
NOTE

STATE BANS ON LABELING FOR ALTERNATIVE MEAT PRODUCTS: FREE SPEECH AND CONSUMER PROTECTION

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ABSTRACT

In recent years, thirteen states have passed laws banning the use of traditional meat terminology on the labels of alternative meat products, such as plant-based burgers or the forthcoming cell-based meat products. But because they ban commercial speech, these laws are at risk of violating the First Amendment, and also raise issues relating to federal preemption. This Note first catalogues and analyzes the state bans, drawing two important distinctions among them: (1) whether they ban labels for only cell-based products or also plant-based products; and (2) whether they ban all uses of traditional meat terminology or only labels lacking qualification, such as “vegan” or “meatless.” It then explores the ramifications of those distinctions under both a First Amendment analysis and also under the preemption regimes of FDA and USDA. In doing so, this Note provides a useful case study for considering how terminology evolves as new technology emerges and how the government’s treatment of that terminology should evolve along with it—all the while, balancing the tension between protecting consumers from misleading information, protecting free speech, and promoting innovation in the burgeoning alternative meat industry.

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INTRODUCTION

“Baby oil is not from babies, Girl Scout Cookies do not contain Girl Scouts, and no one is fooled by Tofurky’s ‘Ham Style.’”¹

“An almond doesn’t lactate, I will confess.”²

The market for alternative meat products is large and growing, attracting both investors and media attention. In a 2019 report, the consultancy AT Kearney predicted that the total value of the global alternative meat market would reach \$392 billion by 2030.³ By 2040, they predicted the value would rise above \$1 trillion, which is even higher than the traditional meat category’s total predicted value of \$720 billion.⁴ A report by RethinkX estimates that “[b]y 2030, the number of cows in the United States will have fallen by 50

¹ Oral Argument at 29:20, *Turtle Island Foods v. Thompson*, No. 19-03154 (8th Cir. Jan. 22, 2020), <https://www.ca8.uscourts.gov/court-session>.

² Alexander Nieves, *Gottlieb: FDA to Crack Down on Labeling Nondairy Products as ‘Milk,’* POLITICO (July 17, 2018, 11:25 AM EDT), <https://www.politico.com/story/2018/07/17/almond-lactate-nondairy-milk-scott-gottlieb-725974>.

³ See AT KEARNEY, *HOW WILL CULTURED MEAT AND MEAT ALTERNATIVES DISRUPT THE AGRICULTURAL AND FOOD INDUSTRY?* 3 (2019).

⁴ See *id.*

percent and the cattle farming industry will be all but bankrupt.”⁵ As such, private investment in alternative meat products has soared. The Good Food Institute reported that \$13 billion was invested in the plant-based food category from 2017 to 2018,⁶ and that from 2015 to 2018, \$73 million was invested in cell-based meat companies.⁷

But what exactly is alternative meat? The products, so far, are generally divided into the two aforementioned categories: “plant-based” and “cell-based.” First are the “plant-based” products, which are “replacements for animal-based products” that attempt to “replicate the taste and texture of meat.”⁸ This category also encompasses “plant-forward products (such as jackfruit, seitan, tofu, and tempeh) that serve as functional meat replacements.”⁹ Notable brands producing food in this category include Beyond Meat, Morningstar Farms, Tofurky, and Boca.¹⁰ According to Nielsen data and the Plant-Based Foods Association, between June 2017 and June 2018, U.S. sales of plant-based products were \$670 million and grew at 24 percent.¹¹

The second category, which is considered the new frontier of food technology, includes “cell-based” products, which are “grown in a laboratory from animal cell cultures.”¹² In other words, they fulfill Winston Churchill’s 1931 prediction that “[w]e shall escape the absurdity of growing a whole chicken in order to eat the breast or wing, by growing these parts separately under a suitable medium.”¹³ The basic process involves “start[ing] with a small sample

⁵ CATHERINE TUBB & TONY SEBA, RETHINKX, RETHINKING FOOD AND AGRICULTURE 2020-2030 6 (2019).

⁶ See BRIANNA CAMERON ET AL., GOOD FOOD INST., STATE OF THE INDUSTRY REPORT: PLANT-BASED MEAT, EGGS, AND DAIRY 4 (2019).

⁷ See *id.* at 12.

⁸ *Id.* at 5.

⁹ *Id.*

¹⁰ See *id.* at 7.

¹¹ See PLANT-BASED FOODS ASS’N, PLANT-BASED FOOD SALES GROW 20 PERCENT (2018), <https://plantbasedfoods.org/wp-content/uploads/2018/07/PBFA-Release-on-Nielsen-Data-7.30.18.pdf>. This does not include tofu or tempeh products.

¹² JOEL GREENE & SAHAR ANGADJIVAND, CONG. RSCH. SERV., IF10947, REGULATION OF CELL-CULTURED MEAT 1 (2018).

¹³ Kat Eschner, *Winston Churchill Imagined the Lab-Grown Hamburger*, SMITHSONIAN MAG. (Dec. 1, 2017), <https://www.smithsonianmag.com/smart-news/winston-churchill-imagined-lab-grown-hamburger-180967349/>.

of cells from an animal” and “plac[ing the] sample in a nutrient-rich environment that allows it to grow” into the desired meat product.¹⁴ Most importantly, the goal is to create products that are genetically, structurally, and otherwise identical to traditional animal-based meat: “It isn’t imitation or synthetic meat; it’s actual meat that is grown from cells outside of an animal.”¹⁵ Also referred to as “clean meat,” “cultured meat,” or “lab-grown meat,”¹⁶ these products are not yet available for purchase in the United States,¹⁷ but Singapore recently broke ground as the first country to approve cell-based products for sale to retail consumers.¹⁸

Critics of the traditional industrial meat system, whether for animal rights reasons or its harmful environmental impacts,¹⁹ are certainly excited about the development of these alternative meat products. However, given the large sales projections and investments mentioned above, it is unsurprising that traditional meat producers are worried²⁰—so worried, in fact, that large producers such as

¹⁴ See CAMERON ET AL., *supra* note 6, at 4.

¹⁵ *Id.* at 2.

¹⁶ Bruce Friedrich, *Cultivated Meat: Why GFI is Embracing New Language*, GOOD FOOD INST. (Sept. 13, 2019), <https://www.gfi.org/cultivatedmeat>.

¹⁷ See CAMERON ET AL., *supra* note 6, at 2.

¹⁸ See Damian Carrington, *No-Kill, Lab-Grown Meat to Go on Sale for First Time*, GUARDIAN (Dec. 1, 2020, 7:01 PM), <https://www.theguardian.com/environment/2020/dec/02/no-kill-lab-grown-meat-to-go-on-sale-for-first-time>.

¹⁹ See H. Charles J. Godfray et al., *Meat Consumption, Health, and the Environment*, 361 SCI. 1, 1 (July 20, 2018), <https://science.sciencemag.org/content/sci/361/6399/eaam5324.full.pdf> (“Meat production is one of the most important ways in which humanity affects the environment: We cut down forests to create pasture as well as arable land to meet the demand for animal feed. Livestock production is a major source of greenhouse gases (GHGs) and other pollutants, in some areas makes major demands on scarce water resources, and can exacerbate soil erosion.”); see also *id.* at 6 (“All developed and many developing countries have legislation that prohibits the production and sale of certain types of meat, based on noneconomic animal rights or conservation considerations.”). For a more extensive list of studies on the environmental impacts of meat consumption, see Steph Tai, *Legalizing the Meaning of Meat*, 51 LOY. U. CHI. L.J. 743, 747–48 n. 22–24 (2020).

²⁰ See Chuck Jolley, *Six Greatest Ag Challenges for 2018*, FEEDSTUFFS (Dec. 7, 2017), <https://www.feedstuffs.com/commentary/six-greatest-ag-challenges-2018> (naming “Plant-based meat substitutes” as number five on the list of “Greatest Ag Challenges”); see also NAT’L CATTLEMEN’S BEEF ASS’N, 2018 POLICY PRIORITIES (2018), https://www.ncba.org/CMDocs/BeefUSA/Media/2018%20Policy%20Priorities_vF-2.pdf (“Protect our industry and consumers from fake meat and misleading labels”).

Tyson and Smithfield are hedging their bets by also investing in the new products.²¹ But the incumbent meat industry has also pursued a more offensive strategy: it has initiated a comprehensive lobbying effort to ban the use of traditional meat terminology on the labels of alternative meat products. The rationale behind these bans is often said to be consumer protection.²² However, there is also evidence that legislators are instead acting to protect the traditional meat industry's incumbent market position. As explained by one Missouri state senator, "We wanted to protect our cattlemen in Missouri."²³ Thirteen states currently have labelling bans.²⁴ A federal bill has also been proposed,²⁵ though this Note focuses entirely on the state laws.

The laws at issue take several different forms, but, at the most general level, they prohibit alternative meat products from being misrepresented as if they contained animal meat. For example, Missouri's law reads, "No person [shall misrepresent] a product as meat

²¹ See CAMERON ET AL., *supra* note 6, at 12 ("Tyson Ventures, the VC arm of Tyson Foods, first invested in a 5% stake in Beyond Meat in 2016, and made a follow-on investment the next year as part of Beyond Meat's \$55 million Series G round."); see also David Yaffe-Bellany, *Big Meat Hops on the Meatless Bandwagon*, N.Y. TIMES, Oct. 15, 2019, at B1 ("In recent months, major food companies like Tyson, Smithfield, Perdue, Hormel and Nestlé have rolled out their own meat alternatives, filling supermarket shelves with plant-based burgers, meatballs and chicken nuggets."); Sam Mehmet, *40 Percent of Leading Food Giants Now Have Dedicated Plant-Based Teams*, NEW FOOD MAG. (July 27, 2020), <https://www.newfoodmagazine.com/news/115179/40-percent-of-leading-food-giants-now-have-dedicated-plant-based-teams/> ("[A]lmost half of the world's largest food retailers and manufacturers now have teams dedicated to plant-based foods.").

²² See, e.g., ARK. CODE ANN. § 2-1-301 (2019) ("The purpose of this subchapter is to protect consumers from being misled or confused by false or misleading labeling").

²³ Sara Brown, *How Missouri Began To Tackle Fake Meat: Missouri Sen. Sandy Crawford*, DROVERS (May 31, 2018, 8:03 AM), <https://www.drovers.com/news-news/ag-policy/how-missouri-began-tackle-fake-meat-missouri-sen-sandy-crawford>; see also Complaint at 8, *Turtle Island Foods v. Strain*, No. 3:20-cv-00674 (M.D. La. Oct. 7, 2020) ("Multiple state legislators also affirmed the protectionist intent behind the law, admitting that 'everybody in here is wanting to protect the interest of our rice farmers and our beef farmers and so on' and '[e]veryone wants to protect the industries in Louisiana.' Or, in the words of the bill's Senate sponsor: 'We must protect our industry in this state. Agriculture. It's the number one industry in the state of Louisiana.'").

²⁴ See Appendix A.1.

²⁵ See Real Marketing Edible Artificials Truthfully Act of 2019, H.R. 4881, 116th Cong. (2019).

that is not derived from harvested production livestock or poultry.”²⁶ However, the labels on various alternative meat products differ significantly from each other, raising questions about which category of labels the state laws would ban. Currently, most—if not all—alternative meat products on the market indicate that their products are plant-based, but they differ in terms of how prominent that qualification is on the packaging. Compare, for example, the images of products by Tofurky (Figure 1) and Sweet Earth (Figure 2), below.²⁷



Figure 1: Tofurky “Plant-Based Deli Slices”



Figure 2: Sweet Earth “Benevolent Bacon”

In Figure 1, Tofurky qualifies that their Deli Slices are “Plant-Based” in similar text size, font, and prominence. On the other hand, Sweet Earth’s Benevolent Bacon indicates via an asterisk and in much smaller font that it is a “Vegan Substitute to Pork Bacon.” These are both examples of qualified labels: those which include some qualification that the product is not derived from animals.

Some state statutes allow qualified labels, or, in other cases, allow labels that display their qualification with equal prominence—like Tofurky’s, but not Sweet Earth’s. Missouri’s statute, however, appears on its face to prohibit both labels because both employ meat terminology—“deli slices” and “bacon”—to describe products that are “not derived from harvested production livestock.”

²⁶ MO. REV. STAT. § 265.494 (2018).

²⁷ Joshua Pitkoff, Photograph of Tofurky: Plant-Based Deli Slices (taken Feb. 2020) (figure 1); Joshua Pitkoff, Photograph of Sweet Earth: Benevolent Bacon (taken Feb. 2020). Because no cell-based products are currently sold at retail, I was not able to provide examples of their labels or packaging.

As such, using these product labels in Missouri may violate the statute.

However, the legality of such laws is up for debate. Because the bans amount to government restrictions on commercial speech, critics have argued that they are unconstitutional under the First Amendment.²⁸ Moreover, there are concerns that the state laws are federally preempted under the Constitution's Supremacy Clause.²⁹ This Note will address these two legal issues as they apply to the state labeling bans. But underlying these doctrinal considerations are also deeper questions about how society uses terminology, how usage of that terminology changes as new technology emerges, and how the government's treatment of that terminology should evolve along with it. And, as the title of this Note alludes to, how do—and how should—courts balance the tension between the free speech rights of commercial entities, on the one hand, and the government's interest in protecting consumers from misleading information, on the other? In this case—perhaps counterintuitively—it is the powerful, incumbent industry players that are advocating for consumer protection regulation, and the environmentally-friendly upstarts asserting the shield of commercial free speech against it. While no article is likely to provide truly satisfactory answers to these difficult questions, my hope is that this Note can serve as a useful and instructive case study for considering these deeper issues.

I will begin in Part I by providing a comparative view of the various state laws that have been passed, focusing in particular on several key distinctions between them, including whether they apply to only cell-based meat products or also to plant-based meat products, as well as whether they ban all uses of animal-based meat terminology or only unqualified uses. Next, in Part II, I will consider the First Amendment concerns with the state laws, analyzing them under the *Central Hudson* test for commercial speech restrictions. As I will show, the laws which are understood as prohibiting even the use of qualified labels—such as “vegan burgers” or “meatless sausage”—are likely to violate this test, but laws that explicitly

²⁸ See Complaint at 1, *Turtle Island Foods v. Soman*, Docket No. 4:19-cv-00514 (E.D. Ark. July 22, 2019).

²⁹ See U.S. CONST. art. VI, cl. 2. See generally Robert Hibbert & Amaru Sanchez, *State Meat Label Restrictions Face Preemption Challenges*, LAW360 (Mar. 6, 2019, 2:37 PM), <https://www.law360.com/articles/1135648/state-meat-label-restrictions-face-preemption-challenges>.

permit, or are understood by courts to permit, the use of labels with appropriate qualifiers are likely to survive a First Amendment challenge. In Part III, I will consider the preemption concerns with the labeling bans, finding that cell-based product labels could, in the near future, be protected by federal preemption, while plant-based product labels will likely only be protected when the label is properly qualified.

I. STATE BANS ON ALTERNATIVE MEAT LABELS

Though thirteen states have banned the use of certain labels on alternative meat products, the laws do not follow any singular model legislation,³⁰ and they bear surprisingly little similarity to each other. Given these differences, I will focus in this section on understanding the overall trends and patterns among the statutes, as opposed to detailing each one.³¹

I will first discuss Mississippi's law as an instructive case study, which raises two important distinctions: (1) whether the laws apply to cell-based or plant-based products; and (2) whether the laws apply to all labels or only unqualified labels. Following this case study, I apply those distinctions to each of the state laws in an effort to assess the overall patterns among them. Each of these distinctions will prove important in the discussions below regarding the First Amendment and preemption challenges.

As of August 2020, thirteen states have passed laws restricting the labels of alternative meat products: Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, Missouri, Montana, North Dakota, Oklahoma, South Carolina, South Dakota, and Wyoming.³² Another seventeen states have introduced bills that failed to pass: Arizona, Colorado, Hawaii, Illinois, Indiana, Iowa, Kansas, Maryland, Michigan, Nebraska, New Mexico, Tennessee, Texas, Vermont, Virginia, Washington, and Wisconsin.³³ This Note's analysis

³⁰ See Elaine Watson, *Plant-Based and Cell-Cultured 'Meat' Labeling Comes Under Attack in 25 States*, FOOD NAVIGATOR USA (July 29, 2019, 8:34 AM), <https://www.foodnavigator-usa.com/Article/2019/05/29/Plant-based-and-cell-cultured-meat-labeling-under-attack-in-25-states>.

³¹ Appendix A includes the relevant text of each law.

³² For both the citations and relevant text of these laws, see Appendix A.1.

³³ For the citations of these bills, see Appendix A.2.

will focus predominantly on the state laws that have passed and are currently in effect.

A. Case Study: Mississippi

Before discussing the overall patterns and trends among states, it will prove instructive to consider the trajectory of Mississippi's law and its subsequently modified regulations. In 2019, the Mississippi legislature amended Mississippi Code § 75-35-15 to ban certain labels on cell-based and plant-based meat products:

A food product that contains cultured animal tissue produced from animal cell cultures outside of the organism from which it is derived shall not be labeled as meat or a meat food product. A plant-based or insect-based food product shall not be labeled as meat or a meat food product.³⁴

This statute highlights three important features of the laws I will be considering in this Note. First, the laws might differentiate between cell-based and plant-based products. Second, the laws are generally structured such that the mislabeling section prohibits plant-based or cell-based products from being called “meat” or a “meat product,” which are terms that are specifically defined in the “Definitions” section of the code.³⁵ In Mississippi, “meat food product” is defined 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.”³⁶ Therefore, the statute effectively prohibits labeling a plant-based product as if it were a product made from the carcass of an animal.

A third important feature of the debate comes into focus if we consider the lack of clarity in Mississippi's statute about its application to qualified labels. At first glance, the Mississippi statute appears to apply to all products “labeled as meat or a meat food product.” The statute notably does not provide for any exceptions, including for labels that include contextual qualifiers like “vegan burger” or “*plant-based* jerky.”

For this reason, the plant-based meat manufacturer Upton's Naturals, along with the Plant Based Foods Association, sued

³⁴ MISS. CODE ANN. § 75-35-15 (2019).

³⁵ See, e.g., *id* § 75-35-3 (2019). Often, though not in Mississippi, the bills have also amended their definitions to exclude non-traditional meat. For an example, see the Arkansas statutes referenced in Appendix A.1.

³⁶ MISS. CODE ANN. § 75-35-3 (2019).

Mississippi's Governor and Commissioner of Agriculture and Commerce over the law, claiming that "[f]or the purposes of the Ban, the term 'meat food product' includes but is not limited to, hamburgers, hot dogs, sausages, jerky, and meatballs,"³⁷ and as such, the ban "prohibits meatless foods that are entirely plant-based from being labeled as 'vegan burgers.'"³⁸ Several months after Upton's Naturals filed its complaint, Mississippi adopted regulations to exempt meatless products from the ban as long as "one or more of the following terms, or a comparable qualifier, is prominently displayed on the front of the package: 'meat free,' 'meatless,' 'plant-based,' 'veggie-based,' 'made from plants,' 'vegetarian,' or 'vegan.'"³⁹ Immediately after this regulation was adopted on November 6, 2019, Upton's Naturals dropped their lawsuit, as their product labels were no longer prohibited under Mississippi's law.⁴⁰ The newly adopted regulations were seen, in the words of a senior attorney representing Upton's, as "a victory for the First Amendment and for common sense."⁴¹

Let's consider the implications of these regulations and what light they shed on the statute as originally passed. I noted above the statute's lack of clarity in terms of whether any qualifying language—for example, "vegan burger"—would render the label permissible. The fact that these clarifying regulations were deemed necessary further reinforces that the statute, as written, was ambiguous. But does this imply that without such regulations, the qualified labels would necessarily be prohibited? Or could a court still determine that, given the statute's ambiguity, it will interpret the statute to permit qualified labels? Both options seem possible, and therefore

³⁷ Complaint for Declaratory and Injunctive Relief at 11, Upton's Nats. Co. v. Bryant, Docket No. 3:19-cv-00462 (S.D. Miss. July 1, 2019).

³⁸ *Id.* at 12.

³⁹ 02-001-407 MISS. CODE R. § 112.01; *see also* Kelsey Piper, *Mississippi Will No Longer Ban Calling Veggie Burgers "Veggie Burgers"*, VOX (Sept. 6, 2019, 4:10 PM), <https://www.vox.com/future-perfect/2019/9/6/20853246/mississippi-veggie-burger-ban-laws-plant-based>.

⁴⁰ *See* Stipulation of Dismissal, Upton's Nats. Co. v. Bryant, Docket No. 3:19-cv-00462 (S.D. Miss. Nov. 7, 2019); Andrew Wilmer, *Victory for Vegan Burgers: New Mississippi Labeling Regulations Will Not Punish Plant-Based Meat*, INST. FOR JUST. (Nov. 7, 2019), <https://ij.org/press-release/victory-for-vegan-burgers-new-mississippi-labeling-regulations-will-not-punish-plant-based-meat/>.

⁴¹ Andrew Wilmer, *Under New Proposed Regulation, "Veggie" Burgers Will Be Legal in Mississippi*, INST. FOR JUST. (Sept. 6, 2019), <https://ij.org/press-release/under-new-proposed-regulation-veggie-burgers-will-be-legal-in-mississippi/>.

it is useful to differentiate between a broad interpretation of an ambiguous statute and a narrow interpretation. Absent any clarifying regulations, broadly interpreting the statute's language would apply the ban to any labels, including those with qualifying language.⁴² As such, subsequent regulation would be necessary to carve out an exception for qualified labels. In adopting regulations to that effect, Mississippi implicitly acknowledged the possibility of a court broadly interpreting their statute. On the other hand, if an ambiguous statute is interpreted narrowly, it would be deemed to permit qualified labels.⁴³ The implications of this difference come into focus when applied to other state statutes that lack any clarifying language or regulations.⁴⁴ When statutes are ambiguous about whether they permit qualified labels, it matters whether they are interpreted broadly, so as to ban qualified labels, or interpreted narrowly, leaving open the possibility that qualified labels are permitted.

It is important to briefly note that whether a label includes qualification is itself not necessarily a binary question. Consider the language adopted in Mississippi's regulations exempting labels where "one or more *of the following terms*, or a comparable qualifier, is *prominently* displayed on the front of the package."⁴⁵ Whether the label includes proper qualification requires both certain terminology

⁴² Note that because of the First Amendment issues discussed below, interpreting an ambiguous statute to ban qualified labels would raise questions under the canon of constitutional avoidance, which precludes a court from interpreting a statute in such a way that would pose constitutional problems. *See* State's Suggestions in Response to Plaintiffs' Motion for Preliminary Injunction at 6, *Turtle Island Foods v. Richardson*, Docket No. 2:18-cv-04173 (W.D. Mo. Aug. 27, 2018), ECF No. 37.

⁴³ Missouri, for example, makes this argument. *See id.* at 4–5 ("The text of the statute does not criminalize the use of the word 'meat' or other words associated with conventional meat when a product is plant-based or lab-grown meat; it just requires the plant-based or lab-grown meat to say that it is plant-based or lab-grown meat.").

⁴⁴ These concerns about ambiguity could also give rise to challenges asserting that the statutes are unconstitutionally vague. *See* Jareb A. Gleckel & Sherry F. Colb, *The Meaning of Meat*, 26 *ANIMAL L.* 75, 88–90 (2020). Though not directly related to this Note's assessment of First Amendment challenges, Gleckel and Colb's article points to the concerning relationship between vagueness and First Amendment violations: "As written, a lack of clarity and censorship work together in a mutually reinforcing way, with each obscuring the other. Vagueness is troubling enough on its own, but there is something especially insidious about using it to mask censorship that may itself violate the First Amendment." *Id.* at 90.

⁴⁵ 02-001-407 MISS. CODE R. § 112.01 (emphasis added).

and prominent placement. Oklahoma included an even more exacting requirement in the statute itself: the exemption for qualified labels only applies “so long as the packaging displays that the product is derived from plant-based sources *in type that is uniform in size and prominence to the name of the product.*”⁴⁶ Implicit in this added condition is the fact that qualification of a product’s source exists on a continuum. At one extreme of the continuum is a label that is, in its entirety, unqualified. This would mean that the product is labeled, for example, as “beef” and nowhere indicates that it is cell-based or otherwise derived from a source differing from traditional livestock—aside perhaps from clarification in the list of ingredients. The other extreme is a product that is perfectly qualified, leaving no doubt whatsoever that the product is produced without animal meat. A product in the middle of the continuum, however, might include “cell-based” on the packaging, but it is not directly modifying the product’s designation as “meat” or, as imagined by the Oklahoma legislature, is not equal “in size and prominence to the name of the product.” For example, consider packaging which labels the product as “beef” in the upper right corner, but says “cell-based” in the bottom left corner in font that is smaller and blends in with the background packaging.⁴⁷ There is also the question whether it is the product’s title itself that must be qualified, or whether it is sufficient for the packaging *as a whole* to be properly qualified. For example, consider the difference between a product titled “Vegan Beef” versus a product with the word “Beef” on the front and “Vegan” on the back. These examples demonstrate that determining where products ultimately fall on the continuum of qualification will require a highly fact-specific inquiry.

In summary, a deep dive into Mississippi’s statute and subsequent regulation has rendered two key distinctions that require attention in the labeling laws more generally: (1) whether a statute’s prohibition encompasses cell-based meat products, plant-based meat products, or both; and (2) whether a statute is ambiguous about the permissibility of qualified labels. The import of this ambiguity depends on whether a court broadly or narrowly interprets the

⁴⁶ OKLA. STAT. ANN. tit. 2, § 5-107 (2020) (emphasis added).

⁴⁷ A helpful example of a label that would likely fail to meet Oklahoma’s proposed condition is Sweet Earth’s label in Figure 2. *See supra* p. 302.

statute at issue, and regardless, it is important to remember that qualification itself exists on a continuum.

B. Analysis of the General Patterns in State Bans

In this section, I will consider how the questions raised by Mississippi's ban shed light on the statutes of other states and assess the patterns that emerge more generally. First is the question whether the laws apply to only cell-based products or also include plant-based products. Four state laws apply only to cell-based products: Alabama, Kentucky, Montana, and North Dakota. For example, Alabama's statute reads, "a food product that contains cultured animal tissue produced from animal cell cultures outside of the organism from which it is derived may not be labeled as meat or a meat food product."⁴⁸

The remaining nine states passed laws that apply to both cell-based and plant-based products. These laws take two approaches to defining meat. The first positively defines "meat" as deriving from an animal, while the second defines "meat" by excluding plant-based and cell-based products. Laws that adopt positive definitions of "meat" require that products labeled as such are derived exclusively from domesticated livestock. For example, Missouri's statute prohibits "misrepresenting a product as meat that is not derived from harvested production livestock or poultry."⁴⁹ Arguably, because cell-based products are quite literally derived from domesticated animals, these definitions could be construed to permit labeling cell-based products as "meat." However, in the case of Missouri in particular, a subsequent memorandum released by Missouri's Department of Agriculture notes that products do not violate the newly amended law as long as the packaging includes a prominent statement that the product is "grown in a lab."⁵⁰ This implies that the statute is understood, by at least the Department of Agriculture, to also cover cell-based products. On the other hand, definitions employing the second approach are explicit about their application to both cell-based and plant-based products. For example, Arkansas's statute reads, "'Meat' does not include a (i) [s]ynthetic product

⁴⁸ ALA. CODE § 2-17-10 (2019).

⁴⁹ MO. REV. STAT. § 265.494(7) (2019).

⁵⁰ MO. DEP'T OF AGRIC., MEMORANDUM RE: MISSOURI'S MEAT ADVERTISING LAW (2018), <https://agriculture.mo.gov/animals/pdf/missouri-meat-advertising-guidance.pdf>.

derived from a plant . . . or other sources; (ii) [p]roduct grown in a laboratory from animal cells.”⁵¹

The distinction between positive and negative definitions is important for two reasons. First, although plant-based and cell-based products are currently the two predominant categories of alternative meat products, it is possible to imagine a future where other products are developed that fall into neither category.⁵² Those products, then, would fall under the purview of only those statutes that define “meat” positively as deriving from domesticated animals. Second, as noted above, it could be argued that these positive definitions of meat might include cell-based products manufactured from animal-derived cells.

The second important pattern to emerge is the statutes’ degree of ambiguity regarding the use of contextual qualifiers such as “meatless” or “vegan.” At the unambiguous end of the spectrum are states that explicitly permit the use of labels with traditional meat terminology as long as they are appropriately qualified. For example, Wyoming’s statute requires that products “clearly label cell cultured products as ‘containing cell cultured product’ and clearly label plant based products as ‘vegetarian’, ‘veggie’, ‘vegan’, ‘plant based’ or another similar term.”⁵³ Montana, Oklahoma, and Georgia also explicitly permit labels with an appropriate qualifier. In the middle of the ambiguity spectrum are states such as Missouri and Mississippi where, as discussed above, the statutes are themselves ambiguous, but other relevant regulations or memoranda clarify that meat-related terminology is permissible with appropriate qualifiers.⁵⁴ Finally, the remaining states fall on the more ambiguous end of the spectrum, lacking any clarification in either the statute itself or subsequent regulations whether qualifiers render the label permissible. As will be discussed in later sections, the degree of

⁵¹ ARK. CODE ANN. § 2-1-302 (2019).

⁵² See, for example, research on the possibility of deriving protein using carbon dioxide, which is provocatively named “air-based protein.” Adele Peters, *The Newest Fake Meat Is Made from Thin Air*, FASTCOMPANY (Nov. 12, 2019), <https://www.fastcompany.com/90428522/the-newest-fake-meat-is-made-from-thin-air>.

⁵³ WYO. STAT. ANN. § 35-7-119(e)(ii) (2019).

⁵⁴ But note that these regulations may not necessarily be binding. *See infra* note 152, at 16.

ambiguity in a statute may directly impact the statute's ability to withstand a First Amendment challenge.

One element critical to understanding these statutes, which unsurprisingly adds a further level of ambiguity, is what specific "meat product" terms fall under the purview of each law. Consider the Arkansas statute, which is arguably the clearest on this question. The legislation included two general sets of amendments. First is the amended Section 2-1-305 on "Prohibited Activities" which prohibits "[r]epresenting the agricultural product as beef or a beef product when the agricultural product is not derived from a domesticated bovine" and similar provisions for "pork" and, more generally, "meat."⁵⁵ Second is the amended Section 2-1-302 for "Definitions," which defines "beef product" as "including without limitation beef jerky, beef patties, chopped beef, fabricated steak, hamburger, ground beef, ribs, and roast."⁵⁶ As such, Section 2-1-305 can be read to prohibit representing a food product as "ground beef" or "hamburger" when not derived from domesticated bovine. Under the "pork product" definition, the same applies for "bacon" and "sausage."⁵⁷ The Arkansas legislature, therefore, specified explicitly that no alternative meat products can bear the labels "bacon" or "hamburger." This would be true, especially if the statute is broadly interpreted, irrespective of whether the product labels qualify that the bacon or hamburger is "meatless" or "veggie." However, the question of what specific words constitute labeling food as "meat" or a "meat product" is entirely unaddressed in all states aside from Arkansas, Louisiana, and Montana.⁵⁸

In summary, there are two important distinctions among the statutes passed by these thirteen states: (1) whether the statutes apply to only cell-based alternative meat products or apply to plant-based products as well; and (2) the degree of ambiguity as to whether the statute applies to labels including appropriate qualifying language. The discussion of constitutional and preemption challenges to these laws in coming sections will show how these distinctions might determine which state statutes are most likely and least likely to be voided and upheld. I now turn to address the first of

⁵⁵ ARK. CODE ANN. § 2-1-305 (2019).

⁵⁶ *Id.* § 2-1-302.

⁵⁷ *Id.*

⁵⁸ *See infra* Appendix A.

these potential legal challenges: that the laws violate First Amendment protections of commercial speech.

II. COMMERCIAL SPEECH AND FIRST AMENDMENT JURISPRUDENCE

A. *Central Hudson's* Four-Part Test

The first case to specifically recognize *commercial* speech—as opposed to personal speech—as protected under the First Amendment was *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council* in 1976.⁵⁹ After the Virginia state legislature banned the advertising of prescription drug prices by pharmacies, the U.S. Supreme Court found that the ban unconstitutionally restricted the use of pharmacies' commercial speech, but noted that "some forms of commercial speech regulation are surely permissible."⁶⁰ Since then, commercial speech "has been held to be entitled to the protection of a form of intermediate scrutiny."⁶¹ In 1980, the Court fully explored the distinction between permissible and impermissible regulations on commercial speech in *Central Hudson Gas & Electric Corp. v. Public Service Commission*.⁶²

Central Hudson concerned an order of the New York Public Service Commission that required electric utilities in the state to "cease all advertising that 'promot[es] the use of electricity.'"⁶³ The Court established a four-part test to determine whether to protect the commercial speech or uphold the government's ban. The first step is a threshold inquiry to determine whether the speech is eligible for First Amendment protection: "For commercial speech to come within that provision, it at least must concern lawful activity and not be misleading."⁶⁴ If the speech at issue concerns unlawful activity or is misleading, it fails the threshold inquiry and can be prohibited. If it passes the threshold inquiry and is eligible for First Amendment protection, the government's restriction only survives if it satisfies the remaining three requirements: "[2] Next, we ask whether the

⁵⁹ See generally *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council*, 425 U.S. 748 (1976).

⁶⁰ *Id.* at 770.

⁶¹ *Ocheese Creamery v. Putnam*, 851 F.3d 1228, 1234 (11th Cir. 2017).

⁶² See generally *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n of N.Y.*, 447 U.S. 557 (1980).

⁶³ *Id.* at 558.

⁶⁴ *Id.* at 566.

asserted governmental interest is substantial. [3] If both inquiries yield positive answers, we must determine whether the regulation directly advances the governmental interest asserted, and [4] whether it is not more extensive than is necessary to serve that interest.”⁶⁵ If the government, which bears the burden of justifying its restriction,⁶⁶ is unable to satisfy any of these three requirements, the speech cannot be restricted.

The *Central Hudson* Court found that the electric utilities’ advertising concerned neither unlawful nor misleading activity;⁶⁷ the state’s interest in energy conservation was clear and substantial;⁶⁸ the ban on advertising advanced the state’s interest in energy conservation;⁶⁹ but, finally, that the Commission’s order was “more extensive than necessary” to further the state’s interest, in that it “prevent[ed] appellant from promoting electric services that would reduce energy use by diverting demand from less efficient sources”⁷⁰ and the state did not show that a “more limited speech regulation would be ineffective.”⁷¹ Therefore, the state ban on advertising failed the Court’s test and was found to violate the First Amendment protection of commercial speech.⁷²

Following *Central Hudson*, two relevant amendments were made to this four-part test.⁷³ First, in *In re R.M.J.*, the Court

⁶⁵ *Id.*

⁶⁶ See *Ocheese Creamery v. Putnam*, 851 F.3d 1228, 1236 (11th Cir. 2017).

⁶⁷ See *Cent. Hudson Gas & Elec. Corp.*, 447 U.S. at 566–68.

⁶⁸ See *id.* at 568–69.

⁶⁹ See *id.* at 569.

⁷⁰ *Id.* at 569–70.

⁷¹ *Id.* at 571.

⁷² See *id.* It has been argued that *Sorrell v. IMS Health Inc.*, 564 U.S. 552 (2011) raised the threshold for meeting *Central Hudson*’s intermediate scrutiny test. See Gleckel & Colb, *supra* note 44, at 80. This would benefit alternative meat producers, as the laws would be subject to more exacting scrutiny and would be more likely to fail. *But see id.* at 101 (arguing that “relying on commercial speech precedents”—and especially *Sorrell*—“may come back to bite animal-rights lawyers when the animal meat industry cites animal advocates’ cases to defend the word ‘natural’ on the labels of their hyper-processed pork, or when animal defenders want to require disclosures regarding e-coli, pus, and toxin-releasing mold in the food headed for your grocer’s freezer.”).

⁷³ Some cases refer to the *Central Hudson* test as involving a threshold inquiry and three sub-parts, instead of four independent parts. See *Ocheese Creamery LLC v. Putnam*, 851 F.3d 1228, 1235 n.8 (11th Cir. 2017). To avoid any confusion about whether the “first part” refers to the threshold inquiry or the requirement that

differentiated between speech that is “inherently misleading” or merely “potentially” misleading.⁷⁴ When speech is inherently misleading, it “may be prohibited entirely,” but potentially misleading speech is subject to the remaining three inquiries of *Central Hudson*.⁷⁵ Put another way, speech that is found to be *inherently* misleading fails the first step of *Central Hudson* and is not protected, but speech that is only *potentially* misleading survives the threshold inquiry and requires an examination of the remaining three requirements.

The second important adjustment relates to the fourth requirement: that the restriction is not more extensive than necessary to accomplish the government’s interest. As noted above, the *Central Hudson* Court found the state’s order too extensive, both because it was overbroad⁷⁶ and because the state failed to show that “more limited speech regulation would be ineffective.”⁷⁷ What appears at first to be a relatively high standard for the fourth requirement was loosened somewhat in *Board of Trustees v. Fox*, where the Court re-framed the inquiry to test “a fit [between restriction on speech and government interest] that is not necessarily perfect, but reasonable; . . . that employs not necessarily the least restrictive means, but . . . a means narrowly tailored to achieve the desired objective.”⁷⁸ Passing *Central Hudson*’s fourth step, therefore, requires that the government’s restriction on speech be reasonable in relation to its legitimate interest, as opposed to being the least restrictive means for accomplishing that interest.

To summarize, once it is shown that the commercial speech is eligible for First Amendment protection because it concerns lawful activity and is not inherently misleading, the government can only restrict the speech if it meets the remaining three requirements: (2) the asserted government interest is substantial; (3) the restriction directly advances the government’s interest; and (4) the restriction is not more extensive than necessary to advance the government’s

the government interest be substantial, I follow the four-part numbering convention.

⁷⁴ See *In re R.M.J.*, 455 U.S. 191, 203 (1982).

⁷⁵ *Id.*

⁷⁶ See *Cent. Hudson Gas & Elec. Corp.*, 447 U.S. at 570.

⁷⁷ *Id.* at 571.

⁷⁸ *Bd. of Trs. v. Fox*, 492 U.S. 469, 480 (1989).

interest, in that there is a reasonable relation between the restriction and interest.

B. Applying *Central Hudson* to Milk Labels: *Ocheesee Creamery*

One recent and useful precedent to consider in depth is an appellate application of the *Central Hudson* test in the food labeling context: *Ocheesee Creamery v. Putnam*.⁷⁹ Decided in March 2017, it provides a useful guide for walking through many of the same First Amendment considerations that also apply to the alternative meat label laws. Moreover, as will be discussed, it was also cited in a decision outside the jurisdiction of the Eleventh Circuit,⁸⁰ indicating that other circuits may follow its precedent.

The background and facts of the case are as follows. Florida law prohibits the sale of non-Grade “A” milk, which means that Vitamin A must be replaced in skim milk after it is removed as a byproduct of the skimming process.⁸¹ However, Ocheesee Creamery (the “Creamery”), a small dairy farm in Florida, had been selling its all-natural skimmed milk without any additives, including Vitamin A, for nearly three years from 2010 to 2012.⁸² In response, the State issued two stop sale orders.⁸³ The Creamery initially complied, deciding to instead discard the skimmed milk, and began the process of applying for a permit to sell the skimmed milk without Vitamin A.⁸⁴

This negotiation process continued through 2014. First, the State proposed that the milk products could be sold as long as they were labeled “imitation skim milk,” but the Creamery objected.⁸⁵ Next, the State proposed that the milk be labeled, “Non-Grade ‘A’ Milk Product, Natural Milk Vitamins Removed.”⁸⁶ The Creamery still objected, and proposed five alternative labels each using the

⁷⁹ See *Ocheesee Creamery v. Putnam*, 851 F.3d 1228 (11th Cir. 2017).

⁸⁰ See Preliminary Injunction Order at 25, *Turtle Island Foods v. Soman*, Docket No. 4:19-cv-00514 (E.D. Ark. July 22, 2019), ECF No. 25.

⁸¹ See *Ocheesee Creamery*, 851 F.3d at 1231. Vitamin A is fat-soluble, so as a byproduct of the skimming process in the production of cream, the Creamery would also be removing the Vitamin A from the skim milk left behind. *Id.*

⁸² See *id.* at 1231–32.

⁸³ See *id.* at 1232.

⁸⁴ See *id.*

⁸⁵ See *id.*

⁸⁶ *Id.*

words “skim milk.”⁸⁷ When the State rejected all five alternatives, the Creamery filed a complaint arguing that the State’s labeling restriction—preventing the Creamery from labeling the product as skim milk—violated the First Amendment under the *Central Hudson* standard.⁸⁸ On a motion for summary judgment, the District Court found for the State, reasoning that “it is inherently misleading to call a product ‘skim milk’ if that product does not have the same vitamin content as whole milk.”⁸⁹ On appeal, however, the Eleventh Circuit vacated the District Court’s judgment.⁹⁰

Under the *Central Hudson* test, as discussed above, the Eleventh Circuit first evaluated whether the banned commercial speech (a) concerned lawful activity and (b) was neither false nor inherently misleading.⁹¹ Because the burden falls on the government to justify its restrictions, the court considered the State’s arguments under both prongs.⁹² Regarding whether the banned speech concerned lawful activity, the State argued that because the Creamery’s skim milk is prohibited for sale in Florida, the restricted speech concerned the unlawful conduct of selling this non-Grade “A” milk.⁹³ However, the State had already conceded in their negotiations with the Creamery that, at the very least, the milk would be permitted for sale if labeled as “imitation skim milk.” Therefore, the court concluded that if the product could be sold under a slightly modified name, the State’s restriction could not have been motivated by the illegality of the product itself. Instead, the restriction was one of speech, not of speech incidental to illegal conduct.⁹⁴

Regarding whether the banned speech was false or inherently misleading, the District Court concluded that, because the State defined the term “skim milk” as requiring the replacement of Vitamin A, anything inconsistent with that definition is inherently misleading.⁹⁵ The Circuit Court disagreed, however, first noting that although “a state can propose a definition for a given term . . . it does

⁸⁷ *See id.*

⁸⁸ *See id.* at 1232–33.

⁸⁹ *Id.* at 1233.

⁹⁰ *See id.* at 1231.

⁹¹ *See id.* at 1235.

⁹² *See id.* at 1236, 1238.

⁹³ *See id.* at 1236.

⁹⁴ *See id.* at 1237–38.

⁹⁵ *See id.* at 1238.

not follow that once a state has done so, any use of the term inconsistent with the state's preferred definition is inherently misleading."⁹⁶ Instead, the burden falls on the State to present evidence to that effect, demonstrating that the Creamery's usage was, in actuality, inherently misleading.⁹⁷ Here, the court found that the State had failed to do so for two reasons. First, the court cited to the Webster's Third New International Dictionary to argue that "[c]alling the Creamery's product 'skim milk' is merely a statement of objective fact."⁹⁸ Second, though the State's evidence included a study in which consumers indicated an expectation that "skim milk . . . [would] include the same vitamin content as whole milk," the court determined that the study "provides no evidence that consumers expected anything other than skim milk when they read those words on the Creamery's bottles."⁹⁹ Consumers may expect skim milk to contain certain vitamins, but that doesn't change the fact that they still expected to be purchasing, and were in fact purchasing, skim milk. Therefore, based on the dictionary definition and the inapplicable survey, the Eleventh Circuit did not deem the label to be inherently misleading.¹⁰⁰

The court then applied the remainder of the *Central Hudson* test. First, the court "assume[d], without deciding" that the interests of "combating deception and in establishing nutritional standards" were valid, as both parties agreed.¹⁰¹ Whether or not the State showed its restriction advanced its interest was left unanalyzed,¹⁰² leaving only the final question: whether there were less restrictive means available to the State. On this question, the court concluded that the alternative suggestions made by the Creamery—"involving additional disclosure without banning the term 'skim milk'"—would adequately serve the State's interest using less restrictive means.¹⁰³ The State's restriction, therefore, failed the *Central Hudson* test and violated the Creamery's First Amendment rights.

⁹⁶ *Id.*

⁹⁷ *See id.* at 1239.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *See id.*

¹⁰¹ *Id.* at 1240.

¹⁰² *See id.*

¹⁰³ *Id.*

The context for the *Ocheesee Creamery* litigation bears important similarities to that of the alternative meat bans: in both, a state government defined a food product term in a particular way and banned labels of non-conforming products. In addition to demonstrating an application of the *Central Hudson* test in a similar context, this litigation highlights several other nuances that deserve attention. First, the burden lies with the government to produce evidence supporting its restriction.¹⁰⁴ Second, it is worth noting the court's reliance on the negotiation process between the Creamery and the State, and specifically its relevance for whether, under *Central Hudson*'s first test, the speech concerned unlawful activity. Because the State had banned non-Grade A milk, the product itself could have been designated as illegal, and the speech therefore only incidental to illegal conduct. However, because the court had evidence that the State would—with appropriate labels—permit the sale of the product, it determined that the mere sale of the product itself was not illegal.¹⁰⁵ The implication here is that in the absence of any state laws entirely prohibiting the sale of plant-based or, as would be more likely, cell-based meat products, the “unlawful activity” prong of the first step is unlikely to be met. On the other hand, were a state to pass a law prohibiting the sale of such meat in their state—regardless of its labeling—a subsequent ban on labeling might be seen by courts as simply incidental to unlawful conduct and therefore upheld.¹⁰⁶

Third, the court's partial reliance on the dictionary's definition of “skim milk” was used as evidence that the label was not inherently misleading. This is important to note because, as this analysis is revealing, much of the *Central Hudson* inquiry turns on the question of whether a label is misleading. For that reason, it is of critical importance to recognize what sorts of evidence courts will rely upon in order to make this determination, such as the dictionary or the

¹⁰⁴ As the court writes in *Ocheesee Creamery*: “With respect to both the threshold question and the three-prong test, the burden is on the government to produce evidence to support its restriction.” *Id.* at 1236 (citing *Edenfield v. Fane*, 507 U.S. 761, 770 (1993)).

¹⁰⁵ *See id.* at 1237 n.10.

¹⁰⁶ The ability to challenge such a law prohibiting the *sale* of alternative meat products, though also an interesting question, is beyond the scope of this Note. For a possible analogue, see *Ass'n des Eleveurs de Canards et d'Oies du Quebec v. Becerra*, 870 F.3d 1140 (9th Cir. 2017), *cert. denied*, 139 S. Ct. 862 (2019) (upholding California's ban on foie gras).

consumer expectations survey. Recall that the State introduced a consumer survey—which demonstrated that customers purchasing skim milk expected it to have the same vitamin content as whole milk—as evidence that the use of the words “skim milk” on the packaging would be “inherently misleading.” However, the court found that though consumers may have been confused about the skim milk’s vitamin content, that fact does not, in itself, imply that the consumers were misled about the product’s identity as skim milk.¹⁰⁷

In order to make the court’s argumentative move here more explicit, consider an analogy to a chocolate bar. Assume most consumers expect milk chocolate bars to have sugar, and empirical evidence backs that up. But one brand of sugar-free chocolate labels its product as “milk chocolate” without qualifying that it is sugar-free, aside from in its nutrition labels. Is a typical consumer being misled in this situation? I think most would agree that the product is still chocolate and that the consumer is not being misled by that term on the packaging. However, imagine instead that the product labeled as “milk chocolate” is missing cocoa powder and lacks any chemical substitute to replicate the flavor. In this case, a consumer would likely consider the label “milk chocolate” to be misleading.¹⁰⁸ The difference between the two cases is rather simple: cocoa flavor is considered an essential component of milk chocolate bars, whereas sugar is a more incidental component. The line between essential components and accidental or incidental ones is certain to be blurry in many cases,¹⁰⁹ but in *Ocheesee Creamery*, I would argue that the Eleventh Circuit implicitly determined that the vitamin content of the milk was merely incidental, and therefore, a survey demonstrating that consumers expect a certain vitamin content was insufficient evidence that the label was inherently misleading.

¹⁰⁷ See generally *Ocheesee Creamery v. Putnam*, 851 F.3d 1228 (11th Cir. 2017).

¹⁰⁸ Note that the analogy extends to “white chocolate” products as well. Though white chocolate products do not contain cocoa powder, consumers are not misled by the inclusion of “chocolate” in the label. Consider this later on in the next section when I discuss the California litigation over “soy milk.” See cases cited *infra* note 112.

¹⁰⁹ The dichotomy between essential and accidental properties is itself contested as well. See generally Teresa Robertson & Philip Atkins, *Essential vs. Accidental Properties*, STAN. ENCYC. OF PHIL. (Oct. 26, 2016), <https://plato.stanford.edu/entries/essential-accidental/>.

C. General Application of *Central Hudson* to Alternative Meat Label Bans

Having discussed the *Central Hudson* framework for assessing state restrictions on commercial speech and a specific application of *Central Hudson* in the context of food labels, the next step is to apply the four-part test to the bans on alternative meat labels that are at issue here. In doing so, it is important to be attentive to the varying forms of these laws, as each variation could result in a different outcome. Therefore, based on the distinctions that arose in Part I, I consider three sample prohibitions: (i) a ban inclusive of qualified labels, e.g. “vegan beef”; (ii) a ban on non-qualified labels of cell-based products, e.g. “beef” unqualified when the product is cell-based; and (iii) a ban on non-qualified labels of plant-based products, e.g. “beef” unqualified when the product is plant-based. The focus of this section is not to conclude one way or another whether a particular state ban violates the First Amendment; rather, it is meant to illustrate the pressure points in the debate and how they might differ depending on the specific ban under consideration.

1. Bans Inclusive of Qualified Labels

As discussed in Part I, there are currently no bans which explicitly prohibit the use of the word “beef,” for example, regardless of whether it is qualified or unqualified. However, many state statutes fall somewhere on the ambiguity spectrum, and if broadly interpreted, would be deemed to prohibit even qualified labels such as “vegan beef” or “meatless sausage.” I will first determine how bans subject to this interpretation are likely to be treated under the *Central Hudson* test.

Under the threshold inquiry of *Central Hudson*, the government can attempt to show that the First Amendment should not apply because the labels at issue are incidental to illegal conduct or inherently misleading. As exhibited in the *Ocheesee Creamery* litigation, absent a law prohibiting the sale—as opposed to merely restricting certain labels—of these products, it is unlikely that a court will find the state restrictions to be incidental to illegal conduct.

Instead, the arguments will focus on whether a qualified label is inherently misleading. As seen above in *Ocheesee Creamery*, the fact that a state has defined a term does not imply that any use of that term conflicting with the state’s definition is per se

misleading.¹¹⁰ Therefore, the fact that, for example, Arkansas defined “meat” as not including a “synthetic product derived from a plant,”¹¹¹ does not automatically mean that products labeled as “vegan meat” are inherently misleading for the purposes of the *Central Hudson* test. The court will instead consider evidence that independently suggests whether or not consumers would be misled by the label.

A similar set of cases recently discussed this question of qualified labels on alternative *dairy* products, and those are likely to be instructive here as well. For example, in 2013, the U.S. District Court for the Northern District of California found that qualified milk labels are unlikely to mislead consumers:

Here, the Court agrees with Defendants that the names ‘soymilk,’ ‘almond milk,’ and ‘coconut milk’ accurately describe Defendants’ products. As set forth in the regulations, these names clearly convey the basic nature and content of the beverages, while clearly distinguishing them from milk that is derived from dairy cows. Moreover, it is simply implausible that a reasonable consumer would mistake a product like soymilk or almond milk with dairy milk from a cow. The first words in the products’ names should be obvious enough to even the least discerning of consumers.¹¹²

Though the claim brought in this case was based on false advertising laws,¹¹³ as opposed to being grounded in a *Central Hudson* analysis, it still reflects a court’s more generalizable view that food

¹¹⁰ See *Ocheesee Creamery*, 851 F.3d at 1238; see also Order Granting in Part Plaintiff’s Motion for Preliminary Injunctive Relief at 10, *Miyoko’s Kitchen v. Ross et al.*, Docket No. 3:20-cv-00893 (N.D. Cal. Aug. 21, 2020), ECF No. 46 (citing *Ocheesee Creamery*, 851 F.3d at 1238) (noting that “justifying governmental speech regulation using the government-issued dictionary is troublingly self-fulfilling.”).

¹¹¹ ARK. CODE ANN. § 2-1-302 (2019).

¹¹² *Ang v. Whitewave Foods Co.*, No. 13-cv-1953, 2013 U.S. Dist. LEXIS 173185, *12–13 (N.D. Cal. Dec. 10, 2013); see also *Gitson v. Trader Joe’s*, No. 13-cv-01333-VC, 2015 WL 9121232, *1–2 (N.D. Cal. Dec. 1, 2015) (“[T]he plaintiffs seem to suggest the term is misleading because people might mistake soymilk for actual milk from a cow, but that is not plausible. The reasonable consumer [indeed, even the least sophisticated consumer] does not think soymilk comes from a cow.”).

¹¹³ See *Whitewave Foods*, 2013 U.S. Dist. LEXIS 173185, at *3.

product labels with appropriate qualification are unlikely to be considered inherently misleading.¹¹⁴

While no outcome is certain, and all decisions will depend on the specific facts under consideration, it appears safe to say that qualified labels are the least likely of all three categories under consideration to be found inherently misleading. Indeed, as will be discussed more fully below, the U.S. District Court for the Eastern District of Arkansas determined that the qualified labels were not misleading.¹¹⁵

When discussing qualified labels, it is important to recognize that the specific terminology used might impact the court's determination whether a product is properly qualified, and therefore not misleading. For example, because of the clarity and ubiquity of terms like "vegan" and "meatless," such terms are surely clear enough to count as proper qualification.¹¹⁶ The same cannot necessarily be said of "cultured" or "clean," which, to the typical consumer, do not necessarily add any clarity. A bill introduced in the Kansas legislature makes this concern explicit by only exempting from violation products which "have a disclaimer in the same font, style and size, immediately before or after the identifiable meat term, *stating one of the following: (A) 'This product does not contain meat'; (B) 'meatless'; or (C) 'meat-free.'*"¹¹⁷ As such, whether a label will be characterized as misleading could vary depending on the specific qualifying language used. This uncertainty is likely to

¹¹⁴ For an expanded argument why, in general, qualified labels (e.g. rye bread, ramen noodle, and peanut butters) should not be considered misleading to consumers, see Good Food Inst., Petition to Recognize the Use of Well-Established Common and Usual Compound Nomenclatures for Food: Dkt. No. FDA-2017-P-1298 7-11 (Mar. 2, 2017), <https://www.gfi.org/images/uploads/2017/03/GFIpetitionFinal.pdf>.

¹¹⁵ See *Turtle Island Foods v. Soman*, No. 4:19-cv-00514 (E.D. Ark. Dec. 11, 2019).

¹¹⁶ This is indicated by the fact that numerous bills specifically exempting qualified labels reference this terminology. See, for example, the proposed bill in Kansas, *infra* note 117, and the bill adopted in Wyoming. See WYO. STAT. ANN. § 35-7-119(e) (2019) (requiring retailers and wholesalers to "clearly label plant based products as 'vegetarian', 'veggie', 'vegan', 'plant based' or other similar term indicating that the product is plant based.").

¹¹⁷ H.B. 2437, Reg. Sess. (Kan. 2020). Note that though the statute would allow certain qualified labels as exempt, it is still open to being challenged on First Amendment grounds. A product labeled as "vegan beef" violates the statute but would likely satisfy the *Central Hudson* test.

be most acute in the context of cell-based products. Because it is unclear what terminology for cell-based products will take root, or how its use will be affected by advertising and consumer education efforts, it is not possible to predict what qualifying terminology will be sufficient to prevent cell-based product labels from being characterized as misleading.

As to the second part of the *Central Hudson* test, a state is likely to succeed in arguing that protecting consumers from deception is a legitimate government interest. The U.S. Supreme Court, in *Zauderer v. Office of Disciplinary Counsel of Supreme Court*, held that “preventing deception of consumers” is a substantial state interest.¹¹⁸ Note, however, that if a court were to determine that the state’s true interest is protecting the incumbent meat industry and discouraging the purchase of alternative meat products, it could conclude that such an interest is not legitimate.¹¹⁹ This is one way that the particular facts surrounding a state law could dramatically affect its constitutionality, and highlights the importance of the consumer protection rationale for a ban on commercial speech.

Assuming the state has shown a legitimate government interest, the third part of *Central Hudson* requires it to show that this interest is advanced by the restriction. Are consumers more protected from deception when labels are prohibited from including even qualified language? Depending on the alternative chosen to “vegan beef,” consumers might, in fact, end up more confused.¹²⁰ Moreover, note the relationship between this requirement and the threshold question. Here, the government must show that the restriction advances the interest of preventing customers being misled, but, if under the first step, the court already determined that the label is not misleading, this analysis is essentially redundant.¹²¹ There is no need for a

¹¹⁸ *Zauderer v. Off. of Disciplinary Couns. of Sup. Ct.*, 471 U.S. 626, 651 (1985).

¹¹⁹ *See, e.g., R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205, 1219 n.13 (D.C. Cir. 2012) (“[W]e are skeptical that the government can assert a substantial interest in discouraging consumers from purchasing a lawful product.”). For evidence of this protectionist motivation, see sources cited *supra* note 23.

¹²⁰ *See* Complaint at 1, *Turtle Island Foods v. Soman*, No. 4:19-cv-00514 (E.D. Ark. Apr. 15, 2019) (arguing that the state ban “creates consumer confusion where none existed before in order to impede competition”).

¹²¹ *See, e.g., Preliminary Injunction Order* at 26, *Turtle Island Foods v. Soman*, Docket No. 4:19-cv-00514 (E.D. Ark. Dec. 11, 2019) (“[A]s to *Central Hudson*’s

restriction that prevents misleading labeling for a label that is not misleading. In this context, then, where the government interest is in preventing misleading labeling, there exists some degree of path dependence that could render the third test less relevant. Whether a court relies on this path dependence in its reasoning is certainly not inevitable¹²² but, especially because one court has already done so,¹²³ it is important to explicitly draw out this relationship between the first and third prongs of *Central Hudson*.

A similar argument can be made for the fourth step: whether the restriction is too extensive, in that there is not a reasonable fit between the restriction and the interest. Given that “vegan beef” is likely to be found not to mislead consumers, there is good reason to think a ban inclusive of qualified labels is more extensive than necessary. In particular, one could argue that allowing such qualifying language—but still prohibiting non-qualified labels—is a less extensive option that still adequately serves the goal of preventing consumer confusion. In addition, plaintiffs may argue that there are already ample laws protecting against misleading advertising at both the state and federal level, rendering unnecessary a specific state law banning this particular instance of misleading labeling.¹²⁴

To summarize, qualified labels for alternative meats products are unlikely to be found misleading, so although the government’s interest in preventing deception is legitimate, a ban on qualified labels is likely to be found to be more extensive than necessary in advancing that interest. As such, these types of bans are likely to fail the *Central Hudson* test and be held to violate the First Amendment protections on commercial speech. Note, too, that this analysis does not depend in any meaningful way on whether the products are cell-based or plant-based.

third prong, the Court determines that Tofurky is likely to prevail on its argument [...] given that the Court concludes Tofurky is likely to prevail on its argument that its speech is neither false nor misleading.”)

¹²² For example, suppose that a label is not *inherently* misleading under the threshold test, and therefore is eligible for First Amendment protection, but the court also believes it is *potentially* misleading. In that case, the government could still plausibly argue that its restriction advances the interest of preventing customers from being misled.

¹²³ See Preliminary Injunction Order, *supra* note 121.

¹²⁴ See, e.g., 21 U.S.C. § 343(a) (2019); CAL. BUS. & PROF. CODE § 17200 (2019).

2. Bans on Unqualified Labels of Cell-Based Products

Next, I consider how the *Central Hudson* test would be applied to a ban on unqualified labels that identify cell-based products as “meat” or any number of specific terms like “beef” or “sausage.” Bans falling into this category include both those that are explicit about allowing qualified labels or are ambiguous and understood by a court—under a narrow interpretation—to only restrict unqualified labels.

Recall the discussion in Part II about the highly fact-specific nature of assessing whether a label is properly qualified. The continuum of qualification ranges, at one extreme, from directly modifying the meat terminology in font of equal prominence, to the other extreme, where the only indication that the product is vegan is a small note on the back of the packaging. Based on my analysis in the preceding section about qualified labels, it would follow that, as products approach the former end of the continuum—that is to say, they are more definitely qualified—they are less likely to be seen by courts as inherently misleading. In this Part, I will instead restrict my analysis to situations where the product label either lacks qualification entirely, or is so far towards the latter end of the continuum that the label is deemed unqualified.

Under the first step of *Central Hudson*, the court will ask whether the speech is inherently misleading. As before, I assume the sale of cell-based meat, if properly labeled, is permitted. Consider the entirely unqualified end of the continuum, where the product only labels itself as “meat.” The question, then, about whether the label is misleading ultimately depends on whether or not the product itself is considered identical to meat. Advocates of cell-based alternatives would argue that the product is derived from animals and is genetically identical to the traditional meat products one would consume, as noted above.¹²⁵ In fact, advocates for alternative products have already argued that the product could be considered mislabeled if it *didn't* label itself as meat.¹²⁶ Moreover, a consumer allergic to

¹²⁵ See CAMERON, *supra* note 7, at 2.

¹²⁶ See Carrie Chan et al., USDA, Comment Letter on Docket No. FSIS-2018-0036 for FSIS-USDA and FDA Joint Public Meeting on the Use of Cell Culture Technology To Develop Products Derived From Livestock and Poultry 10 (Dec. 21, 2018), <https://www.gfi.org/images/uploads/2018/12/GFI-USDA-FDA-WrittenCommentDec212018.pdf> (“A product is misbranded under the FMIA and PPIA when it contains ingredients that are not declared on product labeling, so

traditional meat would likely be allergic to cell-based meat as well, and someone who would not eat meat products derived from pigs for religious reasons would also likely not eat cell-based products derived from pig cells.¹²⁷ This would conceptually follow from the Food and Drug Administration's (FDA) general policy to regulate the product and not the process.¹²⁸ If the product is identical to meat, then the process by which it was created is not necessarily relevant—just as genetically modified corn is still considered to be corn.¹²⁹

If plaintiffs successfully argue that the product is identical to meat, then labeling it as such would not be misleading. However, though the argument might be persuasive to some, absent a radical shift in our traditional categories of food, it appears unlikely to persuade a typical court. Especially in light of the essential versus incidental dichotomy discussed above, it appears likely that the characteristic of being derived from traditional livestock is an essential component of “meat” in the minds of consumers and the courts.¹³⁰

As such, an unqualified label on cell-based products is likely to be found either (a) *inherently* misleading, in which case the label

cell-cultured meat and poultry products would have to disclose that they are meat or poultry to avoid being misbranded.”).

¹²⁷ See *id.* at 12 (“Consumers should be able to identify the kind of meat they are purchasing, which is important both to consumers with meat and poultry and fish allergies, as well as those with religiously prescribed diets that require them to avoid meat from particularly species of animals.”).

¹²⁸ See *Food From New Plant Varieties*, FDA., <https://www.fda.gov/food/food-ingredients-packaging/food-new-plant-varieties> (last visited Jan. 11, 2020) (“The FDA focuses on the safety and nutritional characteristics of foods and not the processes by which they are produced.”).

¹²⁹ See *id.*

¹³⁰ This is understandably a difficult sentiment to measure, but one indication of support for this conclusion is the pervasiveness of language such as “fake” or “unnatural” to describe cell-based meat products. See Christopher Bryant & Julie Barnett, *Consumer Acceptance of Cultured Meat: A Systematic Review*, 143 MEAT SCI. 8, 12 (2018) (“Amongst the most common objections to cultured meat is that it is unnatural. Marcu et al. (2015) report that ‘natural vs. artificial’ is one of the polarities participants established in order to locate cultured meat relative to conventional meat. Indeed, participants in other studies have referred, unprompted, to ‘real meat’ (as opposed to cultured meat) in the context of these discussions (Tucker, 2014; Verbeke, Marcu, et al., 2015), or have described cultured meat as ‘fake’ (Bekker, Tobi, et al., 2017). Laestadius (2015) observed that, unlike other concerns, the unnaturalness objection has been recorded universally across a range of cultures.”).

could be prohibited entirely; or (b) *potentially* misleading, but still pass the following three requirements of *Central Hudson* in advancing, without being overly excessive, the legitimate interest in preventing consumer confusion. Banning such labels, therefore, would likely be consistent with the First Amendment. As the labels move along the continuum from entirely unqualified to semi-qualified—for example, having qualifying language but in smaller font or on the back of packaging—it would follow that courts are increasingly likely to view the labels as falling into the qualified category discussed above. And it should be noted that, as a practical matter, most labels will fall into the qualified category, as alternative meat manufacturers are specifically differentiating their products on those grounds. Indeed, it is easy to see how increasing demand for more environmentally-friendly products would give alternative meat producers reason to highlight the lack of traditional meat in their products.

3. Bans on Unqualified Labels of Plant-Based Products

Many of the same arguments that apply to bans on unqualified labels of cell-based products also apply to bans on unqualified labels of plant-based products. The important difference, of course, is that both parties would agree that the underlying plant-based product is not identical to meat. Therefore, any advocates interested in challenging a ban of this sort would have to argue that an unqualified label of “meat” or “beef” is not misleading for other reasons. One strategy they might employ is to appeal to the long-standing use of the word “meat” in contexts entirely unrelated to the consumption of livestock. For example, the Oxford English Dictionary documents usages of the word “meat” in reference to non-animal products going back to at least the 16th century: “meate of any frute” (1530), “a meate made of honie and popie seed” (1565), “the meat of the Nut” (1613), “meats of herbs and fruits” (1684).¹³¹ The

¹³¹ *Meat n.*, OXFORD ENGLISH DICTIONARY (Online ed. 2019). In a brief supporting a preliminary injunction on enforcing the Arkansas statute, plaintiffs even note the use of “meat” in the King James Bible (Genesis 1:29) to refer to a plant-based product: “And God said, Behold I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in which is the fruit of a tree yielding seed; to you it shall be for meat.” Memorandum of Law in Support of Plaintiff’s Motion for Preliminary Injunction at 7 n.4, *Turtle Island Foods v. Soman*, No. 4:19-cv-00514 (E.D. Ark. Aug. 14, 2019); see also *Meat n.*, MERRIAM-WEBSTER (Online ed. 2020) (“(a) solid food as distinguished from

implication of that usage is that the word “meat” has been used for centuries to mean something other than animal products, even in the context of food, and as such, the use of that term to label plant-based products is not inherently misleading. While this argument may have some force in the context of an already-qualified label,¹³² this alone might not alleviate a court’s concern that the unqualified label is likely to mislead consumers. As such, it appears that labels for plant-based products edging towards the entirely unqualified end of the continuum are more likely to be found inherently misleading.

One interesting question to flag here—which also applies to unqualified labels of cell-based products—is whether a particular brand name amounts to appropriate qualification. For example, the Beyond Meat company’s plant-based products are becoming an increasingly popular option for consumers.¹³³ If, say, “Beyond” became effectively synonymous with “vegan” or “plant-based,” then it could be argued that absent any other qualifying language, the simple fact that the label reads “Beyond Beef” amounts to appropriate qualification. This is unlikely to be true presently, but it is still useful to note another way that the standards for both qualification in particular, and conventional labeling categories more generally, are malleable over time and subject to evolve along with the marketplace.

drink; (b) the edible part of something as distinguished from its covering”). For more historical examples of meat terminology used in reference to non-animal foods, see Tai, *supra* note 19, at 763–66.

¹³² For example, in its Citizen Petition to FDA, the Good Food Institute argued that almond milk “was common (and named similarly) in Western and Middle Eastern kitchens *centuries* ago.” Good Food Inst., *supra* note 114, at 11–12.

¹³³ See Andria Cheng, *Beyond Meat Is the Biggest Beneficiary in the Growing Plant-Based-Meat Market: Study*, FORBES (Jan. 17, 2020, 3:31 PM), <https://www.forbes.com/sites/andriacheng/2020/01/17/beyond-meat-is-the-biggest-beneficiary-in-the-growing-plant-based-meat-market-study> (“Beyond Meat’s retail sales to consumers more than doubled—growing 135% to be more specific—in the 52 weeks through early October, the fastest rate among the top ten plant-based meat-substitute labels.”); Kelsey Piper, *Del Taco’s Meatless Meat Tacos: A Surprise Fast-Food Hit*, VOX (June 20, 2019, 7:10 AM), <https://www.vox.com/future-perfect/2019/6/20/18691964/del-tacos-meatless-tacos-beyond-meat-taco-bell> (“Two months ago, Del Taco announced a partnership with meat alternative company Beyond Meat. The fast-food chain, with 580 locations across the United States, would offer Beyond’s plant-based beef in its tacos [...] The reception to its new Beyond products has been so enthusiastic that Del Taco is launching additional Beyond products.”).

It is worth pausing briefly to state explicitly the policy choices and considerations that underlie the *Central Hudson* framework, and the broader questions they raise. First is the background norm—only a few decades old¹³⁴—that commercial entities deserve First Amendment speech protection. This, of course, places a constitutional limit on the government’s ability to regulate commercial entities and raises a question about how far that limit should extend. One answer to that question is the *Central Hudson* test: the government is limited to advancing, in a restricted manner, a substantial interest. But is this the best framework for achieving the relevant policy goals? How much turns on a court’s discretion in assessing what is a legitimate, “substantial” interest? If the interest is preventing misleading speech, does a court have the tools to assess whether “X” is misleading—which requires some fixed notion of what “X” means—given that words change meaning over time? What if the effect—or the veiled intent—of the government’s restriction on “misleading” speech is to protect powerful market incumbents against a competitive upstart? More broadly, do commercial interests deserve free speech protection at all, and if so, how does that protection affect the balance of power between corporations, the government, and the citizenry? These questions are ultimately ones of value and policy, and any haphazard answers offered here would be inadequate, but my hope is that the statutes, cases, and analyses presented in this Note can offer an instructive case study to ground these abstract questions.

D. Specific Applications of *Central Hudson*: Current Litigation

After examining the more general contours of potential litigation under *Central Hudson*, I will turn now to discussing two instances of currently ongoing litigation: challenges to the Arkansas and Missouri bans on alternative meat labels.¹³⁵ Though the same plaintiffs filed both cases, they achieved different outcomes at the district court level. As such, these cases indicate how statute-

¹³⁴ See generally *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council*, 425 U.S. 748 (1976).

¹³⁵ A third complaint, challenging Louisiana’s ban, was filed when the law came into effect in October 2020. See Complaint, *Turtle Island Foods v. Strain*, No. 3:20-cv-00674 (M.D. La. Oct 7, 2020). Because the case was filed late in the editing process for this Note, and because it largely mirrors the arguments made in the Arkansas and Missouri cases, I do not discuss it further here.

specific each litigation outcome is likely to be, and also the importance of whether qualified labels are permitted.

In July 2019, Turtle Island Foods, producer of the Tofurky brand of plant-based products, along with the ACLU, Good Food Institute, and Animal Legal Defense Fund, filed a complaint in federal court seeking an injunction on enforcement of the newly passed Arkansas state law on the grounds that it violates the First Amendment.¹³⁶ Recall that the Arkansas statute bans even qualified labels on alternative meat packaging, which would render Tofurky's "Vegetarian Ham Roast" products, among others, in violation of the statute.

In December 2019, the U.S. District Court for the Eastern District of Arkansas granted a preliminary injunction after conducting a *Central Hudson* analysis. First, the court found that though Tofurky's labels include words traditionally associated with animal-based meat:

[T]he simple use of a word frequently used in relation to animal-based meats does not make use of that word in a different context inherently misleading. This understanding rings particularly true since the labels also make disclosures to inform consumers as to the plant-based nature of the products contained therein.¹³⁷

Citing to *Ocheesee Creamery*, the court found that Arkansas's "Definitions" in the statute "do not serve as trademarks on these terms" and therefore "do not render Tofurky's speech inherently misleading."¹³⁸ In addition, the court noted a lack of evidence that any Tofurky consumers were "actually misled or deceived."¹³⁹ The court next assumed the second requirement of *Central Hudson* was satisfied.¹⁴⁰ In addressing the third and fourth requirements, however, the court notes the path dependence outlined above: "Act 501 seems unlikely to be a 'reasonable fit' if the law, predicated upon preventing misleading commercial speech, outright bans what

¹³⁶ See generally Complaint, *Turtle Island Foods v. Soman*, No. 4:19-cv-00514 (E.D. Ark. July 22, 2019). The complaint also alleges violations of the Dormant Commerce Clause and Due Process Clause of the Fourteenth Amendment. See *id.* For a further analysis of these and other claims (such as vagueness and political speech), see Gleckel & Colb, *supra* note 44, at 78–79 (2020).

¹³⁷ Preliminary Injunction Order at 23, *Turtle Island Foods v. Soman*, No. 4:19-cv-00514 (E.D. Ark. Dec. 11, 2019).

¹³⁸ *Id.* at 25.

¹³⁹ *Id.* at 24.

¹⁴⁰ See *id.* at 26.

Tofurky is likely to prevail in proving is non-misleading commercial speech.”¹⁴¹ Moreover, the fourth requirement is not satisfied because the state did not convince the court that other federal and state laws prohibiting deceptive labeling are inadequate, and because other less restrictive and more reasonable means exist.¹⁴² The court’s suggestions for less restrictive alternatives included “more prominent disclosures[,] . . . a symbol to go on the labeling and packaging of plant-based products indicating their vegan composition, or . . . a disclaimer.”¹⁴³ Therefore, because the court found the plaintiffs likely to prevail on the merits on the First Amendment claim, it granted a preliminary injunction.¹⁴⁴

Missouri’s ban is also being challenged by the same plaintiffs on similar First Amendment grounds.¹⁴⁵ However, in this case, the district court denied the plaintiff’s motion for a preliminary injunction in September 2019.¹⁴⁶ Recall that the Missouri law is, on its face, ambiguous whether qualified labels such as Tofurky’s are permitted or prohibited, but Missouri’s Department of Agriculture has issued regulations permitting qualified labels.¹⁴⁷ As such, the court agreed with the State’s argument that Tofurky’s qualified labels are, in fact, permitted by the statute, applying a narrow interpretation of the statute.¹⁴⁸ The State, therefore, was not restricting protected commercial speech; none of Tofurky’s speech was being restricted. Moreover, the court found that the plaintiff was unlikely to succeed on a facial challenge because the statute would be valid as applied to a label that did not properly “identify that the product was plant-

¹⁴¹ *Id.*

¹⁴² *See id.* at 27.

¹⁴³ *Id.*

¹⁴⁴ *See id.* at 33. In a related case, the U.S. District Court for the Northern District of California also granted a preliminary injunction blocking enforcement against a plant-based butter product. *See Order Granting in Part and Denying in Part Motion for Preliminary Injunctive Relief* at 13, *Miyoko’s Kitchen v. Ross*, No. 3:20-cv-00893 (N.D. Cal. Aug. 21, 2020).

¹⁴⁵ *See Complaint, Turtle Island Foods v. Richardson*, No. 2:18-cv-04173 (W.D. Mo. Aug. 27, 2018).

¹⁴⁶ *See Order Denying Plaintiffs’ Motion for Preliminary Injunction* at 15, *Turtle Island Foods v. Richardson*, No. 2:18-cv-04173 (W.D. Mo. Aug. 27, 2018).

¹⁴⁷ *See MEMORANDUM RE: MISSOURI’S MEAT ADVERTISING LAW*, *supra* note 50, at 2.

¹⁴⁸ *See Order Denying Plaintiffs’ Motion for Preliminary Injunction*, *supra* note 146, at 11–12.

based or lab-grown when it in fact was.”¹⁴⁹ As such, the court denied the plaintiff’s request for a preliminary injunction¹⁵⁰ and the case is pending appeal in the Eighth Circuit.¹⁵¹ Appellants argue that though the Department of Agriculture interprets the statute as permitting qualified labels:

[n]othing in the statement or memorandum purports to bind the county prosecutors, who have plenary authority to enforce the law. (JA 80.) Indeed, the [Missouri Department of Agriculture] lacks the power to protect a plant-based meat producer from prosecution under the law. Even if a producer follows the memorandum’s guidelines, a prosecutor may still bring charges against the producer.¹⁵²

According to the appellants, then, the non-binding nature of the Department’s narrow interpretation of the statute still allows for the possibility that the statute will be enforced to penalize makers of products with qualified labels.¹⁵³

Because these cases only apply to the statutes of two states, have not run their course through the appellate system, and bear little precedential weight, I have chosen in this Note to decentralize an analysis of their particulars and focus instead on a more generalized application of *Central Hudson* to the state bans. However, these two cases still serve as a window into the approach of two Federal courts, illustrating how case-specific each challenge is likely to be. The same plaintiff brought more or less the same claims in both cases, but achieved different outcomes. One explanation for the difference in outcome is the question of whether qualified labels were seen as permitted under the statute. A preliminary injunction was granted against the Arkansas law, which was understood to ban even qualified labels,¹⁵⁴ however, a preliminary injunction was denied against

¹⁴⁹ *Id.* at 12.

¹⁵⁰ *Id.* at 15.

¹⁵¹ See *Turtle Island Foods v. Thompson*, No. 19-03154 (8th Cir. Jan 22, 2020).

¹⁵² Appellant’s Brief at 16, *Turtle Island Foods v. Thompson*, No. 19-03154 (8th Cir. Jan. 22, 2020).

¹⁵³ This also raises an interesting question about what circumstances warrant treating such regulations as curing a statute’s potential First Amendment violation. Appellants imply, at the very least, one necessary condition is that the regulation be binding on enforcement bodies. See *id.*

¹⁵⁴ See Preliminary Injunction Order at 5, *Turtle Island Foods v. Soman*, No. 4:19-cv-00514 (E.D. Ark. Dec. 11, 2019) (“The statute provides no exception for

the Missouri law because the court found that the more ambiguous statute did not apply to qualified labels. Viewed in tandem, these cases demonstrate that much can turn on the permissibility of qualified labels, but they also caution that the outcome of each litigation will depend on the specific plaintiff, that company's products and labels, and how those labels fit into the state's specific restriction.

E. Empirical Research: Are Customers Actually Confused?

So, are customers actually confused, and if they are, about what in particular? This question is important because it could factor into whether the label is inherently misleading under the threshold inquiry of the *Central Hudson* test. As seen in *Ocheesee Creamery*, it is not sufficient for a study to demonstrate that consumers are confused about an incidental feature of the product, like the vitamin content of skim milk.¹⁵⁵ Assuming a court were to adopt the sensible logic of *Ocheesee Creamery*, empirical research showing that customers incorrectly believe certain facts only about the nutritional content of alternative meat products¹⁵⁶ is unlikely to persuade a court that labels are misleading.

In contrast, empirical research demonstrating that consumers are likely to believe that products labeled as “veggie meat” or “plant-based beef” contain traditional animal-based meat would more likely persuade judges to uphold restrictions on alternative meat labels. While a full survey of all empirical research on this question is beyond the scope of this Note, it is worthwhile to note that neither the plaintiffs nor the state-defendants in either litigation were able to muster empirical evidence to support their claims on

plant-based meat producers that clearly identify their products as being vegetarian, vegan, or made from plants.”).

¹⁵⁵ See *Ocheesee Creamery v. Putnam*, 851 F.3d 1228, 1239 (11th Cir. 2017).

¹⁵⁶ See, e.g., Trey Malone & Brandon McFadden, *Government Restrictions on Labeling Products as ‘Meat’ Aren’t Likely to Help Anyone*, CONVERSATION (Oct. 8, 2019, 8:22 AM), <https://theconversation.com/government-restrictions-on-labeling-products-as-meat-arent-likely-to-help-anyone-117490> (“Responses suggested that consumers don’t understand the nutrition of the foods they purchase, and are especially likely to overestimate the nutrition quality of plant-based alternatives. Respondents who were shown the current labeling scheme overestimated the amount of cholesterol, protein, sodium, and trans fats in both meat and nontraditional meat products, but underestimated their calorie contents.”).

this point,¹⁵⁷ suggesting that reliable empirical evidence is wanting on this question.¹⁵⁸ Given the burden lies with the government, the absence of sufficient empirical research favors plaintiffs, as seen in the preliminary injunction order issued by the district court in the Arkansas litigation: “[T]here is no contention that any [consumer or potential consumer] was actually misled or deceived by Tofurky’s packaging, labeling, or marketing.”¹⁵⁹ While this research could certainly be valuable from the court’s perspective, more consumer studies have instead focused on questions of demand and customer sentiment, which is likely more useful for investors and market analysts.¹⁶⁰ For the purposes of this Note, it is sufficient to state that empirical evidence of customer confusion could help the court determine whether or not the label is misleading under *Central Hudson*’s first step, but likely only subject to the court’s judgment that their confusion pertains to an essential component of the product, as in *Ocheesee Creamery*.

¹⁵⁷ See Memorandum of Law in Support of Plaintiff’s Motion for Preliminary Injunction at 16–17, *Turtle Island Foods v. Soman*, No. 4:19-cv-00514 (E.D. Ark. Aug. 14, 2019) (“Given the total absence of evidence that consumers are confused by the marketing or packaging of Tofurky’s (or other companies’) plant-based meat products.”); Appellant’s Brief at 14, *Turtle Island Foods v. Thompson*, No. 19-03154 (8th Cir. Jan. 22, 2020) (“Missouri has not received any consumer complaints about plant-based products being mistaken for products derived from animals . . . When it enacted the new law, Missouri did not rely on any evidence that Appellant Tofurky’s advertisements or packages—or any plant-based meat producer’s marketing materials—are misleading.”).

¹⁵⁸ See Gleckel & Colb, *supra* note 44, at 84 (“no empirical studies evidence consumer confusion about plant-based products carrying the term meat in their labels”); Tai, *supra* note 19, at 779 (“[S]upport for claims of actual consumer confusion, although the purported basis behind various meat labeling laws and regulations, appear sparse, and not well-supported by historical usage of these terms”). But the House of Lords EU Energy and Environment Sub-Committee UK did report that “there is no evidence that consumers had felt they were misled by meat-free products and < 4% of people had ever unintentionally bought a vegetarian product instead of a meat free version.” Ellen J. Van Loo et al., *Consumer Preferences for Farm-Raised Meat, Lab-Grown Meat, and Plant-Based Meat Alternatives: Does Information or Brand Matter?*, 95 FOOD POL’Y 101931, *11 (2020).

¹⁵⁹ Preliminary Injunction Order at 24, *Turtle Island Foods v. Soman*, No. 4:19-cv-00514 (E.D. Ark. Dec. 11, 2019) (internal quotations omitted).

¹⁶⁰ See, e.g., Chan et al., USDA, *supra* note 126, at App. B. Limited research has also considered consumer preferences for labeling requirements. See Van Loo et al., *supra* note 158 (finding “that over 70% of respondents prefer that plant- and lab-grown alternatives should be prohibited to use the label ‘beef’ while 19 to 30% support meat alternatives carrying the word ‘beef.’”).

III. PREEMPTION

In addition to the First Amendment issues posed by the state bans, it is possible that the state laws are federally preempted based on the Constitution's Supremacy Clause.¹⁶¹ The United States food system, for the most part, is regulated by both the FDA, under the authority of the Food, Drug, and Cosmetic Act (FDCA), and the United States Department of Agriculture (USDA), which derives its relevant authority from the Federal Meat Inspection Act (FMIA) and the Poultry Products Inspection Act (PPIA).¹⁶² According to a November 2018 statement by USDA Secretary Sonny Purdue and FDA Commissioner Scott Gottlieb, cell-based products will be jointly regulated, subject to the following division of labor: "FDA oversees cell collection, cell banks, and cell growth and differentiation. A transition from FDA to USDA oversight will occur during the cell harvest stage. USDA will then oversee the production and labeling of food products derived from the cells of livestock and poultry."¹⁶³ Plant-based products, on the other hand, will remain solely under FDA's regulatory framework.¹⁶⁴ As such, it is important to consider the possibility of preemption from the perspective of each agency's regulations.

The FDCA, as amended by the Nutrition Labeling and Education Act 1990, notably includes a provision that expressly preempts provisions of state law: states are prohibited "from 'directly or indirectly establish[ing]' food labeling requirements 'not identical to' federal requirements."¹⁶⁵ As such, in order to know whether the FDCA preempts a state law, the relevant question is whether any of FDA's federal requirements conflict with the state law at issue.

¹⁶¹ See U.S. CONST. art. VI, cl. 2.

¹⁶² See Robert Hibbert & Amaru Sanchez, *State Meat Label Restrictions Face Preemption Challenges*, LAW360 (Mar. 6, 2019 2:37 PM), <https://www.law360.com/articles/1135648/state-meat-label-restrictions-face-preemption-challenges>.

¹⁶³ FDA, STATEMENT FROM USDA SECRETARY PURDUE AND FDA COMMISSIONER GOTTLIEB ON THE REGULATION OF CELL-CULTURED FOOD PRODUCTS FROM CELL LINES OF LIVESTOCK AND POULTRY (2018), <https://www.fda.gov/news-events/press-announcements/statement-usda-secretary-purdue-and-fda-commissioner-gottlieb-regulation-cell-cultured-food-products>.

¹⁶⁴ See Hibbert & Sanchez, *supra* note 162.

¹⁶⁵ *Painter v. Blue Diamond Growers*, 757 F. App'x 517, 518–19 (9th Cir. 2018) (citing 21 U.S.C. § 343-1(a)).

Some food products are subject to FDA's Standards of Identity, which outline exact specifications for what these products must contain in order to be labeled in a certain way,¹⁶⁶ but no specific FDA standard currently exists for meat products.¹⁶⁷ Instead, the generally applicable mislabeling provision applies, under which foods are deemed to be mislabeled "[u]nless its label bears the common or usual name of the food,"¹⁶⁸ which "may be established by common usage"¹⁶⁹ and "may not be confusingly similar to the name of any other food that is not reasonably encompassed within the same name."¹⁷⁰ Therefore, plaintiffs alleging that a state law is preempted will be required to argue that the state law conflicts with the requirement that products be named according to their "common or usual name."¹⁷¹ For example, if a statute prohibits qualified labels such as "veggie burger," plaintiffs could argue that this prohibition conflicts with the FDA requirement to call the product by that ubiquitous common name and is therefore preempted. However, it would be more difficult to argue that a prohibition on the use of unqualified labels conflicts with FDA's requirement, as it is currently not the case that consumers tend to refer to plant-based products simply as "beef" or "pork."

Note that even where a Standard of Identity does exist for the traditional animal-derived product—as is the case for certain fish and seafood products¹⁷²—a court might still find that because FDA requires common usage labeling, an attempt to ban qualified labels would be preempted. For example, in *Whitewave Foods*, the court argued that because qualified names like "soymilk" and "almond

¹⁶⁶ See, e.g., *Small Entity Compliance Guide: Standard of Identity for White Chocolate*, FDA, <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/small-entity-compliance-guide-standard-identity-white-chocolate> (last updated Sept. 20, 2018) (describing Standard of Identity for white chocolate).

¹⁶⁷ See JONES DAY, *THE COMPLEX LABELING LANDSCAPE FOR PLANT-BASED MEAT ALTERNATIVES 2* (2020). See generally 21 C.F.R. §§ 100-90 (2020).

¹⁶⁸ 21 U.S.C. § 343(i).

¹⁶⁹ 21 C.F.R. § 102.5(d) (2020).

¹⁷⁰ 21 C.F.R. § 102.5(a) (2020).

¹⁷¹ See, e.g., *Regan v. Sioux Honey Ass'n Coop.*, 921 F. Supp. 2d 938, 943 (E.D. Wis. 2013) (holding that a Wisconsin law, which prohibited the labeling of pollen-free honey as "honey," was preempted by the FDA requirement that honey be labeled according to its common usage).

¹⁷² See, e.g., 21 C.F.R. § 161.190 (2020) (defining a Standard of Identity for canned tuna).

milk” reflect the products’ common and usual names, any attempt to “impose new requirements” on the use of those labels is federally preempted.¹⁷³

As such, restrictions on labeling for plant-based products are likely to be federally preempted to the extent they are shown to conflict with FDA’s requirement that foods be labeled according to their common or usual name. If the court believes, as it did for soymilk in *Whitewave Foods*, that the product in question is labeled with its common name, attempts to impose new requirements would be preempted. Because unqualified labels are less likely to be found as bearing the product’s common name, courts are less likely to find these restrictions are federally preempted. Moreover, products determined to violate FDA’s requirement that they bear either the product’s common name—or their Standard of Identity for those handful of fish and seafood products—are likely to simply be found in violation of FDA’s misbranding restrictions and subject to enforcement.¹⁷⁴

The preemption case is even stronger for cell-based products, as it does not rely on the intermediary of proving common name or usage. The FMIA and PPIA include express preemption provisions¹⁷⁵ and because cell-based meat labeling will be regulated by the USDA, according to the joint statement cited above, these products “would, without question, come under the protection umbrella

¹⁷³ *Ang v. Whitewave Foods*, No. 13-cv-1953, 2013 U.S. Dist. LEXIS 173185, at *10–13 (N.D. Cal. Dec. 10, 2013); *see also* *Gitson v. Trader Joe’s Co.*, No. 13-cv-01333-VC, 2015 WL 9121232, at *1–2 (N.D. Cal. Dec. 1, 2015) (“[T]he fact that the FDA has standardized milk does not categorically preclude a company from giving any food product [here, soymilk] a name that includes the word ‘milk.’ Rather, . . . the standardization of milk simply means a company cannot pass off a product as ‘milk’ if it does not meet the regulatory definition of milk.”) (emphasis in original omitted); *Good Food Inst.*, *supra* note 114, at 17 (“[A]s FDA and courts have long recognized, . . . standards of identity only govern unqualified food names. Thus, this provision creates no barrier to qualified uses of standardized terms, because the use of a qualifier will generally indicate that the food does not purport to be the standardized food.”).

¹⁷⁴ Note, however, that the FDCA does not grant a private right of action and “generally all proceedings ‘for the enforcement, or to restrain violations, of’ the Act must be in the name of the United States.” JENNIFER STAMAN, CONG. RSCH. SERV., R43609, ENFORCEMENT OF THE FOOD, DRUG, AND COSMETIC ACT: SELECT LEGAL ISSUES 6 (2018) (citing 21 U.S.C. § 337(a)).

¹⁷⁵ *See* 21 U.S.C. §§ 678, 467(e).

of labeling preemption under the FMIA and PPIA.”¹⁷⁶ Accordingly, once a cell-based product label has been approved by the USDA, any state law subjecting that label to additional regulation would be preempted.¹⁷⁷ As stated in a USDA report, “Federal courts have repeatedly and consistently upheld federal preemption of [USDA] labeling requirements in the face of differing state labeling rules or practices.”¹⁷⁸ For this reason, there is speculation that “this reality may have influenced some members of the cell-based industry to more willingly embrace the idea of USDA inspection oversight.”¹⁷⁹ However, because there are no cell-based products on the retail market with labels approved by the USDA, no laws can currently be challenged as federally preempted by USDA approval.

In summary, cell-based products would—when released with USDA approval—be protected by federal preemption under FMIA and PPIA. Plant-based products could be protected by federal preemption under the FDCA, but probably only when the label is properly qualified. The remaining category of bans—on unqualified labels of plant-based products—may perhaps escape federal

¹⁷⁶ Hibbert & Sanchez, *supra* note 162; *see also* *Armour & Co. v. Ball*, 468 F.2d 76, 85 (6th Cir. 1972) (holding that a Michigan law with meat labeling requirements was preempted by FMIA), *cert. denied*, 411 U.S. 981 (1973).

¹⁷⁷ *See generally* *Nat’l Meat Ass’n v. Harris*, 565 U.S. 452, 459–60 (2012) (“The FMIA’s preemption clause sweeps widely—and in so doing, blocks the applications of [the statute] challenged here. The clause prevents a State from imposing any additional or different—even if non-conflicting—requirements that fall within the scope of the Act.”).

¹⁷⁸ USDA, A GUIDE TO FEDERAL FOOD LABELING REQUIREMENTS FOR MEAT, POULTRY, AND EGG PRODUCTS 13 (R. Post et al. eds., 2007), https://www.fsis.usda.gov/wps/wcm/connect/f4af7c74-2b9f-4484-bb16-fd8f9820012d/Labeling_Requirements_Guide.pdf?MOD=AJPERES.

¹⁷⁹ Hibbert & Sanchez, *supra* note 162. Cell-based meat advocates have, indeed, argued for USDA oversight of labelling, though also highlighting the relevance of meat allergies and religious restrictions to the designation of cell-based products as meat. *See* Chan et al., *supra* note 126 at 11 (“Once FSIS assumes oversight of post-harvest cell-cultured meat and poultry products, these products should be subject to the same labeling requirements as conventional meat.”); *see also id.* at 11–12 (discussing “meat allergies” and “religiously prescribed diets”); Catherine Lamb, *Allergy Fears and Transparency Among Issues at latest USDA/FDA Meat-ing*, SPOON (Oct. 25, 2018), <https://thespoon.tech/allergy-fears-and-transparency-among-issues-at-latest-usda-fda-meat-ing/> (“We cell-based food producers do need to use the terms “fish” and “meat,” said Michael Selden, the CEO of cultured seafood company Finless Foods. ‘If one is allergic to animal-based seafood, that person has a high probability that they’ll be allergic to the seafood made with our technology.’”).

preemption, but recall the discussion above about the First Amendment risks for unqualified plant-based labels. Namely, though these bans might survive preemption, they are also likely to violate the First Amendment. Finally, it is also important to remember that though preemption might provide some protection against state bans, if the federal government were to adopt regulations or laws that are substantially the same as current state bans, the fact that state laws would be preempted is essentially meaningless because the product labels would still be banned under federal law. In that case, advocates for alternative meat products must resort to the First Amendment arguments discussed above, which would also apply to a federal law.¹⁸⁰

CONCLUSION

A comparative examination of the state laws recently passed to ban certain labeling of alternative meat products revealed two important distinctions among them. First is the distinction between bans addressing only cell-based products and those also addressing plant-based products. Second is the distinction between bans that unambiguously apply only to unqualified uses of traditional terminology and bans that are ambiguous as to whether they might also apply to qualified uses.

Two legal issues with the state bans were also addressed. First was the question of whether the state bans violate any First Amendment protection of commercial speech. The application of *Central Hudson*—the governing test for this inquiry—was considered first in general terms and then specifically applied in two instances of ongoing litigation. Bans that include qualified labels are most likely to be found in violation of the First Amendment, as they are unlikely to be considered inherently misleading and the restrictions are likely more extensive than necessary. This was seen specifically in the court's decision to grant a preliminary injunction against the Arkansas statute. Bans on only unqualified labels, however, are more likely to survive scrutiny, as seen in the court's decision to deny a preliminary injunction against the Missouri statute, given the

¹⁸⁰ Perhaps for this reason, the plaintiffs in the Arkansas and Missouri litigation have not brought claims of preemption. See discussion *supra* Part II.D. First Amendment precedent could prove much more valuable if a federal ban is passed.

Department of Agriculture's narrow interpretation that the statute does not apply to qualified labels.

Second, I considered the possibility that the state laws would be preempted. Both the FDCA and FMIA/PPIA include express preemption provisions, meaning that bans on cell-based products would be federally preempted, and bans on qualified labels for plant-based products are also likely to be preempted. However, the First Amendment analysis would still be relevant if advocates for alternative meat products bring claims against any future federal bans or regulations.

Throughout the course of this Note, I have dwelled considerably on the details of particular state legislation and their legality under the *Central Hudson* test. Despite this relatively narrow focus, it is important not to lose sight of the broader context: the dangers of an incumbent, dominant industry empowered to stifle a new market entrant; the role of government in both protecting consumers and fostering innovation; whether or how to allow the government to restrict the use of certain terminology; and how the government's treatment of such terminology must evolve along with the emergence of new technology. As the incumbent industry and policymakers continue attempting to ossify the current definition of "meat," these root concerns will always lurk in the background. Finally, this debate should be situated within the broader effort to replace environmentally harmful practices with more climate-friendly alternatives—and it highlights our ability to use unexpected legal tools, such as the First Amendment, to support that effort.¹⁸¹

¹⁸¹ *But see* Gleckel & Colb, *supra* note 44, at 100–01, who argue that relying on the First Amendment, while helpful in this case, is a double-edged sword: "The cases may conditionally work very well as weapons of the weak, but they also support a market structure oppressive to those most vulnerable in an increasingly laissez faire economy. . . . [R]elying on commercial speech precedents may come back to bite animal-rights lawyers when the animal meat industry cites animal advocates' cases to defend the word 'natural' on the labels of their hyper-processed pork, or when animal defenders want to require disclosures regarding e-coli, pus, and toxin-releasing mold in the food headed for your grocer's freezer."

APPENDIX A: COMPILATION OF STATE FOOD-LABELLING LAWS AND
BILLS, AS OF AUGUST 15, 2020

1) States with Passed Laws

Alabama	
ALA. CODE § 2-17-10 (2019).	(d) A food product that contains cultured animal tissue produced from animal cell cultures outside of the organism from which it is derived may not be labeled as meat or a meat food product.
Arkansas	
ARK. CODE ANN. § 2-1-301 (2019).	The purpose of this subchapter is to protect consumers from being misled or confused by false or misleading labeling of agricultural products that are edible by humans.
ARK. CODE ANN. § 2-1-302 (2019).	<p>Definitions. As used in this subchapter: . . .</p> <p>(2) “Beef” means the flesh of a domesticated bovine, such as a steer or cow, that is edible by humans;</p> <p>(3) “Beef product” means an agricultural product that is edible by humans and produced in whole or in part from beef, including without limitation beef jerky, beef patties, chopped beef, fabricated steak, hamburger, ground beef, ribs, and roast; . . .</p> <p>(7) (A) “Meat” means a portion of livestock, poultry, or cervid carcass that is edible by humans. (B) “Meat” does not include a: (i) Synthetic product derived from a plant, insect, or other source; or (ii) Product grown in a laboratory from animal cells;</p> <p>(8) “Meat product” means 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 . . .</p> <p>(12) “Pork” means the flesh of a domesticated swine that is edible by humans;</p> <p>(13) “Pork product” means an agricultural product that is edible by humans and produced in whole or in part from pork, including without limitation bacon, bratwurst, ground pork, ham, pork chops, ribs, roast, and sausage;</p> <p>(14) “Poultry” means domestic birds that are edible by humans; and</p> <p>(15) “Rice” means the whole, broken, or ground kernels or by-products obtained from the species <i>Oryza sativa</i> L. or <i>Oryza glaberrima</i>, or wild rice, which is obtained from one (1) of the four (4)</p>

	species of grasses from the genus <i>Zizania</i> or <i>Porteresia</i> .
ARK. CODE ANN. § 2-1-305 (2019).	A person shall not misbrand or misrepresent an agricultural product that is edible by humans, including without limitation by . . . (6) Representing the agricultural product as meat or a meat product when the agricultural product is not derived from harvested livestock, poultry, or cervids; (7) Representing the agricultural product as rice when the agricultural product is not rice; (8) Representing the agricultural product as beef or a beef product when the agricultural product is not derived from a domesticated bovine; (9) Representing the agricultural product as pork or a pork product when the agricultural product is not derived from a domesticated swine; (10) Utilizing 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. . . .
Georgia	
GA. CODE ANN. § 26-2-152 (2020).	(c)(1)(B)(2) It shall be unlawful for any person, . . . to label, advertise, or otherwise represent any food produced or sold in this state as meat or any product from an animal unless each product is clearly labeled by displaying the following terms prominently and conspicuously on the front of the package, labeling cell cultured products with “lab-grown,” “lab-created,” or “grown in a lab” and plant based products as “vegetarian,” “veggie,” “vegan,” “plant based,” or other similar term indicating that the product is plant based and does not include the flesh, offal, or other by-product of any part of the carcass of a live animal that has been slaughtered.
Kentucky	
KY. REV. STAT. ANN. § 217.035 (LexisNexis 2019).	A food shall be deemed to be misbranded. . . . (15) If it purports to be or is represented as meat or a meat product and it contains any cultured animal tissue produced from in vitro animal cell cultures outside of the organism from which it is derived.

Louisiana	
LA. STAT. ANN. § 3:4742 (2019).	The purpose of this Part is to protect consumers from misleading and false labeling of food products that are edible by humans.
LA. STAT. ANN. § 3:4743 (2019).	<p>As used in this Part . . .</p> <p>(2) “Beef” means the flesh of a domesticated bovine that is edible by humans.</p> <p>(3) “Beef product” means a type of agricultural product that is edible by humans and produced in whole or in part from beef, including beef jerky, beef patties, chopped beef, fabricated steak, hamburger, ground beef, ribs, and roast. . . .</p> <p>(10) “Meat” means a portion of a beef, pork, poultry, alligator, farm-raised deer, turtle, domestic rabbit, crawfish, or shrimp carcass that is edible by humans but does not include a: (a) Synthetic product derived from a plant, insect, or other source. (b) Cell cultured food product grown in a laboratory from animal cells.</p> <p>(11) “Meat product” means a type of agricultural product that is edible by humans and made wholly or in part from meat or another portion of a beef, pork, poultry, alligator, farm-raised deer, turtle, domestic rabbit, crawfish, or shrimp carcass. . . .</p> <p>(15) “Pork” means the flesh of a domesticated swine that is edible by humans.</p> <p>(16) “Pork product” means a type of agricultural product that is edible by humans and produced in whole or in part from pork, including bacon, bratwurst, ground pork, ham, pork chops, ribs, roast, and sausage.</p> <p>(17) “Poultry” means domesticated birds that are edible by humans.</p> <p>(18) “Rice” means the whole or broken kernels obtained from the species <i>Oryza sativa</i> L. or <i>Oryza glaberrima</i>, or wild rice, which is obtained from one of the four species of grasses from the genus <i>Zizania</i> or <i>Porteresia</i>.</p>
LA. STAT. ANN. § 3:4744 (2019).	<p>B. No person shall intentionally misbrand or misrepresent any food product as an agricultural product through any activity including . . .</p> <p>(4) Representing a food product as meat or a meat product when the food product is not derived from a harvested beef, pork, poultry, alligator,</p>

	<p>farm-raised deer, turtle, domestic rabbit, crawfish, or shrimp carcass.</p> <p>(5) Representing a food product as rice when the food product is not rice.</p> <p>(6) Representing a food product as beef or a beef product when the food product is not derived from a domesticated bovine.</p> <p>(7) Representing a food product as pork or a pork product when the food product is not derived from a domesticated swine.</p> <p>(8) Representing a food product as poultry when the food product is not derived from domesticated birds. . . .</p> <p>(11) Representing a cell cultured food product as a meat product.</p> <p>(12) Representing a food product as sugar when it is not an unaltered plant-based simple sugar or sucrose.</p>
Mississippi	
MISS. CODE ANN. § 75-35-3 (2019)	(g) The term “meat food product” means 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 [...]
MISS. CODE ANN. § 75-35-15 (2019)	A food product that contains cultured animal tissue produced from animal cell cultures outside of the organism from which it is derived shall not be labeled as meat or a meat food product. A plant-based or insect-based food product shall not be labeled as meat or a meat food product.
Missouri	
MO. ANN. STAT. § 265.494 (West 2020).	<p>No person advertising, offering for sale or selling all or part of a carcass or food plan shall engage in any misleading or deceptive practices, including, but not limited to, any one or more of the following . . .</p> <p>(7) [M]isrepresenting a product as meat that is not derived from harvested production livestock or poultry. . . .</p>
Montana	
MONT. CODE ANN. § 50-31-103 (2019).	(4) “Cell-cultured edible product” means the concept of meat, including but not limited to muscle cells, fat cells, connective tissue, blood, and other components produced via cell culture, rather than from a whole slaughtered animal. A cell-cultured edible product derived from meat

	<p>muscle cells, fat cells, connective tissue, blood, or other meat components must contain labeling indicating it is derived from those cells, tissues, blood, or components. . . .</p> <p>(19) “Hamburger” or “ground beef” . . . includes only products entirely derived from the edible flesh of livestock or a livestock product, as meat is defined in 81-9-217. The term does not include cell-cultured edible products.</p>
MONT. CODE ANN. § 50-31-203 (2019).	<p>A food is considered to be misbranded if: [...]</p> <p>(14) it is a cell-cultured edible product labeled as meat but does not meet the definition of meat in 81-9-217. A cell-cultured edible product derived from meat muscle cells, fat cells, connective tissue, blood, or other meat components is not considered to be misbranded if it is labeled in accordance with 50-31-103 to indicate it is derived from those cells, tissues, blood, or components.</p>
MONT. CODE ANN. § 81-9-217 (2019).	<p>(7) “Meat” means the edible flesh of livestock or poultry and includes livestock and poultry products. This term does not include cell-cultured edible products as defined in this section.</p> <p>(8) “Misbranded” means the term applied to meat . . . (c) if it is not entirely derived from the edible flesh of livestock or poultry or livestock and poultry products. A cell-cultured edible product derived from meat muscle cells, fat cells, connective tissue, blood, or other meat components is not considered to be misbranded if it is labeled in accordance with 50-31-103 to indicate it is derived from those cells, tissues, blood, or components.</p>
North Dakota	
N.D. CENT. CODE § 4.1-31-05.1 (2019).	<p>1. A person may not advertise, offer for sale, sell, or misrepresent cell-cultured protein as a meat food product. A cell-cultured protein product:</p> <ul style="list-style-type: none"> a. May not be packaged in the same, or deceptively similar, packaging as a meat food product; and b. Must be labeled as a cell-cultured protein food product. <p>2. For purposes of this section, “deceptively similar” means packaging that could mislead a reasonable person to believe the product is a meat food product.</p>

Oklahoma	
OKLA. STAT. ANN. tit. 63, § 317 (2019). (Repealed and replaced by H.B. 3806, 57th Leg., 2d Sess. (Okla. 2020)).	No person advertising, offering for sale or selling all or part of a carcass or food plan shall engage in any misleading or deceptive practices, including, . . . 7. Misrepresenting . . . a product as meat that is not derived from harvested production livestock or poultry; provided product packaging for plant-based items shall not be considered to be in violation of the provisions of this paragraph so long as the packaging displays that the product is derived from plant-based sources. . . .
OKLA. STAT. ANN. tit. 2, § 5-107 (2020).	[P]roduct packaging for plant-based items shall not be considered in violation of the provisions of this paragraph so long as the packaging displays that the product is derived from plant-based sources in type that is uniform in size and prominence to the name of the product. . . .
South Carolina	
S.C. CODE ANN. § 47-17-510 (2019).	A person who advertises, offers for sale, or sells all or part of a carcass shall not engage in any misleading or deceptive practices, labeling, or misrepresenting a product as “meat” or “clean meat” that is cell-cultured meat/protein, or is not derived from harvested production livestock, poultry, fish, or crustaceans.
South Dakota	
S.D. CODIFIED LAWS § 39-5-6 (2019).	(13) “Meat,” the edible part of the muscle of cattle, bison, sheep, swine, goats, equine, ratites, captive cervidae, and other species as requested by the owner and authorized by the secretary, which is skeletal or which is found in the tongue, in the diaphragm, in the heart, or in the esophagus, with or without the accompanying and overlying fat, and the portions of bone, skin, sinew, nerve, and blood vessels which normally accompany the muscle tissue and which are not separated from it in the process of dressing. It does not include the muscle found in the lips, snout, or ears . . . (16) “Meat food products,” 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, bison, sheep, swine, goats, equine, ratites, captive cervidae, and other species as requested by the owner and authorized by the secretary, excepting products which contain meat or

	<p>other portions of such carcasses only in a relatively small proportion or historically have not been considered by consumers as products of the meat food industry, and which are exempted from definition as a meat food product by regulations promulgated by the secretary pursuant to chapter 1-26, under such conditions as the secretary may deem appropriate to effectuate the purposes of this chapter. . . .</p>
Wyoming	
<p>WYO. STAT. ANN. § 35-7-119 (2019).</p>	<p>(e) (ii) Cell cultured or plant based products not consistent with the definition of meat in subparagraph (iii)(A) of this subsection and not derived from harvested livestock, poultry, wildlife or exotic livestock as those terms are defined in W.S. 11-26-101(a), 11-32-101(a)(iv), 23-1-101(a)(xiii) and 23-1-102(a)(xvi), shall clearly label cell cultured products as “containing cell cultured product” and clearly label plant based products as “vegetarian”, “veggie”, “vegan”, “plant based” or other similar term indicating that the product is plant based;</p> <p>(iii) As used in this subsection: (A) “Meat” means the edible part of the muscle of animals, which is skeletal or which is found in the tongue, in the diaphragm, in the heart or in the esophagus, with or without the accompanying or overlying fat, and the portions of bone, skin, sinew, nerve and blood vessels which normally accompany the muscle tissue and which are not separated from it in the process of dressing, but shall not include the muscle found in the lips, snout or ears, nor any edible part of the muscle which has been manufactured, cured, smoked, cooked or processed. . . .</p>

2) States with Bills That Have Failed to Pass

State	Bill No.
Arizona	H.B. 2044, 54th Leg., 2d Reg. Sess. (Ariz. 2020).
Colorado	H.B. 19-1102, 72nd Gen. Assemb., 1st Reg. Sess. (Colo. 2019).
Hawaii	S.B. 1425, 30th Leg., Reg. Sess. (Haw. 2019).
Illinois	H.B. 2556, 101st Gen. Assemb., Reg. Sess. (Ill. 2019).
Indiana	H.B. 1414, 121st Gen. Assemb., 1st Reg. Sess. (Ind. 2019).
Iowa	S.F. 299, 88th Leg., Reg. Sess. (Iowa 2019).
Kansas	H.B. 2437, 2020 Leg., Reg. Sess. (Kan. 2020).
Maryland	S.B. 188, 2020 Leg., 441st Sess. (Md. 2020).
Michigan	H.B. 4947, 100th Leg., Reg. Sess. (Mich. 2019).
Nebraska	L.B. 594, 106th Leg., 1st Sess. (Neb. 2019).
New Mexico	S.B. 319, 54th Leg., 1st Sess. (N.M. 2019).
Tennessee	S.B. 304, 111th Gen. Assemb., 1st Sess. (Tenn. 2019).
Texas	H.B. 3799, 86th Leg., Reg. Sess. (Tex. 2019).
Vermont	S. 206, 2020 Leg., Reg. Sess. (Vt. 2020).
Virginia	H.B. 2274, 2019 Leg., Reg. Sess. (Va. 2019).
Washington	S.B. 6329, 66th Leg., Reg. Sess. (Wash. 2020).
Wisconsin	S.B. 464, 2019 Leg., 104th Reg. Sess. (Wis. 2019).