As the demand for plant-based meats grew, more and more companies began adding these products to their menus, which further encouraged consumers to eat them.³⁵ The Beyond Burger and Impossible Burger are now available in most grocery stores and have been added to the menus of restaurants and large fast-food chains, including Burger King and

28. *Id.*

29. *Id.*

30. *Id.*; Hunt, *supra* note 26.

31. See Prichep, *supra* note 22.

32. See Mansky, *supra* note 1.

33. *Id.*; Amanda Capritto, *Impossible Burger vs. Beyond Meat Burger: Taste, Ingredients and Availability, Compared*, CNET (Oct. 25, 2019), <https://www.cnet.com/news/beyond-meat-vs-impossible-burger-whats-the-difference/>; Lana Bandoim, *What The FDA's Decision About Soy Leghemoglobin Means For Impossible Burger*, FORBES (Dec. 20, 2019), <https://www.forbes.com/sites/lanabandoim/2019/12/20/what-the-fdas-decision-about-soy-leghemoglobin-means-for-impossible-burger/#46724b5e57f6>. The Beyond Burger is sold by Beyond Meat, a company founded in 2009. See Capritto, *supra* note 33. The Beyond Burger is made from pea protein. *Id.* The company used coconut oil to give the burger a marbled appearance and beet extract to give the burger its red color. *Id.* The Impossible Burger is sold by Impossible Foods, a company founded in 2011. See Bandoim, *supra* note 33. The Impossible Burger is made from soy protein; however, it used soy leghemoglobin as a color additive to achieve the burger's red color. *Id.* Soy leghemoglobin is a protein that carries the iron-containing molecule heme, which is found in all living plants and animals. Heme “is responsible for the color, texture and taste of meat.” *Id.* Soy leghemoglobin was approved by the FDA as a color additive in 2019. See *id.*

34. See Kelsey Piper, *The Rise of Meatless Meat, Explained*, VOX (Aug. 30, 2019), <https://www.vox.com/2019/5/28/18626859/meatless-meat-explained-vegan-impossible-burger>.

35. See *id.*

Dunkin Donuts.³⁶ Further, traditional meat companies, such as Smithfield, Purdue, and Tyson, have invested in these plant-based meats and have even created their own products.³⁷ These companies have helped turn the plant-based meat industry into a mainstream market through the creation of their own products and by providing funds to small plant-based meat start-ups.³⁸

The widespread availability of plant-based meats has caused sales to increase consistently, and the market is expected to be worth eighty-five billion dollars by 2030.³⁹ While the number of people who have adopted vegetarianism and veganism has not drastically increased with the availability of plant-based meats, the number of meat-eaters who regularly eat plant-based meat has. In 2018, a survey showed that only five percent of Americans considered themselves to be vegetarian, while only three percent considered themselves to be vegan.⁴⁰ However, sixteen percent of Americans regularly use plant-based alternatives to meat and dairy products.⁴¹ Further, eighty-nine percent of the Americans who regularly use plant-based alternatives are not vegetarians or vegans.⁴²

II. THE LABELING OF PLANT-BASED MEATS

The increase in popularity of plant-based meats has led to a debate on whether these products should be labeled with traditional meat terms. These meat terms include common names for products with which consumers are familiar, including “sausage,” “burger,” “hotdog,” “bacon,” and “nuggets.” However, these terms are defined by the standards of identity created by the USDA, which only include meat products. The FDA, which is the agency tasked with regulating plant-based foods, has not created standards of identity for these terms. Because these products use terms defined by the USDA but are created from products regulated by the FDA, there is a debate over which agency should have jurisdiction over the regulation of the labeling of plant-based meats. This section will explore both the FDA and the USDA, how each

36. Irene Jiang, *Plant-based ‘Meat’ is Conquering Fast Food. Here’s Where You Can Get Meat Substitutes like the Beyond Burger and the Impossible Taco*, BUSINESS INSIDER (Dec. 26, 2019), <https://www.businessinsider.com/burger-king-tgi-fridays-chains-sell-plant-based-meat-2019-5>.

37. Yaffe-Bellany, *supra* note 3.

38. *Id.*

39. *Id.*

40. Reinhart, *supra* note 2.

41. Martha White, *Almost 90 Percent of the People Eating Non-meat Burgers are not Vegetarian or Vegan*, NBC NEWS (Nov. 14, 2019), <https://www.nbcnews.com/business/consumer/almost-90-percent-people-eating-non-meat-burgers-are-not-n1082146>.

42. *Id.*

agency deals with the regulation of food labels, and how these regulations interact with plant-based meats.

A. The United States Food & Drug Administration

In the second half of the nineteenth century, the commercialization of agriculture led to a concern for adulterated and misbranded foods.⁴³ As Americans became dependent on a general market for their food, instead of a local market, they no longer knew the source of their food.⁴⁴ Not knowing the source meant consumers could not monitor the quality of their food, and companies took advantage of this and began to pollute their food products.⁴⁵ In 1850, a report was released detailing the shorter life-expectancy of Americans, and the adulteration of food products became a major public health problem.⁴⁶ States began to pass anti-adulteration statutes, but they were inadequate to combat the problem because these laws lacked enforcement.⁴⁷ Federal legislation was proposed, but it did not pass for another twenty-seven years.⁴⁸

It was not until food companies started to advocate for the passage of anti-adulteration and misbranding legislation that Congress passed food regulation laws.⁴⁹ Companies were motivated by the high compliance costs of the different states' legislation and the desire for a fair market across states.⁵⁰ Companies started to notice that their competitors in other states were using terms to promote products, but their competitor's products did not meet the same standards.⁵¹ For example, wine companies on the East Coast started labeling their products as California wines, knowing consumers respected the California wine industry.⁵² Companies knew that they needed federal legislation to have consumers respect the food industry and develop trust in their products.⁵³

The Pure Food and Drug Act of 1906 was passed to address the issues present in the food industry, mainly the misbranding and

43. See Mario Moore, *Food Labeling Regulation: A Historical and Comparative Survey*, 2001 HARVARD LIBR. 12.

44. See *id.*; C. C. Regier, *The Struggle for Federal Food and Drugs Legislation*, 1 LAW AND CONTEMP. PROBLEMS 3, 3 (1933).

45. See Moore, *supra* note 43.

46. *Id.* at 17.

47. *Id.*; Regier, *supra* note 44, at 5.

48. Moore, *supra* note 43, at 17.

49. *Id.*

50. *Id.* at 18–19.

51. See *id.* at 17.

52. *Id.* at 18.

53. Moore, *supra* note 43, at 18; see Regier, *supra* note 44, at 15.

adulteration of food.⁵⁴ The Act created the Bureau of Chemistry, the predecessor to the FDA.⁵⁵ However, the Pure Food and Drug Act did not provide the Bureau of Chemistry with authority to create standards of identity for food, nor did it address the specific information required on food labels, “such as the name of the food, the ingredients, quantity, or the name and address of the manufacturer and distributor.”⁵⁶ Also, under the Pure Food and Drug Act, the Bureau of Chemistry had no funds to enforce the Pure Food and Drug Act and had to bring each violation to court.⁵⁷ In 1938, with the newly created FDA and the need for greater specificity, Congress passed the FD&C Act.⁵⁸ The FD&C Act “became the standard for food labeling regulation.”⁵⁹

1. Food Labeling Under the FDA

The FDA regulates all food products, except for meat, poultry, and egg products.⁶⁰ It does this by ensuring that the food is safe, wholesome, and properly labeled.⁶¹ The FDA regulates these products through the FD&C Act, whose purpose is to protect the public’s health.⁶² To do this, the FD&C Act focuses on “the safety, efficacy, and truthful labeling of products.”⁶³ The labeling requirements for food products are found within section 403 of the FD&C Act, and these requirements are further detailed under 21 C.F.R. part 101.⁶⁴

One of the main ways the FDA regulates food product labels is by creating standards of identity. The FD&C Act provides the FDA with the power to create standards of identity that “promote honesty and fair dealing in the interest of consumers.”⁶⁵ These standards of identity “establish a common name and set of content requirements for a food

54. Moore, *supra* note 43, at 19; *see* Regeir, *supra* note 44, at 6.

55. COURTNEY THOMAS, IN FOOD WE TRUST: THE POLITICS OF PURITY IN AMERICAN FOOD REGULATION 20 (2014).

56. Moore, *supra* note 43, at 19–20.

57. Thomas, *supra* note 55, at 21.

58. Moore, *supra* note 43, at 21–22.

59. *Id.* at 22.

60. *See* U.S. FOOD & DRUG ADMIN., GUIDANCE FOR INDUSTRY: FOOD LABELING GUIDE 20 (2013), available at <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-food-labeling-guide>.

61. *Id.* at 4.

62. KATHRYN ARMSTRONG & JENNIFER STAMAN, CONG. RSCH. SERV., R43609, ENFORCEMENT OF THE FOOD, DRUG, AND COSMETIC ACT: SELECT LEGAL ISSUES 1 (2018).

63. *Id.* at 3.

64. 21 U.S.C. § 343; *see* 21 C.F.R. § 101 (2021).

65. 21 U.S.C. § 341 (2021).

product.”⁶⁶ Standards of identity were created to protect consumers by preventing the marketing of misbranded foods, and by creating a common name for a food that would allow consumers to know what they were buying.

In order for food to be properly labeled, it must include a statement of identity, which can come in the form of the standard of identity provided by federal law, “the common or usual name of the food” or “an appropriately descriptive term.”⁶⁷ When a food label does not conform to the applicable standard of identity, that food is considered misbranded.⁶⁸ Under the FD&C Act,

A food shall be deemed to be misbranded—

- (a): If (1) its labeling is false or misleading in any particular . . .
 - (b): If it is offered for sale under the name of another food.
 - (c): If it is an imitation of another food, unless its label bears . . . the word “imitation: and, immediately thereafter, the name of the food imitated.
- . . .
- (g): If it purports to be or is represented as a food for which a definition and standard of identity has been prescribed by regulations as provided by section 341 of this title, unless (1) it conforms to such definition and standard, and (2) its label bears the name of the food specified in the definition and standard, and, insofar as may be required by such regulations, the common names of optional ingredients . . . present in such food.⁶⁹

In order for a food product to be an imitation, it must be “a substitute for and resemble[] another food but is nutritionally inferior to that food.”⁷⁰ When a food label is determined to be misbranded, the FDA will enforce the FD&C Act violation through warning letters, recalls, debarments, monetary penalties, injunctions, and seizures.⁷¹

2. *The FDA & Plant-Based Meats*

Because the FDA has jurisdiction over all foods except meat, poultry, and egg products, the FDA would have jurisdiction over plant-based meats. Currently, however, the FDA has not created any applicable standards of identity for plant-based meats. Further, the FDA has not

66. RENÉE JOHNSON, CONG. RSCH. SERV., IF10811, STANDARDS OF IDENTITY FOR FOODS AND PLANT-BASED FOOD PRODUCTS 1 (2018).

67. 21 C.F.R. § 101.3(b) (2021).

68. 21 U.S.C. § 343(a); 21 C.F.R. § 101.3(e).

69. 21 U.S.C. § 343.

70. 21 C.F.R. § 101.3(e)(1).

71. Armstrong & Staman, *supra* note 62, at 9.

enforced any food labeling requirements on plant-based meats, nor has it determined any of these products to be misbranded. Unlike what was seen with plant-based milk, mayonnaise, and eggs, the FDA has not sent warning letters to plant-based meat companies concerning their product labels.⁷²

However, due to similar issues concerning other plant-based food products, the FDA recently announced its Nutrition Innovation Strategy, which includes the goal of modernizing standards of identity.⁷³ In September 2019, the FDA held a public meeting with various trade organizations to discuss the FDA's Nutrition Innovation Strategy and ways to modernize these standards of identity.⁷⁴

B. The United States Department of Agriculture

The USDA was created in 1862 to provide the American public information on agriculture and to distribute seeds and plants to American citizens.⁷⁵ Because of the USDA's broad statutory mandate, the agency evolved slowly. It was not until 1888 when the Department of Agriculture was declared an executive department, that the agency was able to create

72. Warning letter from Barbara Cassen, FDA District Director, to Yan Hui Fang, CEO Fong Kee Tofu Company, Inc. (Mar. 7, 2012), available at <https://www.fdalabelcompliance.com/letters/ucm295239>; Warning letter from Alonza Cruse, FDA District Director, to Long Lai, Lifesoy, Inc. (Aug. 8, 2008), available at <https://www.fdalabelcompliance.com/letters/ucm1048184>; Warning letter from William Correll, Director of Compliance Center for Food Safety and Applied Nutrition, to Joshua Tetrick, Founder and CEO Hampton Creek Foods, Inc. (Aug. 12, 2015), available at <https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/warning-letters/hampton-creek-foods-08122015>. In 2008 and 2012, the FDA sent warning letters to plant-based milk companies stating that their soy milk products were misbranded because of their use of the word "milk." Then, in 2015, the FDA issued a warning letter to Hampton Creek Foods Inc. concerning the Just Mayo product, a mayonnaise substitute. The FDA stated that the product was misbranded because it did not comply with the standard of identity for mayonnaise.

73. *FDA Nutrition Innovation Strategy*, U.S. FOOD & DRUG ADMIN. (Feb. 3, 2020), <https://www.fda.gov/food/food-labeling-nutrition/fda-nutrition-innovation-strategy>.

74. Public Meeting on Horizontal Approaches to Food Standards of Identity Modernization, FDA (Sept. 27, 2019), available at <https://www.fda.gov/food/workshops-meetings-webinars-food-and-dietary-supplements/public-meeting-horizontal-approaches-food-standards-identity-modernization-09272019-09272019#event-materials>. At the meeting, the public addressed the labeling of plant-based products. *Id.* One issue addressed was whether plant-based meats should be held to the same standardization as their meat counterparts so that meat counterparts are not put at a competitive disadvantage. *Id.* Another issue addressed was how to protect the innovation of the plant-based food industry while having a consistent approach to food labeling. *Id.* The general conversation focused on the protection of the consumer and ensuring that individuals know exactly what they are buying by having a truthful label. *Id.*

75. GLADYS L. BAKER, WAYNE D. RASMUSSEN, VIVIAN WISER & JANE M. PORTER, *CENTURY OF SERVICE: THE FIRST 100 YEARS OF THE UNITED STATES DEPARTMENT OF AGRICULTURE* 13 (1963).

Bureaus and farther-reaching regulations.⁷⁶ As seen with the FDA,⁷⁷ food regulation laws were not favored in the United States until companies and consumers began to notice how adulterated and misbranded foods were affecting the market and their health. After the release of Upton Sinclair's book, *The Jungle*, Congress passed the Meat Inspection Act of 1906 ("FMIA"), which "required that federal inspectors certify meat as healthy, clean, sanitary, wholesome, unadulterated, and properly labeled."⁷⁸ Congress passed the FMIA on the same day as the Pure Food and Drug Act, and like the Pure Food and Drug Act, the FMIA was also limited in its enforcement power.⁷⁹ Because of its lack in enforcement power, the meat industry continued to face challenges in regulating the industry, and the USDA passed a multitude of acts addressing the inspection of meat products.⁸⁰ The USDA continued to grow to address these issues and created the Food Safety and Inspection Service (FSIS) to address the safety of meat food products.⁸¹

1. Food Labeling under the USDA

The USDA Food Safety and Inspection Service (FSIS) handles the labeling of meat, poultry, and egg products.⁸² The FDA and the USDA handle the labeling of food in a similar nature, and both prevent misbranded and adulterated food products by creating standards of identity by which the food has to comply.⁸³

The USDA regulates the labeling of meat and meat food products under the FMIA.⁸⁴ The FMIA defines meat food products as "any product capable of use as human food which is made wholly or in part from any meat or other portion of the carcass of any cattle, sheep, swine, or goats"⁸⁵ Under the FMIA, the Secretary of Agriculture is given the power

76. Baker, *supra* note 75, at 29.

77. See *supra* Section II.A (describing the history of food labeling and the FDA).

78. Thomas, *supra* note 55, at 19. Upton Sinclair's *The Jungle* was published in 1906 and provided graphic descriptions of the meatpacking industry. *Id.* at 18. The book brought public outcry, and within a week of its publication, meat sales in the United States fell by half. *Id.* *The Jungle* also brought public support for food regulation, and within months of its publication, the FD&C Act and the FMIA were passed. See *id.* at 25.

79. See *id.* at 20; see also CATTLE INSPECTION: COMMITTEE ON EVALUATION OF USDA STREAMLINES INSPECTION SYSTEM FOR CATTLE (SIS-C) 69 (National Academic Press 1990); see also *FSIS History*, U.S. DEP'T OF AGRIC. (Feb. 21, 2018), <https://www.fsis.usda.gov/about-fsis/history>.

80. See Thomas, *supra* note 55, at 24–29.

81. See FSIS History, *supra* note 79.

82. See *id.*

83. See U.S. DEP'T OF AGRIC., *supra* note 4, at 6.

84. *Id.* at 4.

85. 21 U.S.C. § 601(j) (2021).

to create any necessary standards of identity to regulate the labeling of meat.⁸⁶

The standards of identity enforced by the USDA are found within 9 C.F.R. part 319 and are expanded on in the USDA Food Standards and Labeling Policy Book.⁸⁷ The USDA has created standards of identity for the majority of meat products, but “meat” or “beef” is never actually defined.⁸⁸ For example, 9 C.F.R. part 319 defines beef products such as “ground beef” or “hamburger,” while the USDA Food Standards and Labeling Policy Book define specific foods that include beef such as “beef stroganoff.”⁸⁹

The USDA enforces these standards of identity through misbranding provisions.⁹⁰ This provision for misbranding found within the FMIA is a replica of the misbranding provision found within section 403 FD&C Act enforced by the FDA.⁹¹ Under the FMIA,

The term “misbranded” shall apply to any carcass, part thereof, meat or meat food product under one or more of the following circumstances:

- (1): if its labeling is false or misleading in any particular;
- (2): if it is offered for sale under the name of another food;
- (3): if it is an imitation of another food, unless its label bears, . . . the word “imitation” and immediately thereafter, the name of the food imitated

. . .

- (7): if it purports to be or is represented as a food for which a definition and standard of identity or composition has been prescribed by regulations of the Secretary under section 607 of this title unless (A) it conforms to such definition and standard, and (B) its label bears the name of the food specified in the definition and standard and, insofar as may be required by such regulations, the common names of optional ingredients . . . present in such food;⁹²

86. See 21 U.S.C. § 607(c) (2021).

87. See 9 C.F.R. § 319.1 (2021); see generally U.S. DEP’T OF AGRIC., FOOD STANDARDS AND LABELING POLICY BOOK (2005), available at <https://www.fsis.usda.gov/guidelines/2005-0003> (discussing standards for different types of meat) [hereinafter *Policy Book*].

88. *Contra* 9 C.F.R. § 319.15(a) (2021).

89. 9 C.F.R. § 319.15 (a)–(e) (2021); *Policy Book*, *supra* note 87, at 14–18; 7 U.S.C. § 2902(1) (2021). While there is no federal standard of identity for beef, the Beef Research and Information Act (BRIA) defines beef as “flesh of cattle.” *Id.* The BRIA was created to establish a Cattlemen’s Beef Promotion and Research Board under 7 U.S.C. § 2902.

90. See 21 U.S.C. § 610(d) (2021).

91. See *supra* Section II.A (discussing the regulation of food product labels and standards of identity).

92. 21 U.S.C. § 601(n)(1)–(3), (7).

The FSIS will enforce violations under the FMIA through withholding the use of the misbranded label, product detention or retention, recalls, fines, or criminal prosecution.⁹³

2. *The USDA & Plant-Based Meats*

While plant-based meats are not under the definition of what the USDA regulates, there is debate over whether the FDA should enforce the current USDA standards of identity for meat products. There is also the possibility that the FDA and USDA could work together to modify these standards of identity, or create new standards of identity, for plant-based meats. This is because plant-based meats are within the USDA's regulatory jurisdiction but use terminology that is defined by the USDA.

The USDA currently has not enforced any misbranding provisions against plant-based meat companies, nor has it specifically addressed plant-based meats.⁹⁴ However, the United States Cattlemen's Association did file a petition with the USDA in February 2019, asking it to limit the definition of "meat" and "beef" so that plant-based meats cannot conform to these standards of identity.⁹⁵ The results of this petition would prevent plant-based meat companies from labeling their products with any terms associated with meat. The USDA is currently accepting comments on this petition.⁹⁶

III. CURRENT ISSUES SURROUNDING THE LABELING OF PLANT-BASED MEATS

The FDA is under increasing pressure to regulate the labeling of plant-based meats in a way that both preserves the current standards of

93. U.S. DEP'T OF AGRIC., *supra* note 4, at 6.

94. Lexi Pitz, *What's the Beef? Controversy Surrounding the Labeling of Plant-Based and Cell-Based Meat*, MINN. L. REV.: BLOG (Feb. 23, 2020), <https://minnesotalawreview.org/2020/02/23/whats-the-beef-controversy-surrounding-the-labeling-of-plant-based-and-cell-based-meat/>; *see generally id.* (discussing requirements for food labeling requirements for meat, poultry, and egg products, while not addressing plant-based meats).

95. *See infra* Section III.D (describing pressures the USDA is getting from Cattlemen's Associations). Petition for the Imposition of Beef and Meat Labeling Requirements: To Exclude Products Not Derived From Animals Raised and Slaughtered from the Definition of "Beef" and "Meat", *In re* Beef and Meat Labeling Requirements: To Exclude Products Not Derived From Animals Raised and Slaughtered from the Definition of "Beef" and "Meat", at 2 (2018) (No. 2018-), available at https://www.fsis.usda.gov/sites/default/files/media_file/2020-07/18-01-Petition-US-Cattlement-Association020918.pdf.

96. *See* Letter from Kevin Kester, President of National Cattlemen's Beef Association to Carmen M. Rottenberg, Acting Deputy Under Secretary for Food Safety (Apr. 10, 2018), available at https://www.fsis.usda.gov/sites/default/files/media_file/2020-07/18-01-NCBA-Comments-Opposition-Petition-041018.pdf.

identity in place for meat products and protects the innovation of plant-based products, while still informing the consumer of what product they are buying. The FDA and USDA have received comments and petitions concerning the labeling of plant-based meats from the meat industry, the plant-based meat industry, and interested consumers. Further, state and federal legislatures have proposed numerous bills addressing the labeling of plant-based meats. This legislation focuses on preserving the standards of identity in place for meat and limiting or entirely preventing the use of meat terms on plant-based products in order to promote the meat industry.

A. Proposed State Legislation

State legislatures have taken to proposing bills that would restrict or even ban plant-based meat companies from using meat terms on their products.⁹⁷ There were a total of forty-five bills on meat labeling proposed in twenty-six states in August 2019; out of those, only seventeen were enacted in a total of fourteen states.⁹⁸ As an example of this state legislation, Arkansas considers the purpose of its “truth in labeling law” to be “protect[ing] consumers from being misled or confused by false or misleading labeling.”⁹⁹

The legislation focuses on enforcing misbranding provisions against products that use the term meat, beef, pork, or other term associated with meat when the food product is not derived from an animal.¹⁰⁰ Some of the legislation provides exceptions for when the plant-based meat product includes terminology such as vegetarian or plant-based or is labeled with the word “imitation.”¹⁰¹ However, other state legislation prevents the terminology altogether with no exceptions.¹⁰²

These states focus their concern on whether consumers are confused over what plant-based meats are and what ingredients they contain.¹⁰³

97. See Jessi Devenyns, *Trade Group Issues Voluntary Plant-Based Meat Labeling Standards*, FOODDIVE (Dec. 11, 2019), <https://www.fooddive.com/news/trade-group-issues-voluntary-plant-based-meat-labeling-standards/568841/>.

98. *Id.* These states include Arkansas, Arizona, Wyoming, North Dakota, South Dakota, Texas, Virginia, Nebraska, Mississippi, and Missouri. Jessi Devenyns, *Mississippi and South Dakota Criminalize Misuse of Term ‘Meat’*, FOODDIVE (Apr. 4, 2019), <https://www.fooddive.com/news/mississippi-and-south-dakota-criminalize-misuse-of-term-meat/552021/>.

99. ARK. CODE ANN. § 2-3-301 (2020).

100. See ARK. CODE ANN. § 2-1-305(6)–(11) (2020); S.B. 68, 2019 Leg., 65th Sess. (Wyo. 2019); S.B. 2922, 2019 Reg. Sess. (Miss. 2019).

101. Wyo. S.B. 68; Miss. S.B. 2922.

102. H.B. 1407, 92d Gen. Assemb., Reg. Sess. (Ark. 2019).

103. Alina Selyukh, *What Gets To Be A ‘Burger’? States Restrict Labels On Plant-Based Meat*, NPR (July 23, 2019), <https://www.npr.org/sections/thesalt/2019/07/23/744083270/what-gets-to-be-a-burger-states-restrict-labels-on-plant-based-meat>.

However, the state legislatures could have been motivated by other factors, besides consumer confusion, when they passed their legislation regulating the labeling of plant-based meats. For instance, many of these states are some of the largest beef producers in the country.¹⁰⁴ These states have a much higher interest in protecting the sale of meat in America. As an example, Arkansas's largest industry is agriculture, specifically beef cattle farms, and the Arkansas Cattleman's Association worked on its bill.¹⁰⁵ Also, the representative who presented Missouri's bill is a poultry farmer, showing he has an interest in preserving the sale of traditional meat products.¹⁰⁶

B. Responses to State Legislation

The state legislation barring the labeling of plant-based meats with meat terms has not been met without criticism. Turtle Island Foods, the maker of Tofurky,¹⁰⁷ and the American Civil Liberties Union (ACLU) challenged the state statutes in Missouri and Arkansas that regulate the labeling of plant-based meats by declaring any plant-based product that contains a meat terminology misbranded.¹⁰⁸ They argued that this restriction on how plant-based meats are labeled prevents plant-based meat companies from accurately labeling their products and would actually create greater consumer confusion.¹⁰⁹ Tofurky claims that the changes required under the act would be “logistically and financially impractical[,]” and would force it to stop selling its products in Arkansas.¹¹⁰ While a federal judge in Missouri declined to issue a preliminary injunction barring the enforcement of the law, a federal judge in Arkansas granted a preliminary injunction that prevents Arkansas from enforcing its law on plant-based meat labeling.¹¹¹

104. *Beef Industry Overview*, NATIONAL CATTLEMEN'S BEEF ASSOCIATION, <https://www.ncba.org/beefindustrystatistics.aspx> (last visited Mar. 14, 2021).

105. Aliza Abarbanel, *As Plant-Based Meat and Dairy Picks Up Speed, A Labeling Fight Heads to Court*, BON APPETIT (Sep. 4, 2019), <https://www.bonappetit.com/story/plant-based-labeling>.

106. *Id.*

107. Jonathan Kauffman, *Where Does Your Tofurky Come From?*, THE NEW YORKER (Nov. 21, 2017), <https://www.newyorker.com/culture/annals-of-gastronomy/tofurky-a-brief-semi-accidental-history-of-thanksgivings-fake-meat>. Tofurky is one of the more recognizable names in plant-based meat products. *See id.* The product is made from vital wheat gluten and was created to replace the traditional Thanksgiving turkey. *See id.*

108. *Turtle Island Foods SPC v. Nihik Soman*, 424 F. Supp. 3d 552, 561 (E.D. Ark. Dec. 11, 2019); ARK. CODE ANN. § 2-1-305; S.B. 627, 99th Gen. Assemb., 2d Reg. Sess. (Mo. 2018).

109. *Turtle Island*, 424 F. Supp. 3d at 562.

110. *Id.* at 563.

111. Kurt Erickson, *Judge Declines to Block Missouri's 'Fake Meat' Labeling Law*, ST. LOUIS POST-DISPATCH (Oct. 4, 2019), <https://www.stltoday.com/news/local/govt-and->

In Mississippi, Upton's Naturals, a popular plant-based meat company, and the Plant Based Foods Association (PBFA) challenged the state's proposed bill that prevents plant-based meat companies from labeling their products with meat terminology.¹¹² After the lawsuit was filed, Mississippi modified its proposed bill to allow for plant-based meats to be labeled as meat or meat food products as long as the label contains an appropriate qualifier, such as plant-based or vegetarian.¹¹³ After the modification to the bill, Upton's Naturals and the PBFA dropped the lawsuit.¹¹⁴

C. Proposed Congressional Legislation

As the debate over what should be considered "meat" continued, legislation was introduced in both the United States Senate and House of Representatives that attempts to define what constitutes "meat" and "beef." The Real Marketing Edible Artificials Truthfully Act of 2019 (Real MEAT Act) was introduced in the House in October 2019, and its companion bill was introduced in the Senate in December 2019.¹¹⁵ The bills are currently in committees.¹¹⁶ The Real MEAT Act's purpose is to "amend the [FD&C Act] to ensure that consumers can make informed

politics/judge-declines-to-block-missouri-s-fake-meat-labeling-law/article_a40f1d59-78a8-5909-847c-0ebb61ae1e7e.html; *Arkansas Judge Allows Vegan Meats to be Labeled as 'Burger' and 'Sausage,'* MARKETWATCH (Dec. 12, 2019), <https://www.marketwatch.com/story/arkansas-judge-allows-vegan-meats-to-be-labeled-as-burger-and-sausage-2019-12-12>; *Federal Court Blocks 'Veggie Burger' Censorship Law,* ACLU (Dec. 11, 2019), <https://www.aclu.org/press-releases/federal-court-blocks-veggie-burger-censorship-law>.

112. Plaintiff's Complaint for Declaratory and Injunctive Relief at 3, Upton's Naturals Co. et al v. Phil Bryant et al No. 3:19-cv-462-HTW-LRA (S.D. Miss. July 1, 2019); Miss. S.B. 2922.

113. Elaine Watson, *PBFA, Upton's Naturals Drop Lawsuit as Mississippi Revises Plant-Based Meat Labeling Law: 'This is a Total Victory,'* FOOD NAVIGATOR-USA (Nov. 8, 2019), <https://www.foodnavigator-usa.com/Article/2019/11/08/PBFA-Upton-s-Naturals-drop-lawsuit-as-Mississippi-revises-plant-based-meat-labeling-law>.

114. *Id.*

115. Devenyns, *supra* note 97. In response to this legislation, the Plant Based Foods Association, a trade group that represents over 160 plant-based food companies, released its "Voluntary Standards for the Labeling of Meat Alternatives in the United States." See *Plant-Based Meat Labeling Standards Released*, PBFA (Dec. 9, 2019), <https://www.plantbasedfoods.org/plant-based-meat-labeling-standards-released/>. These standards provide labeling guidelines that allow plant-based meat companies to include meat terms that describe the flavor, texture, usage, or form of the product when there is a qualifying term that indicates the product is plant-based or vegetarian. See *id.*

116. Real MEAT Act of 2019, H.R. 4881, 116th Cong. (2019) (as referred to the Subcommittee on Livestock and Foreign Agriculture on Nov. 14, 2019); Real MEAT Act of 2019, S. 3016, 116th Cong. (2019) (as referred to the Committee on Health, Education, Labor, and Pensions on Dec. 11, 2019).

decisions in choosing between meat products such as beef and imitation meat products.”¹¹⁷

The Real MEAT Act proposes federal definitions of “beef,” “beef product,” and “imitation meat food product” that would limit the ability of plant-based meat companies to accurately label their products.¹¹⁸ Under the Real MEAT Act, beef and beef product are defined as “any product containing edible meat tissue harvested in whole form from domesticated *Bos indicus* or *Bos taurus* cattle.”¹¹⁹ While imitation food product is defined as “any product manufactured to appear as a meat food product or any food product which approximates the aesthetic qualities (primarily texture, flavor, and appearance) and/or chemical characteristics of specific types of meat but does not contain any meat, meat food product, or meat byproduct ingredients.”¹²⁰ Further, the Real MEAT Act proposes amending the FD&C Act to include a section on the labeling of imitation meat products.¹²¹ This section would require these products to include the word “imitation” on their label or be subject to the misbranding provisions of the FD&C Act.¹²²

D. Petition to the USDA

Further, the USDA is facing pressure from other interested organizations. The United States Cattlemen’s Association filed a petition with the USDA in February 2019, requesting that the FSIS limit the definitions of beef and meat to exclude any product that does not come from an animal.¹²³ The petition further encourages the USDA to enforce misbranding provisions against plant-based meats that do not meet these definitions.¹²⁴ However, the National Cattlemen’s Beef Association opposed the petition because it believes the petition will not “adequately provide meaningful protection for beef nomenclature.”¹²⁵

The National Cattlemen’s Beef Association believes the FDA is unwilling to enforce current standards of identity, so working to create new standards of identity that the FDA would also not enforce would not solve the issue of plant-based meat labeling.¹²⁶ Instead, the National Cattlemen’s Beef Association requested that the USDA work with the

117. H.R. 4881; S. 3016.

118. *Id.*

119. *Id.* *Bos indicus* and *Bos taurus* cattle are popular breeds of cattle in the United States.

120. *Id.*

121. *Id.*

122. H.R. 4881; S. 3016.

123. Petition, *supra* note 95, at 2.

124. *Id.* at 6.

125. Letter from Kevin Kester to Carmen M. Rottenberg, *supra* note 96, at 1.

126. *Id.* at 2.

FDA to enforce the current standards of identity to address “misbranded and mislabeled imitation meat products” that are clear violations of the law.¹²⁷ The USDA has not responded to the U.S. Cattlemen’s Association’s petition or the National Cattlemen’s Beef Association’s opposition. Still, the petition has received numerous responses from organizations and the public in support and in opposition.

IV. EXPANDING THE DEFINITION OF MEAT

The FDA is now left with the task of either defining a standard of identity for plant-based meat or working with the USDA to enforce the standards of identity put in place for meat by the USDA. As the FDA has taken no enforcement measures against plant-based meat product labels, it seems the FDA is not interested in enforcing the USDA’s standards of identity for meat. Further, the FDA enforcing the USDA’s standards of identity would likely lead to greater consumer confusion and would require a complete overhaul of the standards of identity created for meat and meat products. This is because all of the USDA’s existing standards of identity for meat would have to be revised to include plant-based meats, and the USDA and FDA would have to determine which agency would regulate and enforce these standards of identity against plant-based meats. Instead, I propose that it would promote the FDA’s goals of protecting the consumer and preventing deception if the FDA created its own standards of identity for plant-based meats, rather than enforcing a standard of identity put in place for traditional meat by the USDA.

A. Enforcing the USDA’s Standards of Identity for Meat

If the FDA were to enforce the current standards of identity for meat created by the USDA, then there are multiple ways the agencies could go about enforcing them. There is an argument that the FDA has complete jurisdiction over the labeling of plant-based meats, and that the FDA should not enforce standards of identity created by the USDA. Based on each agency’s individual mandates, it seems that the jurisdiction over plant-based meats would belong to the FDA, which has jurisdiction over the regulation of all foods except meat, poultry, and egg products.¹²⁸ However, because the USDA has created standards of identity for meat, the FDA could agree to work with the USDA on the labeling of plant-based meats.¹²⁹

127. *Id.*

128. *Regulated Products*, U.S. FOOD & DRUG ADMIN. (October 25, 2020), <https://www.fda.gov/industry/import-basics/regulated-products>.

129. Press Release, U.S. Food & Drug Admin., *USDA and FDA Announce a Formal Agreement to Regulate Cell-Cultured Food Products from Cell Lines of Livestock and Poultry*

If the USDA and FDA work together, then there are multiple ways these agencies could enforce the standards of identity for meat. The first option is that all plant-based meat products that do not meet the standard of identity for meat would be considered misbranded.¹³⁰ The second is that all plant-based meat products that do not meet the standard of identity for meat would have to be labeled with the word “imitation.”¹³¹ Finally, the FDA could work with the USDA to modify the current standards of identity for meat to include plant-based meat products. However, none of these outcomes would align with the goals of these agencies or the interests of the public.

The U.S. Cattlemen’s Association and various state legislatures have proposed legislation that would prevent plant-based meat companies from using any term associated with meat with no exceptions.¹³² Under this rule, the FDA would enforce the standards of identity put in place for meat by the USDA and would consider any product misbranded that does not meet that standard.¹³³ By preventing plant-based meat producers from labeling their products with terms like “burger,” “hotdog,” or “bacon,” the FDA would create greater consumer confusion because individuals would not know what the purpose of the product they are buying is and, in many cases, not having an expectation of the flavor or use of the product. By using these meat terms, the plant-based meat companies are letting consumers know what food items these products replace. Further, there is no evidence that consumers are currently misled by the inclusion of these meat terms on plant-based meat products. The majority of these products already use terms such as “veggie burger,” “beefless,” “plant-based,” or “vegan,” which let the consumer know that the product they are buying does not contain meat.

Next, the FDA could require plant-based meat producers to label their products as “imitation” if they do not meet the USDA’s standard of identity of meat. This is the rule proposed in Congress with the Real

(Mar. 7, 2019), <https://www.fda.gov/news-events/press-announcements/usda-and-fda-announce-formal-agreement-regulate-cell-cultured-food-products-cell-lines-livestock-and>. The FDA and USDA have agreed to work together to regulate cell-cultured meat. *Id.* However, these cell-cultured meats contain the cells of animals, and the USDA has been tasked with the actual harvesting of these cells. *See id.* In this instance, these plant-based meat products do not contain any part of an animal, meaning there is a small possibility the FDA and USDA would work together on this issue. However, the USDA has accepted petitions and comments concerning the labeling of plant-based meat products, and neither agency has acted regarding this issue.

130. Letter from Kevin Kester to Carmen M. Rottenberg, *supra* note 96, at 2.

131. H.R. 4881; S. 3016.

132. Madeleine Turner, *What’s in a Name? Legislatures Labor over Lab Meat Label*, ENVIRONMENTAL HEALTH NEWS (July 1, 2019), <https://www.ehn.org/whats-in-a-name-legislatures-labor-over-lab-meat-label-2638969335.html?rebelltitem=4#rebelltitem4>.

133. Letter from Kevin Kester to Carmen M. Rottenberg, *supra* note 96, at 2.

MEAT Act and also proposed by some state legislatures.¹³⁴ However, this rule would lead to consumer confusion because the word “imitation” carries implications that would not apply to plant-based meat products, particularly the Impossible Burger or Beyond Meat Burger. When “imitation” is added to food labels, it indicates that the product is nutritionally inferior to the product for which it is substituting.¹³⁵ However, in this instance, the plant-based meat products that exist in today’s market are not nutritionally inferior to traditional meat products.¹³⁶ In a comparison of the Beyond Burger and the Impossible Burger to a traditional beef burger, it was found that the three burgers were comparable in protein, saturated fat, and calories.¹³⁷ This would mean, under the FD&C Act, it would not be appropriate to label plant-based meats as imitations.

Even for plant-based meats that may not contain the equivalent nutritional levels as their meat counterparts, labeling the plant-based meats as imitations would not accurately describe what these products are. Plant-based meats are not being marketed as meat products; instead, they are separate products that are using descriptive terms with which the consumer is already familiar. These are novel products for which a standard of identity does not exist, and if the FDA decided to label all plant-based meat as imitations, then the FDA would likely never create an applicable standard of identity for these products. This would result in consumers always considering plant-based meats to be inferior to meat.

Finally, the FDA could work with the USDA to change the current standards of identity for meat to allow for plant-based meat products to use these terms in their labels. However, modifying the standards of identity for meat products would be challenging and would face backlash from the meat industry. This would require the FDA and USDA to change the standards of identity for meat, beef, poultry, fish, and for each food product that includes these meats. As an example, the standard of identity

134. H.R. 4881; S. 3016.

135. 21 C.F.R. § 101.3(e) (2021).

136. Erica Sweeney, *Are Beyond Meat and Impossible Burgers Better For You? Nutritionists Weigh In*, HUFFPOST (July 10, 2019), https://www.huffpost.com/entry/beyond-meat-impossible-burger-healthy_1_5d164ad1e4b07f6ca57cc3ed.

137. *Id.* While there are a multitude of plant-based meat products that exist in today’s market, this note focuses on the plant-based beef products. In this instance, the plant-based beef products created by Beyond Meat and Impossible Foods were compared to a traditional meat burger counterpart. *Id.* A traditional ground beef burger has 17.1 grams of protein per 100 grams, while the Beyond Burger has 20 grams, and the Impossible Burger has 19 grams of protein per 113 grams. *Id.* Further, the beef burger and the plant-based burgers are comparable in saturated fats and calories. *Id.* The Beyond Burger contains 6 grams of saturated fat and 250 calories, while the Impossible Burger contains 6 grams of saturated fat and 240 calories. Sweeney, *supra* note 136. Similarly, the traditional beef burger has 7.6 grams of saturated fat and 255 calories. *Id.*

for beef would change from “flesh of cattle”¹³⁸ to “flesh of cattle or a product composed of plant proteins and fat designed to replicate the taste and texture of beef.” However, this process would be challenging because the FDA and USDA would have to agree on a new standard of identity for every meat product that exists. Because of this, it would be beneficial to keep the standards of identity for traditional meat products separate from standards of identity for plant-based meat products.

B. Creating a New Standard of Identity for Plant-Based Meats

With the challenges associated with the FDA working to enforce the USDA’s standards of identity, the best option is for the FDA to create its own standard of identity for plant-based meats. The FDA could amend 21 C.F.R. Chapter I, Subchapter B, to include the following language:

21 C.F.R. § ___ Plant-Based Beef Products

(a): *Description.* Plant-based beef products are the foods produced by combining plant proteins and plant fats and processing them to create a beef-like taste and texture.

(b): All ingredients from which the food is fabricated shall be safe and suitable.

(c): *Nomenclature.* The name of the food is “___ beef,” the blank being filled in with the modifier of plant-based, vegan, vegetarian, veggie, meatless, or other similar term. Alternatively, the name is “beefless.”

(1): **Plant-based hamburger.** The name of the food is “___ burger” or “___ hamburger” where the blank is filled in with the modifier of plant-based, vegan, vegetarian, veggie, meatless, or other similar term. Alternatively, the name is “beefless burger.”

(2): **Plant-based ground beef.** The name of the food is “___ ground” or “___ ground beef” where the blank is filled in with the modifier of plant-based, vegan, vegetarian, veggie, meatless, or other similar term. Alternatively, the name is “beefless ground.”

(d): *Label declaration.* Each of the ingredients used shall be declared on the label as required by the applicable sections of part 101 and 130 of this chapter.

This proposed standard of identity for plant-based beef would allow plant-based meat companies to continue to label their products with descriptive terms with which the consumer is familiar. The description of plant-based beef allows for a wide range of plant-based meat products because it is not limited to one particular plant protein source. Further, this proposed standard of identity allows plant-based meat companies to continue to use a variety of modifiers that bring attention to the fact that

138. 7 U.S.C. § 2902 (2021).

the product contains no meat. By allowing for more than one modifying term, it allows the companies to continue to creatively label their products. Also, it means that companies that already have products on the shelves do not have to redo the labeling of products consumers are already familiar with.

This approach would align with the FDA's mission of protecting consumers and preventing deception. If the FDA developed its own standard of identity with which plant-based meats would have to align, then the FDA can regulate these products more efficiently. Further, because there is no evidence that consumers are confused about the difference between plant-based meat products and traditional meat products, this approach allows plant-based meat companies to continue to use the current labels of their products. If the plant-based meat companies were required to change the labels of their products, with technically correct language that did not include meat terms, it is likely there would be greater consumer confusion. By allowing plant-based meat products to use terms generally associated with meat products, consumers would know what the purpose of the plant-based product they are buying is meant to replace.

Creating a standard of identity for plant-based meats also furthers the FDA's goals of promoting public health. The FDA cannot promote this goal without supporting the sale of plant-based meats. Plant-based meats provide the same nutrition as real meat and are enjoyed by many Americans.¹³⁹ If the FDA did not create this new standard of identity and chose to enforce the USDA's standards of identity for meat, then there is a high likelihood that plant-based meats would be removed from the market. This would mean that consumers interested in eating these products would no longer have access to them. With this new standard of identity, plant-based meats will remain on the market with labels consumers are familiar with, which will allow consumers to continue to buy the products they believe are in their best interest.

CONCLUSION

The FDA should create a standard of identity for plant-based meats that allows consumers to understand the products they are buying. Creating this new standard of identity is consistent with the FDA's goals and in the interest of protecting the consumer. Plant-based meats need their own standard of identity because if plant-based meats were held to the same standards of identity put in place for meat, consumers would no longer have access to these products with labels that reflect the products

139. Sweeney, *supra* note 136.

use. Further, consumers will not be misled by labels that allow them to accurately know what product they are buying and what its purpose, taste, and texture is. For these reasons, it is in the FDA's and the public's interest for the FDA to create a separate standard of identity for plant-based meats instead of enforcing the USDA's standard of identity for meat products or amending the standards of identity.