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Where's the Meat? A Constitutional Analysis of Arkansas's Law Prohibiting the Use of "Meat" Terms on Plant-and Cell-Based Products

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WHERE'S THE MEAT? A CONSTITUTIONAL ANALYSIS OF ARKANSAS' LAW PROHIBITING THE USE OF "MEAT" TERMS ON PLANT – AND CELL – BASED PRODUCTS

Christy Wyatt

I. INTRODUCTION

In recent years, consumers have increasingly looked for alternatives to traditional meat products. Consumers often switch to these alternatives due to concerns for animal welfare, for personal health, or for the environment.¹ Out of this desire, two main types of alternative meat products have been developed: plant-based meat and cell-based meat. Plant-based meat has been produced since the mid-1900s and is made by processing plant sources such as soy and peas.² Sales of plant-based meat products have increased drastically over the past couple of years and the plant-based meat industry was worth \$939 million in 2019.³ Cell-based meat is meat that is grown in a laboratory using animal tissue or stem cells.⁴ While cell-based meat products have not yet entered the market, they are expected to between 2021 and 2025.⁵ While some consumers are skeptical about eating lab-grown meat, many consumers are willing to try cell-based meat as an alternative to meat produced from the slaughter of animals.⁶

1. See Shruti Sharma et al., *In Vitro Meat Production System: Why and How?*, 52 J. FOOD SCI. TECH. 7599, 7603 – 04 (2015) (stating that pollution from industrial meat production has significantly impacted climate change, estimates from the FAO stated that the raising of livestock accounted for up to 18% of greenhouse gas emissions. Additionally, consuming lab grown meat would likely reduce the need for factory farming, thus lowering the amount of animal suffering.); see also Julia B. Olayanju, *Plant-based Meat Alternatives: Perspectives on Consumer Demands and Future Directions*, FORBES (July 30, 2019, 12:07 PM), <https://www.forbes.com/sites/juliabolayanju/2019/07/30/plant-based-meat-alternatives-perspectives-on-consumer-demands-and-future-directions/#263e69336daa> [<https://perma.cc/7LSZ-F8J8>] (stating that consumers are increasingly looking for plant-based meat alternatives based on environmental, animal welfare, and health concerns).

2. Olayanju, *supra* note 1; Tara McHugh, *How Plant-Based Meat and Seafood are Processed*, FOOD TECH. MAG. (Oct. 1, 2019), <https://www.ift.org/news-and-publications/food-technology-magazine/issues/2019/october/columns/processing-how-plant-based-meat-and-seafood-are-processed> [<https://perma.cc/VU7K-GE7C>].

3. *Retail Sales Data, PLANT BASED FOODS ASS'N*, <https://plantbasedfoods.org/marketplace/retail-sales-data/> [<https://perma.cc/VAJ5-N3WF>] (last visited Mar. 27, 2020) (retail sales of plant-based meat increased by 18% in 2019 while retail sales of conventional meat grew by 2.7%).

4. Taylor A. Mayhall, Note, *The Meat of the Matter: Regulating a Laboratory-Grown Alternative*, 74 FOOD DRUG L. J. 151, 151 (2019); Sharma et al., *supra* note 1, at 7600.

5. Sam Danley, *Cell-Based Meats Approaching Scalability*, FOOD BUS. NEWS (Jan. 27, 2020), <https://www.foodbusinessnews.net/articles/15286-cell-based-meats-approaching-scalability> [<https://perma.cc/HCV6-K9TN>].

6. Mary Ellen Shoup, *Survey: How do Consumers feel about Cell Cultured Meat, and Dairy*

As cell-based meat prepares to enter the market and plant-based meat gains popularity, states are beginning to regulate the use of meat terms, such as beef, sausage, and chicken, on plant-based and cell-based products. These regulations vary in how they regulate meat terms. Examples of how meat terms are regulated for plant-based and cell-based meat products include forbidding using meat terms in a misleading way, requiring a disclaimer when a meat term is used, or prohibiting using meat terms altogether.⁷ As of May 2019, twenty-five states had introduced or passed regulations limiting the use of meat terms on plant-based and/or cell-based meat products.⁸ Many of these regulations have been challenged by plant-based meat producers as unconstitutional because they violate the First and Fourteenth Amendments.⁹ Cell-based meat producers have not yet challenged these regulations. This is likely because cell-based meat will not enter the market for at least another year, and producers are not prepared to spend money on litigation at this stage.

This Article will focus on an Arkansas statute banning the use of meat terms on plant-based and cell-based products (“Act 501”) and the case challenging its constitutionality, *Turtle Island Foods SPC v. Soman*.¹⁰ Act 501 is relevant because *Turtle Island* is currently being litigated and Act 501 has a complete ban on the use of meat terms on plant-based and cell-based products.¹¹ While Act 501 is the focus of this Article, the

Minus the Cows, FOODNAVIGATOR (Dec. 13, 2019), <https://www.foodnavigator-usa.com/Article/2019/12/13/Survey-Are-consumers-warming-up-to-the-idea-of-cell-cultured-meat> [<https://perma.cc/9HW6-JZGY>] (stating that 46% of consumers over the age of 55 are unwilling to try cell-based meat and 26% of consumers between the age 18-34 years are unwilling to try cell-based meat).

7. See Andrew Wimer, *Victory for Vegan Burgers: New Mississippi Labeling Regulations will Not Punish Plant-Based Meat*, INST. FOR JUSTICE (Nov. 7, 2019), <https://ij.org/press-release/victory-for-vegan-burgers-new-mississippi-labeling-regulations-will-not-punish-plant-based-meat/> [<https://perma.cc/72VT-FS8L>] (stating that *Upton Natural v. Bryant* was dropped because the Mississippi Department of Agriculture plans to replace the regulation forbidding the use of meat terms on plant-based foods with a revised regulation allowing meat terms on plant-based products as long as the label includes disclaimers such as “meat-free,” “plant-based,” “vegetarian,” etc. as well); see also *Turtle Island Foods v. Richardson*, No. 2:18-cv-04173, 2019 U.S. Dist. LEXIS 224840, at *17-18 (W.D. Mo. Sept. 30, 2019) (Order denying motion for preliminary injunction stating that Missouri’s regulation is likely constitutional because they only prohibit using meat terms in a misleading way. Plant-based meat producers can use meat terms on their products as long as they aren’t using the terms in a misleading way.); ARK. CODE ANN. § 2-1-305(6) (2020) (forbidding the use of meat terms on products that are not derived from slaughtered animals).

8. Elaine Watson, *Plant-Based and Cell-Cultured ‘Meat’ Labeling under Attack in 25 States*, FOODNAVIGATOR (May 29, 2019), <https://www.foodnavigator-usa.com/Article/2019/05/29/Plant-based-and-cell-cultured-meat-labeling-under-attack-in-25-states> [<https://perma.cc/3EPF-YPUA>].

9. See, e.g., Wimer, *supra* note 7 (Upton Naturals filed a First Amendment case in Mississippi); see e.g., *Richardson*, 2019 U.S. Dist. LEXIS 224840, at *3 (Order denying motion for preliminary injunction); see, e.g., *Turtle Island Foods SPC v. Soman*, No. 4:19-cv-514-KGB, 2019 U.S. Dist. LEXIS 225017, at *25-26 (E.D. Ark. Dec. 11, 2019) (order granting preliminary injunction).

10. Complaint for Declaratory and Injunctive Relief, *Turtle Island v. Soman*, No. 4:19-cv-514-KGB (E.D. Ark. July 22, 2019).

11. ARK. CODE ANN. § 2-1-305(6) (2020) (forbidding the use of meat terms on products that are

recommendations on legislating meat terms on plant-based and cell-based meat products apply to all states who are considering restricting the use of meat terms.

Part II-A of this Article describes how plant-based and cell-based meats are manufactured. Part II-B provides an overview of state statutes that restrict the use of meat terms on plant-based and cell-based meats and gives a detailed description of Act 501. Parts II-C and D provide background information on the constitutional law that both parties in *Turtle Island v. Soman* use to argue whether Act 501 is constitutional. Part II-E describes the actual arguments both parties make in *Turtle Island v. Soman*. Parts III-A through C analyze why Act 501 should be found unconstitutional based on the First and Fourteenth Amendments. Part III-D evaluates alternatives to completely banning the use of meat terms on plant-based and cell-based products. Finally, Part IV concludes that plant-based meat manufacturers should be able to use meat terms on their products as long as the use of the meat term is not misleading, and that cell-based meat manufacturers should be able to include meat terms on their products with an appropriate disclaimer.

II. BACKGROUND

Part II provides background information necessary to analyze *Turtle Island Foods SPC v. Soman*. Part A gives a brief history of cell-based meat and explains how both cell-based meat and plant-based meat are produced. Part B gives an overview of state statutes that prevent plant- and cell-based products from using meat terms on their labels, focusing on Act 501. Parts C and D explain the constitutional law that Turtle Island uses to argue that Act 501 is unconstitutional: Part C outlines First Amendment rights surrounding commercial speech and the *Central Hudson* Test and Part D explains the Fourteenth Amendment's prohibition on vague statutes. Finally, Part E provides the facts surrounding *Turtle Island Foods SPC v. Soman*, as well as the legal arguments of both parties.

A. Cell-Based Meat versus Plant-Based Meat

Cell-based meat is meat that is grown in a laboratory instead of produced through the slaughter of animals.¹² Cell-based meat is thought to be an environmentally friendly alternative to eating meat from livestock, as well as an improvement in animal welfare.¹³ The National

not derived from slaughtered animals).

12. Mayhall, *supra* note 4, at 152.

13. See Sharma et al., *supra* note 1, at 7603 – 04 (stating that pollution from industrial meat

Aeronautics and Space Administration (“NASA”) was the first to fund research experimenting with lab-grown meat in the early 2000s.¹⁴ NASA began to research cell-based meat with hopes to replace “pasty space food” with a better alternative.¹⁵ Within a few years, other groups and individuals began to fund cell-based meat research as an alternative to meat produced from livestock.¹⁶ In 2013, the first lab-grown burger was produced.¹⁷ However, this burger cost \$300,000 to produce, making it unrealistic for cell-based meat to enter the public market at that time.¹⁸ Since 2013, the costs of producing cell-based meat decreased from \$300,000 to \$100 per hamburger.¹⁹ Currently, cell-based meat has not entered the public market because of cost and other scale-up issues, but it is expected to enter the market in the near future.²⁰

There are currently two techniques to produce cell-cultured meat: the self-organizing technique and the scaffold-based technique.²¹ The self-organizing technique takes muscle tissue from an animal and puts it on a medium containing nutrients.²² The nutrients in the medium allow for the tissue to continue to grow and develop into meat.²³

The scaffold-based technique starts with stem cells instead of muscle tissue.²⁴ First, stem cells are taken from an animal.²⁵ The cells are then

production has significantly impacted climate change, estimates from the FAO stated that the raising of livestock accounted for up to 18% of greenhouse gas emissions. Additionally, consuming lab grown meat would likely reduce the need for factory farming, thus lowering the amount of animal suffering.).

14. Mayhall, *supra* note 4, at 157 (citing Michael Specter, *Test-Tube Burgers*, THE NEW YORKER (May 23, 2011), <https://www.newyorker.com/magazine/2011/05/23/test-tube-burgers>).

15. *Id.*

16. *Id.* (citing Michael Specter, *Test-Tube Burgers*, THE NEW YORKER (May 23, 2011), <https://www.newyorker.com/magazine/2011/05/23/test-tube-burgers>); Josh Schonwald, *The Frankenburger is Coming Sooner than you Think Thanks to Google*, TIME MAG. (Aug. 15, 2014), <http://time.com/3118571/lab-grown-meat-frankenburger-google/>) (stating that in 2008 People for the Ethical Treatment of Animals announced a competition awarding \$1 million to the first group you could create a cell-based chicken product. Sergey Brin, the co-founder of google, and others have also provided funding to cell-based meat research.).

17. Tom Ireland, *The Artificial Meat Factory – The Science of your Synthetic Supper*, SCIENCEFOCUS (May 23, 2019), <https://www.sciencefocus.com/future-technology/the-artificial-meat-factory-the-science-of-your-synthetic-supper/> [<https://perma.cc/3T54-GYPK>].

18. *Id.*

19. Danley, *supra* note 5.

20. *Id.* (stating that multiple companies are expecting to have cell-based meat products in the market between 2021 – 2025).

21. Sharma et al., *supra* note 1, at 7600.

22. *Id.*

23. *Id.*

24. *Id.*

25. *How it's Made*, MOSA MEAT, <https://www.mosameat.com/technology> [<https://perma.cc/N9GE-KGJZ>] (last visited Feb. 22, 2020) (the cells taken are called “myosatellite” cells. Myosatellite cells function to create new protein in animals. Mosa Meat is the producer of the cell-based burger made in 2013).

placed in a medium that will allow them to multiply.²⁶ To help the cells multiply, the medium is placed in a bioreactor.²⁷ The bioreactor creates a favorable environment for cells to multiply.²⁸ As the cells grow in the bioreactor, the cells attach to a scaffold, which is needed to spur cell multiplication.²⁹ Once the cells have multiplied, the medium is changed to stop feeding the cells' growth factors.³⁰ At that point, muscle cells merge into "myotubes," or a muscle fiber.³¹ Myotubes are then merged together to form meat.³²

Unlike cell-based meats, plant-based meats are derived from plant sources such as soy, peas, and potatoes.³³ There are many ways to process plant-based meats.³⁴ Two popular methods of producing plant-based meat are extrusion and shear cell processing.³⁵

Extrusion occurs when food materials are fed into a barrel.³⁶ Next, a screw within the barrel applies pressure and pushes the materials through an orifice creating the desired shape and texture of the food product.³⁷ When making plant-based meats, the temperature of the barrel, the speed of the screw, and the length and shape of the die (the part of the extruder that contains the orifice the food product is pushed through) will alter the proteins found in the plant source, giving the plant proteins a texture similar to meat.³⁸

Shear cell processing uses a Couette Cell to process plant proteins.³⁹ A Couette Cell has a large cone with a smaller cone inside.⁴⁰ A mixture of plant proteins, water, salt, and gluten are placed between the two cones.⁴¹ After the space between the two cones has been filled with the plant protein mixture, the two cones are heated using an oil bath.⁴² The inner

26. *Id.*

27. *Id.*

28. Sharma et al., *supra* note 1, at 7602; *see* Ireland, *supra* note 17 (stating that a large reason that the cell-based meat has not entered the market is that it is challenging to produce a bioreactor large enough to produce meat at an industrial level).

29. Sharma et al., *supra* note 1, at 7602.

30. *How it's Made*, *supra* note 25.

31. *Id.*

32. *Id.*

33. *See* McHugh, *supra* note 2.

34. *See id.*

35. *See id.*

36. H.G. Ramachandra rao & M.L. Thejaswini, *Extrusion Technology: A Novel Method of Food Processing*, 2 INT'L J. OF INNOVATIVE SCI., ENGINEERING, & TECH. 358, 361-62 (2015).

37. *Id.* at 362.

38. McHugh, *supra* note 2.

39. *Id.*

40. Georgios A. Krintiras et al., *Production of Structured Soy-Based Meat Analogues using Simple Shear and Heat in a Couette Cell*, 160 J. FOOD ENGINEERING 34, 35 (2015).

41. *Id.* at 36.

42. *Id.* at 35.

cone then rotates, putting pressure on the plant protein mixture.⁴³ The heat and pressure alter the plant proteins, giving the proteins a texture similar to meat.⁴⁴

B. State Laws Prohibiting Plant-Based and Cell-Based Meats from using Meat Terms

Multiple states have either passed laws or are considering passing laws forbidding food producers from using meat language on their products unless the product actually contains meat from a slaughtered animal.⁴⁵ Additionally, multiple state laws, including Act 501 in Arkansas, have been challenged in court.⁴⁶ Some of these cases have ended in settlements requiring the state to revise their statute to allow plant-based products to use meat terms as long as the label includes a disclaimer that notifies customers that the product is plant-based and does not actually include meat from livestock.⁴⁷ The rest of this Part will focus on Act 501.

On March 18, 2019, Arkansas passed Act 501, which forbids the use of meat terms on plant-based and cell-based products.⁴⁸ The statute states that if a person “represent[s] [an] agricultural product as a meat or meat product when the agricultural product is not derived from harvested livestock, poultry, or cervids,” the producer is misbranding their product.⁴⁹ The statute defines a “meat product” as an “agricultural product that is edible by humans and made wholly or in part from meat or another portion of a livestock, poultry, or cervid carcass.”⁵⁰ “‘Livestock’ means swine, bovine, sheep, and goats.”⁵¹ “Poultry” is defined as “domestic

43. *Id.*

44. McHugh, *supra* note 2.

45. Jessi Devenyns, *Mississippi and South Dakota Criminalize Misuse of the Term ‘Meat,’* FOODDIVE (Apr. 4, 2019), <https://www.fooddive.com/news/mississippi-and-south-dakota-criminalize-misuse-of-term-meat/552021/> [<https://perma.cc/S86B-8HMF>] (In addition to Arkansas, this article states that Montana, Mississippi and South Dakota have all passed laws that prohibit labeling products as meat that are not from a slaughtered animal. Arizona, Colorado, Illinois, Indiana, Nebraska, North Dakota, Virginia, Washington, and Wyoming have pending legislation as of April 2019).

46. *See, e.g.*, Complaint for Declaratory and Injunctive Relief at 1-2, 10, *Upton’s Naturals Co. v. Bryant*, No. 3:19-cv-462-HTW-LRA (S.D. Miss. July 1, 2019) (arguing that MISS. CODE ANN. § 75-35-15, stating that “A plant-based or insect-based food product shall not be labeled as a meat or a meat food product, is unconstitutional).

47. *See* Wimer, *supra* note 7 (stating that *Upton Natural v. Bryant* was dropped because the Mississippi Department of Agriculture plans to replace the regulation forbidding the use of meat terms on plant-based foods with a revised regulation allowing meat terms on plant-based products as long as the label includes terms like “meat-free,” “plant-based,” “vegetarian,” etc. as well).

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

49. ARK. CODE ANN. § 2-1-305(6) (2020).

50. ARK. CODE ANN. § 2-1-302(8) (2020).

51. ARK. CODE ANN. § 2-1-302(6) (2020).

birds that are edible by humans.”⁵² Finally, “cervid” means coming from deer, elk, and other animals within the deer family.⁵³ Additionally, it is considered misbranding if a person uses a “term that is the same as or similar to a term that has been used or defined historically in reference to a specific agricultural product” on a product different from the specific agricultural product.⁵⁴ Questions have arisen surrounding what “similar” means and whether incorrect spellings of specific agricultural products are too similar to be used on plant- and cell-based products.⁵⁵

C. First Amendment Protections for Commercial Speech and the Central Hudson Test

The First Amendment states “Congress shall make no law . . . abridging the freedom of speech.”⁵⁶ Commercial speech was unprotected under the First Amendment until the Supreme Court decided *Bigelow v. Virginia*⁵⁷ in 1975.⁵⁸ However, after *Bigelow*, it was not clear what was considered commercial speech.⁵⁹ To help determine whether speech is commercial, *Bolger v. Youngs Drug Products Corp.*⁶⁰ presented three factors for courts to consider when determining if speech is commercial. Speech is likely commercial speech if the speech is an advertisement, if the speech references a product, and if there is an economic motivation for the speech.⁶¹ The three factors are balanced together and are not determinative on their own.⁶² However, even today it can be challenging to determine whether speech is commercial speech.⁶³

52. ARK. CODE ANN. § 2-1-302(14) (2020).

53. *Definition of “Cervid,”* MERRIAM-WEBSTER DICTIONARY, <https://www.merriam-webster.com/dictionary/cervid> [<https://perma.cc/S92D-7SJ8>] (last visited Feb. 21, 2020).

54. ARK. CODE ANN. § 2-1-305(10) (2020).

55. Complaint for Declaratory and Injunctive Relief, *supra* note 10, at 14 (stating that Tofurky is unsure whether they can market their products as chick’n because it is unclear whether it is too close to chick’n.); *see also* Memorandum of Law in Support of Plaintiff’s Motion for Preliminary Injunction at 14, *Turtle Island Foodsv. Soman*, No. 4:19-cv-514-KGB (E.D. Ark. Aug. 14, 2019) (stating Tofurky is uncertain whether they can use Tofurky as their brand because it may be too similar to the term turkey).

56. U.S. CONST. amend. I.

57. 421 U.S. 809 (1975).

58. ERWIN CHERMERINSKY, *CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES* §11.3.7.1 (5th ed. 2015).

59. *Id.* at §11.3.7.2 (stating post *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc.* (a case decided one year after *Bigelow*) only stated that commercial speech was speech that “proposes a commercial transaction”).

60. 463 U.S. 60 (1983).

61. *Bolger v. Youngs Drug Prod. Corp.*, 463 U.S. 60, 66-67 (1983).

62. *Id.* at 67.

63. CHERMERINSKY, *supra* note 58, §11.3.7.2 (stating that even while the factors given by *Bolger v. Young Drug Products Corp.* to determine whether speech is commercial speech are helpful, they do not solve problems such as if image advertisements are commercial speech).

It is important to determine if speech is commercial because commercial speech is given less protection than expressive speech.⁶⁴ *Central Hudson Gas and Electric Corp. v. Public Service Commission* provided the test to determine if a state statute limiting commercial speech is unconstitutional.⁶⁵ First, for commercial speech to be protected, the speech must “concern lawful activity and not be misleading.”⁶⁶ Second, if the commercial speech is protected, then there must be a substantial government interest in limiting the speech.⁶⁷ Finally, if there is a substantial government interest, the statute must “directly advance[] the governmental interest asserted,” and the statute cannot be “more extensive than is necessary to serve [the governmental] interest.”⁶⁸

If the commercial speech is misleading, the government can ban the speech entirely.⁶⁹ If the commercial speech is not misleading, then the next two factors of the *Central Hudson* test are evaluated.⁷⁰ Commercial speech can be shown to be misleading either by inferring that the speech will mislead consumers through how the company advertises their products, or by showing that the consumers have actually been misled by the commercial speech.⁷¹ Additionally, if the commercial speech has a tendency to be inherently misleading, the state can place restrictions on the speech to prevent the speech being used in a misleading way.⁷²

The second prong of the *Central Hudson* Test states that there must be a substantial government interest to regulate non-misleading commercial speech.⁷³ For the government to pass the second prong of the *Central Hudson* Test, the government must prove that the interest stated is real and that the speech being regulated is truly harmful.⁷⁴ The government cannot use “unsupported assumptions” to prove that the stated interest is substantial.⁷⁵ Finally, the courts must evaluate whether the stated interest is actually served by the regulation being evaluated.⁷⁶

64. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n*, 447 U.S. 557, 562-63 (1980).

65. *Id.* at 566.

66. *Id.*

67. *Id.*

68. *Id.*

69. *In re R. M. J.*, 455 U.S. 191, 203 (1982).

70. *Id.* at 203-04.

71. *Turtle Island Foods SPC v. Soman*, 424 F. Supp. 552, 572 (E.D. Ark. 2019) (quoting 1-800-411-Pain Referral Serv., LLC v. Otto, 744 F.3d 1045, 1056 (8th Cir. 2014))(order granting preliminary injunction for Turtle Foods stating Arkansas cannot enforce Act 501).

72. *In re R. M. J.*, 455 U.S. at 203 (In the case of being potentially misleading, the restrictions can only limit the speech in ways that prevent the speech from being used in the misleading way).

73. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n*, 447 U.S. 557, 566 (1980).

74. *Ibanez v. Fla. Dep’t of Bus. & Prof’l Regulation*, 512 U.S. 136, 143 (1994).

75. *Id.* (citing *Zauderer v. Office of Disciplinary Counsel of Supreme Court*, 471 U.S. 626, 648-49 (1985)).

76. *Edenfield v. Fane*, 507 U.S. 761, 767 (1993).

The final prong of the *Central Hudson* Test requires that the regulation directly and narrowly advances the stated government interest.⁷⁷ If the regulation only provides “ineffective or remote support” for the stated interest, the regulation fails this prong of the *Central Hudson* Test.⁷⁸ Additionally, “if the government interest could be served as well by a more limited restriction on commercial speech,” the regulation fails the third prong of the *Central Hudson* Test.⁷⁹ This does not mean that the government must always use the least restrictive regulation, only that there must be a balance between the government’s stated interest and the restrictions used to support that interest.⁸⁰ If there are less intrusive options to promote the state interest than the regulation being evaluated, the regulation fails the third prong of the *Central Hudson* Test.⁸¹

D. Fourteenth Amendment and Vagueness

The Fourteenth Amendment states that no state shall “deprive any person of life, liberty, or property, without due process of law.”⁸² Under the Due Process Clause, a law is unenforceable if the law is vague.⁸³ The reason that vague laws violate due process is because people must be aware of what conduct is prohibited so that they can avoid violating the law.⁸⁴ According to Justice Thurgood Marshall, “vague laws may trap the innocent by not providing a fair warning.”⁸⁵ Additionally, vague laws require that judges, police officers, and other officials make subjective determinations on what the law means, increasing the likelihood of an arbitrary determination of whether a person broke the law.⁸⁶ Regulations can be flexible and have a reasonable breadth without violating the due process clause as long as it is clear what the regulation as a whole prohibits.⁸⁷ The degree of vagueness that a court will tolerate in a regulation depends on the nature of the regulation.⁸⁸ For example, when a regulation restricts constitutional rights, such as freedom of speech, the

77. *Cent. Hudson Gas & Elec. Corp.*, 557 U.S. at 566.

78. *Id.* at 564.

79. *Id.*

80. *Turtle Island Foods SPC v. Soman*, 424 F. Supp. 552, 573 (E.D. Ark. 2019) (quoting *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 556 (2001))(order granting preliminary injunction for Turtle Foods stating Arkansas cannot enforce Act 501).

81. *See Rubin v. Coors Brewing Co.*, 514 U.S. 476, 491 (1995).

82. U.S. CONST. amend. XIV, § 1.

83. *Grayned v. City of Rockford*, 408 U.S. 104, 108 (1972).

84. *Id.*

85. *Id.*

86. *Id.* at 108-09.

87. *Id.* at 110.

88. *Hoffman Estates v. Flipside, Hoffman Estates*, 455 U.S. 489, 498 (1982).

vagueness test applied is more stringently.⁸⁹

E. Turtle Island Foods, SPC (dba The Tofurky Company) v. Soman

1. Facts of the Case

Turtle Island Foods, SPC (doing business as The Tofurky Company) (“Tofurky”) filed a complaint against Nikhil Soman, the director of the Arkansas Bureau of Standards, on July 22, 2019, arguing that Act 501 is unconstitutional.⁹⁰ Tofurky produces and sells plant-based food products nationwide, including in Arkansas.⁹¹ Tofurky believes that their marketing strategy and ability to communicate what their products resemble to consumers would be inhibited by Act 501.⁹² Tofurky believes that Act 501 is unconstitutional because it violates the First Amendment, the Fourteenth Amendment, and the Dormant Commerce Clause.⁹³ Arkansas argues that Act 501 is constitutional,⁹⁴ and that Tofurky does not have standing to bring this suit.⁹⁵ Each parties’ *Central Hudson* Test and vagueness arguments, described in parts ii and iii, are based on arguments made to grant or deny a preliminary injunction prohibiting Arkansas from enforcing Act 501 until the case is completed.⁹⁶

2. Central Hudson Test Arguments

For the *Central Hudson* Test to apply, the regulated speech must be deemed commercial speech.⁹⁷ Both parties agree that the speech is

89. *Id.* at 499.

90. Complaint for Declaratory and Injunctive Relief, *supra* note 10, at 1.

91. *Id.* at 2.

92. *See id.* at 15 (stating that Tofurky can’t market its products online using meat terms because it advertises in Arkansas and burdens interstate commerce in general).

93. *Id.* at 13-15. This paper will not discuss the Dormant Commerce clause because it is not as significant of an argument as the First and Fourteenth Amendment challenges in Tofurky’s argument.

94. *See* Defendant’s Response to Plaintiff’s Motion for Preliminary Injunction at 1, *Turtle Island Foods v. Soman*, No. 4:19-cv-514-KGB (E.D. Ark. Aug. 22, 2019) (stating that Tofurky is unlikely to succeed on its First and Fourteenth Amendment claims).

95. *Id.* at 8-9. (citing *Susan B. Anthony List v. Driehaus*, 573 U.S. 149, 158-59 (2014)) (stating that to be able to challenge Act 501 Tofurky must have a “credible threat of prosecution under Act 501. Tofurky has not changed its labels and Arkansas has not tried to enforce Act 501 against Tofurky. Therefore, Tofurky does not currently face a credible threat of prosecution.)

96. *See* Defendant’s Response to Plaintiff’s Motion for Preliminary Injunction, *supra* note 94; *see also* Memorandum of Law in Support of Plaintiff’s Motion for Preliminary Injunction, *supra* note 55. To grant a preliminary injunction, a plaintiff only has to prove that they are likely to win the case. That is why both Tofurky’s and Arkansas’s arguments use the terminology that Act 501 is likely or unlikely to be found constitutional. *See Turtle Island Foods SPC v. Soman*, 424 F. Supp. 3d 552, 570 (E.D. Ark. 2019) (order granting preliminary injunction).

97. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n*, 447 U.S. 557, 566 (1980).

commercial speech.⁹⁸ Turning to whether the commercial speech is protected, Tofurky alleges that Act 501 fails the *Central Hudson* Test. First, Tofurky argues that the commercial speech restricted by Act 501 is protected under the First Amendment because the speech, Tofurky's labels and advertisements, is not misleading to consumers.⁹⁹ Tofurky specifically argues that meat terms have been used on plant-based food labels for decades.¹⁰⁰ Additionally, Tofurky asserts that they always label their products to clearly show that their products are plant-based.¹⁰¹ Tofurky provides multiple pictures of their labels to demonstrate that their labels effectively communicate to consumers that Tofurky's products are plant-based.¹⁰² Therefore, it would be "absurdly patronizing" to think that a customer would not know that Tofurky's products are plant-based.¹⁰³

Next, Tofurky argues that Act 501 does not advance a substantial government interest.¹⁰⁴ Tofurky contends that there is no evidence demonstrating consumers are confused by how plant-based meats are labeled.¹⁰⁵ Therefore, Tofurky argues the Arkansas government has not proven that there is real harm in allowing plant-based meats to use meat related terms.¹⁰⁶ Tofurky also argues that there is no evidence showing that Act 501 will actually alleviate any consumer confusion regarding the use of meat terms on plant-based foods.¹⁰⁷ Tofurky believes that Act 501 will actually lead to increased consumer confusion because Tofurky needs to use meat terms to help consumers identify what their plant-based products are supposed to taste like.¹⁰⁸

Finally, Tofurky argues that Act 501 is not "appropriately tailored to

98. See Memorandum of Law in Support of Plaintiff's Motion for Preliminary Injunction, *supra* note 55, at 6; see also Defendant's Response to Plaintiff's Motion for Preliminary Injunction, *supra* note 94, at 13 (both briefs argue their First Amendment cases assuming that Tofurky's labels are commercial speech).

99. Memorandum of Law in Support of Plaintiff's Motion for Preliminary Injunction, *supra* note 55, at 7.

100. *Id.*

101. *Id.* (specifically stating that it uses the label "all vegan," "plant based," "vegetarian," "veggie," and "made with pasture raised plants").

102. See, e.g., Complaint for Declaratory and Injunctive Relief, *supra* note 10, at 10-11 (shows examples of Tofurky's labels. All the labels contain that the products are plant-based or vegetarian).

103. Memorandum of Law in Support of Plaintiff's Motion for Preliminary Injunction, *supra* note 55, at 7.

104. *Id.*

105. *Id.* at 8.

106. *Id.* (Tofurky analogizes Act 501 with statutes forbidding the use of dairy terms on non-dairy products, like soymilk, in which courts stated that there was no reason to believe a reasonable consumer would think there was dairy milk in plant-based milk just because "milk was on the label." *E.g.*, *Gitson v. Trader Joe's Co.*, No. 13-cv-01333-WHO, 2015 WL 9121232 (N.D. Cal. Dec. 1, 2015)).

107. *Id.* at 9.

108. *Id.* (Tofurky argues that it would have to replace "sausage" with a term like "Tube" which does not help consumers determine what the product is supposed to taste like).

any substantial government interest.”¹⁰⁹ Tofurky alleges that “a blanket restriction” on all meat terms is much more restrictive than is necessary to alleviate consumer confusion.¹¹⁰ Tofurky believes that the Arkansas government could prevent consumer confusion by requiring certain disclosures on plant-based foods instead of restricting the use of meat terms.¹¹¹ Requiring certain disclosures more adequately tailors Arkansas’ stated interest of preventing consumer confusion.¹¹² Additionally, Tofurky asserts that there are already multiple federal laws that prevent plant-based food producers from misleading consumers by using meat terms in a misleading way.¹¹³

Arkansas argues that Act 501 passes the *Central Hudson* Test and that Tofurky’s speech is not protected under the First Amendment.¹¹⁴ Arkansas first contends that Tofurky’s labels are not protected by the First Amendment because Tofurky’s labels are misleading.¹¹⁵ Arkansas states that Tofurky’s labels are inherently misleading because when Tofurky uses meat terms, the portion of the label stating that the product is plant-based is often very small, while the meat term is very large.¹¹⁶

Next, Arkansas argues that even if Tofurky’s labels are protected by the First Amendment, Act 501 still passes the *Central Hudson* Test. First, Arkansas states that the Act 501 has a substantial government interest in “protecting consumers from deceptive and misleading advertisement[s].”¹¹⁷ Additionally, Arkansas asserts that Act 501 “directly and materially advance[s] the state interest.”¹¹⁸ Act 501 directly states that food producers cannot mislead consumers by labeling a product as something it is not, and stating that labeling a plant-based meat product as a meat product would mislead consumers.¹¹⁹

Finally, Arkansas argues that Act 501 is as “restrictive as necessary”

109. Memorandum of Law in Support of Plaintiff’s Motion for Preliminary Injunction, *supra* note 55, at 10.

110. *Id.* at 11.

111. *Id.* at 12.

112. *Id.*

113. *Id.* at 11 (Tofurky states the Food, Drug, and Cosmetic Act and the Federal Trade Commission Act already prohibit mislabeling food products in a way that is misleading).

114. See Defendant’s Response to Plaintiff’s Motion for Preliminary Injunction, *supra* note 94, at 13.

115. *Id.*

116. *Id.* at 15-16 (for example, Tofurky’s “slow roasted Chick’n” does not state that the product is plant-based except for in the bottom corner of the box in small print). Arkansas does not state how they expect Tofurky to label their products, but examples could include “Italian spiced soy links” instead of “plant-based Italian Sausage”

117. *Id.* at 18 (citing ARK. CODE ANN. § 2-1-301) (This code lays out the specific purpose of Act 501, to protect against misleading advertisements).

118. *Id.* at 19.

119. *Id.*

to further the substantial interest because Act 501 identifies the specific words and descriptors it intends to prohibit.¹²⁰ Arkansas argues that Tofurky's argument that disclosures would be a narrower restriction that would achieve the same goal as Act 501 is not accurate because using meat terms on plant-based and cell-based products is still misleading and could confuse consumers.¹²¹

3. Fourteenth Amendment Vagueness Argument

Tofurky believes Act 501 is unconstitutional because Act 501 is vague and violates the Fourteenth Amendment.¹²² Tofurky argues that the section of Act 501 that prohibits the use of a "term that is the same or similar to a term that has been used or defined historically in reference to a specific agricultural product"¹²³ is vague because Act 501 does not clarify how similar is too similar.¹²⁴ Additionally, Tofurky argues that there are many meat terms that have multiple meanings and Act 501 is not clear on whether those terms can be used on non-meat labels.¹²⁵ For example, meat can be used to either describe an "edible portion of a livestock, poultry, or cervid carcass," or meat can be used to describe the edible portions of a fruit.¹²⁶ Tofurky asserts that the vagueness in Act 501 regarding "similar terms" and whether meat terms with multiple meanings can be used in non-meat products will give the state too much discretion in determining whether a term used on a plant-based or cell-based product violates Act 501.¹²⁷ Therefore, Tofurky argues that Act 501 is unconstitutional under the Fourteenth Amendment.¹²⁸

Arkansas argues that the Tofurky is unlikely to succeed on its Fourteenth Amendment vagueness challenge.¹²⁹ Arkansas states that the statute, as a whole, defines what each term means and specifies the exact activities that are regulated by Act 501.¹³⁰ The only portion of the statute

120. Defendant's Response to Plaintiff's Motion for Preliminary Injunction, *supra* note 94, at 21 (For example, Act 501 specifically states that a product using pork or pork terms must be derived from swine).

121. *Id.* at 22.

122. Memorandum of Law in Support of Plaintiff's Motion for Preliminary Injunction, *supra* note 55, at 13.

123. ARK. CODE ANN. § 2-1-305(10) (2020).

124. Memorandum of Law in Support of Plaintiff's Motion for Preliminary Injunction, *supra* note 55, at 14 (questioning whether the term "beetballs" is too similar to "meatballs," and whether Tofurky would have to change its brand name because "Tofurky" is too similar to "turkey").

125. *Id.* at 13.

126. *Id.* at 13-14.

127. *Id.* at 14.

128. *Id.*

129. Defendant's Response to Plaintiff's Motion for Preliminary Injunction, *supra* note 94, at 23.

130. *Id.* at 24 (For example, the statute explicitly defines beef, beef product, pork, poultry, etc).

that Tofurky argues is unconstitutionally vague is the prohibition of “any term that is the same or similar to a term . . . in reference to a specified agricultural product.”¹³¹ Arkansas asserts that even if the court agrees that this specific section of Act 501 is vague, it is not enough to declare Act 501 unconstitutional in its entirety because the rest of Act 501 is clear in what it requires.¹³²

III. ANALYSIS

Part A of this Section analyzes whether Act 501 violates the First Amendment under the *Central Hudson* Test as it applies to plant-based meat products. Part B analyzes whether Act 501 violates the First Amendment under the *Central Hudson* Test as it applies to cell-based meat products. Part C analyzes whether Act 501 is unconstitutionally vague under the Due Process Clause of the Fourteenth Amendment. Finally, Part D analyzes other narrower alternatives to Act 501 that Arkansas could implement while furthering its interest of ensuring customers are not misled by advertising of plant-based and cell-based products.

A. Act 501 Should be Found Unconstitutional Based on the Central Hudson Test for Plant-Based Meats

Act 501 will should be found to violate plant-based meat manufacturers’ rights under the First Amendment based on the *Central Hudson* Test. First, it is unlikely that most plant-based products using meat terms are using meat terms in ways that are inherently misleading. On the contrary, many producers of plant-based meat want consumers to know that their products are plant-based because consumers are increasingly looking to purchase plant-based meats.¹³³ Therefore, most plant-based meat products’ labels will include a disclaimer that the product is vegetarian, vegan, or plant-based because it appeals to consumers and encourages sales.¹³⁴ Consumers are not likely to be confused or misled if the packaging of plant-based meats clearly identifies that the product is plant-based. An example of a label that would clearly identify the plant-based meat products is “Vegan Italian Sausage.”

131. *Id.* (ARK. CODE ANN. § 2-1-305(10) is the section of the statute Tofurky questioned).

132. *Id.*

133. *See* Olayanju, *supra* note 1 (stating that consumers are increasingly looking for plant-based meat alternatives based on environmental, animal welfare, and health concerns); *see also* *Retail Sales Data*, *supra* note 3 (Stating that retail sales of plant-based meat increased by eighteen percent in 2019 while retail sales of conventional meat grew by 2.7%).

134. *See, e.g.*, Complaint for Declaratory and Injunctive Relief, *supra* note 10, at 10-11 (shows examples of Tofurky’s labels. All the labels contain that the products are plant-based or vegetarian).

Additionally, plant-based meats have been available since the early to mid-1900s.¹³⁵ Therefore, most consumers are likely familiar with plant-based meats and will not be misled into believing that labeled plant-based meat is meat produced from the slaughter of livestock. However, there is still the potential that plant-based meat producers could mislead consumers by advertising their products without stating that the product is plant-based or vegetarian. Because using meat terms on plant-based meats is not inherently misleading, the remaining factors of the *Central Hudson* Test must be evaluated.¹³⁶

The second prong of the *Central Hudson* Test requires that the Arkansas government had a substantial government interest when they passed Act 501.¹³⁷ Arkansas states that the purpose of Act 501 is to prevent consumer confusion due to false advertisements.¹³⁸ Arkansas' stated interest is substantial, and Act 501 would protect consumers from believing that plant-based and cell-based meat products are actually meat products made from the slaughter of livestock. Therefore, it is likely that Act 501 would pass the second prong of the *Central Hudson* Test. However, Tofurky argues that there are already laws preventing the misleading labeling of food products.¹³⁹ Therefore, Act 501 is not furthering Arkansas' stated interest because it was already illegal for Tofurky to mislead their customers by labeling their products as though they came from livestock.¹⁴⁰ Additionally, Tofurky asserts that Act 501 goes against Arkansas' stated interest because Act 501 actually causes confusion since they would not be able to adequately describe their plant-based products resembling meat.¹⁴¹

Tofurky's arguments that Act 501 is unconstitutional are weak. First, Tofurky's argument that there is no need for Act 501 because there are existing statutes forbidding misleading advertising is inadequate because

135. Olayanju, *supra* note 1.

136. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n*, 447 U.S. 557, 566 (1980) (if speech is inherently misleading, the speech is not protected by the First Amendment, if the speech is not inherently misleading then the remaining prongs of the *Central Hudson* Test is evaluated).

137. *Id.*

138. Defendant's Response to Plaintiff's Motion for Preliminary Injunction, *supra* note 94, at 18 (citing ARK. CODE ANN. § 2-1-301) (This code lays out the specific purpose of Act 501, to protect against misleading advertisements).

139. Memorandum of Law in Support of Plaintiff's Motion for Preliminary Injunction, *supra* note 55, at 11; *see* 21 U.S.C. § 343(a) (Food, Drug, and Cosmetic Act provision stating that a food is misbranded if its label is misleading); *see also* 21 U.S.C. § 601(n)(1) (Federal Meat Inspection Act stating that misleading label makes a meat product misbranded); *see also* 15 U.S.C. § 45(a)(1) (Federal Trade Commission Act stating that deceptive practices affecting commerce are illegal).

140. Memorandum of Law in Support of Plaintiff's Motion for Preliminary Injunction, *supra* note 55, at 11.

141. *Id.* at 9. (Tofurky argues that it would have to replace "sausage" with a term like "Tube" which does not help consumers determine what the product is supposed to taste like).

Act 501 is more restrictive than the federal statutes forbidding misleading advertising. Act 501 specifically restricts how plant-based and cell-based meat producers can label their products. Additionally, Act 501 attempts to prevent consumers from thinking that plant-based and cell-based meat products are meat from slaughtered livestock. The federal laws are broad, and it is logical that Arkansas wants to implement more restrictions regarding specific areas of the food industry to protect consumers from a specific type of misleading label. Second, Tofurky's argument stating that Act 501 is actually creating confusion because they cannot properly label their products is ineffective as well because Tofurky could find creative ways to describe their products. The new terms may be harder to come up with, but it is not impossible. For example, Tofurky could call a product "tofu links with Italian spices" instead of "plant-based Italian Sausage."¹⁴² Because Tofurky's arguments are weak, Act 501 should pass the second prong of the *Central Hudson* Test.

The final prong of the *Central Hudson* Test requires that Act 501 directly advance Arkansas' stated interest and be no more restrictive than necessary to achieve its interest of keeping consumers from being misled.¹⁴³ This prong is where the real issues of Act 501 emerge. While prohibiting the use of meat terms on plant-based meats directly advances Arkansas' interest of stopping consumers from being misled, there are multiple alternatives to Act 501 that are narrower and will achieve Arkansas' stated goal of preventing plant-based meat producers from confusing consumers. Instead of forbidding plant-based meat producers from using meat terms altogether, Arkansas could require that plant-based meat products include a disclaimer on their label, right before the meat term and in the same size font, that identifies that the product is plant-based.¹⁴⁴ Additionally, Arkansas could require that meat terms cannot be used in a way that would misrepresent a product as meat when it is not.¹⁴⁵ Under a statute that allows meat terms on products as long as it does not misrepresent what the product is, a plant-based product could call its product "sausage" as long as the packaging also makes clear that product

142. Tofurky did raise concerns in their argument that Act 501 is vague surrounding whether terms like patty or links could be used because they are often associated with meat products along with others. However, when terms have been used in multiple ways for an extended period of time, it would be hard to argue that consumers automatically associate that term with meat and cause confusion. *See id.* at 13-14.

143. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n*, 447 U.S. 557, 566 (1980).

144. Memorandum of Law in Support of Plaintiff's Motion for Preliminary Injunction, *supra* note 55, at 12 (suggesting that Arkansas requires certain disclosures instead of forbidding the use of meat terms on plant-based products).

145. *See Turtle Island Foods v. Richardson*, No. 2:18-cv-04173, 2019 U.S. Dist. LEXIS 224840, at *17 - 18 (W.D. Mo. Sept. 30, 2019) (Order denying motion for preliminary injunction stating that Missouri's regulation is likely constitutional because they only prohibit designating a non-meat product as a meat product, not using meat terms on non-meat products).

is plant-based. Manufacturers would have flexibility in determining how to notify customers that their product is plant based. Even though Act 501 does not have to be the narrowest regulation available,¹⁴⁶ Act 501 does not properly balance the restrictions implemented with furthering the government interest because including a disclaimer or stating that a meat term cannot be used in a misleading way is an equally effective and narrower restriction. Part III-D of this article discusses the advantages and disadvantages of these narrower regulations. Therefore, Act 501 should be found unconstitutional under the *Central Hudson* Test.

B. Act 501 is Likely to be Found Unconstitutional Based on the Central Hudson Test for Cell-Based Meats

Turtle Island Foods does not discuss cell-based meats, but it is likely that once cell-based meats enter the market, cell-based meat producers will bring suits alleging that statutes prohibiting the use of meat terms on cell-based meat products are unconstitutional. Currently there are no cases questioning the constitutionality of state statutes forbidding the use of meat terms on cell-based products.¹⁴⁷ While many of the same arguments used in the previous section apply to cell-based meats, there are complications that make the *Central Hudson* analysis more difficult when applied to cell-based meats. This analysis uses Act 501 as an example of how a court might analyze whether statutes restricting the use of meat terms on cell-based products are constitutional if a cell-based meat producer challenges the constitutionality of these statutes.

First, cell-based meat labels are more likely to mislead consumers than plant-based meat labels. Unlike plant-based meat that has been in the market for decades,¹⁴⁸ cell-based meat has not yet entered the market and will be a completely novel product once it does.¹⁴⁹ Consumers may not understand what cell-based meat is when it is introduced in the market. Therefore, a label that simply states “cell-based meat” may still mislead customers who are unfamiliar with the product. Courts may find that

146. *Turtle Island Foods SPC v. Soman*, 424 F. Supp. 3d 552, 573 (E.D. Ark. 2019) (quoting *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 556 (2001))(order granting preliminary injunction for *Turtle Foods* stating Arkansas cannot enforce Act 501).

147. Cell-based meat producers are most likely not litigating the many state regulations because it has not entered the market yet. Therefore, since the regulations could change or the labeling of cell-based meat could be regulated federally, it is logical for cell-based meat producers to wait to litigate until they are ready to put their products on the market. Because plant-based products are completely different products than cell-based meat products, plant-based meat producers are unlikely to spend additional time or money litigating whether cell-based meat producers should be able to label their products as “meat.” See Danley, *supra* note 5 (stating that multiple companies are not expecting to have cell-based meat products in the market until sometime between 2021 – 2025).

148. Olayanju, *supra* note 1.

149. Danley, *supra* note 5.

using meat terms on cell-based meat labels, without a disclaimer explaining what cell-based meat is, is inherently misleading because consumers may think that cell-based meat is still meat from livestock.¹⁵⁰ If a court determines that meat terms used by a cell-based meat manufacturer are inherently misleading, it will not be protected under the First Amendment and the state can prohibit the use of those meat terms without applying the rest of the *Central Hudson* Test. However, not all meat terms used on cell-based meat products are necessarily inherently misleading. For example, if the label clearly states that the cell-based meat is “meat made from growing animal cells in a lab,” it would be difficult to argue that consumers would be inherently misled by the use of the term “meat” on the label. Because meat terms can be used on cell-based meat labels without misleading consumers and Act 501 bans all meat terms from being used, courts will likely determine that using meat terms on cell-based meat is not misleading and, therefore, will evaluate whether Act 501 is unconstitutional by looking at the other two prongs of the *Central Hudson* Test.

For the same reasons described in the analysis of plant-based meat, courts will likely find that Arkansas had a substantial interest when they passed Act 501 of protecting consumers from being misled, and that Act 501 directly furthers that interest by banning the use of meat terms on cell-based meat products.¹⁵¹ However, Act 501 once again runs into issues when analyzing whether it is no more restrictive than necessary to further Arkansas’ interest of protecting customers from being misled.¹⁵² First, like plant-based meats, there are less restrictive regulations that Arkansas could implement to further the same goal with regards to cell-based meats, such as requiring a disclaimer or that the meat term cannot be used in a misleading way. However, because cell-based meat products are new and consumers may not understand what cell-based meat is, simply requiring a disclaimer may not adequately keep consumers from being misled from thinking cell-based meat is actually meat made from the slaughter of livestock. Therefore, prohibiting the use of meat terms may be the easiest way to guarantee consumers are not misled into thinking that cell-based meat is meat derived from slaughtering livestock. On the other hand, it would be challenging to call cell-based meat anything other than meat because cell-based meat has the same composition as actual meat from slaughtered animals, and the starting

150. It is likely that consumers being misled by the term “cell-based meat” will decrease after cell-based meat has been in the market for a significant length of time.

151. See *supra* Part III-A for a full-length analysis.

152. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n*, 447 U.S. 557, 566 (1980) (the third prong of the *Central Hudson* Test).

material is animal muscle tissue or animal stem cells.¹⁵³

Unlike plant-based meat, it is difficult to determine other alternatives to labeling cell-based meat without using the term “meat.” There is not a non-animal source to identify cell-based meat, unlike plant-based meat where terms such as “soy protein” or “pea protein” are available. Therefore, it is difficult to balance Arkansas’ interest and the restrictions that Arkansas is placing on cell-based meat producers’ ability to advertise their products. Courts analyzing this issue could reasonably decide that Act 501 passes or fails the final prong of the *Central Hudson* Test. However, due to how challenging it would be for cell-based meat producers to label their products without a meat term, it is likely that courts would decide that Act 501 fails the final prong of the *Central Hudson* Test and, therefore, that Act 501 is unconstitutional.

C. Act 501 is Unconstitutionally Vague, but Can Easily be Amended to Become Constitutional

Courts are likely to find Act 501 is vague, but only for the portion of the regulation that states a company is misrepresenting what their product is when they use a term “that is the same as or similar to a term that has been used or defined historically in reference to a specific agricultural product.”¹⁵⁴ Tofurky’s argument that Act 501 does not clarify what terms are too similar to a term that has been used to describe meat in the past is especially persuasive.¹⁵⁵ For example, Tofurky argues it is unsure whether it can continue to use the term “beetballs” on its products because it is somewhat similar to the term “meatballs.”¹⁵⁶ Arkansas would probably determine that “beetballs” is not similar enough to “meatballs” to prohibit Tofurky from using the term. However, whether “beetballs” is too similar to “meatballs” could not be decided based on the text of the statute. Therefore, if Tofurky continues to use “beetballs,” there is a risk that Arkansas could determine that “beetballs” is too similar to “meatballs” and claim that Tofurky is violating Act 501. Tofurky has no way of actually knowing if “beetballs” is too similar to “meatballs” until Arkansas enforces Act 501. Therefore, a court should find that Arkansas’ use of the term “similar” in Act 501 is unconstitutionally vague.

Tofurky also argues that Act 501 is vague because Act 501 does not clarify how to treat terms that historically have been used by both the meat

153. Sharma et al., *supra* note 1, at 7600; *see also* Mayhall, *supra* note 4, at 168-69 (arguing that cell-based meat should be labeled as “meat” because it has the same properties as meat from livestock).

154. ARK. CODE ANN. § 2-1-305(10) (2020).

155. Memorandum of Law in Support of Plaintiff’s Motion for Preliminary Injunction, *supra* note 55, at 14.

156. *Id.*

industry and other food industries.¹⁵⁷ Tofurky provides examples of such terms, including terms like patty, burger, and meat.¹⁵⁸ While Tofurky's concern is valid, it is unlikely that terms that have historically and commonly been used for both meat terms and non-meat terms would now only be allowed to be used on meat products. First, this clause of Act 501 does not specifically state that only common terms for meat products are protected from being used in other sectors of the food industry.¹⁵⁹ Act 501 only states that if a term has historically been used with a specific agricultural product, then the term cannot be used to describe a new or different product.¹⁶⁰ Therefore, if the term "patty" has been commonly used in the confectionary industry, peppermint patties for example, and the meat industry as another term for a hamburger, both industries should be able to use the term moving forward and still be in compliance with Act 501. Therefore, Tofurky's argument stating Act 501 is vague because it does not clarify how to handle terms that are used across multiple food industries is not an effective argument.

Even though a court should find Act 501 unconstitutionally vague, Act 501 could be easily amended to maintain its goal. Additionally, Arkansas argues that if a court finds Act 501 unconstitutionally vague because it does not clarify how similar a term must be to the meat term to be in violation of Act 501, the statute should be severable and the remainder of it should be saved.¹⁶¹ Even though a court could decide that Act 501 is unconstitutional in its entirety because it does not clarify what similar means, it is unlikely to do so because that specific clause is a small portion of Act 501 and easily severable from the rest of Act 501.¹⁶² Therefore, the portion of Act 501 that prohibits the use of meat terms on products other than meat from slaughtered livestock would still be valid.¹⁶³ Tofurky would not benefit much from that specific section being deemed unconstitutional because it still would be unable to use many of the terms that it wants to use on its products. Tofurky would not be able to use terms like "sausage," "deli slices," or "ham" because historically those terms have only been used with livestock-produced meat.¹⁶⁴

Finally, even if the court decides that Act 501 is unconstitutional in its

157. *Id.* at 13 – 14.

158. *Id.*

159. *See* ARK. CODE ANN. § 2-1-305(10) (2020).

160. *Id.*

161. Defendant's Response to Plaintiff's Motion for Preliminary Injunction, *supra* note 94, at 24.

162. *See id.*

163. ARK. CODE ANN. § 2-1-305(10) is what would be deemed unconstitutional while ARK. CODE ANN. § 2-1-305(6) is the section of Act 501 that prohibits the use of meat terms on non-meat products.

164. *See* Complaint for Declaratory and Injunctive Relief, *supra* note 10, at 10-11. These are all terms that Tofurky currently uses on their labels. Tofurky would still have to change their labels to remove these terms even if they won their vagueness argument.

entirety, Arkansas could easily amend the statute to no longer be vague. Arkansas could either define how similar is too similar for terms historically associated with an agricultural product, or remove the term “similar” from the statute altogether. If Arkansas amended Act 501 in either of these ways, then Act 501 would no longer be unconstitutionally vague. Therefore, even though a court should find that Act 501 is unconstitutionally vague regarding the use of the term “similar,” Tofurky and cell-based meat producers would still not be able to use meat terms on their products. Tofurky’s vagueness argument will not help them to be able to use meat terms on their products. While this Section focused only on Tofurky, the same analysis would apply if cell-based meat producers argued that Act 501 is unconstitutionally vague.

D. Alternatives to Act 501 and their Advantages and Disadvantages

This section will discuss narrower, alternative options that states could enact instead of statutes like Act 501. First, a potential regulation could state that meat terms cannot be used in a misleading way. Another option would be to require a specific disclaimer when a plant-based or cell-based meat producer uses meat terms. Other states have used both these options and have either been held constitutional by courts or have been solutions in settlements between plant-based meat producers and governments.¹⁶⁵

1. Prohibiting the Use of Meat Terms in a Way that Misleads Customers

The first way that a state could more narrowly regulate the use of meat terms on products that are not made from the slaughter of livestock is to just state that meat terms cannot be used in misleading ways. The advantage with stating only that meat terms cannot be used in a misleading way is that it gives both cell-based and plant-based meat producers flexibility to determine the best way to label their products. As long as producers are labeling their products clearly and in a way that consumers know that the product is not meat from slaughtered livestock, the producers are in compliance with the regulation. Additionally, under the misleading standard, cell-based and plant-based meat producers will

165. See Wimer, *supra* note 7 (stating that *Upton Natural v. Bryant* was dropped because the Mississippi Department of Agriculture plans to replace the regulation forbidding the use of meat terms on plant-based foods with a revised regulation allowing meat terms on plant-based products as long as the label includes disclaimers such as “meat-free,” “plant-based,” “vegetarian,” etc. as well); see also *Turtle Island Foods v. Richardson*, No. 2:18-cv-04173, 2019 U.S. Dist. LEXIS 224840 (W.D. Mo. Sept. 30, 2019) (Order denying motion for preliminary injunction stating that Missouri’s regulation is likely constitutional because they only prohibit using meat terms in a misleading way. Plant-based meat producers can use meat terms on their products as long as they aren’t using the terms in a misleading way.).

not have to change labels based on the state in which they are selling. This standard does not require specific wording on the label. Therefore, producers can use one label for every state that adopts this standard because no specific disclaimers are required.

However, using the standard that only requires meat terms be used in a misleading way may be unconstitutional because it could be considered vague. Plant-based and cell-based meat producers may not think that their labeling is misleading, but the enforcing agency could determine that it is misleading. Therefore, plant-based and cell-based producers may not realize that they are not in compliance with the state's regulation. The prohibition on vague laws is to ensure that a person knows if they are violating a law prior to enforcement.¹⁶⁶ Without a proper definition of "misleading" that is easily applied, plant-based and cell-based meat producers could potentially be at the subjective whim of parties enforcing the statute to determine if their label is misleading.

Prohibiting the use of meat terms in a misleading way is the logical solution for plant-based products. The main reason that prohibiting the use of meat terms in a misleading way is logical for plant-based meat products is because plant-based meat products have been in the market for decades.¹⁶⁷ Therefore, plant-based meat products are well known and have used meat terms in non-misleading ways for a long time.¹⁶⁸ There are many examples of plant-based meat labels that are not considered misleading in which enforcing agencies could look at to determine whether a plant-based meat label is misleading.¹⁶⁹ Also, consumers are familiar with plant-based products. Therefore, consumers understand what they are buying as long as the plant-based meat product identifies the product as plant-based, vegetarian, or another equivalent term.

Additionally, plant-based meat producers have an incentive to label their products clearly because many consumers are specifically looking to purchase plant-based meats.¹⁷⁰ It is extremely unlikely that plant-based

166. See *Grayned v. City of Rockford*, 408 U.S. 104, 108 (1972) (stating that laws need to give citizens fair warning of what is prohibited by the law).

167. See Olayanju, *supra* note 1 (stating that meat alternatives have been available beginning in the early to mid-1900s).

168. See *Turtle Island Foods v. Richardson*, 2019 U.S. Dist. LEXIS 224840, at *17 - 18 (Order denying motion for preliminary injunction) (Missouri's statute is an example of a statute that only prohibits meat terms from being used in a misleading way. The preliminary injunction was denied because Tofurky's labels were clearly labeled as plant based and not misleading).

169. See, e.g., BEYOND BURGER, <https://www.beyondmeat.com/products/the-beyond-burger/> [https://perma.cc/TBY9-VD7Q] (last visited Apr. 30, 2020). This site has a picture of beyond burger's label. While the term "burger" is on the packaging, "plant-based patties" is also on the label in large letters that would be difficult for a consumer to miss. This is just one of many examples of plant-based food products within grocery stores that are clearly labeled in a non-misleading way.

170. See *Retail Sales Data*, *supra* note 3 (Stating that retail sales of plant-based meat increased by eighteen percent in 2019 while retail sales of conventional meat grew by 2.7%).

meat producers would not clearly label their products as plant-based because they rely on consumers knowing that their product is plant-based to sell their product. Because plant-based products have been clearly labeled for years, and consumers generally know what plant-based meat is, it is logical to have a flexible standard for plant-based meat labeling by just requiring that the meat terms used are not misleading. By having a more flexible standard, plant-based meat producers should not need to change their labels because their labels are already not misleading. Therefore, stating that it is illegal to use meat terms in a misleading way allows most plant-based meat producers to continue using their current labels, while also ensuring that plant-based meat producers are not trying to pass-off their products as meat from slaughtered livestock.

However, the standard stating meat terms cannot be used in a misleading way is not an effective way to regulate cell-based meat products. Because cell-based meat products have not entered the market yet,¹⁷¹ cell-based meat products do not have the years of non-misleading labels for enforcing agencies to compare with new labels that might be misleading. Therefore, it is likely that determining whether a label on cell-based meat is misleading will be more subjective than for plant-based meat. There are likely to be more situations where cell-based meat producers truly think that they are compliant with a statute only requiring meat terms not be used in a misleading way, but the enforcement agency subjectively determines that the label is misleading. If this happens, there is no precedent to determine whether the label is truly misleading.

Additionally, consumers are more likely to be confused about whether cell-based meat is from slaughtered livestock than plant-based meat for two reasons. First, because cell-based meat has not yet entered the market, consumers are unfamiliar with cell-based meat's composition and origin. Second, cell-based meat is grown from animal stem cells or muscle tissue and is intended to look and taste exactly like meat from slaughtered animals.¹⁷² Therefore, it may be harder for consumers to distinguish between meat from slaughtered animals and cell-based meat, even if cell-based meat producers do not believe that they are using meat terms in a misleading way. Therefore, it would be more logical to have a statute that specifically determines how cell-based meat should be labeled.

2. Requiring a Disclaimer

Another alternative to forbidding the use of meat terms on plant-based

171. Danley, *supra* note 5 (stating that multiple companies are expecting to have cell-based meat products in the market between 2021 – 2025).

172. Mayhall, *supra* note 4, at 168 (arguing that cell-based meat should be labeled as meat because scientifically it is meat).

and cell-based meat products is to require a disclaimer on plant-based and cell-based meat products that use meat terms. Statutes could vary as to how specific the disclaimer must be. For example, a statute could just generically require a disclaimer. If the statute requiring a disclaimer was that broad, there would not be much of a difference from requiring that meat terms not be used in a misleading way because many plant-based meat producers use disclaimers with their meat terms to avoid misleading consumers.¹⁷³ However, states could also require a specific disclaimer on the label of plant-based and cell-based meat products. The advantage of requiring a specific disclaimer is that it is clear how the state requires plant-based or cell-based meat producers to label their products if they are using meat terms. There is no subjective evaluation that enforcement officials would have to make to determine if the label with the meat term is misleading. Therefore, it would be easy for cell-based and plant-based meat producers to evaluate whether they comply with the regulation.

The biggest disadvantage to requiring a specific disclaimer is that different states could have different disclaimers, leading to inconsistent obligations for manufacturers. In this scenario, plant-based and cell-based meat producers likely would have to print different labels for different states. This would come at a huge cost to the producers. Additionally, if each state required a different label, it would make it logistically challenging for plant-based and cell-based meat producers to ensure that they correctly label each product going into different states. This may result in plant-based and cell-based meat producers deciding to limit where they sell their products to states that use the same label.¹⁷⁴ One way to avoid having different disclaimer requirements in different states is for the Food and Drug Administration (“FDA”) or United States Department of Agriculture (“USDA”) to make a regulation with one disclaimer required on plant-based and cell-based meat products nationwide.¹⁷⁵ To

173. The analysis for a generic disclaimer is similar to having a regulation prohibiting the use of meat terms in a misleading way. For that reason, this section will only analyze regulations that require a specific disclaimer. However, some of the states’ legislation surrounding the use on meat terms only require that a disclaimer be used without specifying what the disclaimer must be. *See Wimer, supra* note 7 (stating that *Upton Natural v. Bryant* was dropped because the Mississippi Department of Agriculture plans to replace the regulation forbidding the use of meat terms on plant-based foods with a revised regulation allowing meat terms on plant-based products as long as the label includes terms like “meat-free,” “plant-based,” “vegetarian,” etc. as well).

174. Disclaimers that may deter manufacturers from selling their products in more than one state may be deemed unconstitutional under the dormant commerce clause. At its most basic, the dormant commerce clause states that state laws which excessively hinder interstate commerce are unconstitutional. *See CHEMERINSKY, supra* note 58, §5.3.1; *see also* Complaint for Declaratory and Injunctive Relief, *supra* note 10, at 15 (Tofurky also argued that Act 501 is unconstitutional because it violates the dormant commerce clause. However, Tofurky’s dormant commerce clause argument was not one of its main arguments. Therefore, this paper does not cover the dormant commerce clause in detail).

175. The FDA regulates all plant-based foods. *See Regulated Products*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/industry/import-basics/regulated-products> [<https://perma.cc/3VPL-G79C>]

be effective, this regulation must preempt any state regulations requiring a different disclaimer. This solution would make it much easier for plant-based and cell-based meat producers to comply with regulations.

Requiring a specific disclaimer, however, is not the best option for plant-based meat products. First, plant-based meat products already effectively use a variety of disclaimers.¹⁷⁶ Therefore, there is no reason to require plant-based meat products to have a specific disclaimer. Since these disclaimers are already effective, plant-based meat producers should have the option to use any of the existing effective disclaimers and not be forced to spend money to switch their labels to a new one. The FDA is unlikely to make a regulation requiring such a disclaimer for the same reason—existing disclaimers already work. For these reasons, plant-based meat products should have flexibility in labeling their plant-based meat products and should not be forced to use specific disclaimers on their products.

While requiring disclaimers for plant-based meat products is unnecessary, requiring cell-based meat products to have a specific disclaimer on their label is the most logical option. First, because cell-based meat is more likely to confuse consumers once it enters the market, having a standardized label will allow consumers to easily determine which meat is cell-based and which meat is from slaughtered livestock. Consumers will only have to learn to recognize one disclaimer to recognize cell-based meat.¹⁷⁷ Additionally, it may be helpful to require a disclaimer that explains what cell-based meat is because cell-based meat is a new product. An example of a disclaimer that would help consumers know what they are buying is requiring cell-based meat producers to call their products “cell-based meat,” and then state “cell-based meat is meat that is grown from animal stem cells in a laboratory.” Requiring a label like this would help consumers recognize cell-based meat and inform them about what they are buying. Ideally, the USDA would require a specific disclaimer at a national level. If the USDA develops the disclaimer, it will eliminate the concern of cell-based meat producers having to make multiple labels to comply with each state’s specific disclaimer. Indeed, the USDA is currently writing regulations for cell-based meat, and it would be logical to include a specific disclaimer

(last updated Aug. 3, 2018). The FDA and USDA have agreed to collaborate to regulate cell-based meats together. At this point it is likely that the USDA will oversee regulating labels. See Elaine Watson, *So the FDA and USDA will Share Oversight for Cell-Based Meat . . . but what will this mean in Practice*, FOODNAVIGATOR (July 30, 2019), <https://www.foodnavigator-usa.com/Article/2019/01/03/So-the-FDA-and-USDA-will-share-oversight-for-cell-based-meat-but-what-will-this-mean-in-practice#> [<https://perma.cc/UP4Y-EX54>].

176. See, e.g., Complaint for Declaratory and Injunctive Relief, *supra* note 10, at 10-11 (shows examples of Tofurky’s labels. All the labels contain that the products are plant-based or vegetarian).

177. There are multiple synonyms for cell-based meat such as cultured meat and lab-grown meat.

requirement in those regulations.¹⁷⁸ Because cell-based meat is a novel product, regulations requiring cell-based meat products to have a specific disclaimer on their labels is the best option for clarity for both cell-based meat producers and consumers.

IV. CONCLUSION

As consumers look for alternatives to meat products, plant-based and cell-based meats have become popular options. States should be careful as to how they regulate the use of meat terms on plant-based and cell-based products to avoid litigation challenging the constitutionality of their statutes. States risk being sued by both plant-based and cell-based meat producers if they are not thoughtful in how meat terms are regulated. Based on the analysis in Part III of this Article, it is likely unconstitutional for states to completely ban the use of meat terms on plant-based or cell-based meat products. Therefore, any restrictions that states place on the use of meat terms should be done in a way that allows both plant-based and cell-based meat products to use meat terms in a non-misleading way. Additionally, states should regulate the use of meat terms on cell-based meat and plant-based meat differently. Because plant-based meat products have been available for decades and consumers are familiar with plant-based meat products,¹⁷⁹ the most effective way to regulate plant-based meat products is to require that their labels do not use meat terms in misleading ways. Many plant-based meat producers already use meat terms in non-misleading ways. This regulation will maintain this status quo. However, cell-based meat products should be more carefully regulated because they are new and unfamiliar to consumers. Therefore, meat terms should be allowed on cell-based meat labels if the label has a disclaimer clearly labeling it as cell-based. Ideally, the disclaimer would also give a short explanation of what cell-based meat is. The USDA should enact regulations requiring one uniform, national disclaimer. This disclaimer should preempt any other disclaimers mandated by state legislatures.

178. Watson, *supra* note 175.

179. Olayanju, *supra* note 1.