

# **A Historical Examination of Food Labeling Policies and Practices in the United States: Implications for Agricultural Communications**

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## **Abstract**

*Knowledge of agricultural practices has declined in recent years, resulting in consumers becoming uncertain of where and how their food has been produced and the marketing tactics used to promote the product. Historically, the U.S. population's rich agricultural heritage coincided with higher levels of agricultural literacy. Some scholars, however, have maintained that U.S. culture has begun to lose touch with its agricultural foundations. More recent evidence has demonstrated that consumers acquire knowledge about their food from various media, most notably the Internet and social media. Often these sources use incorrect information and promote food and agricultural marketing trends that may not be grounded in scientific data. In response, this historical narrative analyzed a reform effort that occurred in U.S. food labeling policy and practice in the 1900s, which contributed to food labeling issues and consumer distrust in the agricultural industry. Based on the findings of this investigation, we concluded that food labels were initially intended to provide consumers with more profound knowledge of the food they purchased. However, key legislative acts such as the Fair Packaging and Labeling Act and the Nutrition Labeling and Education Act shifted the food labeling movement into a branding device to differentiate products and brands. We recommend that agricultural practitioners explore new ways to communicate their message more effectively. We also call for producers to incorporate more personal and emotional appeals when marketing agricultural products to better compete with third-party branding efforts.*

**Keywords:** agricultural communications; branding; food labeling; nutrition

## **Introduction**

*“Now that I know how supermarket meat is made, I regard eating it as a somewhat risky proposition....so I don't buy industrial meat” (Pollan, 2004, para. 6).*

The excerpt above from Michael Pollan's (2004) work, *The Omnivore's Dilemma*, has become more relevant as uncertainty among consumers mounts about how animal production practices occur in the U.S. (DeGregori, 2003; Hughner et al., 2007). Consequently, consumers have become increasingly invested in learning where their food comes from, how it is harvested or processed, and the ingredients that compose the product (Bharat Helkar & Sahoo, 2016). Despite

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this, knowledge and understanding of agricultural practices have declined in recent years, resulting in consumers becoming more uncertain of where and how their food has been produced and wearier of food product marketing and branding (Heerwagen et al., 2014).

Historically, the U.S.'s rich agricultural heritage coincided with higher levels of agricultural literacy (Specht et al., 2014b). However, as urban sprawl has increased across the U.S., consumers' connection to agriculture has become more distant (Specht et al., 2014a). For example, Powell et al. (2018) described the public's misunderstanding of agricultural issues as *apathy* or a lack of interest, and as a result, the deficiency in agricultural literacy among U.S. citizens has intensified (Powell et al., 2008). On this point, Russell et al. (1990) maintained that U.S. culture has begun to lose touch with its agricultural foundations: "The role that agriculture plays in the history of the United States, in the quality of life for the nation's citizens and the economic well-being of the nation and its states is poorly understood by youth and the general public" (pp. 13-14).

The concept of agricultural literacy has become a significant theme in the literature over the past few decades (Frick et al., 1991; Hatesohl, 1971; Powell et al., 2008; Specht et al., 2014a). Agricultural literacy is a subset of science literacy that refers to the public's level of knowledge about agriculture (Mercier, 2015). Spurred by the work of the National Research Council (NRC) (1988), an agriculturally literate person has been defined as someone who "...would understand the food and fiber system, and this would include its history and its current economic, social, and environmental significance to all Americans" (NRC, 1988, p. 8). The average U.S. consumer lacks both agricultural literacy and scientific attentiveness, which, in turn, could have serious implications for the future of the agricultural industry (Duncan & Broyles, 2006; Miller, 2004; Olper & Swinnen, 2013).

As a result, communication about agricultural production has become urgent as society has experienced an increased need for knowledge about science and technologies (National Academies of Sciences, Engineering, and Medicine, 2017). However, accomplishing such has been more difficult today than in the 20th Century (Burns et al., 2003). As an illustration, since the turn of the 21st Century, advancements in digital communication have provided not only key opportunities but also challenges for science communicators (McLeod-Morin et al., 2020). The goal of science communication has been to share research results, cultivate an appreciation for science, improve understanding of scientific issues, and inform policy decisions for the public (National Academies of Sciences, Engineering, and Medicine, 2017). Case in point, Metag (2020) demonstrated that most individuals obtain their science information, including agricultural science, from various mediums, most notably, the Internet and social media (Metag, 2020). Often these sources use incorrect information and promote food and agricultural marketing trends that may not be grounded in scientific data. This consumer distance from agriculture has resulted in today's media having "more sports reporters than professionals looking out for the safety of our food" (Zumalt, 2003, p. 27).

Despite this, consumers have remained inundated by agricultural products (Muratore & Zarbà, 2011). Therefore, consumers' relationship with the food they consume has become increasingly intricate (Jeong & Lundy, 2017). For example, consumer interest in food has surpassed taste alone and now includes concerns regarding the social and ethical issues underlying

the production of food products (Briggeman & Lusk, 2011; Unnevehr et al., 2010; Zander & Hamm, 2010). It is also important to note that food companies have historically used labels to promote product differentiation (Ares et al., 2013). In response, the FDA has required that most food products include nutrition labeling to describe the nutrients and health claims to ensure they meet federal requirements (FDA, 2013). Beyond mandatory labeling, some manufacturers of food products have voluntarily included other claims such as carbon neutral, certified humane, and non-GMO on their labels to appeal to consumers and market their products better (FDA, 2018).

Food labels have been defined as “any words, particulars, trademarks, brand names, pictorial matter or symbols on any packaging, document, notice, board or collar accompanying or referring to a product” (Dubreuil & Agatiello, 2007, p. 41). However, for a label to be informative, consumers must have prior knowledge (Powers et al., 2020). On this point, Kumar and Kapoor (2017) reported that a statistically significant and positive relationship existed between consumers’ demand for information regarding food production and their willingness to purchase packaged food. Therefore, a food label has been found to be an effective approach to communicating the production methods, ethics, and sustainability of a food product to consumers (Kumar & Kapoor, 2017). This factor has also encouraged consumers to decide whether to purchase a product based on the information provided on the label. Consequently, detailed and well-informed food labels have become essential to the modern food marketing industry (Singla, 2010). In response, some advocates, including agricultural marketing and communications experts, have made significant efforts to revise and regulate food labeling policies and practices (Shen et al., 2018). However, because of a plethora of food label jargon displayed on food packaging, uncertainty among consumers has persisted (Shen et al., 2018).

On this point, Nestle (2010) reported that food products display more symbols and verbiage to indicate nutrition and health benefits than ever before. Further, increased consumer demand for healthier, more sustainable, and ethically sourced food products has made food labeling necessary (Jeong & Lundy, 2017). For example, credible labels indicate the presence of desirable product attributes while simultaneously creating the potential for brands to charge premium prices (McCluskey & Loureiro, 2003). The Pure Food and Drug Act (1906) prohibited companies from labeling their products with statements that were “false or misleading in any particular” (Pure Food and Drug Act, 1906, para. 3). However, after the bill’s adoption, food manufacturers successfully challenged the notion that food labels could not display health claims in court. In 1911, the Supreme Court ruled on *The United States of America v. Johnson* that the Food and Drugs Act (1906) did not prohibit health claims but instead only prohibited false and misleading statements about the ingredients or the presence of pharmaceutical drugs. In response, in 1912, Congress passed the Sherley Amendment that overturned *The United States of America v. Johnson* and permitted legal actions against false and fraudulent health claims (FSIS, 2015). For decades, the FDA interpreted any indication of health benefit on food labels as meeting the criteria outlined in the Food and Drugs Act (1906), which opened producers and processors up to legal challenges. Eventually, however, food companies began to use symbols and terminology to communicate unique nutritional qualities (FSIS, 2015).

Perhaps the most prominent food label symbol that endorsed nutritional quality appeared in 1995 when the American Heart Association introduced a symbol of a heart that represented heart-healthy products (Nestle, 2010). Nutritional quality symbols have also been used by

companies such as PepsiCo and Kraft, which created self-endorsement labeling systems. Self-endorsement labels, also known as Front-of-Package Labels, presented condensed nutritional information on the front of the package in varied forms that were often aesthetically pleasing (Becker et al., 2015). Self-endorsement symbols have been used so frequently that the Consumers Union funded a service to track them (Consumer Reports, 2010). However, with the marketing potential of this food labeling strategy, stringent regulations soon followed.

Because of the critical changes to food labeling, this investigation analyzed a reform effort in U.S. food labeling policy and practice in the 1900s, which dramatically contributed to the current food labeling issues and overall consumer distrust in the agricultural industry. Although each brand, company, and regulating entity has a unique approach and independent responsibilities for the labeling of food products, they also have fundamental commonalities. Describing how these trends have evolved motivated the current study.

### Purpose and Research Questions

This study aimed to document the history of food labeling in the U.S since the adoption of the Food and Drugs Act (1906). As such, this investigation aligned with the American Association of Agricultural Education *Research Priority Area 1: Public and Policy Maker Understanding of Agricultural and Natural Resources* and could provide agricultural communicators an understanding of how legislation and practices have influenced the public's understanding of food labeling (Enns et al., 2016). Two research questions guided the larger investigation:

1. What federal legislation and rulings have shaped food labeling in the U.S.?
2. What practices have shaped food labeling in the U.S.?

### Methods and Procedures

This study used a historical approach (Salevourious & Furay, 2015). "Historical research is the study of events, what people said or wrote, and trends that emerged. Such matters cannot be changed, but the evidence of them varies widely, and their description and interpretation are often revised" (Brooks, 1969, p. 2). In historical research, artifacts from the past can help advance new knowledge productively and practically (LeJeune & Roberts, 2020; Roberts & Edwards, 2015, 2018).

### Data Collection and Analysis

To accomplish this investigation's purpose, we collected primary and secondary sources (see Table 1) to ensure representation from a range of databases (McDowell, 2002). Finding multiple sources of data to triangulate our findings helped improve the study's credibility (Tracy, 2010). The sources were also exposed to internal and external criticism by the researchers (McDowell, 2002). To analyze the data, we created a detailed outline to reveal the interconnectedness of data sources and their relationships to the study's guiding research questions (McDowell, 2002). Thereafter, we analyzed each data source using Saldaña's (2021) coding process outlined in *The Coding Manual for Qualitative Researchers*. As such, the analytic approach we used in this investigation relied on first and second-cycle coding. The first cycle coding approach used was *concept coding* (Saldaña, 2021). Concept coding can be employed to

create “big picture ideas” by allowing researchers to construct meaning from the phenomenon regarding each source of data (Saldaña, 2021, p. 97). After this phase, we reviewed the initial codes and revised our emergent findings to better describe the historical evolution of food labeling in accordance with the study’s two overarching research questions. Next, we used pattern coding to reduce the first cycle codes into categories (Saldaña, 2021). Examples of the emergent categories included: (a) legislation, (b) court decisions, (c) practices, and (d) examples of labeling problems, and more. This process of data reduction allowed us to construct a narrative for each research question in this historical investigation (Saldaña, 2021).

**Table 1**

*Primary and Secondary Sources used in this Investigation*

Type	Sources
Primary	<ul style="list-style-type: none"> <li>● Legislative Acts</li> <li>● Congressional Reports</li> <li>● Judicial Decisions</li> <li>● United States Department of Agriculture National Agricultural Library</li> <li>● Correspondence between Congress and food companies during the creation of early regulations.</li> <li>● Pure Food and Drug Act (1906)</li> <li>● Nutrition Labeling and Education Act (1990)</li> <li>● Sherley Amendment (1912)</li> </ul>
Secondary	<ul style="list-style-type: none"> <li>● Peer-refereed journal articles</li> <li>● Peer-reviewed magazine articles</li> <li>● Books about well-known philosophers</li> <li>● Books about the history of consumer choice</li> <li>● Books about mass communication</li> <li>● Upton Sinclair’s <i>The Jungle</i></li> </ul>

### Reflexivity

The lead researcher was a doctoral student at Louisiana State University. She also has previous research experience and an industry background in nutrition and food labeling. For example, she grew up on family farm and has regularly communicated with industry and government officials about the importance of food labeling and creating new marketing opportunities for family farmers. Because of these experiences, she was uniquely positioned to have access to a range of artifacts and industry insight that helped illuminate the historical context of this investigation. The second researcher was a faculty member at Louisiana State University with a background in historical research. Therefore, he assisted with the analysis of data. It is critical to note that these experiences and biases likely influenced our interpretation of the data.

### Rigor and Trustworthiness

To ensure trustworthiness in this investigation, Lincoln's and Guba's (1985) four standards of rigor: (1) confirmability, (2) dependability, (3) credibility, and (4) transferability. Confirmability calls for researchers to be clear about the influences that shaped the investigation. In this study, we provided insight into our background and biases while also describe the methods and procedures employed. Meanwhile, dependability reflects the extent to which researchers maintain consistency while conducting a study. As such, we conducted a thorough audit of our data collection and analysis procedures to ensure they were accurate. Credibility, the third standard, speaks to whether a study's findings *ring true* in their given context. To uphold this criterion, we triangulated our findings using multiple sources. Finally, transferability represents if the findings could be transferred across contexts. To accomplish this, we described our data collection and analysis procedures and revealed the biases that likely influenced our interpretation of the findings.

## Findings

### Research Question #1: What Federal Legislation and Rulings have Shaped Food Labeling in the U.S.?

Since the early beginnings of food labeling, the U.S. government has sought to intervene to improve human health and safety (NALC, 2013). In the U.S., food labeling has historically been supervised by the United States Department of Agriculture (USDA), the United States Food and Drug Administration (FDA), and the United States Federal Trade Commission (FTC) (NALC, 2013). Housed within the USDA, the Food Safety and Inspection Service (FSIS) has been the public health agency responsible for enforcing accurate labeling regulations regarding the country's commercial supply of meat, poultry, and egg products (FSIS, 2015).

Following Upton Sinclair's book, *The Jungle*, the Food and Drugs Act (1906) was passed as a reaction to public outrage. This bill outlawed interstate commerce of misidentified or contaminated food items. Sinclair's vivid descriptions of unsanitary conditions in meat-packing plants coupled with depictions of spoiled meat shocked the U.S. public. Because of its bold description of low food safety and quality standards, *The Jungle* inspired the first of many policies that would aim to ensure a safe food supply. The novel's plot followed a Lithuanian immigrant who sought the American dream but found work in a filthy, unsanitary meat processing facility. The novel was intended to raise awareness of the unfair working, living, and economic conditions that immigrants to the U.S. faced (Sinclair, 1906). To much surprise, the public was outraged about the unsanitary and mislabeled meat and food safety-related issues presented in the novel. The unsanitary working conditions, poorly ventilated plants, and meager wages that were vividly described had previously received little attention from the public. Before writing *The Jungle*, Sinclair was known for examining and writing about economic and social injustices. However, he became an accidental muckraker because of his vivid account of the deficiencies in U.S. meat-packing plants.

To discuss his work and shed light on his experiences in a U.S. slaughterhouse, President Roosevelt invited Sinclair to the White House (Constitutional Rights Foundation, 2008). The President then appointed a team of commissioners to conduct a comprehensive investigation of the five slaughterhouses in Chicago. After inspecting meat-packing facilities, the special commission issued its report. The report corroborated nearly all of the conditions that Sinclair had written about to much public dismay. The commissioners recommended that inspections occur at

slaughter to ensure animal health at every stage of meat processing. Further, the commission called for the Secretary of Agriculture to create a policy that required “cleanliness and wholesomeness of animal products” (Constitutional Rights Foundation, 2008, pp. 16-17).

Despite opposition from meatpackers, Roosevelt enacted the Meat Inspection Act (1906). The policy authorized inspectors from the U.S. Department of Agriculture to intervene in interstate and foreign commerce and ensure that misbranded or spoiled meat did not enter the food supply (USDA, 1906). After the passage of the Meat Inspection Act (1906), Congress also passed laws that regulated the sale of most other foods and drugs. In fact, President Roosevelt concurrently enacted the Pure Food and Drug Act (1906) and the Meat Inspection Act (1906). The Pure Food and Drug Act (1906) provided regulation of food additives and prohibited labeling that could be misinterpreted or deceptive. Consequently, the Pure Food and Drug Act (1906) created a need for a regulating agency and led to the development of the federal Food and Drug Administration (FDA) (Constitutional Rights Foundation, 2008). The two laws passed in 1906 ultimately increased consumer confidence in the foods they purchased (Wakefield et al., 2012).

However, after the bill’s adoption, food manufacturers successfully challenged the notion that food labels could not display health claims in court. In 1911, the Supreme Court ruled on *The United States of America v. Johnson* that the Food and Drugs Act (1906) did not prohibit health claims but instead only prohibited false and misleading statements about the ingredients or the presence of pharmaceutical drugs. In response, in 1912, Congress passed the Sherley Amendment that overturned *The United States of America v. Johnson* and permitted legal actions against false and fraudulent health claims (FSIS, 2015). For decades, the FDA interpreted any indication of health benefit on food labels as meeting the criteria outlined in the Food and Drugs Act (1906), which opened producers and processors up to legal challenges.

After the passage of the Sherley Amendment in 1912, no significant legislative or judicial rulings influenced the food industry for nearly half a century (FSIS, 2015). However, in the 1960s, a debate about the importance of communicating potential food allergens on labels began to emerge in the public sphere (Nestle, 2010). In response, Congress passed The Fair Packaging and Labeling Act (1967), which applied to the labeling of foods regulated by the FDA, including “poultry, most meats, certain egg products, and most alcoholic beverages regulated by other Federal agencies” (FDA, 2013, p. 2). This legislation required food companies to identify any ingredients considered significant food allergens or that contained proteins derived from a food allergen clearly on their label. According to the FDA, more than 160 foods have been identified that can cause adverse effects for individuals who have food allergies. The eight major food allergens identified by the law were milk, eggs, fish (e.g., bass, flounder, cod), crustacean shellfish (e.g., crab, lobster, shrimp), tree nuts (e.g., almonds, walnuts, pecans), peanuts, wheat, and soybeans (FDA, 2013).

Despite the risk of legal ramifications, food companies continued to list nutrient contents and claims of health benefits. Manufacturers understood the marketing potential by identifying loopholes in legislation and began advertising foods with high levels of vitamins and nutrients to imply added health benefits (Nestle, 2010). Although the FDA attempted to limit this practice, companies lobbied for the right to market their products freely. In 1969, President Nixon assembled the *White House Conference on Food, Nutrition, and Health* to investigate ending

hunger and malnutrition. As a result of the work achieved at this conference, leaders recommended nutrient information to be displayed for wheat, corn, rice, snack foods, and chocolate (Conference on Food, 1969). To address growing public health concerns, the FDA permitted food packages to indicate “contains [seven] essential nutrients” but continued to prohibit any indication that food products could prevent or remedy disease (FDA, 2018). The FDA maintained that such statements involved pharmaceutical claims that required scientific data for verification (FDA, 2018).

By 1984, Kellogg’s collaborated with the National Cancer Institute to launch a campaign that endorsed health-related claims regarding All-Bran cereal. Within six months of the collaboration, the sales of All-Bran cereal increased by 47%, which suggested that health claims appealed to consumers (Levy, 1987). As a result of this success, Kellogg’s argued a legal basis for health claims and filed a petition with the FDA (Kellogg, 1985). When the Nutrition Labeling and Education Act (1990) was passed, the U.S. Congress incorporated the petition’s suggestions and instructed the FDA to authorize health claims on foods that were accompanied by scientific evidence. Then, four years later, Congress enacted the Dietary Supplement Health and Education Act (1994). This policy allowed food supplement labels to include claims of improving the function of the body. When dietary supplements received this clearance, food companies soon demanded similar approval. However, the FDA’s Modernization Act (1997) and federal litigation during the early 2000s under the George W. Bush administration weakened the FDA’s power to prevent such actions.

For decades, food packages have included indicative labels and nutrition messages to help consumers differentiate products and provide information about nutrition (Kees et al., 2014). However, some lines have been blurred in recent years regarding whether some information provided on labels should be considered essential or unnecessary (Ikonen et al., 2020). In response, The Nutrition Labeling and Education Act (1990) amended the Federal Food, Drug, and Cosmetic Act (1938). This amendment instated the requirement that most packaged food labels include a standardized nutrition label. Food manufacturers were also required to disclose nutritional attributes on labels and undergo more stringent regulation by the FDA. For example, food companies could not make nutrient content claims if they had not met federal labeling criteria (Wartella et al., 2010). However, it should be noted that this statute did not regulate the labeling of meat and poultry products. By the mid-1990s, Food and Drug Administration (FDA) pushed for greater food labeling transparency, which eventually led to the adoption of the Food Allergen Labeling and Consumer Protection Act (2004). The bill’s intent was twofold regarding food labeling: (1) encourage heart health through nutritional transparency, and (2) help Americans prevent health risks associated with food allergies. Since the bill’s enactment, the FDA has enforced regulations to ensure that foods produced and sold, i.e., domestically and globally, have remained safe, properly labeled, and of the highest quality (FDA, 2013).

### **Research Question #2: What Practices have Shaped Food Labeling in the U.S.?**

Although laws and regulations have shaped the criteria that must be included on food packages regarding allergens and other health-related information, there has been little stipulation about what can be printed on labels (Wartella et al., 2010). As such, many third-party food brands have opted out of traditional USDA regulations and developed independent criteria and practices. Because of this, Wartella et al. (2010) reported that most third-party U.S. food companies had used unverified nutritional information, jargon, and aesthetically pleasing symbols that have led to confusion among consumers.



One example of such a company has been Vital Farms. This food company has been one of several brands emphasizing animal husbandry and novelty rearing environments, such as pasture-raised poultry and egg products. Vital Farms began by providing customers with shell eggs and expanded their product base to butter and ghee, and more recently, they created a popular breakfast and snack item called egg bites (Vital Farms, 2020). Vital Farms has operated under the mission of bringing “ethically produced food to the table by coordinating a collection of family farms to operate under a well-defined set of organic agricultural practices that includes the humane treatment of farm animals as a central tenet” (Vital Farms, 2020, para. 2). Through the marketing of this agricultural production approach, Vital Farms has encouraged consumers to adopt alternative egg choices rather than products from what they consider harmful industrial practices (Vital Farms, 2020). The claims found on Vital Farms’ packaging have been emotionally driven and encouraged the consumer to form a mental image of the environment in which their products have originated (see Figure 1). In addition to the claims on this brand’s package, this product used a Certified Humane Raised and Handled® label. As of 2021, the USDA has not regulated any of Vital Farms’ products (Vital Farms, 2021). However, questions have emerged about Vital Farms’ and similar brands’ choice to bypass government regulation, especially regarding how they raise, harvest, and market their products (Britwum et al., 2021). As such, Vital Farms has continued to market its products as superior.

**Figure 1**

*Vital Farms Pasture-Raised Egg Carton*



*Note.* Image used with permission from Vital Farms.

Before the turn of the 21st century in the U.S., a significant need for food labeling reform emerged. A group of advocates, known as *progressives*, led the reform that aimed to address economic and social issues caused by the rapid growth of food manufacturing factories (Constitutional Rights Foundation, 2008). During this time, the progressives attacked corporations such as Standard Oil, U.S. Steel, and meat-packing companies for what they described as unjust practices (Constitutional Rights Foundation, 2008). The progressives argued that corporate food manufacturing companies destroyed free enterprise, controlled market prices, and treated workers

fairly (Constitutional Rights Foundation, 2008). However, their core mission was to inspire better food labeling practices by U.S. food companies (Constitutional Rights Foundation, 2008).

In response to progressives' calls, U.S. food manufacturing companies began using an advertising strategy called Front-of-Package Nutrition Labeling to include nutrient content and health claims (FDA, 2009). As a part of its authority over labeling, the FDA oversaw food Front-of-Package labeling regarding the following key areas: (1) ingredients (listed in order of prominence), and (2) nutrition facts such as serving size, calories, fat, carbohydrates, sodium, protein, nutritional content (e.g., low fat, high fiber, high fiber), health claims, raw fruits, vegetables, fish, and allergy information (FDA, 2009). Because of their authority over Front-of-Package Nutrition Labeling, the FDA (2009) began to examine the effects of the practice on consumer confidence.

The FDA (2009) concluded in an extensive report that Front-of-Package Nutrition Labeling led to consumer misinformation and reduced confidence regarding a food's health attributes. Further, the practice has also made it "less likely that consumers will read the complete nutrition facts information on the back of the package" (FDA, 2009, p. 1). These findings also led to the release of the *Point of Purchase Food Labeling Standards* (FDA, 2009). Further, the Center for Food Safety and Applied Nutrition released an industry letter in which they addressed the role that this practice had on the food and agricultural industries and how they planned to address issues moving forward (FDA, 2009). Highlights from the letter included:

It is...essential that both the criteria and symbols used in front-of-package and shelf-labeling systems be nutritionally sound, well-designed to help consumers make informed and healthy food choices, and not be false or misleading. The agency is currently analyzing Food of Purchase labels that appear to be misleading. The agency is also looking for symbols that either expressly or by implication are nutrient content claims. We are assessing the criteria established by food manufacturers for such symbols and comparing them to our regulatory criteria. (FDA, 2009, para. 3)

Despite addressing these concerns, which promised more thoughtful and stringent regulation, Britwum et al. (2021) argued that governing agencies have done little to provide guidance to third-party food companies on standards to promote transparency through food labeling. As a result, creating more stringent food labeling symbols and terms regulations has been more challenging than initially anticipated (Britwum et al., 2021). Nevertheless, some progress appears to have been made. For example, the FDA (2016) modified the guidelines for Nutrition Fact Labels to promote consumer education. In addition to marketing tactics for food products, another practice that emerged after the turn of the 21st Century was the rise of value-added product attribute labels and terms (Batte et al., 2007; Gadema & Oglethorpe, 2011; Loureiro & Umberger, 2007). These labels (see Figure 2) have included terms that have indicated superior production, e.g., Organic and Certified Naturally Grown, the absence of additives, e.g., Non-GMO and Gluten-Free, as well as indicators of social and high animal welfare standards, e.g., Carbon Trust, Fair Trade, and Certified Humane.

**Figure 2***Examples of Value-Added Food Labels*

*Note.* Images of common value-added food labels. <sup>1</sup>USDA-Organic Label (Left-Top), <sup>2</sup>Certified Naturally Grown Label (Top-Center), <sup>3</sup>Non-GMO Verified Label (Top-Right), <sup>4</sup>Gluten Free Label (Bottom-Left), <sup>5</sup>Carbon Neutral Label (Bottom-Center), and <sup>6</sup>Certified Humane Label (Bottom-Right).

This branding device was intended to inspire greater consumer confidence and expand niche markets; however, Ben-Shahar (2016) reported that value-added product attribute labels and terms had been limited in their effectiveness because consumers have interpreted them as unclear. In response, independent companies have explored the power of displaying labels as a multidimensional component of food marketing in which they offer products in a variety of unique formats to inform consumers about more than just food quality attributes (Hieke & Taylor, 2012; Kiesel et al., 2011). Further, Shen et al. (2018) also explained that food companies had begun to invest more vigorously in food label elements such as graphic design, colors, and font choice to gain consumers' trust. Consequently, agricultural communicators could play a pivotal role in shaping the food labeling movement in the future (Shen et al., 2018).

### **Conclusions, Discussion, Implications, and Recommendations**

Today our world demands sustainability and transparency from the agricultural industry (Food and Agriculture Organization of the United Nations, 2017, p. 3). Consumers have been reported to be more concerned about the production, manufacturing, and marketing of their food than ever before (Food and Agriculture Organization of the United Nations, 2017). However, the public's opinion of production agriculture has primarily hinged on media's depictions of animal husbandry, biotechnology, pesticides, herbicides, and hormones (OECD, 2012). Based on the findings of this investigation, we conclude that food labels were initially intended to provide

consumers with a deeper knowledge of the food they purchased. However, key legislative acts such as the Fair Packaging and Labeling Act (1967) and the Nutrition Labeling and Education Act (1990) shifted the food labeling movement into a branding device to differentiate products and brands from one another – a finding that aligns with previous research (Dubreuil & Agatiello, 2007; Nestle, 2010).

The overwhelming amount of information on food labels appears to have contributed to consumer confusion (Britwum et al., 2021). Although third-party brands, such as Vital Farms, have developed their own standards for food labels, we conclude that their efforts to educate consumers have been negligible. Further, we also conclude that third-party labels' consumer education programs have not benefitted the agricultural industry – a finding that has not been reflected in the broader literature. Despite this, Kumar and Kapoor (2017) reported that consumers have been concerned about methods of food production and raising environments of livestock. Because protein consumption has been a significant component of Americans' diets in the last decade (Kumar & Kapoor, 2017), it is vital to evaluate and understand consumers' perceptions of animal agriculture as well as the conventional and modern raising standards by which livestock have been raised. As such, we recommended that agricultural practitioners explore new ways to communicate this message more effectively. Previous research has shown that consumers trust producers as sources of information (Pew Research Center, 2016). In response, we recommend that producers incorporate more personal and emotional appeals when marketing agricultural products to better compete with third-party branding efforts.

This historical examination also illuminated an important implication for the food industry going forward – that consumers desire food brands' values and meanings to be communicated more explicitly. For instance, Muratore and Zarbà (2011) found that the package design of food products has also been a critical factor in purchasing decisions. As such, we call for marketers of agricultural products to develop modern branding strategies for traditional food products. We also concluded that the findings of this study contributed to knowledge regarding the need to reevaluate and possibly amend food label laws and regulations to ensure greater acceptance (Roberts & Edwards, 2020). Therefore, agricultural advocates and community groups should begin to reexamine food labeling policy to determine the necessary changes that could be made to create a more transparent future. Another important conclusion from this investigation was that notable differences existed between the past and the present regarding food labeling and consumer concerns (Wakefield et al., 2012). For example, in the early 1900s, consumers had little access to information. When consumers learned about food production practices through Sinclair's (1906) novel, *The Jungle*, they were repulsed and disappointed. In contrast, the modern consumer has been presented with so much information that it has made it difficult to distinguish between truth and fallacies. Moving forward, we recommend that future research explore how food companies can better establish trust with consumers through the food labels they encounter.

Based on the findings of this investigation, future research should analyze the branding strategies of third-party labels and how they have affected the brand's efforts. Such a change could shift the focus to consumers' and producers' reactions regarding marketing efforts to determine the most effective communication for each brand (Fergus et al., 2021). For example, Vital Farms has developed innate, distinguishable packaging for their products and developed labels such as *Certified Happy*, *Freedom to Forage Outdoors Year-Round*, *Ethical Eggs*, *Hens Loving Life*

*Outdoors*, and other non-regulated, value-added claims. In the future, research should explore the marketing and branding strategies used by companies that have created their own standards for agricultural products with a niche brand.

A large portion of consumers in the U.S. have been disconnected from agriculture and farming (Wakefield et al., 2012). Packaging and labeling have fundamental roles in ensuring the safe delivery of goods through a supply chain to the end consumer that adequately informs them of the product's contents (Hurley et al., 2013). The evidence presented in this historical investigation illuminated a disconnect between food manufacturers' practices and governing agencies' labeling policies. Therefore, industry professionals should advocate for agricultural literacy among youth to encourage better-educated consumers. Consumers deserve to know what they are buying, where it comes from, the nutrients of each product, and to be assured it has met USDA quality and safety standards. Currently, loopholes in food labeling policy have made it possible for misleading labels to be used on a variety of food products. Food labels have historically been often one of consumers' only connections to agricultural producers (Nestle, 2010). Consequently, issues surrounding the labeling of food warrant greater attention by agricultural communicators moving forward.

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