Articles

CONSUMER POWER TO CHANGE THE FOOD SYSTEM?
A CRITICAL READING OF FOOD LABELS AS GOVERNANCE SPACES:
THE CASE OF AÇAI BERRY SUPERFOOD
Christine Parker, Hope Johnson, and Janine Curll

THE CLASH OF AGRICULTURAL EXCEPTIONALISM AND
THE FIRST AMENDMENT:
A DISCUSSION OF KANSAS’ AG-GAG LAW
Meredith Kaufman

BLOCKCHAIN MEETS GENOMICS:
GOVERNANCE CONSIDERATIONS FOR PROMOTING
FOOD SAFETY AND PUBLIC HEALTH
Walter G. Johnson

FEDERAL REGULATION OF PESTICIDE RESIDUES:
A BRIEF HISTORY AND ANALYSIS
Kate Z. Graham

LEGISLATIVE AND EXECUTIVE BRANCH DEVELOPMENTS
AFFECTING THE UNITED STATES DEPARTMENT OF
AGRICULTURE SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM
Sheila Fleischhacker, Alyssa Moran, and Sara N. Bleich

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CONTENTS

ARTICLES

Consumer Power to Change the Food System? A Critical Reading of Food Labels as Governance Spaces: The Case of Açaí Berry Superfood

Christine Parker, Hope Johnson, and Janine Curll

The Clash of Agricultural Exceptionalism and the First Amendment: A Discussion of Kansas’ Ag-Gag Law

Meredith Kaufman

Blockchain Meets Genomics: Governance Considerations for Promoting Food Safety and Public Health

Walter G. Johnson

Federal Regulation of Pesticide Residues: A Brief History and Analysis

Kate Z. Graham

Legislative and Executive Branch Developments Affecting the United States Department of Agriculture Supplemental Nutrition Assistance Program

Sheila Fleischhacker, Alyssa Moran, and Sara N. Bleich
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Consumer Power to Change the Food System?
A Critical Reading of Food Labels as Governance Spaces:
The Case of Açai Berry Superfoods

Christine Parker,* Hope Johnson** and Janine Curll***

Abstract:
This article argues that the marketing claims on food labels are a governance space worthy of critical examination. We use a case study of superfood açai berry products to illustrate how marketing claims on food labels encapsulate dominant neoliberal constructions of global food systems. These marketing claims implicitly promise that by making careful choices consumers can resist and redress the ravages of unbridled global capitalism. Food labels suggest that consumers can use market signals to simultaneously govern our own selves and the market to ensure sustainable, fair, and healthy consumption. In response, this article develops, justifies and applies a socio-legal approach to researching food chain governance which uses the food label as its unit of analysis and traces from the micro level of what the everyday consumer is exposed to on a food label to the broader governance processes that the food label both symbolizes and effects. We demonstrate our approach through a “label and chain governance analysis” of açai berry marketing claims to deconstruct both the regulatory governance of the chain behind the food choices available to the consumer evident from the label and the way in which labels seek to govern consumer choices. Our analysis unpacks the nutritionist, primitivist undertones to the health claims made on these products, the neo-colonial and racist dimensions in their claims regarding fair trade and rural socio-economic development, and, the use of green-washing claims about biodiversity conservation and ecological sustainability. Through our application of this approach to the case study of açai berry product labels, we show how food labels can legitimize the market-based governance of globalized food chains and misleadingly suggest that capitalist production can be adequately restrained by self-regulation, market-based governance and reflexive consumer choices alone. We conclude by suggesting the need for both greater deconstruction of the governance assumptions behind food labels and to possibilities for collective,

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public interest oriented regulatory governance of both labelling and the food system.

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I.  Introduction

To read the marketing claims on the label of an exotic superfood sold in Western countries like the United States and Australia, such as the Amazonian açaí berry, is to be promised a “healthier you,”\(^1\) a more sustainable food system and a kinder, gentler capitalism. One brand of açaí berry product, for example, tells us that, “for countless centuries, the people of the Amazon have revered this unique fruit for its nutritional content and prized it as a source of health and vitality.”\(^2\) Another promises that “now you can unlock the energy of the Amazon and better health everyday.”\(^3\) A third assures us that, despite its healthfulness and exoticness, açaí

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1 This emphasis on individual health, and personal control over bodily health, is consistent with neoliberal approaches to regulating health. See, e.g., Casimir MacGregor, Alan Petersen & Christine Parker, *Hyping the market for ‘anti-ageing’ in the news: From medical failure to success in self-transformation*, 13 *BioSocieties* 64 (2018).


3 *Id.* at 316.
berries taste delicious and familiar like “a fruit sorbet with hints of dark chocolate and red wine.”

These claims encapsulate dominant neoliberal constructions of global food systems as capable of providing ethical, healthy products through supply chains significantly governed and arranged by market signals. These marketing claims implicitly task consumers with sending the “right” market signals to shape food supply chains and reinforce the positioning of consumers as regulators of our own consumption and the ultimate determiners of our own bodily health. Açaí berry marketing suggests that if we consumers govern our choices “correctly” by eating these “utopian edibles,” we can protect ourselves from cancer, aging and heart disease. Moreover, we can simultaneously alleviate poverty and related inequalities experienced by the indigenous inhabitants of the Amazon while preserving biodiverse ecologies. In short, we are told that by making careful choices based on the marketing and information on food labels we can resist and redress the ravages of unbridled global capitalism, while simultaneously governing our own selves and the market to ensure sustainable, fair, and healthy consumption.

The second part of this article argues that the food label is itself a governance space worthy of critical examination. We define the food “label” broadly, in line with legal definitions, as including all the tags, brands, marks, statements, representations, designs and descriptions on food and its packaging and made or displayed to consumers when it is sold. Collectively, we consider these aspects

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7 This wording is based on the definition of “label” in Standard 1.1.2 of Australia New Zealand Food Standards Code. Broad definitions of food labels are common across jurisdictions consistent with the definition provided by the Codex Alimentarius which is the source for international food standards. Codex Alimentarius, CODEX STAN 1-1985[2] (Rev. 1-1991) defines a label as “any tag, brand, mark, pictorial or other descriptive matter, written, printed, stenciled, marked, embossed or impressed on, or attached to, a container of food.” The US, for instance, defines “label” as “a display, written, printed or graphic matter upon the immediate container of any article.” Federal Food, Drug, and Cosmetic Act, 21 U.S.C § 321(k) (2012); while labelling means “all labels and other written, printed or graphic matter (1) upon any article or any of its containers or wrappers, or (2) accompanying such an article.” Federal Food, Drug, and Cosmetic Act, 21 U.S.C § 321(m) (2012).
of the food label to visibly manifest a series of (contestable) governance processes that influence both the choices presented to us as consumers, and also how we understand what we do when we choose one or another food.

Our approach draws on Dorothy Smith’s “sociology for people” to unpack the complex social and institutional arrangements within which everyday experience is embedded. We also draw on the insights of regulatory studies scholarship for our understanding of food labels as governance spaces. This scholarship understands regulation as emerging from the interactions, stories and power contests between government, industry and civil society organizations and individuals in any particular domain. Food labelling is a governance space, we posit, because the information, stories and images provided (and what they leave out, simplify or exaggerate) reflect the outcomes of those contests. Practices and decisions concerning the sourcing, processing and transporting of produce, and the contractual, legislative and voluntary certification conditions under which these activities occur, illuminates where regulatory power lies in food chains and for what purposes it is being exercised.

Food labelling is also a governance space in the sense that it is a forward attempt to influence the choices of individual consumers. People make choices about what to consume based on their self-identity, and construct consumption as a form of self-expression and status signaling. Consumer choices are, therefore, performative. They shape and reinforce our agency, identity, subjectivities, and intentions, including our conceptions of the responsibilities

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8 See Dorothy E. Smith, Institutional Ethnography: A Sociology for People 29 (2005).
consumers have to govern themselves and the market. Neoliberal governance thus enlists the consumer as a governance agent of themselves and of broader social change. We, therefore, suggest the need for a “label and chain governance analysis” for deconstructing both (a) the regulatory governance of the chain behind the food choices available to the consumer evident from the label and, relatedly, (b) the way in which labels seek to govern consumer choices.

The third part of the article introduces our case study of açaí berry “superfood” product labelling in Australia. The remainder of the article uses this case study to illustrate how our approach to deconstructing food labels as governance spaces can draw out the multiple, varied and complex politics of the global food system starting from the standpoint of the everyday consumer and uncovering the institutions and governance arrangements that support the supply chain as a whole.

We show that misleading claims on labels go beyond simply attracting customers via meaningless puffery. Rather, these claims reinforce the neoliberal ideology, and related governance trajectory, that consumer power and markets are the optimal regulatory instrument for food systems. Through a close inspection, we unpack the nutritionist, primitivist undertones to the health claims (Part IV), the neo-colonial and racist dimensions in the description of the traditional groups behind açaí production connected to claims regarding fair trade and rural socio-economic development (Part V), and, finally, the use of green-washing claims about biodiversity conservation and ecological sustainability (Part VI). By depicting açaí as a product that can address a multitude of food system issues

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12 See Josee Johnston, Michelle Szabo & Alexandra Rodney, Good food, good people: Understanding the cultural repertoire of ethical eating, 11 J. CONSUMER CULTURE 293 (2011); see also Dr Mara Miele & Adrian Evans, When foods become animals: Ruminations on Ethics and Responsibility in Care-full practices of consumption, 13 ETHICS, PLACE & ENV’T 171 (2010).


14 This article furthers the socio-legal analysis of food label first developed by Parker: see Christine Parker, The Food Label as Governance Space: Free-Range Eggs and the Fallacy of Consumer Choice, 35 RECHT DER WERKELIJKHEID, 101 (2014); see also Christine Parker & Josephine De Costa, Misleading the Ethical Consumer: The Regulation of Free-Range Egg Labelling, 39 MELB. U. L. REV. 895 (2015); see also Christine Parker et al., Can the Hidden Hand of the Market be an Effective and Legitimate Regulator? The Case of Animal Welfare Under a Labeling for Consumer Choice Policy Approach, 11 REG. & GOVERNANCE 368 (2017); see also Christine Parker, Rachel Carey & Gyorgy Scrinis, The Meat in the Sandwich: Welfare Labelling and the Governance of Meat-Chicken Production in Australia, 45 J. L. & SOC’Y 341 (2018). See also further discussion infra at Part II C.
while still being a globally traded commodity, the need for collective, public-interested responses to global and local issues are obscured such as public health, social justice, rural development, conservation and ecological limits. Moreover, claims on food labels can contribute, as will be seen in the case of açai, to recreating the types of food chains the claims purport the product to transform.

The final part of this article (Part VII) turns to the implications the analysis has for the (de)construction of the chains binding consumer governance choices. We suggest an urgent need for scholars and activists to tease out the implications of analyses like these in terms of what choices consumers do and do not have, and what possibilities there are for friction and contestation in the governance chain for an emancipatory politics of the label. Critically examining the label as a (market) governance space points to the places where holistic food policy interventions at the national and international level are urgently needed to both empower citizens and create healthier, fairer and environmentally regenerative food systems.

II.  Background and Methodological Approach

A. Consumer choice governance and global food chains

As food supply chains expand globally, and food-processing technologies develop, consumers have more available options than ever before. Historically, colonial empires organized and controlled global food supply chains, and later food supply chains were organized around nation-states.15 Today, global food supply chains are arranged largely through networks of actors that operate somewhere “between arm’s length markets, on the one hand, and large vertically integrated corporations, on the other.”16 The actors within food supply chains develop, monitor or comply with varying regulatory instruments, such as corporate or international institutional codes of practices, guidelines, and standards, domestic and international laws, and contractual agreements. Meanwhile, state interventions in global supply chains are limited and shaped by, among other constraints, international trade and investment treaties.17

15 Harriet Friedmann & Philip McMichael, Agriculture and the State System: The rise and decline of national agricultures, 1870 to the present, 29 SOCIOLOGIA RURALIS 93, 96 (1989).
17 See, e.g., Anne Marie Thow et al., Will the next generation of preferential trade and investment agreements undermine prevention of noncommunicable diseases? A
With reduced state intervention, and notably high levels of corporate concentration, global food chains represent a neoliberal approach to governance in which private regulation and consumer choice are key organizing principles for food systems. Underpinning these principles is the rationale that consumer choices send market signals through supply chains to the actors that influence where and how the supply chain functions, and under what conditions. When consumer choices are understood as holding the power to transform food value chains, then it falls heavily on each individual to make choices that contribute to food systems consistent with commonly shared values such as fairness and environmental stewardship. Given this positioning, consumer choice and individual responsibility can be understood as “a regulatory regime based on voluntarism, market solutions and the state acting at a distance.”

In this context, food labelling takes on a broader and deeper significance than solely a written descriptor of contents. Rather, food labels play a central role in framing the implications of food choices for the individual in terms of their identity, health status and social relationships, and with regard to signaling that consumer choices influence decisions made in supply chains.

Three separate bodies of work question the framing of consumer choice as a solution to health, environmental and justice issues in food systems. The first body of work centers on critically reviewing the dominant construction of individuals as responsible for their food choices and diet-related health outcomes. Scholars

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21 See generally, Steven Shapin, *Expertise, Common Sense, and the Atkins Diet, in EXPERTISE, COMMON SENSE, AND THE ATKINS DIET* 174 (J Porter & PWB Phillips eds., 2007), https://dash.harvard.edu/handle/1/3425897 (finding that people are inclined to follow government food pyramids or privately researched diet plans); Robert Crawford, *Health as a Meaningful Social Practice*, 10 HEALTH 401, 402 (2006) (stating that “personal responsibility for health is widely considered the sine qua non of individual autonomy and good citizenship.”); see also, JONATHAN M. METZL & ANNA KIRKLAND, *Against Health: How Health Became the New Morality* 9 (2010) (claiming that “individuals striving for health, are in some
acknowledge that individuals are, to an extent, personally responsible for their food choices and related health outcomes. Critically, though, environmental factors are significant determinants for the overconsumption of unhealthy foods. As Roberto et al. explains:

A series of environmental factors are exploiting biological, psychological, social, and economic vulnerabilities of people in ways that undermine their ability to act in their long-term self-interest. The high profits that come from the successful exploitation of vulnerabilities are often the driving force behind environmental changes that promote overconsumption of food.22

Researchers have examined the various strategies used to exploit these vulnerabilities. For instance, Scrinis23 and Nestle24 show how the reductive emphasis on individual nutrients suits the commercial interests of food manufacturers. Similarly, Dixon and Banwell25 and Penders and Nellis26 critically investigate how interactions between food corporations, diet-disease researchers and other groupings of professionals (e.g. dietitians, chefs, personal trainers) construct credibility for food marketing claims, which in turn influences the scientific evidence on which regulators base their responses to product claims.

The second body of work has focused on public regulation and private accreditation of particular ethical and political claims on food labels such as fair trade, organic, higher animal welfare and various quality and terroir claims.27 This line of research illuminates instances, rendered more difficult by the ways in which health are culturally configured and socially sustained.”) see also, Janne Huovila & Sampsa Saikkonen, Establishing credibility, constructing understanding: The epistemic struggle over healthy eating in the Finnish dietetic blogosphere, 20 HEALTH 383–400 (2016).

25 Dixon and Banwell, supra note 13, at 1.
27 See generally, Julie Guthman, The Polanyian Way? Voluntary Food Labels as Neoliberal Governance, 39 ANTIPODE 456, 456 (2007) (stating “[w]e expand upon the notion of the ‘credibility cycle’ through a study of credibility engineering by the food industry.”); see also, Brian Ilbery et al., Product, Process and Place: An
how consumer anxieties about, and distrust of, industrially produced, processed and distributed foods have created demand for niche markets and related schemes for verifying ethical claims. Consumer choices are constructed as performances of moral and political acts such as ethical or sustainable consumption, political consumerism and developmental consumption. Evan and Miele observe, “ethical food labels reflect a socio-political environment in which consumption is deemed to be an appropriate, if not a preeminent, field through which to exert influence over the ethics of the entire food system.” Yet much of this work shows that voluntary food label schemes create, at best, incremental and contingent change, and generally fail to create the space for deeper transformations of industrial food systems. Indeed, these ethical and political claims tend to legitimize, green-wash and reinforce confidence in the ability of market mechanisms to address food system issues.

The final key body of work connects the normative claims made through advertisements with cultures and societal structures that not only encourage but also depend on the over-consumption of

Examination of Food Marketing and Labelling Schemes in Europe and North America, 12 EUR. URBAN & REGIONAL STUD. 116, 117 (2005) (discussing the importance of proper food labelling); HENRY BULLER & EMMA ROE, FOOD AND ANIMAL WELFARE (2018) (stating “[t]he central argument of this original book… is that the concern for the welfare of farm animals… constitutes a significant and vital linkage between the processes and the acts of consumption and production.”); TIM BARTLEY ET AL., LOOKING BEHIND THE LABEL: GLOBAL INDUSTRIES AND THE CONSCIENTIOUS CONSUMER (2015) (exploring the link between consumption and production processes in global industries).


Adrian Evans & Mara Miele, Food Labelling as a Response to Political Consumption, in ROUTLEDGE HANDBOOK ON CONSUMPTION 191 (Margit Keller et al. eds., 2017).

food. The term “consumptogenic” environments refer to the varied factors that encourage individuals to excessively consume unhealthy products such as a societal emphasis on economic growth, marketing that fosters personal insecurity, and a culture that values fulfilling wants.\textsuperscript{33} The extreme emphasis on individualism within capitalist societies, \textit{inter alia}, encourages individuals to construct their self-identity and communicate their status to others through their consumption choices.\textsuperscript{34} In the case of food, the global trend away from consuming traditional foods based on distinct food cultures and ecosystems towards “Westernised” diets has diluted previously clear social rules around consumption.\textsuperscript{35} Consumers now depend heavily on food marketing including food labels (broadly defined) to construct their own value system for making food choices, which in turn informs their views of self.\textsuperscript{36} In our analysis of açaí berry labels below, we draw particularly on Warde’s argument that four sets of contradictory advice were commonly used to structure food choice in advertisements in British women’s magazines.\textsuperscript{37} These are (1) novelty and tradition; (2) health and indulgence; (3) convenience and care; and (4) economy and extravagance.\textsuperscript{38} Consistent with Bourdieu’s conceptualizations of the feedback loops between consumer choices, social position, and lifestyle, Warde argues that these “antinomies of taste” are far more than mere marketing devices.\textsuperscript{39} Rather, he suggests they are aimed at allaying consumer anxieties in relation to “real, contradictory appeals, representing social pressures that operate on food choice.”\textsuperscript{40} Similarly, Schneider and Davis’ content analysis of several decades of the Australian Women’s Weekly (Australia’s most popular magazine) shows how food advertisements purposely exploit these “antinomies of taste” to


\textsuperscript{34} See \textit{SEBASTIEN CHARLES, PARADOXICAL INDIVIDUALISM: AN INTRODUCTION TO GILLES LIPOVETSKY, HYPERMODERN TIMES} 1, 15 (ANDREW BROWN TRANS., 2005).

\textsuperscript{35} This trend is termed the “nutrition transition” and is associated with the “double burden of malnutrition” which refers to the converging malnutrition-related issues within societies and populations, that is, the prominence of diet-related NCDs associated with obesity and the continuation of undernutrition (i.e. hunger). See Barry M. Popkin, et al, \textit{NOW AND THEN: The Global Nutrition Transition: The Pandemic of Obesity in Developing Countries}, 70 NUTR. REV. 3, 6–7 (2012).

\textsuperscript{36} Fischler, \textit{supra} note 11, at 277, 290–291.

\textsuperscript{37} \textit{ALAN WARDE, CONSUMPTION, FOOD AND TASTE} 49 (1997).

\textsuperscript{38} \textit{Id.} at 3.

\textsuperscript{39} \textit{Id.} at 55–56.

\textsuperscript{40} \textit{Id.} at 49.
create or trigger consumer feelings of risk and anxiety, which can then be immediately resolved by choosing the branded product.\footnote{41}

Drawing on these three bodies of work, we connect and extend these analyses to show how a range of claims and representations (including implicit appeals to the four antinomies) on food labels reinforce the value of consumption and systematically undermine institutional resources and capacity to consider other ways food systems could function.

**B. The Food Label as a Governance Space**

At the nexus of the various dimensions explored in the previous section lies our argument that the food label is a governance space. Recalling the broad definition of food labels outlined in the introduction, we consider the term “food labels” to encompass all the packaging, stories, and visual images made or displayed to consumers when food is sold.\footnote{42} Besides their materiality, we consider food labels to be, firstly, representations of the decisions made in the value chain that influence its operation. The food label encapsulates “a particular socio-economic ordering of the food system.” Indeed, the distance between producers and consumers requires a narrative about the item’s qualities and value chain that fosters trust and attracts consumers.\footnote{43} The label communicates that narrative.

Secondly, we consider food labels to be performative or, as Evans and Miele put it, “devices.”\footnote{44} Food labels hold potential to bring about material consequences by influencing supply chains and by contouring societal understandings of food system issues and solutions, thus channeling “our ethics and politics along certain pre-set paths.”\footnote{45} The food label is, therefore, a very small piece of “valuable real estate”\footnote{46} on which larger contests over ecologies, markets and consumer bodies are all played out.


\footnote{42} As mentioned in the introduction we define the food “label” broadly, in line with legal definitions, as including all the tags, brands, marks, statements, representations, designs and descriptions made on a food and its packaging and made or displayed to consumers when it is sold. See note 10.

\footnote{43} Evans and Miele, *supra* note 31, at 191.

\footnote{44} *Id.* at 192.

\footnote{45} *Id.* at 191.

Corresponding with this understanding of food labels, our analysis specifically focuses on how food labels implicitly and explicitly represent and act on the governance systems that support and construct food chains. As mentioned in the introduction, we draw here on the insight of regulatory studies where scholars show that regulation is not a top-down state-centric imposition of rules. Rather, regulation emerges from ongoing interactions (e.g. conflicts, alliances, modelling and mimicking) among multiple actors (including government, industry and civil society), with each actor seeking to exercise power legitimately and effectively at specific or multiple levels from local and national to regional and global.47

The significance of these interactions goes beyond setting rules and monitoring compliance. These interactions determine what products are available, who produces them, how they are produced, and under what conditions. They determine the methods and materials used in processing, packaging and trading and, crucially for this analysis, how a product is available for sale and marketed. Finally, these interactions determine the contractual, legislative and certification conditions that shape how actors carry out supply chain activities and communicate to consumers.

C. Methodology for Deconstructing Food Labels as Governance Spaces

The growth of processed and packaged food, supermarket concentration, and quality claims on food makes human interaction with food labelling an everyday experience. We suggest, inspired by Dorothy Smith’s “sociology for people,”48 that it is possible and important to start a socio-legal analysis of food labels as governance spaces from the standpoint of a person going about their daily life. From this standpoint, Smith suggests that scholars can use “institutional ethnography” to unpack the complex social and institutional arrangements within which everyday experience is embedded. Smith shows how this approach can “enlarge the scope of what becomes visible from that site, mapping the relations that connect one local site to others” (emphasis added). 49

Smith describes the purpose of this “institutional ethnography” as twofold:

One is to produce for people what might be called ‘maps’ of the ruling relations and specifically the

47 EWICK & SILBEY, supra note 9, at 17; Colin Scott, Analysing regulatory space: fragmented resources and institutional design, PUBLIC LAW 329, 330 (2001).
48 SMITH, supra note 8.
49 Id. at 29.
institutional complexes in which they participate in whatever fashion. People’s knowledge of their everyday world is thereby expanded beyond the scope of what can be learned in the ordinary ways they go about their everyday activities . . . The second aim is to build knowledge and methods of discovering the institutions and, more generally, the ruling relations of contemporary Western society.50

In this case, we use what the consumer sees on food labels as our starting point from which to illuminate the broader regulatory and institutional complexes that frame consumers’ food choices. Following Smith, we start with what a consumer sees when they wander down food aisles of supermarkets, scroll through online food stores, or peruse a café menu. We then map and evaluate the relations, institutions and governance processes, mediated through food labelling, that influence individual consumers and how food systems function. Besides Smith, our focus is inspired by the emphasis that new materialism in food studies places on the importance of geographies, objects and non-human living beings in understanding the food system.51

This approach to deconstructing food labels was previously suggested and applied by Parker.52 While Parker preliminarily termed the method “backwards mapping,” in this article we develop the methodology further and refer to the approach as a “label and chain governance analysis” for “deconstructing food labels as a governance space.” We prefer this terminology because it better encapsulates our understanding of the food label as both representative and performative in the relationship between the consumer and the food chain.53 That is, we suggest the need for deconstructing both (a) the regulatory governance of the chain behind the food choices available to the consumer evident from the

50 Id. at 51.
52 See, e.g., Christine Parker, The food label as a governance space: free-range eggs and the fallacy of consumer choice, 35 RECHT DER WERKELIJKHEID 101, 101 (2014) (“Investigating how the choices presented to consumers on [their] labels have been constructed.”).
53 Evans and Miele adopted a similar framing of the food label as both an icon (symbolic) and a device (capable of bringing about material change). See, Evans & Miele, supra note 31.
label and, relatedly, (b) the way in which labels govern consumer choices.

The methodology for deconstructing food labels is based on visual sociology. It derives from the notion that “valid scientific insight in society can be acquired by observing, analyzing and theorizing its visual manifestations: behavior of people and material products of culture.” In the context of complex, globalized supply chains, the methodology of visual sociology offers opportunities to “bridge some of the disconnections in the contemporary food web.”

The food label can be, literally, seen as a visual embodiment of supply chain actors interacting with the consumer. In practice, deconstructing food labels requires the researcher to consider the food label as an everyday “found” object and engage with the combined effect of a label’s visuals and text on the claims and stories it provides.

Deconstructing food labels combines visual sociology and regulatory network analyses with supply chain mapping, ethnographic and geographic research. Chain mapping entails mapping the product and information flows as well as relationships between the actors along the supply chain. This entails identification of key chain actors, a mapping of the functions of the actors, consideration of the various actors’ goals, and identification of where the most value is added to the product. The chain mapping aspect to the methodology allows the researcher to understand the material arrangements that connect consumers at the end of the value chain to the producers and ecologies at the start of the chain without lapsing into sentimentalism or sensationalism. Additionally, deconstructing food labels also requires an examination of the regimes developed to regulate the value chain, the interactions among these regimes (or lack thereof), and their interactions with state-based regulation. Throughout the analysis, geographic and anthropological research provides context for the value chain and its drivers and impacts, as well as relevant empirical evidence for the label’s claims. In sum, the aim is for a sober assessment of socio-economic governance.

57 See, e.g., Simon Bolwig et al., A Methodology for Integrating Developmental Concerns into Value Chain Analysis and Interventions, in MARKETS AND RURAL POVERTY: UPGRADING IN VALUE CHAINS 21, 23 (Jonathan Mitchell & Christopher Coles eds., 2011).
58 Eberlein et al., supra note 9, at 3.
arrangements that create particular value chains to inform understandings of what these processes mean for the potential to change the food chain specifically and food systems more generally.

D. Label and Chain Governance Analysis

Following initial observations, the researcher begins systematically collecting data on each product available for sale. The core of this stage involves a segment by segment observation and documentation of the label’s textual content and tone, certification marks, trademarks and other visuals, as well as a collective look and feel of the label including branding, color and font choices. At the end of this stage, the researcher should be able to make quantitative conclusions about the main messages communicated to the consumer via the product label and have an idea of the governance practices and governmentality emerging.

For the second stage, the researcher maps out the value chain that brings the products to market with an emphasis on the various formal and informal governance arrangements influencing supply chain activities. This entails identification of the key stages a product moves through from production to consumption and of the main actors involved in the supply chain in terms of their role, information and resources.

Proceeding to the third step, the researcher delves deeper into the analysis by critically examining the actors, their interests and values, interactions between actors, and the form or nature of these interactions. Here, the researcher uses a variety of data collection methods to more deeply delineate the governance relations implicated by the label. This includes empirical research methods (e.g. interviews, fieldwork, desktop review) and an examination of secondary scholarly and activist research.

Finally, the researcher returns to what the consumer sees to make visible the meaning and significance of the inferred governance relations. At this stage, the researcher interrogates what the label includes and excludes from its communication with the consumer, and considers the interests and values served by providing or not providing information or by portraying an aspect of the value chain in a particular way. Questions relevant to this aspect include: How have those who have sought to unsettle and change dominant food chains used regulation to do so? How have the dominant players used regulation in their responses? What values and interest (that is, what rationalities of governance) do the regulatory options chosen

59 Id.
represent? What alternative regulatory options and associated values and interests have been sidelined or occluded? Which are still available or might be available in the future? To what extent have choices already made constricted or co-opted the potential for further critique and contestation, or to what extent have they opened up possibilities for further dialogue and change? What supply chain actors are mentioned on the label, which actors are not, and how are they depicted? What activities in the supply chain are communicated and which activities are not?

III. Case Study: Açai Berries

A. Origins, Practices and Popularity

Açai berries originate from two types of palms that grow along the Amazon river from Bolivia to Brazil. Originally consumed largely by rural, floodplain groups called Amazonian *ribeirinhos*, açai became popular throughout Brazil by the early 1990s due to internal migration of these people to provincial cities. Western tourists exported the berry to Los Angeles in the later 1990s. The two most common açai products on the market are frozen smoothie packs and açai powders, which are both used in various beverages or, for the powders, in baking.

When first imported into the US, açai was a niche product described as “[a] cult phenomenon, popular mostly among young, male extreme-sport enthusiasts... skaters, surfers, snowboarders.” It became widely popular after Dr. Nicholas Perricone, a New York dermatologist and “anti-ageing expert,” presented açai as a “superfood” for its “anti-ageing properties” in his book that was featured on the Oprah Winfrey Show in 2003 and 2004. By 2013, “açai-laced products grossed nearly $200 million in the United States.” Açai followed a highly similar trajectory in Australia when

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60 Jie Kang, et al., *Bioactivities of açai (Euterpe precatoria Mart.) fruit pulp, superior antioxidant and anti-inflammatory properties to Euterpe oleraca Mart.*, 133 FOOD CHEMISTRY 671, 671 (2012).


63 Colapinto, supra note 61.


it was first imported in the early 2000s. Similar to açaí’s original market in LA, açaí began being distributed in Australia through stalls and cafes in beachside health conscious areas such as the Gold Coast and Bondi beach. Freeze-dried açaí powder, capsules and tonics began to be sold in retail and health stores in the mid to late 2000s.

Because açaí berries begin to spoil within 24 hours of being harvested, export of the berries to a broader consumer base was only made possible by advances in food processing, preservation and transportation technologies. They are 1 to 2 cm in diameter and contain a large seed that makes up about 80 to 90% of the fruit in both size and weight. The seeds are covered in a thin, oily coat, which is the edible pulp layer, and tough, fibrous outer layers. Generally, the manufacturing of açaí juice entails the açaí berries being soaked in (often, hot and/or chlorinated followed by potable) water, added to a rotation device that separates the seeds, pulped and sieved in a machine, mixed with citric acid, pasteurized and then frozen for and throughout transportation. The juice produced is then subject to further processing to make either smoothie or powder packs. Both products require costly and complex machinery to create the right kind of environment, texture and color.

The changing role of açaí from mainly traditional diets in the place of production to a high value Western “superfood” spruiked by

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69 Id.


Oprah and sold as far away as Bondi Beach is a good example of the creation of global food chains and the way they are represented to consumers. In Australia, like the US, açaí products are sold in a variety of forms and retail locations (as shown below) and have become an established niche in the market – thus allowing for observation of a variety of marketing claims on the labels. Yet, it is a small enough niche to enable data collection that covers the whole market thus allowing us to take a snapshot of the whole market for a relatively new product and the way it tries to establish itself to consumers.

B. Data

Following the approach described above to critically examine the food label as governance space, we identified 49 açaí berry products on sale in Australia as of September 2017, which were sold through 41 Australian businesses. Most of these products are either: a) frozen açaí berry pulp and açaí berry powders and capsules for individual consumption or b) frozen açaí berry pulp sold in cafés (in ready to eat bowls and smoothies) and health store retailers. These products were identified through multiple searches over various public and private databases for companies, trademarks or products that used the word “açaí.” Following the initial database searches, the researchers conducted online or physical site visits.

Upon identifying an açaí product advertised for sale in Australia, all information regarding each product visible to the consumer was recorded, compiled, and thematically coded. Relevant sources of information included written online product descriptions, pictures, signs or symbols in the product description or on the packaging, other information on labels (e.g. slogans), and pamphlets at point-of-sale. Five common themes, or product claims, were identified:

1. Açaí berries are uniquely nutritious;
2. Açaí berry consumption is rooted in traditional knowledges and practices;

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72 In order of search: all trademarks registered in Australia with the terms ‘açaí’ or ‘amazon’ on IP Australia; all business names with the term ‘açaí’ on ASIC business and company names database; products with the keyword ‘açaí’ in a product name search in the Australian Certified Organics (ACO) database; products of Australian sellers on ebay.com.au. Specialist açaí cafes were only included if they do not source through a wholesaler or if they do not appear to source through a wholesaler and were marketed as specialist açaí cafes. A full list of the brands included in our sample is available from the first author upon request.

73 A table showing the products and types of claim made on each product is available from the first author upon request.
3. Purchasing açaí berries contributes to poverty reduction and facilitates sustainable livelihoods;
4. Açaí berries are organic; and
5. Açaí berry production preserves the Amazon.

These claims are often on the same label and, as we will show, reinforce each other. Accordingly, we have further grouped them into three meta-claims: those claims focused on the health benefits of consumption of the açaí berry (claims 1 and 2), those claims relating to how purchasing açaí berries contributes to poverty reduction and facilitates sustainable livelihoods (claim 3), and finally those claims that açaí berries are produced in an environmentally sustainable manner (claims 4 and 5). The remainder of the paper analyzes the results for each of these meta-claims in turn.

IV. Health: Nutritionism and Primitivism

A. Nutritionism

Of the 49 açaí products identified in the Australian market place, all labels referred to the large concentration of ‘antioxidants’ and other chemical compounds in the açaí berry. About a third of the products claimed that açaí berries could help with serious diseases like cancer or heart disease, and a third claimed that açaí berry products have anti-ageing properties. This is frequently explained in highly scientific terminology. For example, “Kiss the Berry” cafes in Brisbane claim that açaí:

…contains high levels of essential fatty acids (omega 3’s in particular) known for their cardio and neuro-protective and anti-inflammatory effect. It is super rich in antioxidants to reduce cholesterol, contains 19 different amino acids to optimize brain signaling pathways, and is rich in minerals and vitamins (especially calcium and vitamin E) for healthy hair, skin and nails.

At the same time, however, “Kiss the Berry” goes on to neatly juxtapose the health benefits of açaí with pleasure:

So now you’re probably thinking ‘Surely something that good for me, can’t possibly taste good.’ Well, eating your own words has never been so delicious. When the berries are blended, we describe it as a fruit sorbet with hints of dark chocolate and red wine. What’s not to like?
This common juxtaposition speaks to consumer anxiety regarding the need to continuously choose between hedonism and health or, in Warde’s terms, the antinomie of health and indulgence. The antinomie is resolved in a gendered way. In her critical discourse analysis of superfood marketing, Sikka notes that the great majority of superfood advertisements are targeted at women and marketed as “a solution to the highly confusing message women are given with respect to the need to maintain a thin body at the same time as giving in to junk food.” We found that attention is increasingly being given to youthful, muscular male gendered bodies in açai advertising consistent with idealized images of male bodies, and exemplified by, for instance, a newer brand (“Açaí Brothers”) focused on health and fitness.

The previous work of Curll et al comprehensively examined the research findings behind these health claims. Curll et al found no evidence to support the unique health and anti-ageing claims made for açai berry products over many other nutrient-dense foods. Rather, the labelling of these products conflates the well-accepted health benefits of antioxidants and other nutrients found in a variety of “normal” fresh, unbranded fruits and vegetables with claims exaggerating the unproven benefits of particular phytochemicals apparently found in higher concentrations in açai berries. This is a form of “nutritionism”, a reductionist emphasis on micro-nutrients.

B. Primitivism

Açai is heavily promoted to western consumers as a “traditional food.” All 49 of the products in our survey directly made claims regarding the traditional role of açai in the diets of those on the Amazonian floodplains. For example, one line of products point

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74 Warde, supra note 37, at 70.
75 Sikka focused on how the marketing for many sweeter superfoods like açai centres on the sweetness and decadence of the food, which is consistent with the traditional connection drawn in Western societies between the consumption of sweets by women as related to pleasure, sex, desire and lust, and the cultural expectation that these wants should be policed. See Contemporary Superfood Cults: Nutritionism, Neoliberalism and Gender, in FOOD CULTS: HOW FADS, DOGMA, AND DOCTRINE INFLUENCE DIET 87, 93, 95 (Kima Cargill ed., 2017).
76 Curll et al., Unlocking the Energy of the Amazon: The Need for a Food Fraud Policy Approach to the Regulation of Anti-Ageing Health Claims on Superfood Labelling, 44 FED. L. REV. 419, 448 (2016). This study was based on an earlier version of the same product survey as the research in the current article – but focused only on the health claims on the products.
77 Id. at 435.
78 Dana Sturtevant & Hilary Kinavey, Nutritionism, BE NOURISHED (OCT. 10, 2016), https://benourished.org/nutritionism/.
out that açaí was a “staple of Amazon natives for hundreds of years.”79 Another assures the consumer that açaí, and the other superfoods in the range, “have been fueling indigenous people around the world for thousands of years.”80

These exotic superfoods are thus marketed at the intersection of scientific nutritionism and nutritional primitivism.81 They tell the consumer that the product is verified by both Western science and indigenous tradition. This is appealing because it transcends the antinomie between novelty and traditional foods.82 Nutritional primitivism “privileges ancient or indigenous knowledge and ‘natural’ production practices in a nostalgic search for authenticity in the diet and its related health outcomes, in contrast to those food and health cultures and regimes seen as ‘tainted’ by complex modern technologies.”83 The marketing of açaí berries invokes novel nutritionist discourse while still appealing to those who might eschew non-traditional foods based on novel technologies (such as fortification and genetic manipulation) that produce functional foods with higher nutrients.84

Nevertheless, the way açaí is processed and consumed today is far removed from traditional practices. Indigenous Amazonians domesticated the palm for use in construction over 8000 years ago.85 They did consume, but did not rely on, açaí berries before colonization. During European colonization (roughly 1494 to 1815) açaí became a staple for Amazonian peasants in riverine areas (i.e. Amazonian ribeirinhos).86 Since this time, açaí has been consumed after being soaked in water, pulped, strained and then drunk, added to grains or served with fish or meats. Brazil’s dietary guidelines

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79 Johnson, et al., supra note 2, at 316.
81 Loyer, supra note 5, at 1, 4.
82 Warde, supra note 37 at 55.
83 Loyer, supra note 5, at 3.
84 See Jessica Loyer, Communicating Superfoods: A Case Study of Maca Packaging, in FOOD AND COMMUNICATION: PROCEEDINGS OF THE OXFORD SYMPOSIUM ON FOOD AND COOKERY 236, 241 (Mark McWilliams ed. 2015).
continue to recommend eating açai with cassava flour or grits and fish.87

By contrast, Western consumers eat frozen açai as a dessert, smoothie or breakfast item, combined with fruits. Contrary to some products’ claims to be “teaching Australians how to eat and prepare Açai as the locals do in the streets of Brazil,”88 Fajan observed that the Western way of eating açai is commonly viewed within the key açai production region as disrespectful and inappropriate.89 According to traditional beliefs, açai has a reputation for being “a heavy food that weighs you down and makes you lethargic.”90 Traditional beliefs in Brazil also associate the inter-mixing of açai with other vegetables and fruits with indigestion.91 Yet, western marketing claims that açai is a “natural energy boost,” an “energizing superfood,” a “sustained energy boost.” This representation is what MacCannell92 refers to as “staged authenticity,” that is, a product is presented as authentic, but the representation of the product for western consumers displaces the cultural meaning of the product for those who traditionally produce and consume it.

This cultural displacement in the western market place reflects a more literal displacement of açai in diets in the Amazon. For Amazon ribeirinhos today, while açai is still an accompaniment to the staple foods of fish and manioc, there have recently been significant declines in açai consumption. Açai is increasingly replaced by the global commodities of soy oil, meat93 and sugar.94 This is the neocolonial flip side of the globalization of the food supply that has brought açai to western consumers. While western consumers are sold açai as a disease-preventing solution to unhealthy western lifestyles,95 the Amazonian ribeirinhos are joining the global nutrition transition and the associated rise in the prevalence of diet—

89 Jane Fajans, Brazilian Food: Race, Class and Identity in Regional Cuisines 64 (2013).
90 Id. at 65.
91 Id. at 64.
94 Id.
95 Curll et al., supra note 76, at 420; MacGregor, Petersen, and Parker, supra note 1.
related non-communicable diseases. We return to the neocolonial implications of açai marketing in Part V.

C. Market-based Governance of Health Claims

As Frohlich has shown in the US context, health claims and nutritional labelling were largely prohibited on food items throughout the western world prior to the 1970s on the basis that such information would confuse consumers by conflating the properties of pharmaceuticals and foods. Nutrition labelling emerged in the 1970s as a form of consumer empowerment and now reflects the “belief that it is better to manage markets indirectly through information than directly through product bans and standards.” This approach reinforces the market by suggesting that consumers can govern the market via businesses’ self-regulatory responses to consumer choices.

The regulation of health claims on food in Australia is broadly similar to the US and likewise tends to reinforce this neoliberal approach. Food Standards Australia and New Zealand (FSANZ) take an equivalent role to that of the US Food and Drug Administration (FDA). Both FSANZ and the FDA set standards for food labelling, and prohibit health claims that cannot be substantiated by evidence. In the US, the FDA is guided by the principle of “significant scientific agreement” among qualified experts when deciding whether to allow a proposed health claim on a food product. The FDA applies this standard as part of a systematic review of evidence regarding the causal link between a food and a health effect. FSANZ also requires “systematic scientific reviews of the evidence to establish causal links between a food and health

97 Id. at 147.
98 Australia New Zealand Food Standards Regulations 1994 (FSANZ Code); see Standards 1.2.1 and 1.2.7. (reflecting internationally agreed principles for food regulation set out in Codex Alimentarius 1991: principle 1.2, Codex General Guidelines on Claims); see Curl et al., supra note 76, at 445 (“In the US, ‘health claims’ on food that expressly, or by implication, characterise a relationship between any substance and a disease, or health related-condition, must be approved by the US Food and Drug Administration (FDA) before market”).
effect before a health claim can be made” on food.101 Neither the FDA nor FSANZ requires particular kinds of scientific evidence, and both institutions can authorize the full version of a health claim or a qualified version of the health claim.102

Many general level health claims, such as those health claims on açai product labels that do not mention a specific disease or claim a specific health effect, can be made in the US, Australia and New Zealand without pre-market approval. Rather, Australia and New Zealand use a self-substantiated procedure that allows the food business to determine whether a general health claim is supported by manufacturer evidence.103 Similarly, the US adopts a lower threshold for general health claims that requires only notification from the food manufacturer with an authoritative statement of support from a list of legislatively approved scientific bodies.104 In practice, then, the monitoring and compliance of health claims in Australia and New Zealand, similar to the US, is left largely to business self-regulation. Even where the regulator has to pre-approve claims, it generally relies largely on evidence provided by the food business. There is little or no proactive monitoring of what claims are actually made on products, whether they have been pre-approved or self-substantiated, or what overall message is being provided in the market place.105

This means that exaggerated health claims flourish, as do representations that reinforce highly gendered understandings of desirable body types and attitudes as well as inaccurate claims about traditional uses of the food. The EU, in contrast to the US, Australia and New Zealand, demands a higher level of scientific evidence (randomized control trials) and requires regulatory pre-approval of all health claims.106 This means that superfood health claims such as

101 Curll et al., supra note 76, at 426; see Food Standards Australia New Zealand, Food Standards Code Standard 1.2.7, s 18(3)(b) (prescribing the elements of a systematic review).
103 Curll et al., supra note 76, at 426.
105 Curll et al., supra note 76, at 426–27 (discussing the general lack of oversight and pre-approval requirements under the regulatory system).
those found on açai products in Australia and the US are absent from the European marketplace.107

In Australia, the monitoring and enforcement of misleading health and other marketing claims are left to the consumer regulator, the Australian Competition and Consumer Commission (ACCC). The ACCC, like the Federal Trade Commission (FTC) in the US, enforces the general legal prohibition on false, misleading or deceptive conduct in trade and commerce. US law also grants specific powers to the FDA to take enforcement action in relation to deceptive food labels and labelling (broadly defined). This creates some overlap between the powers of the FDA and the FTC but the FTC tends to hold the primary enforcement role.108 In relation to açai berry non-food products, the FTC has taken enforcement action by seeking and receiving injunctions over the websites of particular açai berry products marketed as dietary supplements.109 Yet, as scholars observed the “deceptive practices on the part of companies not party to the FTC action have continued.”110

Enforcement often relies on the ability of consumers and food system advocates to successfully notice misleading claims, bring them to the attention of the appropriate regulator, and persuade the regulator that the issue is significant enough for the regulator to take enforcement action out of the other thousands of potential actions available to it. However, misleading representations of açai on açai food labels, as identified later in this article, have not so far prompted action in either jurisdiction. After all, Western consumers are unlikely to know and complain about details about Amazonian


107 The EFSA Scientific NDA Panel has rejected the vast majority of food business health claim substantiation dossiers submitted to it. See European Food Safety Authority Panel on Dietetic Products, Nutrition and Allergies, General Guidance for Stakeholders on the Evaluation of Article 13.1, 13.5 and 14 Health Claims, 9 EUR. FOOD SAFETY AUTHORITY J. 2135 (2011). Based on the submitted, assessed evidence, EFSA has since 2010 rejected all 149 attempts to substantiate food health relationships involving the word ‘antioxidant’, and accepted only one out of 19 industry submissions regarding ‘polyphenols’. See Aalt Bast et al., Scientism, Legalism and Precaution—Contending with Regulating Nutrition and Health Claims in Europe, 6 EUR. FOOD & FEED L. REV. 401 (2013) (reviewing the European approach to health claims on food); see also Curll et al., supra note 76, at 443–44 (providing a more detailed discussion of the European approach in comparison with the Australian and US approach).


ribeirinhos’ traditional consumption of açaí’. Nor have Amazonian ribeirinhos complained nor pushed for rules that require tradition and culture be accurately portrayed at the other end of the value chain. We argue in the next section that these inaccurate claims are not just trivial marketing puff. They help reinforce a food system in which those in the Amazon where the açaí was grown and eaten can be exploited.

V. Fair Trade: Racism and Neo-colonialism

A. Rural Socio-economic Development Claims

After health claims, the next most common claims on açaí products concerned the benefits of açaí production and sale in reducing poverty and facilitating sustainable livelihoods for the rural communities of the Amazon. Twenty of the açaí products made claims regarding how the purchases of açaí benefit Amazon communities through increased incomes. Three products even went as far as to proclaim that “[t]he manual harvesting of the berries also provides hundreds of jobs for the indigenous tribes around Brazil and helps minimize the human trafficking and deforestation that these tribes would otherwise partake in to make ends meet.”

Açaí’s international popularity has created economic opportunities for those Amazonian ribeirinhos involved in cultivating the palms, harvesting the berries and/or operating the boats to transport the berries to processing facilities as well as for those employed in the associated industries for açaí processing and export. Indeed, Brondizio, a leading anthropologist on rural populations in the Amazon, claimed that “[t]here may be no better example of an economic prospect for overcoming underdevelopment in rural Amazonia than the case of açaí palm fruit production system.”


113 Eduardo S. Brondizio, From Stape to Fashion Food: Shifting Cycles and Shifting Opportunities in the Development of the Açaí Palm Fruit Economy in the Amazon Estuary, in WORKING FORESTS IN THE NEOTROPICS: CONSERVATION THROUGH SUSTAINABLE MANAGEMENT 399, 339 (Daniel J. Zarin et al. eds., 2004).
Empirical research shows, to an extent, that the economic opportunities Brondizio refers to have been leveraged. Pegler conducted in-depth interviews with over twenty açaí-producing households and found that since gaining popularity açaí has become an important source of income. These households collected around 150 sacks of açaí per year, and earn R$40 per sack, which is roughly US$11.69 (or AU$15) and equals a monthly income of between R$4800 and R$6000. Similarly, another study reported that a ribeirinhos family will make an average of 2300 euros, or US$2640, during each month of the harvesting season for açaí. These figures are significantly higher than the average monthly income in Brazil over the last two years, which at its highest was R$2186.

Yet, this does not necessarily mean that Amazonian ribeirinhos have received a fair proportion of the profits generated from açaí production. Similar dynamics that exist in cocoa and coffee value chains are evident in açaí supply chains. Amazonian ribeirinhos cultivate the palms and provide the berries, but significant market value is added through the processing, export and retail of açaí. Additionally, the reliance of Amazonian ribeirinhos on a single raw commodity for the majority of their income leaves them especially vulnerable to fluctuations in market prices. The existence of a market opportunity due to the popularity of açaí with some western consumers does not necessarily equate to a sustainable fair-trade opportunity. Moreover, the racist and neo-colonial representation of Amazonian people in açaí marketing raises suspicion that their contribution to global supply chains will be undervalued.
B. Racist and Neocolonial Representations

Generally, Amazonian ribeirinhos (also referred to as caboclo)\textsuperscript{119} have mixed ancestry (Latin American, European and African descent) and live a semi-subsistent life based on fishing, small-scale farming and agroforestry,\textsuperscript{120} and tend to govern their communities with relative autonomy.\textsuperscript{121} Lima-Ayres explains that:

Forced cultural transformation and intense miscegenation with whites resulted in the dilution of specific tribal identities, and led to the formation of the caboclo population who considered themselves as part of the national society.\textsuperscript{122}

This history has led to native, non-Indigenous populations, like the Amazonian ribeirinhos, as often being described as a relatively invisible group in both the Amazon and in the broader world.\textsuperscript{123} Nowadays, ribeirinhos live either in cities or along the river of the Amazon, but mostly they move periodically between both.\textsuperscript{124}

A food label cannot convey the history or current marginalization of Amazonian ribeirinhos nor would such accounts be an appealing marketing strategy. Yet, the widespread popularity of açai presented an opportunity to raise the profile of the significant disadvantages experienced by and contributions made from Amazonian ribeirinhos. Given their “invisibility,” it would be

\textsuperscript{119} Richard Pace, The Amazon Caboclo: What’s in a Name?, 34 LUSO-BRAZILIAN REV. 81, 84 (1997) (explaining how the term caboclos is colloquially used to describe Amazonian ribeirinhos and other rural populations in the Amazon. However, this term is contested, and for some this term carries prejudicial connotations about the groups mixed ancestry and class).

\textsuperscript{120} James A. Fraser, Caboclo Horticulture and Amazonian Dark Earths along the Middle Madeira River, Brazil, 38 HUMAN ECOCOLOGY 651, 653 (2010).

\textsuperscript{121} Heather F. Roller, Amazonian Routes: Indigenous Mobility and Colonial Communities in Northern Brazil 210 (2014); Barbara A. Piperata, Nutritional status of Ribeirinhos in Brazil and the nutrition transition, 133 AM. J. PHYSICAL ANTHROPOLOGY 868, 869–70 (2007).


\textsuperscript{123} Jacqueline M. Vadjunec & Marianne Schmink, New Amazonian Geographies: Emerging Identities and Landscapes, 28 J. Cultural Geography 1, 2–6 (2014).

socially beneficial for this group to receive recognition as a distinct and diverse cultural entity.

Yet, none of the labels examined referred to Amazonian \textit{ribeirinhos}. Instead, several labels describe Amazon \textit{ribeirinhos} as either indigenous, traditional or native. Such references have the potential to be true, untrue or half-true given the heterogeneity of Amazonian \textit{ribeirinhos}.\textsuperscript{125} What is of significance is the decision to omit referring to Amazonian \textit{ribeirinhos} as a distinct group with their own history and culture. Referring to Amazonian \textit{ribeirinhos} broadly as indigenous or native sanitizes difficult aspects of history. For instance, it removes the effects of colonization by making it seem as if this social category of people were undisturbed by its processes.\textsuperscript{126} Consistent with the “nutritional primitivism” of the health claims on açaí products mentioned above, the food label acts as a constructed window into the history and identity of Amazonian \textit{ribeirinhos}.

Like other “superfoods,” açaí labels commonly use warrior imagery and references to warriors to depict Amazon \textit{ribeirinhos}. Warrior imagery is often a component of the “noble savage” stereotype, which stems from colonial ideology and theology. This long-standing stereotype casts non-white ethnic groups as pure, wise stewards of the land that are removed from capitalist processes and urban societies.\textsuperscript{127} Likewise, on some online açaí sites, consumers are invited to “join the tribe,” i.e. sign up to their mailing list or loyalty program.\textsuperscript{128} Other labels feature what appears to be a man with a dramatically protruding bottom lip, a slanted forehead, and tribal jewelry as a logo (\textit{Amazon Power Açaí Smoothie Packs}, \textit{Amazon Power Pure Açaí Pulp} and \textit{Organic Açaí Capsules}, Amazon Power Pty Ltd.) Protruding lips are a facial feature focused upon in racist pseudo-science to assign inferiority to certain races.\textsuperscript{129} As

\textsuperscript{125} Lima-Ayres, \textit{supra} note 122, at 119; Pace, \textit{supra} note 119, at 84; ROLLER, \textit{supra} note 121, at 205.

\textsuperscript{126} M. J. Rowland, \textit{Return of the “Noble Savage”: Misrepresenting the Past, Present and Future}, \textit{Australian Aboriginal Studies} 2, 6–9 (2004).

\textsuperscript{127} TER ELLINGSON, \textit{The Myth of the Noble Savage} 211–12 (2001).


O’Toole observed, “in the language of racism, thick lips speak volumes.”\(^{130}\)

This “noble savage” caricature is at best culturally insensitive. It can also incidentally serve a racist agenda.\(^{131}\) Stearman\(^{132}\) has shown how an ecological version of the noble savage stereotype in the Amazonia has undermined efforts for land tenure security. She argues that policies that grant land entitlements on the condition that a native group exhibits conservationist qualities distracts from the fact that rights to remain on traditional lands is supported by human rights law.\(^{133}\) The subsuming of the contemporary Amazonian ribeirinhos into the identity of primitive “Amazon natives” ‘casts remote producers as “Others” who exist in a timeless, imaginary geography, when in reality they are real people in real places faced with a range of “contemporary challenges.”’\(^{134}\)

Açaí products claim that açaí berry “naturally grows” and is “wild-harvested” to ensure that “the delicate environment of the Amazon is protected and the ancient traditions of indigenous people from this region are respected and preserved.”\(^{135}\) These claims overlook the role of Amazonian ribeirinhos as stewards of the açaí palm. Amazonian ribeirinhos employ skill and labor to manage the palm, “including through thinning, weeding, pruning, inter-cropping techniques and the development of seedlings.”\(^{136}\) Arguably then, the land and crop management by Amazonian peasants may fit some definitions of ‘agroforestry,’ and is certainly an example of small-scale production systems which tend to use less intensive harvesting methods.”\(^{137}\) By not mentioning their role as forest managers, açaí

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\(^{131}\) Ellingson, *supra* note 127, at 297.


\(^{133}\) Id.

\(^{134}\) Jessica Loyer, *Superfoods*, in ENCYCLOPEDIA OF FOOD AND AGRICULTURAL ETHICS 1, 2 (David M. Kaplan ed. 2016).


\(^{136}\) Id. at 313–14 (citing Eduardo S. Brondízio & A.D Siqueira, *From Extractivists to Forest Farmers: Changing Concepts of Caboclo Agroforestry in the Amazon Estuary*, 18 Res. in Econ. Anthropology 233, 258 (1997)).

berry claims have perpetuated on a global scale the prejudicial views in Brazil about Amazonian peasants as “low-skill” and “lazy,” due to their subsistence, rural lifestyle. Yet Amazonian *ribeirinhos*, in the initial period of açai boom, did manage to increase the production of açai without leading to deforestation or monoculture farming. Brondizio and Siqueria explain:

> Agroforestry systems that mimic native forests are ‘invisible’ in the analysis of most researchers who employ conventional measures of [agricultural] intensification. The result is agroforestry’s characterization as extensive, partially extractivist and non-dependent on labor and energy input other than for ‘gathering.’ [In other words,] conventional ideas of what farming involves, [which stem from colonial processes,] combined with the marginalization of Amazonian *ribeirinhos* have fed into the claims that açai is passively ‘gathered’ and undervalue the contribution of Amazonian people to the production and sustainable management of açai.\(^\text{139}\)

The agricultural activities of other colonized peoples around the world, including Australian Aboriginal groups, have also been constructed in this way, which has provided a narrative that has assisted in justifying the taking of their (supposedly unmanaged and uncared for, yet potentially agriculturally productive) land for industrial, export-oriented agriculture.\(^\text{140}\)

C. Voluntary Fair-trade Certification and Other Schemes for a Just Distribution of Benefits and Burdens

The dominant governance method for addressing the equitable inclusion of poor producers in developing countries into global supply chains that serve markets of developed countries\(^\text{141}\) is

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\(^{138}\) See id. at 313 (citing Mark Harris, Nature Makes them Lazy: Contested Perceptions of Place and Knowledge in the Lower Amazon Floodplain of Brazil, 3 Conservation and Society 461 (2005)).

\(^{139}\) Id. at 313.

\(^{140}\) CHRISTOPHER MAYES, UNSETTLING FOOD POLITICS: AGRICULTURE, DISPOSSESSION AND SOVEREIGNTY IN AUSTRALIA 19–48 (2018); see generally BRUCE PASCOE, DARK EMU: BLACK SEEDS: AGRICULTURE OR ACCIDENT? (2014) (discussing how the colonizing Europeans mistakenly believed that Australian Aboriginals did not use agriculture to develop the land).

the fair trade movement. Fair trade aims to create supply chains based on adequate working and trading conditions to alleviate poverty and enable sustainable development. From the 1960s onwards, fair trade spawned various formalized non-governmental bodies who create and administer, *inter alia*, third-party certification schemes.

Third-party fair trade certification entails independent non-governmental organizations (NGOs) or private companies auditing aspects of a supply chain against specified criteria including, for instance, that cooperatives in the chain are democratic, that farm workers are, at least, being paid the minimum wage for their work, and that small-scale farmers are receiving at least a fair trade floor price (i.e., profits cover the costs of production, savings and the living costs for an average family). The results of such audits may be sent back to a parent company or head NGO for review. If the audit reveals that fair trade requirements are being met, then the manufacturer, in the case of açai, is licensed a certification mark to feature on the product’s label. The mark alerts consumers that a third-party has verified the product’s claims of being from a “fair,” equitable supply chain, differentiates the product and attracts price premiums.

Only two açai products in our survey (both from Sambazon, a US-based wholesaler) displayed a third-party fair trade certification. The remaining 18 açai products that made claims regarding the fairness of the supply chain had not been subject to any third-party oversight. For instance, one product explained: “[t]he Açai berries used in this product have been harvested by local families, which also means rural community and grower critique and reregulation, challenging dominant ‘unfair’ trade practices and promoting alternative ‘fair’ trade norms in global arenas.”).

143 Matthew Anderson, *NGOs and Fair Trade: The Social Movement Behind the Label, in NGOs in Contemporary Britain* 222–41 (Nock Crowson et al., 2009).
146 Because fair trade is a broader concept than third-part certification schemes, supply chain actors can also assess their own value chains against set social and environmental standards and make product claims regarding how the supply chain follows fair trade principles in a broad sense.
cooperatives are empowered through fair trade pricing.”\textsuperscript{147} Another uncertified claim was that “[e]very step of our supply chain is closely monitored to ensure sustainable and fair trade practices are followed.”\textsuperscript{148} These claims are difficult, if not impossible, for a consumer, regulator or another third party to verify.

Even where fair trade certification was obtained, it was the company, Sambazon, that manufactured the product that was certified, as opposed to the açaí product themselves or, at the time of writing, the cooperatives that bought açaí from Amazonian ribeirinhos.\textsuperscript{149} The certifying body was “ECOCERT” a private company based in France. The certification would have involved a review of mainly documentary evidence including Sambazon’s corporate social responsibility policy, the clauses in contracts between Sambazon and cooperatives and the cooperatives to the individual producers (e.g. prices paid to producer must be at least 10% higher than standard price determined annually), the fair trade policies of the cooperatives Sambazon works with, and other documentary evidence such as delivery notes and invoices. The auditor would also have carried out a specified number of interviews between the auditor and individual producers, cooperatives and Sambazon staff and management to verify the documentary evidence.

However, the working conditions for açaí harvesting seem inconsistent with the ECOCERT audit criteria regarding working conditions. Açaí harvesting involves climbing near the top of a tall palm while carrying a machete to cut down palm fronds that grow the berries. Once on the ground, people hand-strip the berries from their stalks. Raffles describes it as:

\begin{quote}
[R]ough, dangerous work, hard on hands and feet, made worse by the relentless insects… The emphasis is on speed and volume. On a good day – if it does not rain, if no one gets injured, if there are big bunches and short trees– two people might
\end{quote}


\textsuperscript{149} Amazonian ribeirinhos engaged in forest farming of açaí do not apply for third-party fair trade certification. The fees and administrative work involved can be considerable. Further, processing companies will obtain fair trade certification that requires them to work with farming cooperatives that in turn meet fair trade standards such as minimum price requirements. For exported açaí, Amazonian ribeirinhos tend to engage with cooperatives that on-sell the berries to a processor.
collect four sacks, each holding fruit from seven or eight bunches. But to do that, collectors have to cut corners. 150

Yet ECOCERT criterion 3.4.4.2 requires that the cooperatives Sambazon engages with do not allow the use of equipment that presents a danger to users and that adequate protective equipment is provided at the producer level. To safely use a machete, equipment required includes appropriate gloves, protective eyewear and a lanyard around the machete to prevent against slippage. 151 Images of Amazonian ribeirinhos provided by Sambazon do not appear to be wearing safety equipment, and no mention is made of the measures Sambazon takes as part of ensuring the safety of people harvesting açai.

The evidence is lacking regarding whether açai producers involved in fair trade certified supply chains are better placed than those producers who are not. Generally, case studies investigating the impact of cooperatives meeting fair trade standards have found modest benefits accrue to small-scale farmers that are members of the cooperative. 152 Nevertheless, a range of contextual and geographical factors significantly determine whether small-scale farmers and/or farm workers benefit from participation in fair trade certification schemes, and so it is difficult to make sweeping claims about the benefits of fair trade beyond particular contexts. 153 Beyond the household level, a large body of work critiquing fair trade suggests that the scheme itself is neither novel nor a challenge to

150 Hugh Raffles in Amazonia: A Natural History 202 (2002).
151 See, e.g., R.A. Munoz et al., Sugar Cane Cultivation and Processing, in Encyclopædia of Occupational Health & Safety 64.36 (Jeanne Mager Stellman ed., 1998) (discussing recommended safety precautions to be taken when using a machete).
154 See, e.g., Frank Trentmann, Before “fair trade”: empire, free Trade, and the moral economies of food in the modern world, 25 ENV'T & PLANNING SOC. & SPACE
neocolonial trade relations typified by human and natural resources being significantly exploited in less wealthy areas while the benefits and outputs from this exploitation flow to wealthier countries and groups.\footnote{155}

Consistent with the critiques of fair trade as unsuited to bringing about systematic change, açaí is increasingly being grown on plantations, i.e. large, privately held, largely corporate-managed farms that employ economies of scale and specialize in cash crops.\footnote{156} The intensified scale of açaí production is, arguably, a natural trajectory of relatively unregulated market dynamics that seek ever-increasing levels of production and consumption enabled via existing wealth inequalities which provide a cheap labor pool for plantation agriculture. This trend is not evident on açaí product labels examined, which are either silent as to its specific production methods or claim to originate from wild-harvesting. Nevertheless, the shift to plantations in the case of açaí is threatening the small-scale production of açaí in the estuary, which model of production has been and generally is the most suited to addressing social and economic inequalities in rural communities.\footnote{157}

The move towards plantations reflects an inherent contradiction within the popularity of açaí; that is, its popularity is facilitated by claims that purchasing açaí benefits the Amazonian communities, while its increasing popularity beyond a niche undermines its potential to benefit such communities in the long-term. Fair trade schemes rather than challenging such capitalist dynamics in the context of açaí reinforces them by allowing plantations to be incorporated into fair trade certified supply

\footnote{1079, 1090–92 (2007) (analyzing the changing moral geography of trade and consumption over time).}


\footnote{156 Nathalie Cialdella \& Livia Navegantes Alves, \textit{La ruée vers l’« açaï » (Euterpe oleracea Mart.): trajectoires d’un fruit emblématique d’Amazonie [The rush to the “açai” (Euterpe oleracea Mart.): Trajectories of an emblematic fruit of the Amazonia]}, \textit{4 Revue Tiers Monde (Third World Review)} 119 (2014).}

\footnote{157 Olivier De Schutter, \textit{How not to think of land-grabbing: three critiques of large-scale investments in farmland}, \textit{38 J. Peasant Stud.} 249, 258–59 (2011).}
Moreover, açaí product labels, through their misrepresentation of Amazonian *ribeirinhos*, are counter to efforts like fair trade to re-embed social relations in supply chains. Of the 49 products examined, none pictured açaí plantations, instead preferring romanticized and mystified representations of the Amazonian river. No labels depicted the reality of the difficult working environments that Amazonian ribeirinhos operate in to secure their livelihoods.

A related issue is the role of Amazon *ribeirinhos* in cultivating the palms on which açaí grows over the centuries (as well as Indigenous groups). Generally, two schemes are relevant where a group in a particular area has been the stewards for a particular plant variety. The first is geographical indicators, but no geographical indicators were provided for on the açaí products examined. Perhaps this is because the palms on which açaí grows are across country borders.

The second schemes are those international agreements, namely the *Convention on Biological Diversity* and the *Nagoya Protocol*, that establish bilateral access and benefit sharing schemes.

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158 ECOCERT, *Technical Standards Defining the Requirements Relating to Products Originating from Fair Trade* 4 (2010) (arguing just like the other predominant fair trade schemes, make plantations eligible for fair trade certification). Although, ECOCERT explains that products from plantations will only be fair trade certified under exceptional circumstances, but it is unclear what those exceptional circumstances may be. ECOCERT does state that, when considering the eligibility of a plantation, the context of plantation (e.g. size of land, type of production), as well as the corporate structuring of the plantation (e.g. shareholding structure) are relevant considerations. Note also the incorporation of plantations into fair trade is not necessarily counter to progressing social justice, but much will depend on the political context and state willingness to regulate fair trade practices on plantations. See, e.g., Sarah Besky, *Can a Plantation be Fair? Paradoxes and Possibilities in Fair Trade Darjeeling Tea Certification*, 29 Anthropology Work Rev. 1 (2008) (stating the context-specific factors that influence whether fair trade certification makes the conditions on plantations just and favorable to workers.) In the context of açaí, plantations are only now emerging and competing with small-scale operations and wild-harvesting. Combined with the current political climate in Brazil following the country’s 2018 presidential election, it is questionable whether the context is conducive to supporting fair work conditions on plantations. See Peter Fleming and Marc T. Jones, *The End of Corporate Social Responsibility: Crisis and Critique* 91, 91 (2013) (commenting on Nestle’s ability to appropriate the work of fair trade social movements for corporate branding).

159 Cf. Rosemary J. Coombe & S. Ali Malik, *Transforming the Work of Geographical Indications to Decolonize Racialized Labor and Support Agroecology*, 8 U.C. Irvine L. Rev. 363 (2018) (arguing that geographical indicators combined with fair trade and analogous certification schemes have the potential to transform unequal relations within and between countries that perpetuate harms).
Regarding genetic materials and related traditional knowledge. Access and benefit sharing schemes incentivize biodiversity conservation and recognize the role of traditional communities as stewards of particular genetic resources.\textsuperscript{160} State signatories to these international instruments then implement these schemes through domestic legal regimes. However, access and benefits schemes generally do not apply in the context of açaí production and export. The schemes are relevant where a company wishes to patent genetic material from the palms on which açaí grows or the fruit themselves. In the context of a traditional food item dramatically increasing in value like açaí, access and benefit sharing schemes are irrelevant, as a third-party is not taking the açaí plant genetics and related knowledge to develop, for instance, a new plant variety or pharmaceutical drug. Thus, no direct avenues exist to reward those communities that have acted as stewards to the açaí palms that now provide significant economic benefits to a range of supply chain actors.

VI. Biodiversity and Ecological Sustainability: Green-Washing

A. Biodiversity Conservation

Nineteen of the 49 products examined made claims about how the wild harvesting of açaí preserves the biodiversity of the Amazon rainforest. For instance, one product claimed that:

This Açaí is wild harvested from deep in the Amazon forests. This means the fruit grows in its native bio-diverse ecosystem maintaining its natural nutrient profile. Wild harvesting ensures that the delicate environment of the Amazon is protected” (\textit{Raw Organic Açaí Powder}, Loving Earth Pty Ltd).

Another claimed:

Harvested sustainably from a wild and vigorous 25-foot Brazilian tropical palm that naturally grows prolifically across 2.5 million acres of Amazon River floodplains – supporting the Açaí Berry industry makes these trees more valuable vertical than logging them – and how good is that? (Açaí Powder, Power Super Foods Pty Ltd)

These claims imply that food can be produced and consumed on a large and globalized scale while having only a minimal, or even positive, impact on the natural environment. The consumer is told that it is possible to use and consume aspects of Amazonian ecosystems while simultaneously conserving the same ecosystems.  

Conventional food production in relation to fruits tends to be monoculture, mechanized and input intensive. To cast açai berries production and consumption as a counter to conventional food systems, açai berry labels do not draw attention to the long, energy-intensive supply chains that employ highly technical food processing methods. Instead, the food labels place emphasis on the harvesting process, with descriptors including “wild-harvested,” “wild-gathered,” “hand-picked” and “manually harvested.” These phrases convey the message that açai berries are grown in the wild as opposed to on farms and that açai berries are harvested by hands and not machinery. As mentioned above, it also devalues and invisibilizes the Amazonian ribeirinhos’ role as stewards of the Euterpe oleracea palm on which açai grows.

As global demand for açai has continued to increase, market pressures have incentivized the development of more intensive açai farms. Furthermore, Brazilian politicians have sought to attract private investment into açai plantations and increase the use of synthetic fertilizers in açai management. This outcome is predicated on the theory of comparative advantage, which provides the rationale for international trade and investment law. Comparative advantage holds that each country should specialize in the commodities that they produce best, rather than directing resources towards commodity production that is more difficult for them to perform due to, for instance, environmental, geographic and social conditions. As Brazil, and other Latin American countries, are particularly well-suited for growing açai, the theory provides that they should specialize and intensify the production of açai berries.

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162 The supply chain is energy intensive owing to the need for refrigeration for frozen açai pulp or juice. The powders do not require the same refrigeration, but the processing methods used to formulate the powders have the potential to be energy intensive depending on the context and methods employed.


[In the last few years,] production of açai has intensified in the floodplains leading to large areas of diverse forest being converted into açai agroforests and [to açai berries] being grown on monoculture plantations. A recent study by Freitas et al. examined the impact of the demand for açai on the biological diversity of Amazonian floodplain forests. They found a loss of 50% of tree species diversity and a 63% reduction in pioneer species (hardy varieties that are the basis for forest ecosystems). These findings align with empirical studies that illustrate a negative correlation between increase[s in intensive agricultural production for export to meet global demand] and declines in [dietary diversity] and on- and off-farm biodiversity.165

Similarly, Barlow et al.166 compared the biodiversity loss from human disturbances within forests in the Amazonian flood plains (including from açai agroforestry) to the expected biodiversity loss from deforestation. They commented that:

At its most stringent, Brazil’s centrepiece environmental legislation, the Forest Code, mandates Amazonian landowners to maintain 80% of their primary forest cover. Our results show that even where this level of compliance is achieved, the primary forests of these landscapes may only retain 46%-61% of their potential conservation value and are likely to have lost many species of high conservation and functional importance.167

In the catchments studied then, more biodiversity was lost due to human disturbances than would be expected by deforestation to the extent allowed under Brazilian laws. Barlow et al.168 framed their research as evidence for urgent regulatory interventions that go beyond preventing deforestation and center on preserving the diversity of these ecosystems. While market dynamics stemming from the popularity of açai may prevent land use change in the

165 Johnson, Parker & Maguire, supra note 136, at 314.
166 Jos Barlow et al., Anthropogenic disturbance in tropical forests can double biodiversity loss from deforestation, 535 Nature 144, 144 (2016).
167 Id. at 147.
168 Id. at 144.
Amazonian floodplains, the market as it currently functions does not conserve biodiversity and instead facilitates simplified agroforests.

Despite the common marketing claims regarding “wild-harvested” açai berries, the rapid development of açai plantations in upland areas of the Amazon river delta suggests that açai is increasingly sourced from plantations.\(^\text{169}\) Alternatively, it may indicate that domestic markets are now relying on plantation-grown açai, while wealthier Western markets have maintained access to açai that is wild-harvested and organic.

More broadly, trends in the intensification of açai production for export show how the successful marketing of açai products, with its emphasis on the multiple benefits of açai consumption for health and the environment and rural development, contribute to undermining these very claims. The popularity of açai, partly fueled by such claims, creates market incentives to intensively produce açai berries on monoculture farms, which in turn undermines the claims about how the consumer choice to buy açai contributes to the preservation of pristine Amazonian environments.

B. Organic

The main way in which environmental claims are regulated in global supply chains is through voluntary organic certification.\(^\text{170}\) Organic claims are common on açai products with 29 of the identified labels describing the açai contents as organic.\(^\text{171}\) Of these, 17 claims were supported by third-party certification marks, and 12 claims were unsupported by a certification scheme.

\(^{169}\) Alistair John Campbell et al., *Anthropogenic disturbance of tropical forests threatens pollination services to açai palm in the Amazon river delta*, 55 J. APPL. ECOL. 1, 1 (2018).


\(^{171}\) Generally, organic agriculture refers to a set of ecologically-based land use practices that do not use synthetic in-puts (fertilizers, herbicides, insecticides, genetically modified seeds, etc.). Underlying the concept of organic agriculture is, inter alia, resistance to industrial agriculture, characterised by intensive practices, low biodiversity and a high dependence on external in-puts.
For highly processed foods like açaí berries, these organic claims give the message that the consumer can purchase a product that is simultaneously clean, green, and super convenient. Warde suggests that processed foods are often marketed, especially towards working people with caring responsibilities, as quick and easy yet also showing care to the family – overcoming the antinomie of convenience and care. Acai superfood products also emphasize their convenience (e.g. ready to blend smoothie packets or freeze-dried powers) that synchronously allow the consumer to care for the environment and their own body:

The açaí in our [product name] is natural and organic and is harvested from the Brazilian rainforest. For your convenience, our product range includes RioLife 100% certified organic and wild harvested freeze-dried açaí powder…. The only açaí in Australia with absolutely nothing added to it! . . . since RioLife Açaí berries are wild harvested and organic, there are no pesticides involved.

Yet the claim that these products care for the environment is not easy to verify and may be greenwashing. No legally binding standards exist in Australia in relation to “organic” claims nor does any required pre-market verification process exist. Thus, the manufacturer of the açaí product broadly determines: firstly, whether they will make an organic claim, and secondly, whether they will seek certification of their claim by a NGO or make the claim without third-party certification.

The only way in which an Australian government regulator would examine the substantiation of an organic claim on a product for domestic consumption would be if a consumer, NGO or competing business made a complaint to one of the state consumer protection regulators or the ACCC (discussed above). Under s18 of the Australian Consumer Law, the complaint would have to allege that a product’s claim is ‘misleading and deceptive.’ When investigating whether an organic claim is misleading or deceptive, the ACCC refers to the Australian Standard for Organic and biodynamic product (AS 6000-2015) as a guideline. Sellers

172 Warde, supra note 37, at 152.
173 RioLife, supra note 149.
174 Competition and Consumer Act 2010 (Cth) (Austl.) (being a model law that applies at both Commonwealth and State levels).
wishing to comply with consumer and imported food law in Australia would, therefore, follow the minimum standards set out in AS 6000-2015 to mitigate their potential liability. This approach, thus, informally enrolls the manufacturer to self-regulate their use of organic claims (which they may do by obtaining organic certification in accord with the standard), and enrolls the consumer, and other market actors, in information-gathering to trigger an ACCC investigation. However, it would be difficult for a consumer to detect whether an organic claim was actually misleading since açaí is harvested in lands not subject to secure land tenure rules, and moves through globalized supply chains. For example in relation to wild-harvested plants, an açaí product would be consistent with 2.9.2 of the AS 6000-2015, if the açaí berries it contains were sourced from a clearly defined collection area and the collection area was not subject to synthetic farming inputs in the last three years. Additionally, the operator must carry out collections in a way that does not “disturb the stability of the natural habitat or the

2019) (stating that “there is a voluntary Australian standard for growers and manufacturers wishing to label their products ‘organic’ and ‘biodynamic’ (AS 6000-2009)” and that “this standard is a useful reference point when determining whether a product is organic”); see generally Memorandum, Memorandum of Understanding Between the Commonwealth of Australia and Standards Australia International Limited 2003 (Austl.) (Standards Australia, which is analogous to the American National Standards Institute, is a long-established NGO and not-for-profit in Australia. This organization develops standards in a range of sectors, participates in the creation of international standards and accredits other organizations to develop standards. It works closely with the Australian Government pursuant to the Memorandum of Understanding Between the Commonwealth of Australia and Standards Australia Limited.).

176 See generally Imported Food Control Act 1992 (Cth) (Austl.) Because açaí is an imported product, it is also regulated under the Imported Food Control Act 1992 (Cth), which contains a “labelling offence” in s 8A. The offence is made out where a person does not meet “applicable standards” relating to information on food packaging labels and carries a penalty of imprisonment for 10 years. The burden of proof falls on the defendant to prove that they did not commit a labeling offence, which places the onus on the party with the most information about a food package’s contents. “Applicable standards” is defined as ‘the national standard in force in relation to that food or matter’, and so would likely encompass the AS 6000-2015.

177 See generally Curll et al., supra note 76, at 425 (discussing further the pathway of enforcement) The ACCC usually only takes action where there is a complaint and the issue is of significance; see also Julia Black, Enrolling actors in regulatory systems: examples from UK financial services regulation, 2003 PUB. L. 63 (2003) (discussing the concept of enrollment).

178 See Fábio de Castro, Local politics of floodplain tenure in the Amazon, 10 INT’L J. COMMONS 1 (2016) (finding that forests are community-based management systems, which are not subject to land tenure rules).

179 Organic and Biodynamic Products 2015 (Austl.) Farming inputs must meet the requirements in Appendix B of the AS 6000-2015 if the product is to be labelled as “organic” in a manner complying with the standard. Generally, farming inputs should be naturally occurring materials (e.g. compost).
maintenance of species in the collection area” (art 2.9.2(b)). Thus, consumers would generally need to rely on third-party organic certification, consistent with AS 6000-2015.

Even though certification is not a precondition to marketers making organic claims in Australia, organic claims on açai products certified by a third-party were more common than uncertified claims. Third-party certification involves non-state actors setting management standards which meet, and perhaps go beyond, AS 6000-2015. No requirements, on-going monitoring or approval processes exist in relation to certification bodies. Thus, their ability to create and implement standards generally occurs without any regulatory intervention from governments.

Meanwhile, certification trademarks are available for an entity setting itself up as a certification body, provided their trademark application includes the standards that the goods must meet before the certification trademark can be employed. The rights to use and license the certification trademark are limited to the rules governing the use of the mark, as submitted in the trademark application. In sum, certification bodies are not regulated by a government body in terms of their activities or standards; but they are able to obtain private property rights in their certification mark, which incidentally provides a small level of regulatory oversight through the requirement that a trademark application includes the scheme’s rules.

The Australian and New Zealand approach to regulating organic claims significantly differs to the US where the term “organic” can only be used on a food label if the product has been produced according to the Organic Food Production Act and the US Department of Agriculture’s (USDA) organic regulations. The US approach enables significantly more public oversight and critique of organic standards. However, the USDA’s Organic Standards are routinely critiqued for representing the interests of large-scale, industrial organic operations owned by corporations rather than requiring genuinely sustainable farming practices.

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180 TRADE MARKS ACT 1995 (Cth) pt 16 (Austl.).
182 See Jaffee and Howard, supra note 156; Alessandra Arcuri, The Transformation of Organic Regulation: The Ambiguous Effects of Publicization, 9 REG. & GOV. 144 (2014); Leslie King & Julianne Busa, When Corporate Actors Take Over the Game: The Corporatization of Organic, Recycling and Breast Cancer Activism, 16 SOCIAL MOVEMENT STUD. 549 (2017); Michael A. Haedicke, ORGANIZING ORGANIC:
Of the 17 açai products that claimed to be certified, over half were accredited through the not-for-profit entity Australian Certified Organic (ACO). This is consistent with the ACO being the most common certification mark applied to organic products sold in Australia. ACO’s Standard 7.5 relates to “wild harvesting.” Given that most açai does not grow on farms subject to private property rights, standard 7.5 is likely to be the standard used by açai product manufacturers to obtain certification. The USDA’s Organic Regulation “5022: Wild Crop Harvesting” is highly similar to Standard 7.5, which indicates that analogous standards and evidentiary requirements apply to açai certified as organic and imported into the US.

To be certified organic under standard 7.5, açai product manufacturers must periodically verify that the açai harvesting is not “degenerating to the natural systems” of the Amazonian estuary or other natural habitats in which the palm grows. Essentially, the açai manufacturer must check on, and verify that, the harvested areas regenerate post-harvest, and that the harvesting of açai does not involve felling of the palms or impacts to other flora to the extent that harvesting has compromised surrounding ecosystems. The standard states that the harvesting area should “encourage co-mingling of species of wild-harvest products and native species so as to mimic as much as is feasibly possible the natural ecosystems within which these species have evolved.” In other words, the wild harvesting of açai should be conducted in smaller-scale ways that make use of an abundant species without resulting in the loss of ecosystems functions or the biodiversity that supports ecosystems.

The açai manufacturer must identify on a map a clear area for the harvesting of açai that are “a satisfactory distance” from conventional farming or related contamination risks. The açai manufacturer must keep a record of all “collectors” and any local

CONFLICT AND COMPROMISE IN AN EMERGING MARKET (2016); JULIE GUTHMAN, AGRARIAN DREAMS: THE PARADOX OF ORGANIC FARMING IN CALIFORNIA (2004).


AUSTRALIAN CERTIFIED ORGANIC STANDARD PTY. LTD., AUSTRALIAN CERTIFIED ORGANIC STANDARD § 7.5, at 54 (2017).


AUSTRALIAN CERTIFIED ORGANIC STANDARD PTY. LTD., AUSTRALIAN CERTIFIED ORGANIC STANDARD § 7.5.1, at 54 (2017).

Id. at § 7.5.1–7.5.2, at 54.

Id. at § 7.5.3, at 54.

Id. at § 7.5.5–7.5.6, at 54.
agents, as well as the respective quantities of açaí berries they provided.\textsuperscript{190} Açaí manufactures must further provide instructions to collectors or other local agents that defines the area of collection and informs them about the standard.\textsuperscript{191} To evidence that these instructions were provided, the collectors or relevant agents must “sign statements to say that they have followed the instructions,” which are kept on file by the açaí manufacturer.\textsuperscript{192}

Documents formulated and provided by the açaí processor provide the evidentiary base for certification in the context of açaí. This evidence is provided by the açaí processor to a Brazilian certification body that is recognized by the ACO. The ACO assesses the evidence gathered by the approved Brazilian certification body, along with import documentation and documented proof that the product was not fumigated or irradiated at the Australian border. The ACO may then confer its certification mark to the açaí processor or importer as a wholesaler. The on-going use of the mark is subject to annual review by the ACO, and the ACO performs random checks on imported products to test for contaminants.

Overall, an açaí processing company does not know for certain whether the instructions were followed nor is it required to perform periodic checks. Financial and time pressures may lower incentives to examine whether their instructions to forest farmers have been followed. It is also conceivable that these standards are not practical, given that they were not developed with the bottom-up involvement of Amazonian ribeirinhos and apply broadly to all wild-harvested products. In the case of açaí products, the organic certification does not represent, as consumers would assume, a product that is free from synthetic chemicals. Rather, it represents that açaí processors and forest farmers have self-substantiated their efforts to avoid harvesting too close to, for instance, conventional farms. No objective scientific evidence, or evidence verified first-hand by the ACO itself, is used in the process of certification.

Moreover, the biodiversity loss in the Amazonian floodplains suggests that the organic certification requirements, especially those regarding the preservation of ecosystems during harvest, are not being followed or that not enough actors have voluntarily agreed to such standards. In the context of açaí then, organic certification is not confirmation that the product is sustainably harvested. Consumers think they are buying a product that is “clean and green” even though the veracity of these claims

\textsuperscript{190} Id. at § 7.5.13–7.5.14, at 55.
\textsuperscript{191} Id. at § 7.5.12, at 54.
\textsuperscript{192} Id.
requires much more evidence and oversight than the supply chains of a globally-traded, durable commodity allows. Moreover, consumers cannot know what proportion of land is being preserved as organic or biodiverse due to açai production, but it is not likely to be large as long as it remains a market niche. At the same time, the more popular the product becomes, the more likely it is to create pressure for unsustainable production practices.

VII. Conclusion

Through our preliminary development of a label chain governance analysis, we demonstrate how to connect, and the value of connecting, the micro world of the consumer and their everyday choices with the macro world of cultural, social, political and governance institutions. In Part II we suggested that this approach can help scholars, activists and engaged consumers to not only critically evaluate particular products but also identify patterns in markets and supply chains that should be addressed by collective action and governance strategies beyond consumer choice. We operationalized our approach through a case study of the marketing for açai berry products, introduced in Part III. These marketing claims suggest that choosing these products enable consumers to govern their own health while also contributing to market signals, as a form of regulation, which supports a fairer more sustainable food system.

Our analysis of health claims in Part IV shows the factors that have influenced the generally lax regulatory standards around health claims and suggests the need to reconsider whether certain health and nutritional claims should be legally allowed to be made on foods at all. In the European Union, for example, many claims about diseases and disease markers that can be allowed in the US and Australia are legally prohibited. The result is that many of the misleading and overreaching claims seen on US and Australian superfood products are not seen in the market in the EU. Addressing the claims themselves will be important. Stricter regulation of the claims and more active monitoring and enforcement of the requirements to back up claims in the US and Australia would help prevent misleading claims and quieten the noisy landscape of self-interested commercial health messages provided to consumers.

193 See Schneider & Davis, supra note 41, at 32 (discussing the intersection between food production, industry, regulation, and consumer choice).
194 See Curll et al., supra note 76, at 443–45 (discussing the failure of Australian and American regulatory measures in preventing fraudulent food label health claims).
Public messaging and guidance regarding food choices should adopt a more holistic understanding of the connections between human bodily health and food. One example of this approach is the development of sustainable dietary guidelines by various nations. Brazil’s dietary advice, for instance, tells citizens that “[d]iet is more than the intake of nutrients.”195 Such guidance needs to be combined with restrictions on food advertising itself and in particular on commercially conflicted health messaging.196 This would help create space for public health professionals to provide fairer and more precise messages about healthy diets and healthy lives and may go some of the way to mitigating the cultural factors that promote over-consumption. Finally, public regulatory interventions, such as fiscal measures, could be taken that make ultra-processed, unhealthy food products less economically and physically accessible, while improving the availability and accessibility of a diverse range of unprocessed, unbranded plant food.197

Our analysis of fair trade representations in Part V showed how product labels leave out the limitations inherent in market-based responses to social inequalities and highlight a simple understanding of social issues and social change. They tend to provide some technically true information (e.g. demand for açai has created more employment opportunities) that are undermined by the omission of other aspects (e.g. the working conditions, the lack of land tenure security, the problems with dependence on raw agricultural commodities for livelihoods). Rather, açai product labels tended to reinforce social inequalities by omitting the distinct culture and position of Amazonian ribeirinhos, including in particular, the significance of their agroforestry skills and knowledge in enabling the mass supplies of açai while preserving biodiversity.

Part VI exposed how food labels can depict technically true environmental claims but avoid contextualizing these temporary benefits within the broader dynamics of capitalist, globalizing food supply chains that necessarily incentivize monoculture, intensive

196 See id. at 38–40 (summarizing relevant regulatory policy measures and supporting literature); see also Walter Willett et al., Food in the Anthropocene: The EAT-Lancet Commission on Healthy Diets from Sustainable Food Systems, 393 LANCET 447, 478–84 (2019) (summarizing regulatory policy measures necessary for healthy sustainable diets).
197 See Willett et al, supra note 199, at 484.
farming. Moreover, this part illustrated how the depiction of third-party certification marks is designed, and empirical evidence showed how it has created, consumer trust in environmental claims. Going beyond the marks to critically examine the evidence and standards being imposed undermines the trust created when it comes to wild-harvested, imported products. The difficulties of verifying claims in this context stem from the distances over which global food chains operate and the way in which these claims rely largely on documentary evidence provided by parties with an interest in being certified.

As Dorothy Smith observed the “work of inquiry” as to how local sites of people’s experience “are connected into the extended social relations of ruling and economy” must be “technical,” yet “its product should be ordinarily accessible and usable, just as a well-made map is, to those on whose terrain it maps.” Similarly, our deconstruction of the label as governance space is technical and scholarly in part. Yet, we also propose it as an emancipatory study that can be communicated for reflexive consumers who wish to identify and exercise agency in relation to social systems and structures. We do not mean to imply that every individual consumer must be aware of everything in the supply chain and its governance behind every product. Democratic control and accountability of the market and the food system, however, requires that there be enough individuals and groups, consumers, activists, policy-makers, business people, artists, and so on, who look behind the label and identify governance practices that recreate injustice and inequality and act to change them. Therefore, we see our study as a resource to further critical examinations of the food label as a governance space while positioning such analyses as a starting off point from which to think through, detail and advocate for new possibilities for the regulatory governance of food systems.

The Clash of Agricultural Exceptionalism and the First Amendment: A Discussion of Kansas’ Ag-Gag Law

Meredith Kaufman*

I. Introduction

A. Overview

Since the Nation’s founding, agricultural production has been treated differently than other industries. This concept, known as “agricultural exceptionalism,” has manifested in many different ways throughout U.S. history.1 Since the 1990s, one manifestation of agricultural exceptionalism has been the enactment of “Ag-gag laws,” state laws that limit information gathering activities at animal production facilities.2 Ag-gag laws are frequently criticized by animal welfare advocates and legal scholars for seeking to shield

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1 For example, the agriculture industry is exempted from federal labor laws, environmental regulations, and antitrust restrictions. See Susan Schneider, A reconsideration of Agricultural Law: A Call for the Law of Food, Farming, and Sustainability, 34 WM. & MARY J. ENVTL. L. & POL’Y REV. 935, 935–36 (2010) (discussing the history of agriculture law in the U.S. and arguing for a new paradigm for the special treatment afforded agriculture under the law).

2 It should be noted that Ag-gag laws generally apply to “processing activities” and “farming activities.” Traditionally, agricultural exceptionalism applies to the latter, but not the former, and the distinction is not trivial. For example, the exemptions afforded to agriculture under the Fair Labor Standards Act is a form of agricultural exceptionalism, and the exemptions do not extend to workers in processing. The Supreme Court has held that chicken catchers are not agricultural workers and therefore not exempt from the Fair Labor Standards Act overtime pay provisions. See Herman v. Tyson Foods, Inc. 82 F. Supp. 2d 631 (2000). By contrast, Ag-gag statutes attempt to expand the umbrella of agricultural exceptionalism to also include processing activities.
animal production facilities\textsuperscript{3} from public scrutiny, a state-sanctioned protection not afforded to other industries.\textsuperscript{4}

Early Ag-gag laws were enacted to protect agriculture facilities from trespass and property damage, known as “agriculture interference laws.”\textsuperscript{5} After 2011, a second wave of Ag-gag laws were enacted, focusing solely on information gathering activities.\textsuperscript{6} Six states currently have Ag-gag laws which have not been challenged in court; one state (Kansas) currently has Ag-gag litigation pending; and in four states, Ag-gag laws have been ruled unconstitutional.\textsuperscript{7,8}

\textsuperscript{3} By “animal production facility” I refer to feedlots, slaughterhouses, and livestock processing facilities, although the term might also include animal research facilities. For example, the Kansas Farm Animal and Field Crop and Research Facilities Protection Act defines “animal facility” as including “any vehicle, building, structure, research facility or premises where an animal is kept, handled, housed, exhibited, bred or offered for sale.” KY. STAT. ANN. § 47-1826(b) (2018). In this paper, I use the terms “animal production facility,” “animal facility,” and “agriculture facility” to mean the same thing.

\textsuperscript{4} See generally Matthew Shea, Punishing Animal Rights Activists for Animal Abuse: Rapid Reporting and the New Wave of Ag-Gag Laws, 48 COLUM. J. L. & SOC. PROBS. 337 (2015) (discussing the arguments made against Ag-gag laws, particularly the most recent generation of Ag-gag laws requiring rapid reporting to local authorities and the damaging effects these laws have for promotion of animal welfare).


\textsuperscript{6} Id.


\textsuperscript{8} This paper does not discuss the Wyoming Ag-gag law because it does not solely target speech activities pertaining to animal facilities. WYO. STAT. ANN. § 6-3-414 (2016) and WYO. STAT. ANN. § 40- 27-101 (2016) were nearly identical statutes which imposed civil and criminal penalties, respectively, for entering private land for the purpose of collecting resource data or crossing private land to collect resource data. WYO. STAT. ANN. § 6-3-414 (2016), invalidated by W. Watersheds Project v. Michael, No. 15-CV-169-SWS, 2018 WL 5318261 (D. Wyo. Oct. 29, 2018); WYO. STAT. ANN. § 40-27-101 (2016), invalidated by W. Watersheds Project v. Michael, No. 15-CV-169-SWS, 2018 WL 5318261 (D. Wyo. Oct. 29, 2018). In Western Watershed Project v. Michael, the United States District Court for the District of Wyoming held that the statutes were content-based restrictions on speech because they only penalized data “relating to land or land use.” W. Watersheds Project v. Michael, No. 15-CV-169-SWS, 2018 WL 5318261, at *8 (D. Wyo. Oct. 29, 2018) (finding that the laws failed to meet strict scrutiny, the court deemed the laws unconstitutional).
As recent litigation demonstrates, a state’s desire to protect animal facilities from public scrutiny through Ag-gag legislation frequently clashes with the First Amendment of the U.S. Constitution. Despite the prominence of agricultural exceptionalism in federal and state laws and in U.S. history, where agricultural exceptionalism clashes with the U.S. Constitution, the former must yield.

The purpose of this article is to discuss the constitutionality of the Kansas Ag-gag law, “The Farm Animal and Field Crop and Research Facilities Protection Act,” focusing on the First Amendment. It explores the law in light of Supreme Court jurisprudence and three recent Ag-gag cases, Animal Legal Defense Fund v. Herbert, Animal Legal Defense Fund v. Wasden, and Animal Legal Defense Fund v. Reynolds. The courts in each respective case held the states’ Ag-gag laws unconstitutional in part or in whole.⁹

A consideration of the Kansas Ag-gag law’s constitutionality is timely because on December 4, 2018, a coalition of public interest groups filed suit against the state, arguing the Kansas Ag-gag law violates the First Amendment. This article argues that the public interest groups should succeed in its lawsuit in part and adds additional perspective on the Kansas Ag-gag law by addressing additional First Amendment issues with the law not raised by the public interest group’s complaint.

Section One of this paper looks at the Kansas statute and the complaint filed by the public interest groups. Section Two discusses the holdings in ALDF v. Herbert, ALDF v. Wasden, and ALDF v. Reynolds. Section Three discusses the First Amendment problems with the Kansas law. As this article discusses below, the Kansas law is different from the laws in Idaho, Utah, and Iowa. Nevertheless, the two sections of the law which implicate speech are unconstitutional and should be struck by the U.S. District Court for the District of Kansas.¹⁰

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¹⁰ See KAN. STAT. ANN. §47-1825(a) (2018); KAN. STAT. ANN. § 47-1827(c)(4) (2018).
B. Undercover Activities at Animal Facilities: Why They Matter

The term “Ag-gag” was coined by food writer Mark Bittman in 2011, though the history of animal activism and undercover activity goes farther back. The first animal cruelty indictment occurred in 1999 after People for the Ethical Treatment of Animals (PETA) released footage from a three-month investigation of animal abuse at Belcross Farm in North Carolina. Today, a YouTube search of “animal production undercover investigation” yields countless undercover videos revealing horrific animal abuse at farms, slaughterhouses, and processing facilities for all types of animals.

These investigations matter foremost because no animal should endure abuse. Moreover, a consumer has a right to know how her meat arrived on her plate, and undercover investigations can help consumers make informed decisions when purchasing food. Also, given the expanding disconnect between consumers and food production in our society, and the tight security at animal facilities, these investigations may be the only source of information disseminated to the public.

These investigations can also have serious consequences for exposed facilities. For example, footage of graphic chicken abuse at an egg production facility, Sparboe Farms, released by Mercy for Animals in 2013 led McDonald’s and Target to drop the egg supplier. In a dramatic example, in 2007, the Humane Society released footage of workers torturing cattle at Hallmark Meat Packing Co., which raised concerns about mad cow disease and led to a massive recall. As a result, the slaughterhouse went bankrupt.

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C. State’s Fight Back: From Property Destruction to Free Speech

As discussed above, the focus of Ag-gag laws has shifted over time. Laws adopted in the 1990s—such as the Kansas law—were enacted in response to groups like the Animal Liberation Front, which engage in illegal tactics, such as fence cutting, animal theft, and arson, to liberate animals.\textsuperscript{15} The second wave of Ag-gag laws, which includes the laws in Idaho, Utah, and Iowa, were enacted in response to undercover investigations and do not implicate physical conduct.\textsuperscript{16}

This article argues that the term “Ag-gag” applies to any law that implicates speech activities at agriculture facilities, including laws that mainly target trespass and physical damage.\textsuperscript{17} A full discussion of the evolution of these laws and the semantics of what constitutes “Ag-gag” is beyond the scope of this article, but merits attention in its own right.\textsuperscript{18}


\textsuperscript{16} Prygoski, \textit{supra} note 5.

\textsuperscript{17} See Rita-Marie Cain Reid & Amber Kingery, \textit{Putting a Gag on Farm Whistleblowers: The Right to Lie and the Right to Remain Silent Confront Agricultural Protectionism}, 11 J. Food L. & Pol’Y 31, 35–38 (2015) (“The first generation of ‘ag-gag’ laws . . . generally concerned trespass and harm to property at animal facilities and properties with field crops. Additionally, however, they criminalized unauthorized photographing or recording at the agriculture facility…. The second wave of ag-gag enactments emphasized new ways to chill whistleblowing and undercover reporting.”).

\textsuperscript{18} For example, whether Ag-gag encompasses “eco-terrorism” laws is open to discussion. See Will Potter, \textit{Sentinel Species: the Criminalization of Animal Rights Activists as “Terrorists,” and What It Means For Civil Liberties in Trump’s America}, 95 Denv. L. Rev. 887, 882–83 (2018) (discussing the history of eco-terrorism laws and arguing that the term ‘eco-terrorism’ was created by corporate interest groups to shift public perception regarding animal activists). \textit{See also} Kevin Adam, \textit{Shooting the Messenger: A Common-Sense Analysis of State “Ag-Gag” Legislation Under the First Amendment}, 45 Suffolk U.L. Rev. 1129, 1166–67 (2012) (“The AETA has been the subject of extreme criticism, primarily because of its disproportionately harsh penalties for conduct that falls outside of what most would consider ‘terrorism.’ For example, six animal-rights activists—known collectively as the ‘SHAC 7’—were convicted of conspiring to violate the AETA and sentenced to four to six years in federal prison for operating a website that was used to organize undercover animal-rights investigations.”).
II. Kansas Farm Animal and Field Crop and Research Facilities Protection Act

A. The Nation’s First Ag-Gag Law: Constitutionally Suspect Sections

There are many ways for a state to draft Ag-gag legislation. As this paper demonstrates, there are major differences in the Idaho, Utah, Iowa, and Kansas laws, to varying degrees of constitutionality.

The Kansas Farm Animal and Field Crop and Research Facilities Protection Act, enacted in 1990, was the nation’s first Ag-gag law. “Animal facility” is defined as “any vehicle, building, structure, research facility or premises where an animal is kept, handled, housed, exhibited, bred or offered for sale.”

The Act broadly criminalizes four types of conduct: (1) damaging or destroying an animal facility; (2) exercising control over an animal facility; (3) entering an animal facility to take pictures or recordings of the facility; and (4) remaining at an animal facility against the owner’s wishes. Each prohibited act requires that the actor have “the intent to damage or destroy” the enterprise or the enterprise’s property. Violation of the Act varies from misdemeanor to felony depending on the amount of damage caused to the facility.

Not all sections of the Kansas law are constitutionally suspect. The sections of the law which this article argues violate the First Amendment are the focus of this paper. First, Section (a) “Prohibited acts; criminal penalties” is void for vagueness and chills protected speech because it is overbroad. Section (a) states: “No person shall, without the effective consent of the owner and with the intent to damage the enterprise conducted at the animal facility, damage or destroy an animal facility or any animal or property in or on an animal facility.” However, the terms “intent to damage” and “damage” are not defined in the statute.

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20 KAN. STAT. ANN. § 47-1826(b) (2018).
21 See KAN. STAT. ANN. §47-1827(a)–(d) (2018) (providing a more detailed description of the prohibited conduct).
22 Id.
23 KAN. STAT. ANN. § 47-1827(g) (2018).
24 KAN. STAT. ANN. § 47-1827(a) (2018).
Second, Section (c) “Prohibited acts; criminal penalties” of the statute states: “No person shall, without the effective consent of the owner and with the intent to damage the enterprise conducted at the facility: . . . (4) enter an animal facility to take pictures by photograph, video camera or by any other means.”  

As this article discusses in detail below, this section violates the Free Speech Clause of the First Amendment. Before addressing these sections and comparing them with the constitutional issues addressed by the Ninth Circuit, the U.S. District Court for the District of Utah, and the U.S. District Court for the District of Iowa, this article discusses the recent complaint filed against the State of Kansas.

**B. Animal Legal Defense Fund Files Suit**

**i. The Complaint**

On December 5, 2018, Animal Legal Defense Fund, Center for Food Safety, Shy 38 Inc., and Hope Sanctuary filed suit against the Kansas Governor and State Attorney General, alleging that the Kansas Farm and Field Crop and Research Facilities Protection Act violates the First Amendment. The complaint alleges (1) that the law is an impermissible content and viewpoint-based restriction on protected speech; and (2) that the law is overbroad.  

First, Animal Legal Defense Fund (ALDF) alleges that the Act violates the First Amendment because it regulates speech based on the speaker’s message, which is a content-based restriction on protected speech. When the Farm Animal and Field Crop and Research Facilities Protection Act was enacted, the state already had content-neutral statutes prohibiting fraud, trespass, adulteration of food products, theft, theft of trade secrets, and destruction of property. Because the state has created a separate law to prosecute

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25 [KAN. STAT. ANN. § 47-1827(c) (2018)].
27 Id. at 28–30.
28 Id. at 30–31.
29 See id. at 28–29 (citing Police Dep’t of Chi. v. Mosley, 408 U.S. 92, 95–96 (1972), holding that “laws which target certain messages or speech because of their ‘ideas, subject matter, or content’ violate the First Amendment, and arguing that this designation of content-based restrictions applies to the Kansas Ag-Gag law).
30 See [KAN. STAT. ANN. § 21-5808 (2018) (creating and describing the state crime of criminal trespass); KAN. STAT. ANN. 65-664 (2018) (describing the conditions
certain conduct and speech at animal production facilities, ALDF argues the law distinguishes favored speech from disfavored speech on the basis of ideas or viewpoints. 31 The complaint alleges that “the law applies only to speech that involves the subject matter of the animal industry and its practices and is therefore content-based on its face.” 32

As the complaint notes, content-based restrictions regarding speech are subject to strict scrutiny. 33 ALDF argues the law is neither justified by a compelling interest, nor narrowly tailored to protecting privacy, trespass, and biosecurity because the state can do so through less restrictive means. 34

ALDF’s second cause of action is that the law’s overbreadth amounts to a restriction on protected speech. 35 ALDF also argues that the law has a chilling effect on speech because the text is vague, and violations carry a heavy criminal penalty. 36 Specifically, because the law does not define the meaning of “intent to damage,” it is unclear what type of conduct is prohibited. 37 Moreover, the “almost limitless” definition of animal facility 38 and research facility 39 chills speech because the statute covers an expansive number of forums: the complaint notes, “these broad definitions would include not just factory farms . . . but also . . .

under which a food will be deemed adulterated); KAN. STAT. ANN. 21-5801 (2018 (describing the crime of theft)); KAN. STAT. ANN. 60-3320 (2018); KAN. STAT. ANN. 21-5813 (2018) (describing the crime of criminal damage to property).
31 See Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622, 643 (1994) (explaining that regulations which differentiate speech on the basis of content are subject to exacting scrutiny, while regulations unrelated to the content of speech are subject to intermediate scrutiny).
32 Complaint, supra note 26, at 28–29.
33 See Turner Broad. Sys., Inc., 512 U.S. at 643 (holding content-based restrictions are subject to strict scrutiny).
34 Complaint, supra note 26, at 29.
35 See United States v. Stevens, 559 U.S. 460, 473 (2010) (holding that a law prohibiting substantially more speech than necessary is unconstitutional even though some of the conduct targeted by the law does not offend the First Amendment).
36 Complaint, supra note 26, at 17–19.
37 Complaint, supra note 26, at 13–14.
38 Defined as “any vehicle, building, structure, research facility or premises where an animal is kept, handled, housed, exhibited, bred or offered for sale. KAN. STAT. ANN. § 47-1826(b) (2012).
39 Defined as “any place, laboratory, institution, medical care facility, elementary school, secondary school, college or university, at which any scientific test, experiment or investigation involving the use of any living animal or field crop product is carried out, conducted or attempted.” KAN. STAT. ANN. § 47–1826(i) (2012).
restaurants with lobster or fish tanks, pet stores, circuses, petting zoos, and elementary school classrooms with an ant farm . . . "

The chilling effect of the law’s vagueness and broad sweep is compounded by the potential for criminal prosecution at the felony level. ALDF indicates that “the criminal penalties are the same for a person who intends to take a picture in an animal facility without the consent of the owner as for a person who knowingly kills or injures an animal.”

ii. Assessment of Complaint

This article agrees with ALDF’s claims for relief—that the law violates the First Amendment as a content and viewpoint-based discrimination, and second, that the law’s overbreadth violates the First Amendment—while diverging from the argument that the entire statute is unconstitutional.

As a content and viewpoint based discrimination, this article relies heavily on Reed v. Town of Gilbert, discussed in detail below. While ALDF’s complaint does not cite Reed, reference to this important case regarding facially content-neutral laws would strengthen its case.

Regarding the statute’s overbreadth, ALDF focuses on the wide range of conduct prohibited by the law, alleging that the entire law is unconstitutional because “the law as a whole restricts substantially more speech than the First Amendment permits.”

This article diverges from ALDF in this allegation, because certain prohibited activities in the statute do not implicate speech.

For example, K.S.A. § 47-1827(b) prohibits “acquir[ing] or otherwise exercis[ing] control over an animal facility . . .” and K.S.A. §§ 47-1827(e) and (f) prohibit “dana[ing] or [destroy]ing . . . field crops” at a private research facility or a government agency.

The conduct prohibited in these sections does not implicate the First Amendment, and, despite the statute’s overbreadth and vagueness, there is a significant difference between causing

40 Complaint, supra note 26, at 20.
41 Id. at 18 (comparing KAN. STAT. ANN. § 47-1827(g)(3) (2006) with KAN. STAT. ANN. § 21-6412(b)(2)(A) (2017)).
43 Complaint, supra note 26, at 30–31 (citing United States v. Stevens, 559 U.S. 460, 473 (2010)).
? physical damage to a facility versus making an undercover recording. While the statute amounts to an unreasonable restraint on protected speech, damaging or destroying another’s property is not protected speech. Thus, the Kansas District Court could find the sections of the statute which implicate speech unconstitutional while upholding the sections of the statute targeting conduct.44

iii. Comparison to Idaho, Utah, and Iowa Ag-Gag Laws

This section discusses the opinions in the Idaho, Utah, and Iowa cases. Notably, these three Ag-gag statutes all targeted some form of false speech used to obtain entry, access, or employment at an agriculture facility. By contrast, the Kansas statute does not address false speech. Thus, while the courts in these respective cases all apply the Supreme Court’s test for laws regulating false speech, this inquiry is not relevant in the Kansas case.45

The Idaho statute was deemed unconstitutional in part, while the Utah and Iowa statutes were deemed unconstitutional entirely. While the Kansas statute does not address false speech, it is still at least in-part unconstitutional.

C. ALDF v. Wasden: Idaho Ag-Gag Held Partially Unconstitutional

The Idaho Interference with Agricultural Production law was passed in 2014 after an undercover video of abuse at an Idaho dairy was released.46 Shortly after the law was enacted, ALDF filed suit. The case was eventually appealed to the Ninth Circuit, and a decision was released in January 2018.

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44 A discussion of conduct under the First Amendment is beyond the scope of this paper, though it should be noted that damaging or destroying an animal facility would be not considered expressive conduct. See United States v. O’Brien, 391 U.S. 367 (1968) (discussing the limits and considerations involved when considering restrictions on symbolic speech).

45 See U.S. v. Alvarez, 567 U.S. 709 (2012) (holding that false speech which neither causes a legally cognizable harm nor inures a material gain to the speaker is a form of protected speech).

In *ALDF v. Wasden*, the Ninth Circuit Court of Appeals held two sections of Idaho’s Interference with Agricultural Production law unconstitutional. First, Section (1)(a), the “Misrepresentation Clause,” stated: “a person commits the crime of interference with agricultural production if the person knowingly: (a) is not employed by an agricultural production facility and enters an agricultural facility by force, threat, misrepresentation or trespass.”

Second, Section (1)(d), the “Recording Clause,” prohibited “enter[ing] an agricultural production facility that is not open to the public and, without the facility owner’s express consent . . . mak[ing] an audio or video recording of the conduct of an agricultural production facility’s operation.” The remainder of Section A focuses on the Ninth Circuit’s opinion.

i. Misrepresentation Clause

1. Gaining Entry Through Misrepresentation is Protected Speech

Assessing the constitutionality of the Misrepresentation Clause, the Ninth Circuit looked to *U.S. v. Alvarez*, in which the Supreme Court held unconstitutional the Stolen Valor Act, which criminalized false claims that the speaker had received the Congressional Medal of Honor. In *Alvarez*, the Court held that false speech is neither categorically protected nor unprotected; false speech made for the purpose of material gain, material advantage, or that inflicts a legally cognizable harm can be criminalized. Other forms of false speech, which do not fall into any of the unprotected categories, receive constitutional protection.

The Ninth Circuit held that criminalizing entering an agricultural production facility by misrepresentation violated

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49 *Alvarez*, 567 U.S. at 709.
50 Id. at 712.
51 *Id.* Animal Legal Defense Fund v. Wasden, 878 F.3d 1184, 1195 (2018). It should be noted that *Alvarez* was a plurality decision, and there has been discussion in lower courts as to whether the plurality’s opinion applies, or the concurrence’s (Breyer, J. concurring, applying a form of intermediate scrutiny to protected false speech). While considering the narrow grounds of the *Alvarez* majority, the Ninth Circuit and the District Courts for Utah and Iowa all applied strict scrutiny.
Alvarez. The court reasoned that “lying to gain entry merely allows the speaker to cross the threshold of another’s property, including public property.” Lying for this purpose does not necessarily result in material gain or advantage for the speaker, nor does it inflict a legally cognizable harm on the property owner.

Because lying to gain entry is protected speech under Alvarez, the court assessed Section(1)(a) under strict scrutiny. The court held that the state might have a compelling interest in regulating property rights and protecting its farm industry, but “criminalizing access to property by misrepresentation is not actually necessary to protect those rights . . . If . . . [the state’s] real concern is trespass, then Idaho already has a prohibition against trespass that does not implicate speech in any way.”

2. Obtaining Records Through Misrepresentation is Unprotected Speech

Conversely, Section (1)(b), which prohibits “obtaining records of an agricultural production facility by force, threat, misrepresentation or trespass” and Section (1)(c), which prohibits “obtaining employment with an agricultural facility by force, threat, or misrepresentation with the intent to cause economic or other injury to the facility’s operations, livestock, crops, owners, personnel, equipment, buildings, premises, business interests or customers” were upheld.

The court held that making false statements to obtain records inflicts a property harm upon the owner and could result in material gain to the speaker and is thus unprotected speech under Alvarez. For example, a property owner suffers a legally cognizable harm from records obtained through false speech and

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52 Id. at 1195.
53 See id. at 1194–95 (exemplifying this point, the court makes the following analogy: “Take, for example, a teenager who wants to impress his friends by obtaining a highly sought-after reservation at an exclusive pop-up restaurant that is open to the public. If he were to call the restaurant and finagle a reservation in the name of his mother, a well-known journalist, that would be a misrepresentation. If the restaurant offers up a reservation on the basis of the mother’s notoriety, granting a “license” to enter the premises… the teenager would be subject to punishment of up to one year in prison, a fine not to exceed $5,000 or both.”).
54 Id. at 1196.
57 Wasden, 878 F.3d at 1199.
the speaker may learn trade secrets. Because such speech is unprotected, it is only subject to rational review.

Regarding the Equal Protection Clause, the Ninth Circuit did acknowledge that the law was partially motivated by animus towards animal welfare groups.58 However, because animal welfare groups are not a traditionally suspect class, a court may only strike the statute “if [it] serves no legitimate government purpose and if impermissible animus towards an unpopular group prompted the statute’s enactment.”59 The court acknowledged that animus towards reporters and activists was a factor in passing the statute, but that it also serves the legitimate purpose of protecting agricultural production facilities from interference.60

3. Obtaining Employment Through Misrepresentation is Unprotected Speech

The Ninth Circuit also held that Section (1)(c), which prohibits obtaining employment through misrepresentation with the intent to cause economic or other injury to the facility, does not offend Alvarez. In Alvarez, the Supreme Court stated, “[w]here false claims are made to effect a fraud or secure moneys or valuable considerations, say offers of employment, it is well established that the Government may restrict speech without affronting the First Amendment.”61 Moreover, this section is limited to those seeking employment with intent to cause economic or other injury to the facility, which further narrows its scope.

While this speech is unprotected, in R.A.V. v. City of St. Paul, the Supreme Court held that the government may offend the First Amendment if it makes a viewpoint distinction in regulating unprotected speech.62 ALDF argued that the statute’s Restitution Clause, which permits victims to recover twice the amount of the damage resulting from the statute’s violation, violated R.A.V.

58 See id. at 1200–01 (quoting City of Cleburne v. Cleburne Living Ctr., 473 U.S. 432, 448 (1985), holding “a bare…desire to harm a politically unpopular group [or] negative attitude[s] or fears about that group [do not constitute] a legitimate government interest for the purpose of this review.”).
59 Id. at 1200 (citing Mountain Water Co. v. Mont. Dep’t of Pub. Serv. Regulation, 919 F.2d 593, 598 (9th Cir. 1990)).
60 Id. at 1201.
61 Alvarez, 567 U.S. at 723.
because it was enacted solely to punish whistleblowers and journalists, and thus suppress a specific viewpoint. The Ninth Circuit held that because the Restitution Clause is limited to economic loss, rather than “less tangible damage” such as emotional distress, the statute does not punish animal activists any more so than other regulations in the Idaho Penal code.

ii. Recording Clause

The Recording Clause created the crime of interference with agricultural production if a person knowingly “[e]nters an agricultural production facility that is not open to the public and, without the facility owner’s express consent or pursuant to judicial process or statutory authorization, makes audio or video recordings of the conduct of an agricultural production facility’s operation.”

The Ninth Circuit held that the Recording Clause violated the First Amendment. As a preliminary matter, the court indicated that making an audio or video recording is speech protected by the First Amendment. The court then determined the Recording Clause was a content-based restriction because law enforcement would be required to view the content of the recording to determine before bringing charges. Because the Recording Clause was deemed to be a content-based restriction, the court assessed it under strict scrutiny. The court held that the clause was not narrowly tailored to protect agriculture production facilities because it was both over and under-inclusive. The clause was held to be under-inclusive because it did not regulate photographs and over-inclusive because it suppressed more speech than necessary to protect property and privacy.

D. ALDF v. Herbert: Utah Ag-Gag Held Unconstitutional

In 2012, the State of Utah enacted the Agricultural Operation Interference law, which created the crime of agricultural interference for certain recording activities; seeking access to an agriculture operation under false pretenses; and seeking

64 Wasden, 878 F.3d at 1202
66 Wasden, 878 F.3d at 1203 (stating “[N]either the Supreme Court nor [the Ninth Circuit] has ever drawn a distinction between the process of creating a form of pure speech (such as writing or painting) and the product of these processes (the essay or artwork) in terms of First Amendment protection afforded…” 1203.
67 Id. at 1204.
employment with the intent to record activities at an agriculture production facility. The United States District Court for the District of Utah held the entire statute unconstitutional, and the State of Utah did not file an appeal.

i. **Lying Provision: Unconstitutional Restriction on Protected Speech**

Section (2)(b) created the crime of agricultural operation interference if a person “obtains access to an agricultural operation under false pretenses.” The court assessed this section under the Alvarez standard discussed above. The Utah District Court, like the Ninth Circuit in Wasden, held that Section (2)(b) infringed on protected speech, noting “[l]ying to gain entry, without more, does not itself constitute trespass.” Thus, because obtaining access through false pretenses does not necessarily result in a legally cognizable harm, it does not fall into a category of unprotected false speech under Alvarez. The court cited numerous examples of speech which could be criminalized under this provision, such as a restaurant critic who hides her identity, a dinner guest who lies to his host, and a job applicant who fabricates his hobbies.

Because Section (2)(b) infringed on protected speech, it was assessed under strict scrutiny. The state cited four interests before the court: 1) protecting animals from injury resulting from unqualified workers; 2) protecting animals from disease brought into the facility by workers; 3) protecting workers from exposure to disease; and 4) protecting workers from injury resulting from unqualified workers.

The court held that even if these were compelling interests, the statute was not narrowly tailored to address these problems. The lying provision was over-inclusive in that it criminalized conduct unrelated to protecting these interests, and under-inclusive in that it did nothing to target harmful conduct resulting from “anyone other than an undercover investigator.”

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68 UTAH CODE ANN. § 76–6–112.
70 Id.
71 Id. at 1211.
72 Id. at 1213.
ii. Recording Provision: Unconstitutional Restriction on Protected Speech

Section (2)(a), (c), and (d) created the crime of agricultural operation interference for various recording activities at an agricultural production facility. As a preliminary matter, the court held that recordings were a form of speech for First Amendment purposes. The state argued that because the Act only applied to speech on private property, First Amendment protections did not apply. The court rejected this argument, stating “a landowner’s ability to exclude from her property someone who wishes to speak, and the government’s ability to jail the person for that speech” are two different concepts which the state incorrectly conflated.

The court then determined that the recording provisions were a content restriction because they required viewing the content of the recordings to determine if they were recordings of an agriculture operation. Had the statute supplanted the term “of” with “at” the court indicated it might have assessed the provisions as content-neutral restrictions.

As a content-based restriction, the court assessed the recording provision under strict scrutiny. The court held that the state offered no clear evidence of how its interests in enacting the statute, discussed above, were furthered by recording restrictions. The recording provisions, like the lying provisions, were deemed unconstitutional.

E. ALDF v. Reynolds: Iowa Ag-Gag Held Unconstitutional

Most recently, in January 2019, the U.S. District Court for the District of Iowa held the state’s “Agricultural production facility fraud” statute unconstitutional in a summary judgement motion. The Iowa law, enacted in 2012, created the crime of agricultural production facility fraud for “(a) obtain[ing] access to an agricultural production facility by false pretenses” and “(b).

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73 IDAHO CODE ANN. § 76–6–112(2)(a), (c), (d).
74 Herbert, 263 F. Supp. at 1208 (stating that, “[b]ecause recordings themselves are protected by the First Amendment, so too must the making of those recordings be protected. This is not to say that the State cannot regulate the act of recording; it is merely to say that if it wishes to do so, the State must justify and narrowly tailor the restriction, as with any other constraint on speech.”).
75 Id.
at 1211.
76 Id. at 1211.
mak[ing] a false statement or representation as part of an application or agreement to be employed at an agricultural production facility, if the person knows the statement to be false, and mak[ing] the statement with the intent to commit an act not authorized by the owner . . . ”

For a first conviction, the crime constituted a serious misdemeanor and for a subsequent conviction, the crime constituted an aggravated misdemeanor.

i. False Speech and Employment: A Different Outcome Than Wasden

As a preliminary matter, the Iowa District Court determined that the false speech at issue—both making false statements to access an agriculture facility and making false statements to seek employment at an agriculture facility—are protected forms of speech under Alvarez because neither instance causes a legally cognizable harm nor provides a material gain to the speaker. Interestingly, the Iowa District Court came to a different conclusion regarding false speech and employment than the Ninth Circuit, which upheld Idaho’s restriction on obtaining employment at an agriculture facility through false speech.

Unlike the Idaho statute, which prohibited obtaining “employment . . . by force, threat, or misrepresentation with the intent to cause economic or other injury,” the Iowa statute prohibits obtaining employment by false speech “with the intent to commit an act not authorized by the owner.” In a previous decision addressing the state’s motion to dismiss, the Iowa court held that the Ninth Circuit’s holding regarding Idaho’s employment clause was inapplicable because the court “placed great emphasis on the intent prong of the Idaho statute.”

The Iowa court reasoned that “[t]his intent provision cabined the application of the Idaho statute so that it only criminalized the sort of false statements that the plurality in [Alvarez] recognized the government may target . . . : those likely to cause material harm to others.” Conversely, the Iowa code

78 IOWA CODE ANN. § 717A.3A(1)(a),(b) (2012).
80 Reynolds, 2019 WL at 10.
82 IOWA CODE ANN. § 717A.3A(b) (2012).
84 Id.
prohibits all false speech in a job application if the speaker intends to commit an unauthorized act—a much broader prohibition that the Idaho code. Determining section § 717A.3A(b) to be broader than the type of false speech the Court deemed unprotected in *Alvarez*, the Iowa court assessed section (b) under strict scrutiny.

ii. Iowa Statute Does Not Survive Strict Scrutiny

In the court’s summary judgment opinion, it deemed § 717A.3A unconstitutional. First, the court determined the entire statute was a content-based restriction because the content of the speech—whether it was true or false—would need to be assessed to find an individual guilty of agriculture production facility fraud.85

As a content-based restriction, the court applied strict scrutiny in assessing the law.86 Though dubious of the state’s justifications for the law (property interests and biosecurity) it still held that these interests were important, but not compelling.87 The law was also deemed unnecessary to protect these interests because the state made no argument explaining how false speech used to access or gain employment at an agriculture facility would compromise biosecurity.88 Finally, the court determined that because Iowa already has other content-neutral statutes regarding trespass and biosecurity, the state’s interests could be achieved by means which do not affront protected speech.89 As of February 14, 2019, the Iowa Attorney General’s Office is set to file an appeal brief by March 20, 2019.90

III. Kansas Ag-Gag: ‘Better’ Drafted, But Partially Unconstitutional

As the nation’s first Ag-gag law, perhaps there is a reason the Kansas Farm Animal and Field Crop and Research Facilities

86 *Id.* at 6.
87 *Id.* at 7.
88 *Id.*
89 *Id.* at 8.
Protection Act was not challenged until 2018; it is ‘better’ drafted than the Idaho and Utah laws.\textsuperscript{91}

Notably, there is no section in the Kansas statute which criminalizes false speech used to enter or seek employment at an animal facility, so \textit{Alvarez} is not relevant. However, like the Idaho and Utah statutes, the Kansas statute does criminalize conduct involving recording and photography.

Despite its tactful drafting, certain sections are still constitutionally suspect.\textsuperscript{92} This section assesses these problematic sections of the law in light of the holdings in \textit{Reynolds}, \textit{Wasden}, and \textit{Herbert}.

\textbf{A. Unconstitutional Aspects of Kansas Law}

\textit{i. Because Key Terms are Not Defined, the Statute is Overbroad and Vague}

\textbf{1. The Meddling Student Example}\textsuperscript{93}

The word ‘damage’ and the clause ‘intent to damage’ are not defined in the statute’s definition section. However, each prohibited act under § 47-1827 requires the actor have the ‘intent to damage’ the enterprise.\textsuperscript{94} Because the term ‘damage’ and the clause ‘intent to damage’ are not defined in statute’s definitions section, the statute chills speech and restricts more speech than necessary to serve its purpose. If the term ‘damage’ were defined to only include activities resulting in \textit{physical} damage, the remainder of the statute (excluding § 47-1827(c)(4)) might be constitutional.

The Supreme Court has stated, “a law may be invalidated as overbroad if a substantial number of its applications are

\textsuperscript{91} It should also be noted that no one has ever been prosecuted under this law.
\textsuperscript{92} See Complaint, supra note 26, at 31 (alleging that the entire statute is unconstitutional on its face or, in the alternative, that Kan. Stat. § 47-1827(c)(4), (c)(1), (c)(3), Kan. Stat. § 47-1827(a), (b), (c)(2), and (d)(1) are unconstitutional as applied to Plaintiff.) For purposes of this paper, I only argue that Sections Kan. Stat. § 47-1827(a) and (c)(4) are unconstitutional.
\textsuperscript{93}This example was inspired by the Ninth Circuit’s factious teenager who lies about his identity in order to secure a reservation at an exclusive restaurant, thus implicating Idaho Code § 18–7042(1)(a). See \textit{Wasden}, 878 F.3d at 1195.
\textsuperscript{94} § 47-1827(b) is the only prohibited act with a different standard, requiring the actor have the “intent to deprive the owner of such facility.”
unconstitutional, judged in relation to the statute’s plainly legitimate sweep.95 Even if aspects of the law are constitutional, under the overbreadth doctrine, the court considers that “the threat of enforcement of an overbroad law [will] dete[r] people from engaging in constitutionally protected speech.”96

In this instance, the word ‘damage’ and the term ‘intent to damage’ could mean many things and runs the risk of criminalizing perfectly legitimate forms of speech. For example, does the statute criminalize economic, emotional, or physical damage, or all three?

There is also a timing issue: must the speaker have the intent to damage the enterprise before she engages in her speech activity, or can she be charged if her intent changes from the time she made a recording or photograph to the time of disseminating the information?

To exemplify the statute’s overbreadth, consider the following hypothetical activity which could be criminalized under the statute. A school group offers a tour to a local animal production facility as part of a field trip for a science class. Though the students are told in advance not to take any photos inside, a student nonetheless hides his phone in his pocket before the field trip because he plans to take a photo, just for fun. The student has signed up for the field trip because his friends dared him to take a photo inside.

Once inside, he takes a particularly gruesome photo of an animal carcass being processed. The student entered the facility an omnivore, but, when he returns home and views the photo, he realizes he is disgusted by the facility and becomes a vegetarian. Wanting to share his news and hoping to persuade others in his network to stop eating meat, he posts the photo to his Facebook page, and in the caption, he names the animal production facility and tells his friends that they should stop eating meat because of the atrocities he witnessed at the facility. A few of his friends view the photo, are also disgusted by it, and decide to stop eating meat.

Under Section (c)(4), the student could be criminally prosecuted. By captioning the facility’s name in his photo and hoping to convert his friends to vegetarianism, the student had the

“intent to damage the enterprise.” Because he planned to take the photo in advance of entering the facility, he entered “to take pictures.” For his actions, the student could be fined and charged with a misdemeanor or felony, depending on the extent of his damage. Whether the facility owner might have recourse in a private tort action (which is beyond the scope of this paper), the State cannot lawfully criminalize such conduct without infringing on First Amendment rights.97

2. Kansas Attorney General Opinion Letter Does Not Ameliorate Statute’s Issues

Following the statute’s enactment, the Kansas Attorney General released Opinion Letter No. 90-72 on the issue of the meaning of “intent to damage.”98 The letter does little to clarify any confusion surrounding the statute’s vagueness and overbreadth, and moreover, the letter is not binding law.99

The letter states that the specific intent to damage the enterprise conducted at the facility is a required element of the crime, and such intent is determined by a judge or jury based on the totality of circumstances surrounding the event.

Responding to the question of what “damages” means, the Opinion Letter essentially ‘punts’ on the issue. The most definitive statement in the letter says, “[u]pon conviction, restitution may be ordered in an amount sufficient to compensate the victim for the loss suffered. In a civil action compensatory damages may include out-of-pocket loss as well as consequential damages.”100 So, if damages constitute any form of quantifiable harm, perhaps any intent is sufficient to implicate charges so long as the victim’s losses are quantifiable. This logic is purely speculative and does little to clarify the meaning of ‘intent to damage.’

97 Note that the State of Utah argued that the First Amendment was inapplicable to its Ag-gag statute because the law only regulated speech on private property. The Utah District Court was quick to reject this argument, noting that the state had conflated the difference between “a landowner’s ability to exclude from her property someone who wishes to speak, and the government’s ability to jail the person for that speech.” The former does not affront the First Amendment, while the latter does. Herbert, 263 F. Supp. at 1208.


99 Id.

100 Id. at 10.
i. The Pictures Clause Fails First Amendment Scrutiny as Either Content-Based or Content-Neutral Restriction

Section (c) of Prohibited acts; criminal penalties states: “[n]o person shall, without the effective consent of the owner and with the intent to damage the enterprise conducted at the animal facility . . . (4) enter an animal facility to take pictures by photograph, video camera or by other means.”¹⁰¹ This section infringes on protected speech in violation of the First Amendment as either a content-based or content-neutral restriction on speech.¹⁰²

The first step in assessing this section under the First Amendment is to determine if it infringes on protected speech. The Supreme Court has held movies to be protected by the First Amendment.¹⁰³ And in United States v. Stevens, the Court stated “visual [and] auditory depiction[s], such as photographs, videos, or sound recordings” are subject to the First Amendment.¹⁰⁴ It logically follows that the act of creating a film, photo, or recording must receive some level of protection as well, and neither the Ninth Circuit, the Utah District Court, nor the Iowa District Court considered otherwise. Thus, protected speech is at issue.

1. Assessed as Content-Neutral Restriction

Section (c)(4) prohibits entering an animal facility “to take pictures by photograph, video camera, or by other means.”¹⁰⁵ This section is notably different from both the Idaho and Utah statutes in that it does not prohibit taking pictures or recordings of an agriculture production facility, but rather at an animal production facility.¹⁰⁶

Because this section limits where a photo or recording can be made, rather than regulating the photo or videos content, it might be deemed a content-neutral regulation. In Herbert, responding to the state’s argument that the recording provision was a content-neutral restriction, the Utah District Court stated, “[t]hat might be

¹⁰¹ KAN. STAT. ANN. § 47-1827(c)(4) (2018).
¹⁰² There is also a timing issue here, as discussed above in the meddling student example. Must the actor have the intent to damage the enterprise before she enters? This uncertainty contributes to the statute’s overbreadth and vagueness.
¹⁰⁶ Id.
so if the Act criminalized recording an image at an agricultural operation. But the Act criminalizes recording an image of an agricultural operation. The distinction is not trivial... the use of “of” rather than “at” means the Act does not bar all filming at an agricultural operation, so it is not location based.”

Following the rationale of the Utah District Court, the Kansas recording provision should be assessed as a content-neutral restriction. Though there are different variations of the content-neutral test, the Supreme Court commonly asks if the law “is designed to serve a substantial government interest and [does] not unreasonably limit alternative avenues of communication.”

Even assuming the Kansas legislature has a substantial interest in protecting its farmers and ranchers, it is dubious that the law does not ‘unreasonably limit alternative avenues of communication.’

Individuals and groups who wish to disseminate information and exposés of animal production facilities essentially have no other avenue of communication under this law. The hypothetical “alternative avenues of communication” do not measure up to the prohibited conduct. For example, an individual could seek the owner’s consent to film or photograph, but clearly what the individual would see while undercover at a facility would be different than what the individual would see during a planned visit.

And given the tight security at animal production facilities, there is essentially no way to take photos or recordings from the outside. Alternatively, an entity or individual wishing to expose abuses at an animal production facility could interview a willing employee, but the differences between reading an interview versus viewing images or audio recordings is significant. A business can prohibit individuals from recording or taking photos on its property, but the state cannot lawfully criminalize such conduct. Because the

107 Herbert, 263 F. Supp. at 1211.
law limits the only legitimate avenue for this speech to occur, it infringes on protected speech if it is deemed content-neutral.

2. Assessed as Content-Based Restriction

Despite the text of Section (c)(4), and the distinction drawn by the Utah District Court between the term “at” and “of,” it is not clear if the Kansas recording provision is actually content-neutral. Arguably, Section (c)(4) is content-based.

In Reed v. Town of Gilbert, the Supreme Court stated, “our precedents have . . . recognized a separate and additional category of laws that, though facially content-neutral, will be considered content-based regulations of speech: laws that cannot be justified without reference to the content of the regulation of speech or that were adopted by the government because of disagreement with the message [the speech] conveys. Those laws, like those that are content-based on their face, must also satisfy strict scrutiny.”

The Kansas statute is content-based under the Gilbert logic. First, the law cannot be justified without reference to its content. For example, although the law prohibits recordings and taking photos at an animal production facility, it only singles out those made with the intent to damage the enterprise. Viewing the contents of the photo or recording is important, if not necessary, to determine the actor’s intent. For example, a photograph of a sunset taken at an animal production facility is probably not taken with the intent to damage the enterprise. But a photograph of animal abuse is likely taken to expose the conduct and cause the enterprise economic damage. Thus, Section (c)(4) cannot be justified without viewing the content of the photo or recording.

Second, the law regulates the content of speech because the government disagrees with the speaker. In Gilbert, the Court further stated, “government regulation of speech is content-based if a law applies to a particular speech because of the topic discussed or the idea or message expressed.” In this instance, the state already has other laws on its books which protect privacy, trespass, and biosecurity. Why the state should need an additional law singling out speech at an agriculture production facility is unclear.

110 Complaint, supra note 26, at 29.
and is only justified by a desire to suppress speech on the topic of animal welfare.111

Because Section (c)(4) is content-based under the “additional category” of laws recognized in Gilbert, it will only be upheld if it meets strict scrutiny, a standard most laws infringing on protected speech are unable to meet.

Under strict scrutiny, a law must be narrowly tailored to serve a compelling state interest. While the state may have a compelling interest in protecting its agriculture production facilities, the law is not narrowly tailored to this interest because, as mentioned above, other laws are already on the books in Kansas that protect these interests and do not infringe on speech. Under strict scrutiny, this section fails.

IV. Conclusion

The outcome of four prior cases striking Ag-gag legislation indicates an ominous fate for the Kansas Farm Animal and Field Crop and Research Facilities Protection Act. While the statute’s Picture’s Clause uses different language from the Pictures Clauses in Idaho and Utah respectively, it too fails to meet the demands of strict scrutiny for the reasons discussed above. Moreover, the vague meaning of ‘damage’ and ‘intent to damage’ creates an issue of overbreadth.

While the entire Farm Animal and Field Crop and Research Facilities Protection Act might not violate the First Amendment, whether these laws are good public policy is an entirely separate question. The State of Kansas and the remaining six states with Ag-gag laws might rationalize these laws with trespass or property damage concerns, but there is no rational justification to suppress speech in the process. Ag-gag laws are yet another example of legislation which affords agriculture special status. While agricultural exceptionalism’s pervasiveness in U.S. history and law is unlikely to shift in the immediate future, it must always yield to the First Amendment.

111 Even if the state has a compelling interest in protecting the property of animal facilities from physical damage—and it is not even clear this was the state’s real interest in enacting the law—prohibiting recording and photography is not necessary to further this interest.
Blockchain Meets Genomics: Governance Considerations for Promoting Food Safety and Public Health

Walter G. Johnson, M.S.T.P.*

I. Introduction

Foodborne illness remains an ongoing public health challenge in both the developing and industrialized worlds.¹ In the United States, almost 50 million reported cases of infectious disease occur every year from a food product, resulting in substantial morbidity and mortality with economic burdens to health care and productivity.² Despite recognition as a leader in food safety, the U.S. experiences longstanding and novel issues in food safety.³ Advances in whole genome sequencing (WGS) promise to bolster food safety regulators’ capabilities to identify pathogens and determine their source.⁴ However, inefficiencies in tracing food products through the supply chain remain.⁵

Simultaneously, practical applications are beginning to emerge for new distributed ledger technologies, including blockchain.⁶ First popularized by the Bitcoin cryptocurrency, blockchain has been hailed as a transformative technology for any industry engaged in recordkeeping.⁷ Blockchain has attracted

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¹ J.D. Candidate, 2020, Sandra Day O’Connor College of Law; Master of Science and Technology Policy, 2017, Arizona State University. With many thanks to Gary Marchant and David McCarville for helpful comments and suggestions.
² Diane G. Newell et al., Food-Borne Diseases — The Challenges of 20 Years Ago Still Persist While New Ones Continue to Emerge, 139 INT’L J. FOOD MICROBIOLOGY S3, S4 (2010).
⁵ Thea King et al., Food Safety for Food Security: Relationship Between Global Megatrends and Developments in Food Safety, 68 TRENDS FOOD SCI. & TECH. 160, 170 (2017).
massive investments for its broad applications in finance.\textsuperscript{8} Meanwhile, academic and industry research on blockchain has exploded since 2012.\textsuperscript{9} Though blockchain applications have only begun to surface, other sectors including healthcare, energy, and government services stand to benefit from this technological revolution.\textsuperscript{10}

New pilot projects suggest blockchain may also serve a public health function as applied to food safety,\textsuperscript{11} potentially overlapping with WGS advances. Blockchain in the food industry promises increased traceability of food products through the supply chain, as well as reduced fraud and counterfeiting of food products.\textsuperscript{12} In 2017, Walmart and IBM began a collaboration to pilot blockchain in the food supply chain to hasten responses and reduce waste during an outbreak of foodborne illness.\textsuperscript{13} Federal regulators in the U.S. have gained interest in exploring this application of blockchain technologies in the wake of two lettuce E. coli outbreaks during 2018 which suffered from traceability issues.\textsuperscript{14} Given their complementary

\textsuperscript{11} See generally Frank Yiannas, A New Era of Food Transparency Powered by Blockchain, 12 INNOVATIONS: TECH., GOVERNANCE, GLOBALIZATION 46 (2018).
\textsuperscript{14} Maggie Fox, The FDA Thinks Walmart May Have One Solution to Romaine Lettuce Recalls, NBC NEWS (Nov. 28, 2018), https://www.nbcnews.com/health/health-news/fda-thinks-walmart-may-have-one-solution-romaine-lettuce-recalls-n940826.
nature, industry-driven blockchain projects could soon converge with government-based WGS infrastructure to provide a more comprehensive approach to responding to foodborne illness. Accomplishing this goal will require addressing regulatory and technical hurdles.

This article illustrates opportunities and obstacles arising from combining blockchain and WGS in food safety. Part I reviews food safety regulatory infrastructure in the U.S. and recent advances in WGS. Part II describes the rise of blockchain and its application in the food supply chain. Part III presents the promise of successfully combining blockchain and WGS tools alongside governance challenges and opportunities, pointing to soft law approaches including voluntary regulatory programs and technical standards as a potential path forward.

II. Food Safety Oversight and Whole Genome Sequencing

Ensuring food safety and preventing foodborne illness represent common, pervasive public health challenges for every nation and state. Nearly 50 million individuals in the U.S. become ill after exposure to contaminated food products in a single year.

Food poisoning may produce more mild symptoms of gastric distress but can also yield potentially fatal liver, kidney, and neurological complications. In turn, foodborne illnesses in the U.S. result in 128,000 hospitalizations and 3,000 mortalities annually. Globally, food poisoning strikes 600 million individuals, resulting in 420,000

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15 See Inst. Med., Addressing Foodborne Threats to Health: Policies, Practices, and Global Coordination 3 (2006) (“Ensuring the safety of food is a long-standing and critical objective of public health. The estimate that millions of Americans—whose food is among the safest on earth—are sickened by tainted food each year attests to the need to further safeguard our food supply, while the mounting threat of terrorism lends this mission a particular urgency.”).


17 See Paul S. Mead et al., Food-Related Illness and Death in the United States., 5 Emerging Infectious Dis. 607, 607 (1999) (“[S]ymptoms of foodborne illness range from mild gastroenteritis.”).

fatalities. Foodborne illness may have disparate impacts on vulnerable groups, including minorities and people of lower socioeconomic status, suggesting health justice as a needed lens for this public health hazard. Consumers consistently rate food poisoning among top food-related concerns, ahead of pesticides, antibiotics, or allergens. The economic burden of foodborne illness from common pathogens on the American healthcare system may approach $78 billion per year.

The expansive scope of pathogens and food products contributing to foodborne illness complicates oversight for prevention and response. Myriad species of microorganisms and toxic metabolites lead to illness every year. Prominent pathogens are

21 See generally Lindsay F. Wiley, Health Law as Social Justice, 24 CORNELL J. LAW & PUB. POL’Y 47 (2014) (arguing that health law should be used as a tool for social justice).
22 See, e.g., INTERNATIONAL FOOD INFORMATION COUNCIL FOUNDATION, 2018 FOOD & HEALTH SURVEY 49 (2018) (finding “[f]oodborne illness from bacteria” was ranked as the most important food safety issue in 2018 more often than any other choice); INTERNATIONAL FOOD INFORMATION COUNCIL FOUNDATION, 2014 FOOD & HEALTH SURVEY 75 (2014).
23 See Scharff, supra note 2, at 123 (finding that the aggregated annual cost of foodborne illness was $77.7 billion under its enhanced model). Cf. Sandra Hoffmann et al., Annual Cost of Illness and Quality-Adjusted Life Year Losses in the United States Due to 14 Foodborne Pathogens, 75 J. FOOD PROTECTION 1292, 1292 (2012) (reporting an average of $14 billion annually as a result of only common pathogens).
24 See generally U.S. FOOD & DRUG ADMIN., BAD BUG BOOK: HANDBOOK OF FOODBORNE PATHOGENIC MICROORGANISMS AND NATURAL TOXINS (2d ed. 2012) (providing information about major food pathogens and discussing the related oversight challenges) [hereinafter BAD BUG BOOK].
bacterial or viral, including salmonella, E. coli, and norovirus. Every year, multiple outbreaks in meat, produce, and other types of consumables are investigated by federal regulators. Illness arising from all food types can give rise to infection, hospitalization, and mortality. Moreover, contamination vulnerabilities exist at all stages of the food supply chain, “from farm to table.” Identifying the pathogen responsible and the origin of contamination is a critical part of the response to an outbreak and preventing future outbreaks, and thus promoting food safety more broadly. Difficulties in characterizing pathogens can arise from food contaminated by multiple microorganisms. Unfortunately, determining the origin of an outbreak with current tools can require a substantial amount of time, potentially enabling the outbreak to propagate.

Federal law divides regulatory authority over food safety between multiple agencies. Recently boosted by the Food Safety Modernization Act, the Food and Drug Administration (FDA) has primary responsibility for preventing and responding to food

26 See *Bad Bug Book*, supra note 24 (discussing the impact of each of these categories of contaminants on food safety).
31 Marion Koopmans, *Food-Borne Viruses from a Global Perspective*, in *Institute of Medicine, Improving Food Safety Through a One Health Approach: Workshop Summary* 225, 225 (2012).
contamination. FDA yields various tools for ensuring food safety including inspection, recalls, sampling, and voluntary destruction. Complementing FDA jurisdiction, the Department of Agriculture’s Food Safety Inspection Service (FSIS) has similar authority over meat, poultry, and processed eggs. The Centers for Disease Control and Prevention (CDC) conducts food safety surveillance, investigates multistate outbreaks, and coordinates state and local public health actions. These three federal agencies established the Interagency Food Safety Analytics Collaboration (IFSAC) in 2011 to promote coordination and cooperation in identifying culpable pathogens and contaminated food products.

Despite its multi-agency scheme, gaps in U.S. food safety oversight remain. For example, of the nearly 50 million cases of foodborne illness in the U.S. each year, the responsible pathogen has historically only been identified in one fifth of the cases. In 2011, the FDA launched the “Whole Genome Sequencing (WGS) Program” to enhance its food safety operations. WGS methods comprehensively decode the full genome of an organism, identifying


35 See Deliganis, supra note 20, at 702–05 (considering the many tools available in FDA’s arsenal); Food: Compliance & Enforcement, U.S. Food & Drug Admin. (Sept. 18, 2018), https://www.fda.gov/Food/ComplianceEnforcement/default.htm (discussing FDA’s authority to take action against “adulterated” or “misbranded” foods); see also 21 U.S.C. §§ 321(f), 393(b)(2)(A) (2018).


40 Eric L. Stevens et al., The Public Health Impact of a Publicly Available, Environmental Database of Microbial Genomes, 8 FRONTIERS MICROBIOLOGY 1, 2 (2017).
the organism by comparing the data produced through sequencing to reference genomic datasets. With the costs of WGS technology falling, the FDA program calls on laboratories to characterize the full genome of microbes obtained from food, environmental, and clinical samples in their local areas. The GenomeTrakr platform serves as a key tool in the FDA Whole Genome Sequencing Project by providing an international reference database of pathogen genomes. GenomeTrakr enables public health officials to infer the origin of contamination in food products by comparing the genomes of new outbreak pathogens, obtained from WGS, to references in the database from various geographical locations. In 2013, CDC announced its existing PulseNet network of genomic food safety laboratories would begin collecting WGS data. PulseNet aims to recognize outbreaks earlier by finding common strains of specific pathogens in different clinical cases and whole genome data should augment these efforts. FSIS contributes to both CDC’s PulseNet and FDA’s GenomeTrakr, and, in 2017, indicated interest in conducting its own analyses of pathogen genomic data. An overview of the efforts of IFSAC agencies to implement WGS techniques in food safety are described in Figure 1.

41 Jenny C. Taylor et al., Factors Influencing Success of Clinical Genome Sequencing Across a Broad Spectrum of Disorders, 47 NATURE GENETICS 717, 717 (2015).
42 Xavier Didelot et al., Transforming Clinical Microbiology with Bacterial Genome Sequencing, 13 NATURE REV. GENETICS 601, 610 (2012).
45 Id.
Early evidence suggests these WGS methods for pathogen characterization may improve the response capacity of food safety regulators. FDA reports cases showing WGS affords the ability to identify and distinguish between problematic pathogens in the food system, even in products with ingredients from diverse geographic locations. In 2013, CDC launched a pilot project to detect food contaminated with listeria using WGS techniques. Initial results demonstrate that WGS methods enabled public health officials to identify as many as 50% more related cases of foodborne listeria in a year and reduced the average number of cases reported per outbreak by up to 50%. The listeria project points to significant possible public health and economic savings by reducing the burden of foodborne illness. The expanding international adoption of PulseNet and GenomeTrakr should allow for further improved results. Moreover, WGS systems may offer a platform for public health officials to monitor the food supply chain and intervene earlier

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49 See E. Kurt Lienau et al., Identification of a Salmonellosis Outbreak by Means of Molecular Sequencing, 364 NEW ENG. J. MED. 981, 981 (2011) (discussing how genome sequencing methods were used in identifying a salmonella outbreak in 2009-2010).

50 Examples of How FDA Has Used Whole Genome Sequencing of Foodborne Pathogens for Regulatory Purposes, U.S. FOOD & DRUG ADMIN. (Nov. 16, 2017), https://www.fda.gov/Food/FoodScienceResearch/WholeGenomeSequencingProgramWGS/ucm422075.htm.


52 Id. at 382 (comparing data from the year prior to WGS implementation to year 2 of WGS use).


than otherwise possible to mitigate the spread of detected pathogens.55

Despite advances in WGS food regulation, gaps exist in industry and regulatory entities’ abilities to trace food through the supply chain.56 Paper documentation in the food supply chain continues to be used despite inefficiency.57 No comprehensive digital system exists to track food products through the supply chain, slowing down regulatory responses to outbreaks of foodborne illnesses.58 The summer 2018 regulatory investigation of an E. coli outbreak in lettuce from Arizona lasted for weeks,59 illustrating long response times despite access to CDC and FDA genomic databases. Challenges in traceability can lead to significant waste as well. For example, after struggling to identify the source of an E. coli outbreak in November 2018, CDC and FDA warned consumers and distributors to discard all romaine lettuce from all producers.60 This extensive response to the uncertain source of contamination further raised objections from farmers feeling they were unfairly forced to

55 Proactive Approaches of Whole Genome Sequencing Technology, U.S. FOOD & DRUG ADMIN. (Nov. 16, 2017), https://www.fda.gov/Food/FoodScienceResearch/WholeGenomeSequencingProgramWGS/ucm422077.htm.
56 See King et al., supra note 5 at 160, 170.
57 Myo Min Aung & Yoon Seok Chang, Traceability in a Food Supply Chain: Safety and Quality Perspectives, 39 FOOD CONTROL 172, 181 (2014).
58 Sylvain Charlebois et al., Comparison of Global Food Traceability Regulations and Requirements, 13 COMPREHENSIVE REV. FOOD SCI. & FOOD SAFETY 1104, 1108 (2014).
carry the costs of traceability issues. New approaches for digitally managing food safety data and tracing food products will be needed to complement other advances in preventing and responding to foodborne illness.

III. Blockchain and Applications in the Food Supply Chain

Improving traceability in the food supply chain may require novel tools. Opportunities to optimize and streamline the food safety infrastructure and to trace contaminated foods identified by WGS through the supply chain may arise with new technological approaches offered by blockchain. These approaches offer platforms for a host of participants to collectively build a record of data while ensuring that only one, authoritative version exists at any time.

Blockchain represents a large category of upcoming technologies anchored in the larger umbrella of distributed ledger technologies. Blockchain systems have gained substantial attention by stakeholders from myriad industries due to several key elements

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63 See, e.g., Ryan Surujnath, Off the Chain: A Guide to Blockchain Derivatives Markets and the Implications on Systemic Risk Notes, 22 FORDHAM J. CORP. & FIN. L. 257, 262 (2017) (discussing the efficiency of blockchains compared to a centralized system); see Sorkin, supra note 8 (comparing blockchains to the use of Google Docs).

of the technology. First, blockchain acts as a ledger or recording system for data or transactions. Data are loaded onto the ledger in discrete “blocks” and coupled to the prior block, forming a “chain” with a timeline. Second, blocks are placed on the ledger chronologically and users can view all blocks dating back to the original. Third, that ledger is distributed across all nodes in the system, signifying that all users have a copy of the record. Finally, verified blocks become immunized from changes by individual users, because altering an old block requires a majority of nodes to agree on the change.

Classifying blockchains can occur in multiple manners, though a useful lens comes from viewing systems as permissioned or permissionless, public or private (as in Figure 2). Permissionless blockchains enable any party to add a block to the chain, where permissioned systems require users to first obtain prior authorization from an administrator. The public-private dimension instead distinguishes whether anyone can access and review data stored on the ledger, or if only authorized entities can access the information. While Bitcoin functions as a public, permissionless system without a central authority, businesses looking for more top-down

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65 The National Academies describes blockchain as “a technology meant to achieve and unalterable, decentralized, public, append-only log of transactions, without any single authority in a position to change the log.” NAT’L ACAD. SCI., ENG’G, & MED., SECURING THE VOTE: PROTECTING AMERICAN DEMOCRACY 103 (2018).
66 See NIST REPORT, supra note 6, at 13–1717 (explaining the ways blockchain can track data); Konstantinos Christidis & Michael Devetsikiotis, Blockchains and Smart Contracts for the Internet of Things, 4 IEEE ACCESS 2292, 2293 (2016).
67 NIST REPORT, supra note 6, at 13–17; Christidis & Devetsikiotis, supra note 66, at 2293; see also Wessel Reijers, Fiachra O’Brocháin & Paul Haynes, Governance in Blockchain Technologies & Social Contract Theories, 1 LEDGER 134, 136 (2016).
69 WORLD BANK GROUP, supra note 64, at 5–6; see also R3, supra note 64, at 2 (noting that while blockchains are distributed, they can be built as both centralized or decentralized systems).
70 Nir Kshetri, Blockchain’s Roles in Strengthening Cybersecurity and Protecting Privacy, 41 TELECOMM. POL’Y 1027, 1027–28 (2017); see Yli-Huumo et al., supra note 9, at 3 (discussing the process of forming blockchain).
72 See NIST REPORT, supra note 6, at 5–6.
73 See Meng et al., supra note 71, at 10183.
approaches generally select private and permissioned schemes.\textsuperscript{74} These characteristics may change the method of verifying blocks before being added to the immutable chain, called consensus models.\textsuperscript{75} Proof of work consensus models have become commonplace in permissionless blockchains such as Bitcoin, which competitively reward the first participating node to verify blocks by solving algorithmic “puzzles.”\textsuperscript{76} However, consensus protocols better suited for permissioned systems may provide useful alternatives to proof of work models and their high fiscal and energy costs.\textsuperscript{77} For greater flexibility, data recorded on the distributed ledger and associated applications can be stored on- or off-chain.\textsuperscript{78}

**Figure 2. Basic Blockchain Structural Classifications\textsuperscript{79}**

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\textsuperscript{75} For a comprehensive review of consensus mechanisms, see NIST Report, supra note 6, at 18–24.

\textsuperscript{76} Id. at 19–20.


\textsuperscript{78} See Jose Luis Bellod Cisneros et al., *Public Health Surveillance using Decentralized Technologies*, 1 BLOCKCHAIN HEALTHCARE TODAY 1, 7 (2018).

\textsuperscript{79} Adapted from information in NIST Report, supra note 6, at 5–6; Meng et al., supra note 71, at 10183.
Blockchain has gained a reputation as a financial technology, with its popularization through Bitcoin and the oscillating market value of cryptocurrencies since then. However, blockchain applications also offer substantial promise in the health care and public health sectors. Perhaps best documented is the anticipated application of blockchain to power electronic health records to enhance privacy and portability. But various other opportunities to advance public health through blockchain exist, including tracing medical products through the supply chain. Converging with the interest in blockchain for logistics, blockchain has been proposed as a system to track prescription opioids through the drug supply chain.

The intersection of blockchain, supply chain logistics, and public health has recently sparked attention for its applications in food safety. In August 2017, IBM and food industry giants including Walmart announced a partnership to pilot a blockchain-based food surveillance system. The permissioned IBM platform aims to record data throughout the supply chain for individual food batches including location of origin, identification numbers, expiration dates, shipping records, and other processing information. Notably, the Walmart-IBM collaboration promises to identify the source of an

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82 See Gammon, supra note 10, at 378–79.
87 Brigid McDermott, Improving Confidence in Food Safety with IBM Blockchain, IBM BLOCKCHAIN BLOG (Sept. 5, 2017), https://www.ibm.com/blogs/blockchain/2017/09/improving-confidence-in-food-safety-with-ibm-blockchain/. (In general, relevant supply chain data loaded on the blockchain may include “time, location, price, parties involved, and other relevant information when an item changes ownership.”); See Kshetri, supra note 70, at 1034.
outbreak “in seconds rather than days or weeks.” The blockchain application could give retailers the confidence to only discard food products from the affected farms, rather than wasting considerably more food. By September 2018, Walmart announced it would retain the program permanently to trace lettuce products. Walmart will require direct suppliers and over 100 upstream farms to comply over the course of 2019.

Though no public data on the project have been released, the Walmart-IBM pilot offers a valuable case study in leveraging distributed ledger technology to promote public health. The preliminary reports of success for blockchain in the food supply chain will likely draw further interest from industry competitors and regulators alike for uses beyond leafy greens. In November 2018, the French distributor Auchan SA announced its own blockchain

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92 The late 2018 expansion of the pilot to include European food distributor Carrefour may open more opportunities for evaluation. See Food Traceability: Carrefour, a Blockchain Pioneer in Europe, Has Joined the IBM Food Trust Platform to Take Action on a Global Scale (Oct. 8, 2018), http://www.carrefour.com/current-news/food-traceability-carrefour-a-blockchain-pioneer-in-europe-has-joined-the-ibm-food. However, should the pilot fail and these industry leaders abandon a blockchain approach, this may ripple into the food supply chain industry. See Christian Catalini & Catherine Tucker, When Early Adopters Don’t Adopt, 357 SCIENCE 135, 135–36 (2017).
pilot to trace meat and vegetables through the supply chain. The World Wildlife Fund has launched a blockchain project to trace tuna through the supply chain in Australia, New Zealand, and Fiji. Insurers may support the drive towards blockchain, given the potential for lowering fiscal risk in the food supply chain. Publicized foodborne illness outbreaks may add pressure to adopt blockchain, with some coverage casting blockchain as a potential solution to traceability issues arising from the November 2018 E. coli outbreak. CDC and FDA already collaborate with IBM on blockchain applications in public health, and may take new steps to infuse their food safety operations with blockchain. While vital to acknowledge that blockchain technology cannot solve all problems, its potential to reduce foodborne illness will likely drive further experimentation and implementation.

IV. Governance Considerations for Combining Blockchain and Genomics

Two rising trends in food safety may soon converge. On one side, food regulators have begun to implement WGS methods and databases to enhance responses to foodborne illness, aiming also to

99 See Fox, supra note 14.
augment prevention efforts. On the other, private industry is developing blockchain capabilities for data recording to streamline regulatory compliance and minimize discarded products during an outbreak. Blockchain offers strengths to cover the weaknesses of WGS, enabling officials to trace contaminated food products through the supply chain and potentially increasing data liquidity. In turn, whole genomic sequencing methods should enable determining the exact type of pathogen and its geographical origin, when blockchain is limited to tracing backwards rather than starting at the beginning. If combined effectively, the nexus of blockchain and WGS could enhance the capacity of public health actors to respond to and prevent foodborne illness mortality and morbidity.

More specifically, benefits might accrue from fusing the power of WGS methods and government reference databases with the advantages of blockchain containing an authoritative, timestamped, readily searchable record (as depicted in Figure 3). Since blockchain systems likely cannot store the amount of data constituting a full genomic sequence, useful information about each sequenced organism including species and location could instead be recorded directly on the chain. The full DNA sequence of pathogens could instead be stored “off the chain,” with a central authority providing permission to access the full sequence data on request by public health officials. In one possible scheme, during an outbreak of foodborne illness, pathogen information from clinical samples could be compared to reference databases and on-chain data to narrow the search for a matching organism. Permissioned access to off-chain genomic sequences could then be used to infer where the contamination originated and which downstream facilities were affected.

101 See Proactive Applications of Whole Genome Sequencing Technology, U.S. FOOD & DRUG ADMIN. (Nov. 16, 2017), https://www.fda.gov/Food/FoodScienceResearch/WholeGenomeSequencingProgramWGS/ucm422077.htm.
102 Halil Ibrahim Ozercan et al., Realizing the Potential of Blockchain Technologies in Genomics, 28 GENOME RES. 1255, 1262 (2018).
103 See Nadon et al., supra note 54, at 4–5.
104 See Bellod Cisneros et al., supra note 78, at 5.
Beyond public health benefits, incentives exist to encourage private actors to pursue the integration of blockchain and WGS in food safety operations. Despite upfront costs in developing or leasing the blockchain platform, the Walmart case study suggests substantial potential savings for food distribution corporations by increasing response time to contamination in food products.¹⁰⁶ The heightened agility and specificity offered by combining WGS and blockchain should therefore promote greater internal savings and less waste for industry actors. More targeted responses to contamination should also protect farming entities from the economic impact of distributors discarding even uncontaminated food products when faced with uncertainty about the source and path of an outbreak.¹⁰⁷ The potential for blockchain and WGS combination systems to streamline and speed compliance should reduce or mitigate regulatory penalties resulting from contamination.¹⁰⁸

Though offering great promise, excitement for a pragmatic new public health tool should be tempered by a realistic understanding of remaining technical, corporate, and governance challenges.¹⁰⁹ Whether developers can adequately scale up the blockchain supply chain pilot projects remains an open question, and

¹⁰⁷ See, e.g., Finucane & Camero, supra note 61.
may require years to accomplish.\textsuperscript{110} Scaling up may also come with added risks of cybersecurity vulnerability.\textsuperscript{111} Further increasing adoption of and participation in FDA and CDC pathogen sequencing programs will take time and appropriate standardization of the technology.\textsuperscript{112} Deploying blockchain and WGS sequencing technologies at all nodes in a food supply chain will demand substantial time, resources, and, likely, political capital. Notably, while implementing blockchain would allow for improved supply chain management and mitigate the extent and duration of foodborne illness outbreaks, it would not directly resolve existing food safety issues leading to contamination.\textsuperscript{113}

Moreover, technical decisions about the most appropriate architecture for a blockchain will be required and have regulatory implications. Blockchain-powered food supply chain systems promise to reduce fraud by holding all users accountable for the data they enter.\textsuperscript{114} However, this benefit is only possible from within a permissioned blockchain system, as all users creating blocks must be identifiable to gain permissioned access.\textsuperscript{115} Permissionless systems could create insurmountable challenges in data integrity and compliance by enabling any party to add blocks to the ledger.\textsuperscript{116}

\begin{footnotesize}
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\item[\textsuperscript{110}] Evelyn Cheng, For All the Hype, Blockchain Applications Are Still Years, Even Decades Away, CNBC (June 4, 2018), https://www.cnbc.com/2018/06/04/for-all-the-hype-blockchain-applications-are-still-years-even-decades-away.html; Melissa Gilmour, Blockchain for Supply Chains—More Hype Than Reality?, SWEETBRIDGE (June 11, 2018), https://blog.sweetbridge.com/blockchain-for-supply-chains-more-hype-than-reality-150f9962b80c.
\item[\textsuperscript{112}] Jacob Moran-Gilad, Whole Genome Sequencing (WGS) for Food-Borne Pathogen Surveillance and Control – Taking the Pulse, 22 EUROSurveillance 30547, 30547 (2017).
\item[\textsuperscript{115}] See NIST Report, supra note 6, at 5–6.
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Permissioned systems could also avoid proof of work consensus mechanisms, avoiding substantial energy consumption and environmental impacts upon scaling up.\(^{117}\)

If permissioned platforms advance, questions may arise about whether industry or government entities will hold centralized control of the blockchain to grant permission to participate and add blocks.\(^{118}\) The potential public health utility and existing government stewardship over WGS databases may support placing public actors in control of permissioned blockchains. Federal regulators administering the permissioned systems may maximize accountability for industry and the effectiveness of enforcement actions.\(^{119}\) The possibility of deliberate food contamination in acts of agroterrorism\(^{120}\) may provide further rationale for federal government control. Yet, the technology and supply chain industries will likely lead the efforts to build blockchain infrastructure in the food supply chain.\(^{121}\) Despite incentivizes to minimize fiscal harm from contamination, blockchain development will require private firms to expend notable resources in a competitive market. Accordingly, economic factors will likely disincentivize industry members who have invested the most in creating and maintaining platforms to cede control of their permissioned systems to federal food safety regulators.\(^{122}\)
Further governance challenges could arise in the decision for public or private blockchain architecture. A public blockchain could enable public health officials globally to monitor food safety in the supply chain without procedural constraints on gaining access to the blockchain, likely leading to improved foodborne illness responses. The open-access model of a public ledger may also offer the most pragmatic interface between blockchain and the growing international adoption of GenomeTrakr and the PulseNet International network of WGS public health laboratories.\textsuperscript{123} However, a public design would also enable any other party to view data on the chain, including competitors, yielding corporate confidentiality dilemmas.\textsuperscript{124} Accordingly, businesses generally seek to utilize private blockchains.\textsuperscript{125} Off-chain storage of confidential data could ease such concerns, but off-chain storage can carry independent security vulnerabilities.\textsuperscript{126} Though a public blockchain could maximize transparency in supply chain governance,\textsuperscript{127} business incentives may resist regulatory moves granting competitors access to confidential supply chain and compliance data.

The presence of competition in crafting blockchain platforms for the food supply chain also highlights the potential for interoperability challenges.\textsuperscript{128} Given the competitive pressures to protect confidential data, each supply chain manager will likely

gov/regulatory-policy/1910833.pdf (illustrating how corporate “[c]ompliance rates are lower when regulation does not fit well with existing market practices or is not supported by cultural norms and civic institutions.”).
\textsuperscript{123} See Nadon et al., supra note 54, at 10.
\textsuperscript{125} See Jayachandran, supra note 74.
\textsuperscript{126} Ana Reyna et al., On Blockchain and Its Integration with IoT. Challenges and Opportunities, 88 FUTURE GENERATION COMPUTER SYSTEMS 173, 177 (2018).
\textsuperscript{128} As in health care, blockchain is not an inherent solution to interoperability and issues will likely develop when blockchain platforms are implemented. Raj Sharma, Don’t Look to Blockchain to Solve Healthcare’s Interoperability Woes, FORBES (Sept. 18, 2018), https://www.forbes.com/sites/forbestechcouncil/2018/09/18/dont-look-to-blockchain-to-solve-healthcares-interoperability-woes/#7a19bd5e6eab.
obtain and operate their own blockchain with limited incentives to ensure it could interface with others.\textsuperscript{129} Moreover, firms will lack incentives to switch to a new, more centralized blockchain platform once committed to one, as logged data will remain on the original blockchain and protocols to transfer data to a new blockchain remain limited.\textsuperscript{130} Food blockchains lacking interoperability may complicate efforts by public health officials to effectively track foodborne illness outbreaks and apply WGS data, particularly when outbreaks span facilities and regions involving multiple supply chains.\textsuperscript{131} Food products packaged with multiple types of ingredients,\textsuperscript{132} potentially tracked through different blockchains, may exacerbate interoperability challenges.\textsuperscript{133} Government pressure or mandates to create interoperable platforms could be opposed by industry, citing potential anticompetitive effects.\textsuperscript{134}

No simple solution exists to these governance challenges, given the conflicting public health and business interests in designing and deploying a blockchain to integrate with existing WGS operations. Overly aggressive actions or requirements by regulators, even made in the interest of public health, may disincentivize industry from ever developing the blockchain platforms.\textsuperscript{135} Command and control regulatory approaches administered by a central government may suffer from perceived or real inefficiency,

\textsuperscript{129} Absent standardization or other pressures, blockchain developers will have significant latitude to build unique platforms to the specifications of individual clients, likely resulting in interoperability issues. See DAVID SCHATSKY, ET. AL., BLOCKCHAIN AND THE FIVE VECTORS OF PROGRESS 4, DELOITTE, (2018), https://www2.deloitte.com/content/dam/insights/us/articles/4600_Blockchain-five-vectors/DI_Blockchain-five-vectors.pdf.
\textsuperscript{130} See JAIKARAN, supra note 109, at 8.
\textsuperscript{131} See Aung & Chang, supra note 57, at 178.
overly burdensome costs to industry, and restricting flexibility to innovate with emerging blockchain systems.\textsuperscript{136}

Instead, handling the synthesis of WGS methods and blockchain in the food supply chain may benefit from “softer” regulatory approaches. As opposed to command and control schemes, softer approaches offer a spectrum of regulatory mechanisms lacking traditional legal enforceability.\textsuperscript{137} So called “soft law” enables more voluntary, innovative, and adaptable regulatory possibilities by expanding definitions of oversight to include regulation by private or public-private entities.\textsuperscript{138} Limitations of these softer approaches should guide their implementation and combination, including the potential for reduced legitimacy, inconsistent enforcement, and regulatory capture, as well as coordination issues in public-private settings.\textsuperscript{139}

Softer oversight should offer useful tools for advancing the effective combination of blockchain and WGS technologies while responding to governance challenges. Public-private or voluntary oversight programs\textsuperscript{140} may ease tensions between government or industry control over permissioned blockchains through leaving control with industry while creating infrastructure for collaboration. Such arrangements could promote the flow of blockchain and WGS data across the public-private border during an outbreak while also enabling government information gathering to measure the effectiveness of blockchain implementation.\textsuperscript{141} Federal regulators already facilitate food industry action on traceability without

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\textsuperscript{137} Kenneth W. Abbott et al., \textit{The Concept of Legalization}, 54 INT’L ORG. 401, 401–02 (2000).
\textsuperscript{139} See Bowman & Hodge, \textit{supra} note 119, at 477.
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wielding formal regulatory power. Following the November 2018 lettuce contamination, FDA coordinated stakeholders in forming a task force to generate recommendations for improving traceability with labeling. These existing relationships could provide the groundwork for close collaboration on governing blockchain and WGS tools.

Technical standards, another soft regulatory tool, could promote interoperability and facilitate common blockchain architecture for WGS compatibility. Third party standards can provide technical guideposts to direct and stimulate innovation in nascent technologies with various forms. Civilian standard setting bodies with high credibility including ISO and IEEE could build on their existing projects on blockchain to craft standards for interoperability in food safety applications and WGS compatibility. In the U.S., the National Institute of Standards and Technology could provide a similar function as a public entity with expertise on blockchain, crafting voluntary standards with stakeholder input to encourage data fluidity across blockchains and intersections with public genomic databases.

V. Conclusion

Blockchain and WGS represent powerful emerging technologies capable of bolstering regulatory and corporate response to foodborne illnesses. The technologies carry complementary strengths, combining increased traceability and accountability in the food supply chain with enhanced identification of pathogens and location of origin. With the clear potential to advance public health, the convergence of blockchain and WGS appears inevitable.

142 See FDA Update, supra note 60.
143 For a review of blockchain technical features amenable to standardization, see Advait Deshpande et al., Understanding the Landscape of Distributed Ledger Technologies/Blockchain, RAND (2017), https://www.rand.org/pubs/research_reports/RR2223.html.
146 See NIST Report, supra note 6, at ii.
However, synthesis and implementation will require addressing technical and governance challenges.

Government-based WGS operations must effectively intersect with industry-driven blockchain developments to realize the promise of both technologies. Questions arise over whether public or private entities should retain control of permissioned platforms, whether to use public or private blockchain architectures, and how to address interoperability. Soft regulatory approaches offer a path to balancing public and private interests in resolving these governance challenges, though selecting exact oversight instruments should be reevaluated as both technologies mature independently and together. Successfully navigating governance and technical challenges to bring blockchain and WGS together, though complex, should promote public health and reduce foodborne illness burdens.
Federal Regulation of Pesticide Residues: A Brief History and Analysis

Kate Z. Graham, Esq.*

1. Introduction

In the United States today, there are over 900 pesticides in use and over 400 are approved for use in food production, whether used as part of the growing process or in post-harvest handling. Although the history of pesticide use in food crops goes back centuries, the post-war period has seen an enormous growth in the varieties and amounts of pesticides used in our food system. As our reliance on pesticides has grown, pesticides have become a divisive issue. Pesticide advocates view them as essential to a secure and reliable food supply needed to feed a growing world population. Detractors, however, point out the public health risks—both known and not yet fully understood—that widespread pesticide use may entail. Meanwhile, consumer demand for products grown without the use of pesticides is increasing, while at the very same moment farmers are applying more and different pesticides to combat pesticide-resistant “superweeds.” These tensions are playing out both globally and locally in a variety of arenas, from debates over pesticide bans within international organizations and national governments, to the litigation of personal injury claims in American courts.

As policy-makers and the public rethink the current regulatory framework, it is helpful to have a basic understanding of what that framework is. This paper seeks to explain the process by which the U.S. government approves the use of pesticides for food production, manages potential public health risks associated with pesticides in our diets, and enforces these policies throughout the food system. First, I will begin with a discussion of what pesticides are and the relationship of pesticides to the history of agriculture in the U.S., tying together both this history with the history of our laws addressing pesticide use in food. Second, I will describe the features

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and complexities of our current pesticide-residue regulatory system. Finally, I will discuss criticisms of our current regulatory system and opportunities for improvement.

But first, what are pesticides? Simply put, pesticides are any substance used to kill or mitigate the harmful effects of organisms viewed as “pests.” “Pests,” broadly defined, are any organisms that are unwelcome from a human perspective. In the context of food and agriculture, pests of concern include weeds and insects that compete with crops or predate upon them, as well as fungi and rodents that attack food plants in the field and after harvest.

The U.S. government has defined “pesticides” as “(1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, [and] (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.” “Pests” are defined in the law as “(1) any insect, rodent, nematode, fungus, weed, or (2) any other form of terrestrial or aquatic plant or animal life or virus, bacteria, or other micro-organism (except viruses, bacteria, or other micro-organisms on or in living man or other living animals) which the Administrator declares to be a pest under section 136w(c)(1) of [Title 7].”

Basically, any chemical applied to a food crop or to the medium in which a food crop is grown is most likely regulated in the U.S. as a pesticide.

II. A Brief History of Pesticide Use and Regulations

Pesticides are nearly as old as agriculture itself. Pre-Roman civilizations used sulfur as a fumigant and insect repellent, a practice recorded by Homer in the Odyssey in 1000 BC. Until the 19th century, however, most pesticides were derived from botanical preparations, sulfur, oil soaps, kerosene emulsions, lime, and sodium chloride (i.e. salt). In 1867, a grape-grower in Europe discovered that the paint known as Paris Green, a substance that contained

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5 Id. at § 136(t).
7 NATIONAL ACADEMY OF SCIENCES, supra note 3, at 23.
arsenic and copper, not only deterred would-be grape thieves, but also kept insects away.\(^8\) This led to the widespread use of arsenicals as both insecticides and herbicides.\(^9\) Not only were arsenicals highly effective on a broad array of insects, they were cheap, allowing farmers to boost yields and profits.\(^10\) Other heavy-metals were also employed as pesticides, such as the mixture of hydrated lime and copper sulfate known as Bordeaux mixture, a fungicide still in use today to control downy mildew,\(^11\) and lead arsenate, used to halt the spread of the gypsy moth.\(^12\)

During the first three decades of the 20\(^{th}\) century, use of arsenicals as insecticides increased significantly.\(^13\) Aside from the fact that these chemicals were inexpensive and effective against pests, other changes in agriculture drove farmers to embrace pesticides in a way they had not previously. Advances in agricultural technology, including the adoption of mechanized plows, cultivators, and harvesters and the application of crop rotation and fertilizers allowed farmers to grow more crops in large monocultures with a much smaller labor force.\(^14\) But these monoculture fields presented a veritable buffet for would-be pests, a problem compounded by the loss of natural habitat for pest predators and alternative sources of pest foods.\(^15\) Thus, between 1919 and 1929, total insecticide use quadrupled from 14.5 million pounds to 58 million pounds.\(^16\)

As the number of pesticide chemicals on the market increased, so too did the number of fraudulent products. Farmers had no way of knowing that the products they purchased actually worked. Thus, the first law regulating pesticides was intended to ensure their efficacy rather than their safety. Passed in California, the Insecticide Law of 1901 standardized arsenic content in arsenical pesticides.\(^17\) Shortly thereafter, the U.S. Congress passed the first federal law

\(^8\) Id.; see also ERIC L. TAYLOR, ET AL., SOUTHERN REGIONAL EXTENSION FORESTRY, PESTICIDE DEVELOPMENT: A BRIEF LOOK AT THE HISTORY 3 (2007), https://sref.info/resources/publications/pesticide-development---a-brief-look-at-the-history/at_download/file (noting that “Paris green . . . was used extensively to control the potato beetle and protect grapes from insect damage.”)
\(^9\) NATIONAL ACADEMY OF SCIENCES, supra note 3, at 23.
\(^11\) NATIONAL ACADEMY OF SCIENCES, supra note 3, at 23; see also Eric L. Taylor, et al., supra note 8, at 3.
\(^12\) DAVIS, supra note 3, at 4.
\(^13\) Id. at 10.
\(^14\) Id. at 3.
\(^15\) Id.
\(^16\) Id. at 11.
\(^17\) NATIONAL ACADEMY OF SCIENCES, supra note 3, at 24.
aimed at regulating pesticides. The Insecticide Act of 1910 prohibited the manufacture, sale, and transportation of adulterated or misbranded pesticides.\textsuperscript{18} The law also standardized the content of the two most popular pesticides of the time: Paris green and lead arsenate.\textsuperscript{19} The U.S. Department of Agriculture (USDA), whose mission was to support and promote U.S. agriculture, was tasked with enforcement of the new pesticide law.\textsuperscript{20}

Arsenical pesticides were the mainstay of pest control until the introduction of synthetic organic compounds following World War II. Dichlorodiphenyl trichloroethane (DDT) was first synthesized in 1874 but was not used as an insecticide until 1939 when a researcher discovered it was extremely toxic to a wide variety of insects.\textsuperscript{21} During the war, DDT was used effectively to reduce casualties of malaria and other insect-borne diseases for troops in the Pacific theater, and likely saved the lives of many troops.\textsuperscript{22} DDT was the first in a long line of these second-generation pesticides developed during WWII, including organophosphates like parathion (originally developed by the Germans as a nerve gas) and the herbicide 2,4-D, still widely used today.\textsuperscript{23} Insecticide use in this period increased significantly as farmers were advised to apply chemicals at rates intended to totally eradicate pests and “sterilize” farm fields.\textsuperscript{24} This sterilization approach eliminated crop pests but also eliminated beneficial insects, and as was later discovered, it had a disastrous effect on bird populations.\textsuperscript{25}

Meanwhile, a revolution in food safety was taking place. A grassroots movement known as the Pure Food movement led to the creation of the first federal law governing food safety in 1906.\textsuperscript{26} Passage of the law was finally made possible following public outcry over the publication of Upton Sinclair’s novel, \textit{The Jungle}, a book intended to spotlight dangerous labor practices in the meatpacking industry but caused a greater stir over its revelations about what was

\begin{footnotesize}
\textsuperscript{19} DAVIS, \textit{supra} note 10, at 5.
\textsuperscript{20} Id.
\textsuperscript{21} Id. at 24.
\textsuperscript{22} Id.
\textsuperscript{23} TAYLOR, ET AL., \textit{supra} note 8, at 4.
\textsuperscript{24} Id. at 5.
\textsuperscript{25} Id.
\end{footnotesize}
in the meat that people were consuming.\textsuperscript{27} The 1906 Food and Drugs Act prohibited the interstate transport of unlawful food and drugs.\textsuperscript{28} The law focused on the accuracy of food and drug labeling and prohibited certain food adulterants, including ingredients intended to substitute for the food, conceal, damage, harm human health, or constitute a filthy or decomposed substance.\textsuperscript{29}

Despite the benefits of the 1906 law, by the 1930s it became clear that the law was insufficient to protect consumers. For example, the law had no judicial enforcement mechanism to halt the sale of adulterated food products.\textsuperscript{30} Because the law did not punish noncompliance, adulterated products continued to proliferate in the marketplace. Further, the economic climate of the 1930s exacerbated the impacts of the law’s shortcomings and spurred renewed interest among the public in better food safety regulation.\textsuperscript{31} These concerns led to the passage of the 1938 Federal Food, Drug, and Cosmetic Act (FFDCA), which ushered in our modern regulatory framework for food labeling. Among other things, the new law beefed up enforcement by authorizing courts to issue injunctions to halt the sale of adulterated products and allowed the federal government to establish food standards to promote honesty and fair dealing.\textsuperscript{32}

But it was not until the 1950s that the two most important sections of the FFDCA relating to pesticide use were passed. In 1952, a committee of the U.S. House of Representatives released a report that investigated the “nature, extent and effect of the use of chemicals” in food and food production.\textsuperscript{33} The committee, led by Congressman John Delaney, concluded that many chemicals used in food production may be linked to cancer and that additional regulation of chemical residues in food was necessary.\textsuperscript{34} As a result, Congress passed the Miller Amendment in 1954, which added Section 408 to the FFDCA.\textsuperscript{35} Section 408 directed the federal government to establish limits, known as “tolerances,” on the amount

\textsuperscript{27} Davis, \textit{supra} note 10, at 1.
\textsuperscript{29} Id.
\textsuperscript{30} Id. \textit{supra} note 26, at 8.
\textsuperscript{31} Id. at 9.
\textsuperscript{32} Id. at 7.
\textsuperscript{34} Id.
\textsuperscript{35} Id. at 165.
of chemical residues permitted in food.\textsuperscript{36} In order to establish appropriate tolerances, the government was directed to balance the interest of food safety against the interest in providing an adequate food supply. This risk-benefit balancing standard appealed broadly to industry groups because it meant the government could only curtail pesticide use to the extent that it did not interfere with agricultural production.\textsuperscript{37} Prior to the establishment of the Environmental Protection Agency (EPA) in 1970, pesticide residue tolerances were set by the Food and Drug Administration (FDA).\textsuperscript{38}

Four years later, Congress passed Section 409 of the FFDCA, which required that all food additives be found “safe” before being allowed on the market.\textsuperscript{39} Pesticide residues were included in the definition of food additives and regulated under Section 409 if they became concentrated in the food product through processing such that it exceeded the tolerance in the raw product, or where the residue had not been sufficiently reduced through good manufacturing practices.\textsuperscript{40} In addition, the law included what became known as the Delaney Clause (named for Congressman Delaney), which prohibited any food additive known to induce cancer in humans or animals.\textsuperscript{41} Although technically the Delaney Clause only applied to processed foods, because pesticides are generally applied to the raw product prior to processing it was impossible to omit such residues without also banning them from use on the raw product. Thus, the Delaney Clause had the practical effect of banning virtually all pesticides linked to cancer from use in the food system.

By the 1950s, over 300 million pounds of pesticides were being manufactured each year, a huge increase from the 100 million pounds produced in 1945.\textsuperscript{42} This growth in production mirrored a steady increase in the number of different products available on the market. It soon became clear that the 1910 Insecticide Act was stretched to the limits. In 1947, Congress passed the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in an attempt

\textsuperscript{36} Id. at 25.
\textsuperscript{37} Id. at 165.
\textsuperscript{39} James Smart, \textit{All the Stars in the Heavens Were In the Right Places: The Passage of the Food Quality Protection Act of 1996}, \textsc{17 Stan. Envtl. L. J.} 273, 279 (1998).
\textsuperscript{40} Id. at 280.
\textsuperscript{41} Id. at 279.
\textsuperscript{42} Pamela A. Finegan, \textit{FIFRA Lite: A Regulatory Solution or Part of the Pesticide Problem?}, \textsc{6 Pace Envtl. L. Rev.} 615, 619 (1989).
to update the law, and in doing so established the basic framework for pesticide regulation that is still in effect today.\textsuperscript{43} Although it enhanced enforcement mechanisms, the law remained essentially a labeling law that prohibited the manufacture and sale of any pesticide that was adulterated or mislabeled. Once again, the emphasis was on protecting pesticide purchasers from fraud rather than protecting applicators and the public at large from pesticide exposures.\textsuperscript{44} In 1959, FIFRA was amended to require the registration of all new pesticides prior to sale to the public.\textsuperscript{45} The USDA continued to be the agency responsible for enforcement of pesticide regulations under FIFRA.

By the 1960s, public outcry over the widespread use of pesticides was again piqued by the publication in 1962 of \textit{Silent Spring} by Rachel Carson, a scientist and former employee of the federal Bureau of Fisheries (a predecessor to the US Fish and Wildlife Service).\textsuperscript{46} In her book, which sold 162,000 copies in hardback and several million in paperback, Carson described serious harms to the environment and human health from pesticide exposures.\textsuperscript{47} Such harms included massive die-offs of fish and birds, cow’s milk containing pesticide residues, and pesticide-induced diseases in humans.\textsuperscript{48} Carson’s work galvanized the emerging environmental movement, led to an all-out ban on DDT, and

\textsuperscript{44} See Finegan, supra note 42, at 623 (noting that the “[Federal Insecticide Act] prevented the manufacture, sale, or shipment of certain adulterated insecticides in order ‘to protect farmers and consumers against fraudulent products.’”).
\textsuperscript{46} See JoAnne L. Dunec, \textit{On a Farther Shore: The Life and Legacy of Rachel Carson}, 27-SPG NAT. RESOURCES & ENV’T 62, 62 (2013) (noting how Rachel Carson (a scientist and former employee of the federal Bureau of Fisheries, a predecessor to the US Fish and Wildlife Service) published her book \textit{Silent Spring} in 1962, creating a “national debate” over the “‘growing concern among scientists as to the possibility of dangerous long-range side effects from the widespread use of DDT and other pesticides’”).
\textsuperscript{48} See Finegan, supra note 42, at 619–20 (“In the 1960s, public enthusiasm for pesticide use dwindled following publication of Rachel Carson's Silent Spring which focused public awareness on the environmental and public health problems posed by pesticides. Carson presented a frightening picture of massive fish kills, residue-saturated milk from cows grazing on treated pastures, a poisoned wildlife population, and a human population plagued by a host of new pesticide-induced diseases.”).
contributed in no small part to the creation of the Environmental Protection Agency (EPA) in 1970.49

Shortly thereafter, Congress passed the Federal Environmental Pesticide Control Act (FEPCA), which contained a number of amendments to FIFRA.50 First, the law shifted regulatory enforcement from USDA to the new EPA.51 Second, the law amended the criteria for pesticide registration to include consideration of a pesticide’s adverse impacts on the environment and human health.52 Third, the law required the EPA to reregister all previously registered pesticides in light of this new standard.53 The law kept in place the risk-benefit balancing test, however. Following these changes, FIFRA emerged not only as a consumer protection law but as an environmental protection law as well.

Despite these changes, however, the law had little effect on the amount of pesticides making their way into the environment. In fact, pesticide use in the US hit a peak in 1979.54 For the next twenty years, there were no major changes in the pesticide regulatory system, but the use and variety of pesticides continued to grow and change. By 1981, farmers in the U.S. were applying 632 million pounds of pesticides annually.55 The increased use of pesticides resulted from the increase in the total number of acres planted as well as a decline in herbicide costs.56 Additionally, whereas most pesticides applied in the 1950s and 1960s were insecticides, by the 1980s and 1990s the vast majority of pesticides applied to crops were herbicides.57 With the rising popularity of organophosphates, like atrazine and 2,4-D, farmers shifted their dependence from the more acutely toxic and persistent heavy metals to compounds that were

49 See Medowell, supra note 47 (“[Silent Spring] led to a spate of state and local laws regulating the use of pesticides, it helped to make ecology one of the great popular causes of the 1960’s, and eventually it helped lead to the creation of the Environmental Protection Agency.”).
51 Finegan, supra note 42, at 624,
52 Id.
53 Id.
54 GAO FOOD SAFETY REPORT, supra note 2, at 5–6.
55 FERNANDEZ-CORNEJO, ET AL., supra note 18, at 11.
56 See id. at 13–15 (describing how increasing herbicide use due to relatively falling prices combined with increasing crop acreage contributed to increased pesticide use from the early 1960s to early 1980s).
57 See id. at 11 (“Pesticide use more than tripled between 1960 and 1981. Herbicide use increased more than tenfold (from 35 to 478 million pounds) as more U.S. farmers began to treat their fields with these chemicals. By contrast, insecticide use declined from 114 million pounds in 1960 to 97 million pounds in 1981.”).
less persistent in the environment but entailed different health and environmental risks. Further, the overall increase in the use of pesticides led to an increase in the potential human exposures to these chemicals.

In 1993, the National Research Council issued a groundbreaking study examining pesticide exposures in infants and children. Pesticides in the Diets of Infants and Children revealed that the EPA was failing to adequately consider the different physiologies of young children when calculating pesticide residue tolerances. Compared to adults, children consume more food per pound of body weight, which means that they also consume more pesticides relative to their body weight when pesticide residues are present in their food. In addition, infants and children tend to consume a lesser variety of foods compared to adults, which can lead to a greater concentration of certain pesticides in their diets. The report raised concerns about the heavy reliance on organophosphates in particular, which have been shown to cause neurological problems and developmental delays in children. The report urged the EPA to take infants and children into account when determining tolerance levels, to move away from the risk-benefit balancing test, and to consider exposures from a variety of dietary and nondietary exposures.

In reaction to the study and public outcry, Congress passed the 1996 Food Quality Protection Act (FQPA), which revised Section 408 of the FFDCA. The new law replaced the risk-benefit balancing test for establishing tolerances with a new test focused entirely on safety. In establishing tolerances, the EPA was required to determine “to a reasonable certainty” that “no harm would result” from “aggregate exposures” to pesticide residues. In addition, the

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58 See id. at 16 (“In 1968, atrazine and 2,4-D were among the top five pesticides used, but the other three were insecticides: toxaphene, DDT, and methyl parathion (fig. 9). In 2008, each of the top five herbicides (glyphosate, atrazine, acetochlor, metolachlor, and 2,4-D) were more heavily used than the top insecticide.”).
59 COMMITTEE ON PESTICIDES IN THE DIETS OF INFANTS AND CHILDREN, NATIONAL RESEARCH COUNCIL, PESTICIDES IN THE DIETS OF INFANTS AND CHILDREN i (1993).
60 See id. at 344–45 (discussing how traditional toxicity tests do not make allowances for the unique feature of infants and children).
61 See id. at 4 (noting how children are at more risk to pesticide exposure because they eat more food per unit of body weight than adults do).
62 See id. (discussing how children are at more risk to pesticide exposure because they consume fewer types of foods than adults do).
63 Id. at 63.
64 Id. at 8–9.
EPA had to take into account the particular susceptibilities of infants and children, including incorporating an additional tenfold safety factor when setting tolerances. This new standard required not only that the EPA solely consider health risks when setting tolerances in most cases, but also that the EPA had to obtain and incorporate data on American diets to determine what an average person’s aggregate exposure to pesticides might be. In addition, the new law removed the Delaney Clause which had barred pesticides linked to cancer; now, all pesticides would be subjected to the same scrutiny, whether they were linked to cancer or to other health problems. Finally, the law required the EPA to re-evaluate all existing tolerances using the new “no harm” standard within the following ten years.

In the years that followed, the EPA canceled some registrations for certain highly toxic organophosphates for use on some crops and farmers began to shift away from a reliance on more acutely toxic organophosphates to new products believed to be safer and less persistent in the environment. The introduction in the 1990s of herbicide-resistant seed varieties developed with the use of genetic engineering and generated a significant increase in the use of the herbicide glyphosate. Glyphosate, originally released under the tradename RoundUp by Monsanto (now Bayer), was believed to be both safe for humans and wildlife and able to break down quickly in the environment. Even though glyphosate is a type of organophosphate, which is known to cause neurological and development issues, initial studies indicated there were few health risks. Combined with glyphosate-resistant crop varieties, farmers could apply significant amounts of glyphosate to control weeds throughout the growing season without damaging their crop. By the 2000s, glyphosate was the number one most applied pesticide in the U.S., amounting to 38% of all pesticides used in 2008, trailed by atrazine at only 13%. By 2008, farmers were applying approximately 516 million pounds of pesticides. About 80% of

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67 See id. (discussing what the EPA is required to determine by law).
70 FERNANDEZ-CORNEJO, ET AL., supra note 18, at 40.
71 Id. at 20.
72 Id. at 5.
pesticides are applied to five major crops: corn, soybeans, potatoes, cotton, and wheat.73

## III. Pesticide Regulation Today: A Patchwork of Agencies and Laws

Our current system of pesticide regulation reflects the complex history and evolution of our laws governing the various disciplines that touch on pesticide use, including agricultural law, environmental law, and human health law. The laws that make up this regulatory framework include FIFRA, enforced by the EPA, and the FFDCA, enforced by the FDA and the USDA. In brief, the following agencies have the following responsibilities in regulating pesticide residues in food:

- EPA registers pesticides and establishes tolerances;
- FDA enforces pesticide residue limits on most foods;
- USDA Food Safety and Inspection Service (FSIS) enforces pesticide residue limits in meat and poultry; and
- USDA Agricultural Marketing Service (AMS) researches and issues reports on the levels of pesticide residues found in foods.

### A. Pesticide Registration: FIFRA

All pesticides must be registered with the EPA in accordance with FIFRA.74 Recall that FIFRA is essentially a labeling law, which means that the applicant must provide the EPA with information about the product along with a proposed label to qualify for registration.75 FIFRA allows the EPA to approve a pesticide for sale on the market so long as the manufacturer’s claims about the product are warranted, the product is properly labeled, and when used “with widespread and commonly recognized practice” it will not “cause unreasonable adverse effects on the environment.”76 In certain circumstances, the EPA may classify a pesticide as “restricted-use,” meaning that the pesticide may only be applied by or under the supervision of a trained and certified applicator.77 The EPA may also issue “conditional use” registrations, which means that a pesticide

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73 Id. at 27.
75 40 C.F.R. § 152.50(d) (2018).
77 40 C.F.R. § 152.170(a) (2018).
may be available for purchase and use even before the agency has received all data regarding the safety and efficacy of the product.\(^{78}\) A pesticide may be conditionally registered in situations where a similar product is already on the market or where the manufacturer can show that no harm will come about as a result of the conditional use registration.\(^{79}\) If a product receives a conditional use registration, however, the manufacturer is still required to provide the necessary information at some future date.\(^{80}\) The applicant must also specify the intended use for the product. If a new use is proposed for a product that is already registered, the applicant must still go through the registration application process, although it may qualify for conditional registration.\(^{81}\)

After a pesticide registration application is received, whether for a new active ingredient or a new use, the EPA issues a notice of receipt in the Federal Register describing the new active ingredient or proposed new use and soliciting public comment.\(^{82}\) Once the EPA reviews the application and issues a decision to conditionally or unconditionally register the product for the proposed use, it publishes a notice of issuance in the Federal Register. The notice of issuance describes the new chemical or new use, summarizes the EPA’s conclusions, lists any missing data and the conditions for their submission, and responds to comments received from the initial notice of application.\(^{83}\)

B. Tolerance Setting: FFDCA

In addition to the registration requirement under FIFRA, a pesticide intended for use on food must also receive a tolerance pursuant to the FFDCA. A tolerance is the maximum residue level of a pesticide that may legally be present in food, measured in parts per million (ppm).\(^{84}\) According to the FFDCA, a food is considered adulterated if it contains a pesticide residue for which no tolerance is established (and no exemption from the tolerance requirement was

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\(^{80}\) Id. at § 152.115.

\(^{81}\) See id. at § 152.102.

\(^{82}\) Id.

\(^{83}\) Id.

established) or where the amount of the residue is in excess of the established tolerance.85 A tolerance may be established for pesticide residues in a raw agricultural commodity or in a processed commodity under the same procedures.86 But where pesticide residues are not in greater concentration after processing, the tolerance in effect for the raw agricultural product is applicable and a separate processed tolerance is not necessary.87

Prior registration of the pesticide is not necessary to obtain a tolerance from EPA. In fact, there are certain situations in which obtaining a registration for a product for which a tolerance is required is not possible, such as where the product is approved for use in a foreign country but is not in use in the U.S.88 To register a product under FIFRA, the applicant must either state that a tolerance or exemption from tolerance was previously obtained or that the applicant is requesting that a tolerance be obtained pursuant to EPA regulations.89 A tolerance or an exemption from tolerance must be established for all active and inert ingredients in a pesticide.90

In order to obtain a tolerance determination from the EPA, the applicant must provide, among other things, a description of the chemical, data regarding how the chemical is used and how much of its residue remains on food, a summary of studies regarding the safety of the chemical, proposed tolerances, methods for removing residues in excess of the proposed tolerance, whether processing increases the concentration of residues, practical methods for detecting and measuring the chemical’s residues in foods, and a description of any effects on infants and children or to the human reproductive or endocrine systems.91 The applicant must also provide a summary of the application, which the EPA will publish in the Federal Register along with a notice of filing of a petition for tolerance.92 After the application is submitted and published, the EPA must decide whether to issue an order establishing, modifying, or revoking a tolerance regulation, or whether to publish a proposed regulation and request public comment, or whether to deny the petition.93

88 Pesticide Registration Manual, supra note 84.
89 40 C.F.R. § 152.50(i) (2018).
90 Pesticide Registration Manual, supra note 84.
91 40 C.F.R. § 180.7 (2018).
92 Id. at § 180.7(d), (f).
93 Id. at § 180.7(h).
The standard by which EPA must establish a tolerance is whether the tolerance is “safe.” “Safe” means the EPA has determined “there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information.” EPA applies this standard differently depending on whether a chemical is deemed to have a no observed adverse effect level (NOAEL), which is also known as a threshold effect, or, whether no threshold can be identified. Residues below a NOAEL are considered to have no known or anticipated adverse effects, whereas residues for nonthreshold chemicals have no dose below which there is any certainty that no harm will occur. For threshold chemicals, EPA applies a 100-fold safety factor to account for potential differences between human and animal physiologies since safety studies are generally conducted on animals and not humans. In addition, EPA is directed to apply an additional 10-fold safety factor to account for the unique susceptibilities of infants and children. But EPA is permitted to use a different (i.e. lower) safety factor if “on the basis of reliable data, such margin will be safe for infants and children.”

For nonthreshold chemicals, the “safe” test is satisfied if the increased lifetime adverse risk is “negligible,” which is defined as no greater than a one-in-a-million lifetime risk. Cancer risks generally fall into the nonthreshold category. Recall that, prior to passage of the FQPA, the Delaney Clause effectively established a zero-tolerance policy for chemicals associated with cancer risks; post-FQPA, cancer-causing chemicals may receive a tolerance so long as the established tolerance does not exceed this “negligible” risk limit. In addition, for certain nonthreshold chemicals that entail up to a ten-in-a-million annual risk or a two-in-a-million lifetime risk of adverse health effects, the EPA is permitted to

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95 Id. at § 346a(b)(2)(A)(ii).
96 See id. at § 346a(b)(2)(B) (stating that a pesticide chemical residue that has a nonthreshold effect is assessed by quantitative risk analysis while a pesticide chemical residue that has a threshold effect is assessed by determining the level of aggregate exposure that is safe); see also LYNN L. BERGESON, FIFRA: FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT 31 (2000).
97 BERGESON, supra note 96, at 31.
98 Id.
100 Id.
101 BERGESON, supra note 96, at 31.
102 Id.
consider the pesticide’s offsetting benefits when establishing a tolerance. EPA may consider benefits to human health and to avoid a “significant disruption in domestic production of an adequate, wholesome, and economical food supply.”

In general, if a pesticide residue is found on a food for which there is no tolerance or exemption from tolerance, the food is considered adulterated. However, if the residue is unavoidable through good agricultural and manufacturing practices, the food may still be marketable. For instance, many pesticides that are no longer authorized for use on food are persistent and remain in the soil, finding their way into the food supply even though they are no longer registered and approved for use. In this case, the FDA may issue an “action level.” An “action level” is a recommended level above which an environmental contaminant in food should not exceed. The action level is not legally binding, and FDA may take enforcement action, or not, at its sole discretion. In addition, while the EPA sets tolerances for most pesticides used on crops, the FDA establishes tolerances for animal drug residues found in food-producing animals.

C. Diet Surveys: FDA & USDA

As previously discussed, FFDCA requires the federal government to establish tolerances by taking into account all dietary exposures to pesticide residues. As a practical matter, this requirement also mandates that the government monitor American diets for the presence of pesticide residues in the foods most commonly consumed. USDA and FDA each have a program that monitors the amount of pesticide residues consumed in the average American diet. While these programs sometimes find tolerance

108 Id.
109 Id.
violations, they are not designed for enforcement purposes; rather, they are intended to simply gather data to inform EPA’s tolerance-setting process and other government food safety and nutrition programs and policies.\footnote{U.S. DEP’T AGRIC. AGRIC. MKTG. SERV., PESTICIDE DATA PROGRAM ANNUAL SUMMARY, CALENDAR YEAR 2016 ii (2018), https://www.ams.usda.gov/sites/default/files/media/2016PDPAnnualSummary.pdf.pdf.}

\section*{i. FDA Total Diet Study}

The FDA’s Total Diet Study (TDS) is an annual report of the levels of various contaminants and nutrients in commonly consumed foods in the U.S.\footnote{Total Diet Study, U.S. FOOD & DRUG ADMIN. (Feb. 23, 2018), https://www.fda.gov/food/foodscienceresearch/totaldietstudy/default.htm.} The TDS has been conducted continuously by FDA since the early 1960s.\footnote{Katie Egan, FDA’s Total Diet Study: Monitoring U.S. Food Supply Safety, FOOD SAFETY MAG. (June/July 2002), https://www.foodsafetymagazine.com/magazine-archive/1junejuly-2002/fdas-total-diet-study-monitoring-us-food-supply-safety/.} To conduct the study, the FDA buys, prepares, and tests about 280 different foods and beverages for the presence of about 800 different contaminants and nutrients.\footnote{Total Diet Study Design, U.S. FOOD & DRUG ADMIN. (Mar. 21, 2018), https://www.fda.gov/Food/FoodScienceResearch/TotalDietStudy/ucm184232.htm.} The study adopts a “market basket” methodology: Researchers purchase the same foods from retailers around the country four times a year and at least once in each of four regions per year (West, North Central, South, and North East).\footnote{Id.} The list of foods purchased is based upon food consumption surveys performed by USDA.\footnote{Id.} To select which foods will be added to the list of products to be tested, FDA groups similar foods together, choosing the one specific food that is most commonly consumed in that group to represent an entire group of foods.\footnote{Id.} About every ten years, FDA revises its list of tested foods to account for changes in eating patterns.\footnote{Id.} In performing the tests, the researchers attempt to closely mimic how the average consumer would likely consume the food by purchasing it from a retail outlet and preparing it as it would normally be prepared (i.e., peeling, cooking, etc.).\footnote{Id.} The testing methods used...
to detect contaminants are extremely sensitive, able to detect chemicals in concentrations as low as 100 parts-per-billion (ppb), which is significantly more sensitive than the tests used for regulatory enforcement.121

While the TDS results are not generally used for enforcement, they have in some cases led to further investigation and regulatory action. For example, test results from the 1970s revealed unusually high levels of iodine in dairy products that was traced back to the use of iodine-based cleaners in the dairy industry, the use of which was subsequently reduced.122 And in 1971, higher concentrations of polychlorinated biphenyls (PCBs) were identified in boxed cereals; it was subsequently discovered that cereal boxes made with PCB-contaminated recycled paper were leaching PCBs into the breakfast cereals. The federal government issued regulations limiting PCB content of packaging and industry began bagging foods inside paper boxes to prevent chemical contamination.123

ii. AMS Pesticide Data Program

The Pesticide Data Program (PDP) is a national pesticide residue monitoring program conducted by the Monitoring Programs Division of the USDA’s Agricultural Marketing Service (AMS) since 1991.124 PDP data are primarily used by EPA to assess dietary exposure to pesticide residues to assist with the establishment of tolerance levels.125 PDP data are also used by FDA in planning its enforcement and regulatory programs, such as the TDS (discussed above).126 The PDP is similar to the TDS in that it samples foods determined to be representative of the foods most commonly eaten in the U.S., with a special emphasis on the diets of infants and children.127 In addition, the samples are collected from a variety of sampling sites in ten states representing each of the four census regions of the U.S.128 However, rather than purchase samples from retail outlets, PDP researchers acquire samples from “terminal

121 Egan, supra note 114.
122 Id.
123 See id.
125 U.S. DEP’T AGRIC., AGRIC. MKTG. SERV., supra note 112, at 1.
126 See id.
127 Id. at ii.
128 Id. at 3 (currently, the ten states involved in the PDP are Washington, California, Colorado, Texas, Michigan, Ohio, New York, Maryland, North Carolina, and Florida).
markets,” which are generally wholesale distributors that voluntarily participate in the program. AMS coordinates with state governments to select the samples and ship them to the appropriate laboratories for testing. In addition, instead of a “market basket” approach to testing, the PDP does not test the same foods each year. Rather, it cycles commodities through the testing program about once every five years for “high-consumption items,” and less frequently for other items. In any given year, the majority of products tested are fruits and vegetables, whereas grains and dairy are only rarely tested. In 2012, AMS decided to stop testing beef, pork, and poultry products with the expectation that USDA FSIS would provide this data to the EPA. PDP tests are performed after the food is prepared in a manner that emulates consumer practices.

Like the TDS, the PDP tests for a variety of pesticides at the lowest detectable levels. In 2016, about 77% of samples tested positive for the presence of pesticide residues, but over 99% of samples had residues below the tolerance established by the EPA. 15.7% of samples tested positive for 1 pesticide and 61.6% tested positive for more than one pesticide. In addition to testing for pesticide residues, the PDP tests for environmental contaminants, which include pesticides that are no longer authorized for use in the U.S. but persist in the environment, and pesticides found on imported goods; for example, a metabolite of DDT was found in 39.2% of spinach samples. About 2.6% of samples tested in 2016 contained residues with no established tolerance and .46% contained pesticide residues in excess of tolerance. These tolerance violations were reported to the FDA for enforcement, but by the time the PDP study results are available it is often too late for the FDA to issue any enforcement action.

129 Id. at 3.
130 Id. at 5.
131 Id. at 4.
132 See id. at ix (90.3% of samples collected and analyzed in 2016 were fruits and vegetables).
133 U.S. GOV’T ACCOUNTABILITY OFF., supra note 54, at 14.
134 U.S. DEP’T AGRIC. AGRIC. MKTG. SERV., supra note 112, at 1.
135 Id. at ix–x.
136 Id. at 20.
137 Id. at 18.
138 Id. at 20.
139 Id. at 22.
140 See id. at 21.
The USDA and the FDA are charged with enforcing EPA tolerances in the foods that each agency is required to regulate. Due to the unique histories of these two organizations, USDA is charged with regulating meat, poultry, egg products (not shell eggs), and catfish, whereas FDA is charged with regulating nearly everything else, including fruits, vegetables, dairy, seafood, and spices. Both agencies also regulate imports as well as domestically produced goods in the categories of food for which each agency has jurisdiction. Each agency also takes a different approach to its regulatory enforcement procedures. Because USDA regulates a comparatively much smaller segment of the food system, it has greater enforcement resources available to it relative to the number of products it oversees, which enables it to take a more rigorous approach to testing and enforcement. The FDA, by contrast, is saddled with regulating around 75% of the food system, requiring it to divert limited resources to known problem areas.

i. FSIS National Residue Program

The National Residue Program (NRP) is designed to identify and control chemical and pesticide residues, including veterinary drug residues, found in the products that the USDA regulates. The Food Safety and Inspection Service, a division of USDA, administers the program under the Federal Meat Inspection Act (FMIA), the Poultry Products Inspection Act (PPIA), and the Egg Products Inspection Act (EPIA). In carrying out the program, FSIS conducts random sampling of carcasses at the slaughter establishments it regulates, testing for over 80 veterinary drugs and over 100 pesticides as well as certain metals. Meat carcasses

147 U.S. DEPT. AGRIC., FOOD SAFETY & INSPECTION SERV., supra note 143, at 4.
148 Id. at 3.
are required to be held pending the testing results, whereas poultry and catfish are not required to be held but FSIS regulations recommend that establishments hold these items pending the testing results. Not all livestock are included in the sampling program, however; each year FSIS generates a sampling plan to identify which classes of livestock will be tested. A Surveillance Advisory Team (SAT), consisting of representatives from FSIS, FDA, EPA, USDA’s Agricultural Research Service (ARS), USDA’s AMS, and HHS’s Centers for Disease Control and Prevention, assist FSIS in identifying its sampling targets each year. For 2019, FSIS’s sampling plan will sample production classes covering about 95% of domestic meat and poultry consumption. In addition, FSIS conducts random sampling of imported meat and poultry.

In addition to gathering data on the presence of residues in the food system, the NRP plays an important role in enforcement. A violation occurs when an FSIS laboratory detects a chemical compound in excess of an established tolerance or FDA action level or if the detected chemical has no established tolerance. FSIS enters violation data into the Residue Violator Tracking (RVT) system, which is an FDA/FSIS interagency database. FSIS notifies the slaughter establishment and the producer of the violation, and recommends that the establishment also notify the producer of the violation. FSIS also shares the violation data with the EPA and the FDA, giving the FDA the opportunity to further investigate the producer in cooperation with state agencies, and to take further enforcement action if necessary. Information about repeat violators is posted publicly on FSIS’s website each week on the Residue Repeat Violators List to warn processors and deter violations. In addition, FSIS requires all slaughter establishments to implement Hazard Analysis and Critical Control Point (HACCP) inspection systems that identify and mitigate all food safety hazards posed by chemical residues. In general, data from the NRP show that tolerance violations in FSIS-regulated products are extremely rare. For example, FSIS found a total of 30 pesticide residue

149 Id. at 4.
150 Id.
151 Id. at 1.
152 Id. at 4.
153 Id. at 6–7.
154 Id. at 2.
155 Id.
156 See id.
157 Id.
158 Id.
159 Id.
violations out of nearly 55,000 random samples of domestic and imported products between 2000 and 2011. The most frequently found violations were for products that are now banned but have persisted in the environment, such as hexachlorobenzene, DDT, and chlordane.

ii. FDA Pesticide Residue Monitoring Program

Whereas the USDA regulates meat, poultry, egg products (except shell eggs), and catfish, the FDA regulates all other food products, amounting to 75% of the U.S. food supply. The amount and variety of food products that fall within the FDA’s jurisdiction is staggering, amounting to $417 billion worth of domestic food and $49 billion worth of imported food. In addition, the number of imports within the FDA’s jurisdiction has increased dramatically, doubling in the ten years between 1999 and 2009 and reaching 9.7 million individual “entry lines” in 2012. The FDA also tests and regulates animal food products, focusing on feed for animals intended for human consumption. The sheer magnitude of products that fall within the FDA’s jurisdiction underscores the important role the FDA plays in ensuring the safety of the U.S. food supply, but also evidences the growing strain on the FDA’s limited enforcement resources.

In contrast to the USDA, the FDA does not take a statistical approach to its sampling program to test for pesticide residue violations. The agency acknowledges that such an approach would be impossible given the limited resources allocated to it for enforcement and the magnitude of its regulatory jurisdiction. Instead, the FDA focuses its limited resources on sampling targeted commodities based on a number of different factors, including the frequency of consumption, the history of prior violations, findings from other studies (including the TDS and PDP), and toxicity of

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160 U.S. GOV’T ACCOUNTABILITY OFF., supra note 54, at 38.
161 Id. at 39.
164 U.S. GOV’T ACCOUNTABILITY OFF., supra note 54, at 38.
166 See id. at 10–11.
particular pesticide residues. When a tolerance violation is identified in a product, the FDA may issue a Warning Letter to the producer, or it may seize the product or issue an injunction to correct the cause of the violation. The FDA may also request that a company recall its products, or in very serious cases the FDA has the authority to require a recall if the FDA believes the product would cause serious health consequences or death in humans. For imported products, the shipment may be refused entry into U.S. commerce, or the FDA may place an import alert for all future shipments of the product, allowing future shipments to be detained without physical examination. The import alert also shifts the burden to the producer or shipper to prove their products are not in violation of tolerance levels before the product will be permitted to enter U.S. commerce.

As part of its sampling program, the FDA uses a multi-residue method (MRM) capable of detecting a majority (but not all) of the approximately 400 pesticides with EPA tolerances, plus several others that lack tolerances. Occasionally, the FDA also uses selective residue methods to test for the presence of specific residues that are not picked up by the MRM. No one test is capable of detecting all pesticide residues. Results of the FDA’s enforcement sampling generally show very low levels of tolerance violations; however, the FDA’s sample size is small relative to the total number of products available for human or animal consumption. For 2016, FDA tested just 7,413 samples, of which 6,946 were human foods and 467 were animal foods (mostly foods for livestock). Of all the samples, 2,670 were from domestically-produced foods and 4,276 (60% of samples) were imported, reflecting FDA’s targeted enforcement of imports based on historical data indicating more frequent violations in imported goods. Violative residues were detected in 0.9% of domestic samples and 9.8% of import samples. Of domestic samples, 46.2% contained

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167 Id.
168 Id. at 13.
169 Id. at 9.
170 U.S. GOV’T ACCOUNTABILITY OFF., supra note 54, at 12.
172 Id. at 10.
173 Id. at 12.
174 Id.
175 U.S. GOV’T ACCOUNTABILITY OFF., supra note 54, at 11.
176 U.S. FOOD & DRUG ADMIN., supra note 165, at 15.
177 Id.
178 Id. at 18.
some pesticide residues below tolerance (non-violative), whereas 39.5% of imports contained some pesticide residues below tolerance.\textsuperscript{179}

\section*{IV. Criticism of Pesticide Residue Regulatory Framework}

Since the passage of the FQPA in 1996, many of the most toxic pesticides have been taken off the market or their usage has been significantly decreased.\textsuperscript{180} By one measure, overall dietary risk from pesticide residues declined 81\% between 1996 and 2013.\textsuperscript{181} Even so, USDA residue data indicate that residues from highly toxic pesticides are still a significant risk factor, particularly for certain organophosphate pesticides still in use and for fungicides applied post-harvest.\textsuperscript{182} In addition, the use of lower-toxicity pesticides, such as glyphosate and neonicotinoids, raises questions about their safety relative to their dosage as such chemicals are being applied in larger and larger quantities on more and more crops.\textsuperscript{183} The reliance on genetically engineered (GE) herbicide resistant crops has led to overapplications of herbicides and the development of herbicide-resistant weeds, leading to even greater increases in the use of herbicides to eliminate these “superweeds.”\textsuperscript{184} During the first 15 years of commercial use, genetically engineered crops caused an increase of 527 million pounds of herbicides used.\textsuperscript{185} Recently, with the introduction of GE crops resistant to 2,4-D, the USDA estimates that the use of 2,4-D will increase from 77.8 million pounds per year to 176 million pounds per year.\textsuperscript{186}

In the following sections, I discuss some of the criticisms leveled at the current pesticide regulatory system. These criticisms primarily described the following shortcomings: inadequate protection of children and infants, insufficient protection from nontreshold effects, and tolerance setting that fails to consider sufficient nonbiased data.

\textsuperscript{179} Id.
\textsuperscript{181} Id.
\textsuperscript{182} Id.
\textsuperscript{183} Id.
\textsuperscript{184} Id. at 26.
\textsuperscript{185} Id.
\textsuperscript{186} Id.
A. Protection of Children

The protection of infants, children, and pregnant women were the focus of the reforms brought about by the FQPA, and with good reason—immature humans suffer a greater detrimental impact from exposure to pesticide residues than adults. Children consume more food relative to their body weight and are less able to detoxify their bodies due to differences in their metabolism and the immaturity of their immune systems and neurological development. Empirical studies have shown that children exposed to pesticide residues disproportionately suffer from neurological disorders. For example, several studies of children living on or near farms have shown that such children suffer from increased rates of neurological problems, including autism and developmental delays.

In particular, a class of pesticides known as organophosphates are especially neurotoxic to humans, with serious implications for infants and children. The National Institutes of Health has concluded that exposure to organophosphate pesticides at even very low, infrequent doses can permanently affect developing brains, leading to changes in brain chemistry and behavior, including hyperactivity. A Harvard School of Public Health study showed that children with higher detectable levels of organophosphate pesticide metabolites in their urine were more likely to be diagnosed with attention deficit hyperactivity disorder (ADHD). While the use of organophosphate pesticides declined 70% between 2000 and 2012, their use still represented 33% of all insecticides applied in 2012. For example, residues of malathion, a highly toxic organophosphate, were detected in 6.2% of samples of strawberries tested by the USDA in 2016.

The FQPA requires the EPA to impose an additional ten-fold safety factor to account for the particular susceptibilities of children, unless the EPA finds that “on the basis of reliable data, such [other]
margin [of safety] will be safe for infants and children.”194 Despite this requirement, a 2001 report showed that in more than two-thirds of cases, the EPA was not applying the ten-fold safety factor in organophosphate pesticides.195 Overall, the EPA has applied the ten-fold safety factor in only 16% of tolerances.196 The EPA’s evident reluctance to apply the mandated additional safety factor to pesticide tolerances along with its sanction of organophosphate pesticides for use on fruits that are commonly consumed by children raises questions about whether the EPA is sufficiently protecting the health of U.S. children.

B. Protection from Nonthreshold Effects

In establishing tolerances for pesticide residues in food, the EPA categorizes chemical compounds into two classes based upon empirical data: (1) those chemicals with no discernable harms below a certain dosage, and (2) those chemicals without an identifiable “threshold” dosage below which no adverse effects are detected. The latter category is referred to as “nonthreshold” chemicals. This distinction is significant because the EPA is permitted to use a different regulatory approach for nonthreshold chemicals. Even though there is no known dosage of a nonthreshold chemical that entails no health risk from exposure, the EPA is permitted to consider the chemical’s offsetting benefits to society when determining the appropriate tolerance.197 Thus, even though exposure to a pesticide may entail an increased risk of cancer, such risk may be balanced against the benefit that use of the pesticide would provide in increased access to a low-cost and stable food supply.

Many critics have expressed concern that the EPA’s approach to regulating nonthreshold chemicals does not go far enough to protect human health from risks of cancer and other health problems. Many chemicals in common use in agriculture have been linked to the development of various cancers. For example, the commonly-used herbicide 2,4-D and related chlorophenoxy herbicides are listed by the International Agency for Research on Cancer (IARC), a division of the World Health Organization of the United Nations, as “possibly carcinogenic to humans.” At least one study has found a correlation between cancer mortality and proximity to farm fields treated with 2,4-D.198 Glyphosate, the leading

195 CONSUMER REP., supra note 180, at 14.
196 Id.
198 CONSUMER REP., supra note 180, at 24.
pesticide in agriculture today, was identified as a “probable” carcinogen by the IARC in 2015.\textsuperscript{199} In all, around 40 different EPA-registered pesticides are classified as carcinogens, probable carcinogens, or possible carcinogens by the IARC.\textsuperscript{200}

In addition, emerging research has shown that even low-dose exposure to pesticide residues can cause adverse health effects, and may be linked to neurological disorders, obesity, heart disease, and diabetes.\textsuperscript{201} The concern stems in large part from the fact that many pesticides are “endocrine disrupting chemicals” (EDCs), meaning they interfere with the body’s natural hormone-driven processes, including metabolism, reproduction, and the development of some cancers.\textsuperscript{202} While much of the concern is focused on the organophosphate pesticides, some of which (like DDT) are no longer in use, even newer generation pesticides may pose serious risks, although the research is less settled. For example, neonicotinoid pesticides have generally been considered a safer alternative to organophosphate pesticides.\textsuperscript{203} But at least one study has shown that these chemicals’ effects mimic the effects of nicotine in developing mammal brains, indicating they may disrupt brain development.\textsuperscript{204} Although food is not the only pesticide-exposure pathway, it is one of the most significant ones.\textsuperscript{205}

\textsuperscript{203} Elizabeth Grossman, \textit{Are Bee-Killing Pesticides Impacting Our Health?}, CIVIL EATS (Feb. 3, 2016), https://civileats.com/2016/02/03/are-bee-killing-pesticides-impacting-our-health-neonicotinoids/.
The possibility that even low-dose exposure to pesticide residues entails serious health risks is particularly concerning given the extent to which most people are now exposed to pesticides through their diets. According to data from the 2016 PDP, a mere 22.7% of the fruits, vegetables, and milk sampled that year contained no pesticide residues; 15.7% contained residues of 1 pesticide, and the majority of samples (61.6%) contained residues from at least two or more pesticides.206 And, the U.S. Centers for Disease Control and Prevention (CDC) has found that the bodies of most Americans contain the metabolites of 29 different pesticides.207

C. Insufficient Data

The FFDCA requires the government to establish residue tolerances at safe levels, considering aggregate exposures from all possible exposure sources.208 However, the government no longer has a program that tracks the aggregate amount of pesticides applied each year.209 The last year for which we have such data is 2007, and in that year an estimated 684 million pounds of pesticides were applied, which was an increase from the prior year, but less than the peak of 843 million pounds in 1979.210 In addition, there is no reliable data on the breakdown of which types of active ingredients are in use, which is significant because one type of pesticide may be significantly more toxic to human health than another, meaning that a total increase or decrease in the use of all pesticides does not mean the risk to human health has proportionately changed.211 In short, we simply do not know the quantity and types of pesticide chemicals in use, making it difficult to predict the quantity and types of residues that will end up in American diets.

206 See U.S. DEP’T AGRIC. AGRIC. MKTG. SERV., supra note 112, at 20. However, results vary greatly year to year since the PDP tests a different mix of commodities each year. Compare U.S. DEP’T AGRIC. AGRIC. MKTG. SERV., PESTICIDE DATA PROGRAM ANNUAL SUMMARY, CALENDAR YEAR 2017 20 (2017), https://www.ams.usda.gov/sites/default/files/media/2017PDPAnnualSummary.pdf (For 2017, 53% of samples had no pesticide residues, 19.5% of samples contained residues of one pesticide, and 27.5% contained residues of two or more pesticides); with U.S. DEP’T AGRIC. AGRIC. MKTG. SERV., PESTICIDE DATA PROGRAM ANNUAL SUMMARY, CALENDAR YEAR 2015 20 (2015), https://www.ams.usda.gov/sites/default/files/media/2015PDPSummary.pdf (For 2015, 15.5% of samples contained no pesticide residues, 11.5% contained residues of just one pesticide, and 73.0% of samples contained residues of two or more pesticides.).

207 CONSUMER REP., supra note 180, at 8.


209 See U.S. GOV’T ACCOUNTABILITY OFF., supra note 2, at 5.

210 Id. at 6.

211 Id. at 7.
In addition, the EPA generally relies on animal studies when establishing tolerances. But whether and to what extent the animal subjects of studies respond in the same way human subjects would is a question that is not well understood. In fact, animal studies may not accurately represent the reproductive and endocrine-disrupting harms caused by pesticide exposure in humans. The EPA attempts to compensate for this information gap by applying a 100-fold safety factor, and in some cases, the EPA applies an additional 10-fold safety factor to account for the susceptibilities of children and infants. But it is not known whether a 100-fold or 1,000-fold safety factor accurately accounts for the differences between humans and the animals subjected to study. Further, these safety factors can only be applied where the chemical demonstrates a threshold effect; for non-threshold effects where there is no level below which there is no risk of harm, the safety factor is inapplicable.

Finally, the tolerance-setting system depends upon data supplied by the chemical makers, which creates a conflict of interest that invites bias into the system. Industry-sponsored studies have been shown to be more likely to provide results favorable to the pesticide manufacturer. And in most cases, the EPA makes its findings based primarily on data supplied by industry rather than independent researchers, in part due to the way the study criteria are determined. The EPA develops the research methodologies and study design with industry representatives, a process that results in stringent and prohibitively expensive study criteria that effectively excludes independent researchers from the process. While some of these additional criteria are necessary to exclude inherently flawed studies, some industry-proposed criteria eliminate from consideration so-called “qualitative studies” that may provide useful data on cause and effect relationships. In some cases, the EPA applies rigid study criteria retroactively to existing independent laboratory studies; unsurprisingly, few or no independent studies meet the qualifications for consideration by the EPA. In addition, the EPA may disregard studies that do not show a uniform response at the species or population level or that were done in situ instead of in the laboratory. Studies have shown, however, that, there is

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212 See, CONSUMER REP., supra note 180, at 10.
215 Id.
216 Id.
significant natural variation among organism response at individual, population, and species levels, and further that laboratory research is not inherently better than experiments conducted in the field.\textsuperscript{217} By excluding data from independent researchers and relying primarily on industry-supplied data, the EPA may not be seeing the whole picture when it engages in tolerance setting.

\textbf{D. Lack of Enforcement}

\textit{i. FDA}

The FDA is tasked with enforcing pesticide residue tolerances for the vast majority of foods produced in and imported to the United States. The FDA enforces tolerances by taking samples of domestic and imported foods and testing those samples for the presence of chemical residues.\textsuperscript{218} But the FDA’s sampling procedure does not use statistical methods; instead the FDA aims its limited resources at targeting products that the FDA believes are more likely to be out of tolerance. This means that its sampling results and the number of tolerance violations is not representative of the entire portion of the food system that falls within the FDA’s jurisdiction.\textsuperscript{219} Further, when the FDA does sample a commodity, it takes very few samples, which further dilutes the representational quality of its testing.\textsuperscript{220} Thus, the fact that the FDA’s targeted enforcement program shows very low rates of tolerance violations is not generalizable to the food system as a whole. For example, compare the results of the FDA’s sampling of lettuce with AMS’s sampling of lettuce in the same year. In 2005, the FDA took 26 samples of head lettuce and 44 samples of leaf lettuce. Of those samples, none of the head lettuce was violative, and 2.3% of the leaf lettuce was violative, with one sample presenting with a residue that was out of tolerance.\textsuperscript{221} By contrast, data from AMS in 2005 found presumptive residue violations in 17.77% of lettuce samples.\textsuperscript{222} As previously discussed, AMS uses a statistically valid sampling method and tests a greater number of samples of the small number of products it tests.

\textsuperscript{217} Id. at 919.
\textsuperscript{218} U.S. FOOD & DRUG ADMIN., supra note 213.
\textsuperscript{219} U.S. GOV’T ACCOUNTABILITY OFF., supra note 2, at 19.
\textsuperscript{220} See U.S. GOV’T ACCOUNTABILITY OFF., supra note 2, at 19–20.
\textsuperscript{221} FDA, Pesticide Residue Monitoring Program Results and Discussion FY 2005, U.S. FOOD & DRUG ADMIN. (June 20, 2017), https://wayback.archive-it.org/7993/20170723105235/https://www.fda.gov/Food/FoodborneIllnessContami nants/Pesticides/ucm125186.htm#appa-05.
\textsuperscript{222} See U.S. GOV’T ACCOUNTABILITY OFF., supra note 2, at 21.
In addition, the FDA has decreased the amount of samples it takes from a high of over 12,000 domestic and imported food samples in 1993 to a low of about 5,000 total samples in 2008. In 2016, FDA tested just 7,413 samples. In addition, roughly 60% of these samples were from imports, even though the majority of the U.S. food supply is domestic in origin. Even looking solely at imports, however, FDA tests less than 1/10th of 1% of imports. The FDA’s methodology for targeting certain samples of the food supply often misses the mark. For example, its PREDICT system designed to recommend which imported foods to test based on prior history and other data has failed to accurately estimate which foods will have the highest violation rates. The FDA relies on data from its Total Diet Study and AMS’s Pesticide Data Program to supplement its enforcement data. But while these programs use statistical sampling methods, the sample sizes used in these studies are too small to be representative. For example, the PDP tests only about 20 to 30 foods each year.

When the FDA tests a food sample, it does not test for all known pesticide residues because doing so would be prohibitively expensive. Instead, the FDA uses a multi-residue method test (MRM) that detects many different pesticides, but not all. The FDA’s MRM cannot detect six of the most commonly used pesticides. And the FDA only rarely uses selective residue methods (SRMs) due to their cost. The following pesticides are listed in the top 25 most used pesticides, but the FDA rarely if ever tests for their presence in the food supply: glyphosate, 2,4-D, MCPA, mancozeb, paraquat, and methyl bromide. Further, the FDA does not disclose in its reports that its testing methods cannot detect these pesticides.

In a 2014 report, the U.S. Government Accountability Office made the following observation:

If, for example, the agency wanted to know incidence and level of pesticide residues across all

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223 See U.S. Gov’t Accountability Off., supra note 2, at 23.
224 U.S. Food & Drug Admin., supra note 165, at 15.
225 Id. at 11; See U.S. Gov’t Accountability Off., supra note 2, at 25.
226 U.S. Gov’t Accountability Off., supra note 2, at 24.
227 Id. at 33.
228 Id. at 37.
229 Id. at 25.
230 Id.
231 Id. at 26.
232 Id.
domestic and imported foods, it would need to design statistically valid random samples of those two broad categories of foods. If, on the other hand, FDA wanted to know about residue levels within particular commodities, it would need to design a survey of random samples of those commodities that meets statistical standards. FDA is not currently taking either of these approaches in its regulatory monitoring program. Finally, FDA’s ability to evaluate the effectiveness of its targeted monitoring program (i.e., enforce pesticide residue tolerances in foods established by EPA) is limited because it has not determined the incidence and level of pesticide residues in the foods it regulates against which it can compare the results of its targeted compliance and enforcement monitoring.  

ii. USDA

Compared to the FDA, the USDA is tasked with regulating a much smaller proportion of the U.S. food system. Its jurisdiction is limited to meat, poultry, some (but not all) egg products, and catfish. Like the FDA, the USDA uses a multi-residue method to test for veterinary drugs and pesticide residues as part of its enforcement program. Its methods test for over 80 veterinary drug analytes and over 100 pesticide analytes. However, as of 2014, there were 191 pesticides with established tolerances for direct or indirect use in animals. In addition, of the pesticides for which the USDA tests, it does not perform all tests on all categories of animal products. For instance, the USDA only recently began using the multi-residue pesticide method on egg products. The USDA does not disclose in its reports which pesticides its tests do not detect or the potential bias caused by its selection of production classes for testing. Although the USDA tests samples from the production classes that represent that vast majority of the animal products

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233 Id. at 34–35.
235 U.S. DEPT. AGRIC. FOOD SAFETY & INSPECTION SERV., supra note 143, at 3.
236 U.S. GOV’T ACCOUNTABILITY OFF., supra note 2, at 41.
237 See U.S. DEPT. AGRIC. FOOD SAFETY & INSPECTION SERV., supra note 143, at 11.
238 U.S. DEPT. AGRIC. FOOD SAFETY & INSPECTION SERV., supra note 143, at 7.
239 U.S. GOV’T ACCOUNTABILITY OFF., supra note 2, at 42.
consumed in the U.S., it routinely does not test whole production classes that are less frequently consumed, like ducks and rabbits.\textsuperscript{240}

Although the USDA reduced the number of scheduled samples it took from over 8,000 per year in 2000 to less than 1,900 per year in 2009, it has since increased the number of scheduled samples.\textsuperscript{241} In Fiscal Year 2017, the USDA took over 7,000 scheduled domestic samples and over 2,700 import samples.\textsuperscript{242} In addition, for that same year, FSIS took over 177,000 inspector-generated (i.e. non-random) samples.\textsuperscript{243}

The USDA is also responsible for the Pesticide Data Program (PDP), conducted by AMS. Although the PDP uses statistically valid sampling methods, the number of food types sampled each year is very small. The AMS reports do not demonstrate to what extent the foods chosen for testing differ from or are similar to other foods in the overall food system or to what extent the distribution centers chosen for study differ from or are representative of all distribution centers in the food system.\textsuperscript{244} The PDP is limited by not having a complete record of all food distribution centers and data regarding how food obtained from non-participating centers may differ from the food obtained from those that voluntarily participate.\textsuperscript{245}

\section*{V. Conclusion}

On August 10, 2018, a California jury ordered Monsanto (now a division of Bayer) to pay $289 million to Dewayne Johnson, a former pest control manager for a public-school system who contracted non-Hodgkin’s lymphoma.\textsuperscript{246} Johnson’s doctors stated that his cancer is aggressive, and it is unlikely that Johnson will live past 2020.\textsuperscript{247} Johnson’s lawyers persuaded the jury that Monsanto,

\textsuperscript{240} \textit{Id.} at 43; \textit{see also}, U.S. \textsc{Dept. Agric. Food Safety \\ & Inspection Serv.}, \textit{supra} note 143, at 19.
\textsuperscript{241} U.S. \textsc{Gov’t Accountability Off.}, \textit{supra} note 2, at 43.
\textsuperscript{243} \textit{Id.} at 6.
\textsuperscript{244} U.S. \textsc{Gov’t Accountability Off.}, \textit{supra} note 2, at 54–55.
\textsuperscript{245} \textit{Id.} at 54.
\textsuperscript{247} \textit{Id.}
the maker of the glyphosate-based herbicide RoundUp, was responsible for Johnson’s cancer. The verdict was the first of its kind, but possibly not the last—Monsanto faces more than 5,000 similar lawsuits across the U.S.248

Glyphosate is one of many pesticides previously assumed to be safe, but new research is casting doubt on this assumption and raising questions about the efficacy of our current regulatory system. This system, originally devised to guarantee the effectiveness of pesticides, has since been tasked with guaranteeing their safety and limiting the public’s exposure to them. But limited resources and industry influence may be hampering the ability of federal regulators to carry out this task. And due to the unique history of the regulatory system, enforcement authority is fragmented among several different federal agencies. These shortcomings are now giving rise to a wave of litigation over pesticide safety and an increase in the demand for products made without pesticides such as foods that are certified organic. Maintaining and restoring public confidence in the safety of the U.S. food system may depend on the ability of policy makers to reform our current regulatory system to better guarantee the public’s protection from the adverse health effects of pesticide residues.

248 Id.
Legislative and Executive Branch Developments Affecting the United States Department of Agriculture Supplemental Nutrition Assistance Program

Sheila Fleischhacker*, Alyssa Moran**, and Sara N. Bleich***

Abstract

For more than forty years, the United States Department of Agriculture Supplemental Nutrition Assistance Program (SNAP; formerly Food Stamps) has offered nutrition assistance to nearly forty million eligible individuals and families each month. This article first provides a brief overview of the evolution of the United States’ largest domestic food security and nutrition safety net program. Then, the article reviews Congressional actions taken regarding SNAP during the 2018 Farm Bill deliberations, appropriations for fiscal years 2017 through 2020, and oversight (in)activities. The article focuses on Congressional activities regarding block grants; participant eligibility; benefit adequacy, issuance, and redemption; and strengthening SNAP’s nutritional impacts. Next, the article discusses a variety of executive orders, administrative actions, initiatives, nominations, budget proposals, and tweets with SNAP implications put forth thus far by President Donald Trump, the 45th President of the United States. These actions include the America’s Harvest Box, natural disaster responses, the public charge rule, tariffs on Chinese imports, and various agency relocations and reorganizations. The article reflects on how each of these legislative and executive developments might impact SNAP's organization, operations at the federal, tribal, state and retailer levels, and, ultimately, eating patterns and health of participating and eligible children and families, persons with disabilities, and elders.

I. Introduction

While the United States (US) has not explicitly enshrined the right to food in our Constitution or adopted national legislation specifically recognizing the fundamental right to freedom from hunger\(^1\), the national government has an extensive history of using

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policy and programmatic approaches to ensure individuals and families in most need have access to nutritious and safe foods and beverages. Helping secure access to nutritious and safe foods and beverages has been associated with a variety of positive impacts including but not limited to economic growth and job creation, increased global security and stability, improved health, poverty reduction, reduced healthcare burden, and trade opportunities. The US Department of Agriculture (USDA) leads the national efforts to tackle hunger and promote food security through the administration of fifteen federal food and nutrition assistance programs, including the Supplemental Nutrition Assistance Program (SNAP; formerly Food Stamps). In the 2008 Farm Bill, the Food Stamps Program

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was renamed to SNAP to include a greater emphasis on nutrition.\(^5\) For more than forty years, SNAP has been the nation’s largest program in the domestic food security and nutrition safety net and accounted for sixty-eight percent of all federal food and nutrition assistance in fiscal year 2018.\(^6\)

Each month, SNAP offers nutrition assistance to nearly forty million eligible individuals and families, persons with disabilities, and elders.\(^7\) In fiscal year 2018, twelve percent of the population participated in SNAP; this marked the fifth consecutive year that participation decreased after increasing in twelve of the previous thirteen years.\(^8\) The monthly benefits are delivered to electronic benefit transfer accounts, allowing beneficiaries to purchase eligible foods and beverages from 247,861 authorized retailers.\(^9\) The per person SNAP benefits for fiscal year 2018 averaged $125.25 per month.\(^10\) SNAP also lifts individuals and families out of poverty; in 2014, this included more than four million people.\(^11\) And, SNAP is known as an “automatic economic stabilizer” that dampens the depths of recession and protects the larger national economy; because, as an entitlement program, SNAP automatically expands

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\(^8\) OLIVEIRA, supra note 6, at 4–5.


\(^10\) OLIVEIRA, supra note 6, at 4.

when individuals and families qualify for the program without direct legislative or executive actions at the federal or state levels.\textsuperscript{12}

SNAP was initially developed to prevent hunger and enable workers to work and children to grow up and thrive, even if their families or our nation fell on tough times.\textsuperscript{13} Hunger is a potential but not necessarily physiological consequence of \textit{food insecurity}.\textsuperscript{14} A 1990 Life Sciences Research Office of the Federation of American Societies for Experimental Biology report explained, “food insecurity exists whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain.”\textsuperscript{15} According to the World Food Summit of 1996, \textit{food security} “exists when all people at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.”\textsuperscript{16} This definition encompasses food availability, food access (physical and financial), utilization (sufficiently nutritious and safe foods and beverages that are equitably distributed within the household), and stability of these three dimensions over time.\textsuperscript{17} Since 1995, the USDA Economic Research Service (ERS) has monitored national and state-level food insecurity through the Current Population Survey Food Security Supplement (CPS-FSS), administered monthly by the Census Bureau and Bureau of Labor Statistics.\textsuperscript{18} The CPS-FSS uses the eighteen-item US Household Food Security Survey Module, which categorizes households as having \textit{very low food security} (reports of multiple indications of disrupted eating patterns and reduced food intake), \textit{low food security} (reports of reduced quality, variety, or


\textsuperscript{14} NAT’L RES. COUNCIL, \textit{FOOD INSECURITY AND HUNGER IN THE UNITED STATES: AN ASSESSMENT OF THE MEASURE} 44 (Gooloo S. Wunderlich & Janet L. Norwood eds. 2006).

\textsuperscript{15} FED’N OF AM. SOC’Y FOR EXPERIMENTAL BIOLOGY, \textit{CORE INDICATORS OF NUTRITIONAL STATE FOR DIFFICULT-TO-SAMPLE POPULATIONS} vi (Sue Ann Anderson ed. 1990), https://www.faseb.org/Portals/2/PDFs/LSRO_Legacy_Reports/1990_Core%20Indicators%20of%20Nutritional%20State%20for%20Difficult-to-Sample%20Populations.pdf.


\textsuperscript{17} \textit{Id.}

desirability of diet; little or no indication of reduced food intake), marginal food security (one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house; little or no indication of changes in diets or food intake), or high food security (no reported indications of food-access problems or limitations). \(^{19}\)

In 2017, “an estimated 11.8 percent of US households were food insecure, down from 2016 and continuing a decline from a high of 14.9 percent in 2011, while still above the pre-recession (2007) level of 11.1 percent.”\(^{20}\) Among households with children, an estimated 7.7 percent were food insecure, slightly down from 8.0 percent in 2016.\(^{21}\) Evidence suggests undocumented immigrants face “unique vulnerabilities for food insecurity related to unfamiliar food environments, remittances and separation, employment, and community and government resources” that are likely not accurately captured in national estimates of household food insecurity.\(^{22}\) Besides households, growing concerns have emerged on college campuses.\(^{23}\) A 2017 systematic review of grey and peer-reviewed literature reported average rates of food insecurity on postsecondary education campuses of 35% and 42%, respectively.\(^{24}\) Similarly, a 2018 Government Accountability Office report noted there are no national estimates for food insecurity among college students and recommended areas for improvement for communicating to eligible students the options for federal food and nutrition assistance, such as

\(^{21}\) Id. at ii.
\(^{24}\) See Meg Bruening et al., The Struggle is Real: A Systematic Review of Food Insecurity on Postsecondary Education Campuses, 117 J. ACAD. NUTRITION & DIETETICS 1767, 1767 (2017) (reviews the peer-reviewed and gray literature to assess the prevalence of food insecurity on postsecondary education institutions, as well as factors related to food insecurity among students and suggested/practiced solutions and included seventeen peer-reviewed studies and forty one sources of gray literature in the analysis and found food insecurity was high among students and more studies are needed to assess the long-term influence of food insecurity among this vulnerable population).
SNAP. Food insecurity among older adults “remains a persistent problem, particularly in minority and rural populations.”

Across the life course, food insecurity—even marginal food security—has direct and indirect consequences with short and long term impacts including inadequate dietary intake, suboptimal development and function, increased hospitalizations, disrupted or under use of prescribed medications, poorer management of chronic diseases, elevated and prolonged periods of stress, reduced academic achievement, decreased interpersonal skills, and fetal epigenetic changes. A 2014 systematic review of the associations between

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27 See Ellen Barnidge et al., Clinic-to-Community Models to Address Food Security, JAMA PEDIATRICS, 507-508 (2017) (discusses how food insecurity is a social and economic condition with direct and indirect consequences, including poor dietary intake, poor physical and mental health, hospitalizations, stress, reduced academic achievement, and fetal epigenetic changes); John T. Cook et al., Are Food Insecurity’s Health Impacts Underestimated in the U.S. Population? Marginal Food Security also Predicts Adverse Health Outcomes in Young U.S. Children and Mothers, 4 ADV. NUTRITION 51, 51–52 (2013) (reviews the literature regarding households with marginal food security and found these households should not be classified as food secure, as is current practice, and should be reported in a separate discrete category); John T. Cook & Deborah A. Frank, Food Security, Poverty, and Human Development in the United States, 1136 ANN. N.Y. ACAD. SCI., 196–202 (2008) (summarizes the data on household and children’s food insecurity and its relationship with children’s health and development and with mothers’ depressive symptoms); Robert C. Whitaker et al., Food Insecurity and the Risks of Depression and Anxiety in Mothers and Behavior Problems in their Preschool-Aged Children, 118 PEDIATRICS e859, e866 (2006) (conducted a cross-sectional survey and found mental health problems in mothers and children are more common when mothers are food insecure); Diana F. Jyoti et al., Food Insecurity Affects School Children’s Academic Performance, Weight Gain, and Social Skills, 135 J. NUTRITION 2831, 2835–2836 (2005) (used longitudinal data and found food insecurity was a positive predictor of poor developmental trajectories in children); Craig Gunderson & James P. Ziliak, Food Insecurity and Health Outcomes, 34 HEALTH AFF. 1830, 1832–1835 (2015) (reviews the literature and discusses how food insecurity is consistently associated with poor health); Seth A. Berkowitz et al., Treat or Eat: Food Insecurity, Cost-Related Medication Underuse, and Unmet Needs, 127 AM. J. MED. 303, 308 (2014) (conducted a cross-sectional study with chronically ill adult patients and found about 1 in 3 were unable to afford food, medications, or both); Jung Sun Lee et al., Food Insecurity and Health Across the Lifespan, 3 ADVANCES NUTRITION 744, 745 (2012) (summarizes a symposium that aimed to learn about the prevalence and severity of food insecurity in the US across the lifespan, understand the growing body of research that documents the impact of varying degrees of food insecurity on physical and mental health across the lifespan, examine how food insecurity is related to chronic disease, and explore research methodology to determine the
food insecurity and dietary quality reported that food insecure adults consumed fewer vegetables, fruit, and dairy products in comparison to food secure adults and had lower intakes of vitamin A and B6, calcium, magnesium, and zinc.\textsuperscript{28} Food insecure children only

\textsuperscript{28} Karla L. Hanson & Leah M. Conner, \textit{Food Insecurity and Dietary Quality in US Adults and Children: A Systematic Review}, 100 AM J. CLINICAL NUTRITION 684, 687 (2014) (across all studies, food security or food sufficiency was generally measured for the household and indicated by one or more of the following categories: 1) food secure or food sufficient, 2) marginal food security (MFS), 3) food sufficient with
consumed less fruit than food secure children; however, research suggests parents or primary care givers protect their children from compromised dietary quality during food shortages and are also the ones (mis)reporting their children’s consumption. This suggests that even during times of food scarcity, parents are prioritizing their children’s nutritional needs. For almost a decade and a half, evidence continues to mount demonstrating food insecurity often co-occurs with being overweight, particularly among women.

The intersections between inadequate dietary intake, weight gain, and increased risk of non-communicable chronic diseases such as obesity, cardiovascular disease, type 2 diabetes mellitus, and certain types of cancer may be linked through a developed dependence on inexpensive, highly palatable foods and beverages that are energy dense, but nutrient poor. And, these intersections could potentially result from a cyclical pattern of having enough food at certain periods followed by food scarcity, especially if these episodic food shortages are experienced during critical periods of growth and development, particularly, pregnancy and infancy. Research indicates overconsumption when food is available and under-consumption when scarce may contribute to metabolic disturbances, such as cycles of hyper- and hypoglycemia. Moreover, research regarding the role of body fat in fertility suggests that women tend to conserve energy even when food is limited, which may explain gender differences in associations between food

limitations (i.e., “enough but not always what we wanted to eat”), 4) low food security (LFS), 5) very low food security (VLFS), and 6) food insecure or food insufficient, which was equivalent to LFS and VLFS combined).

29 Id. at 684 (identifying 16 articles that examined the associations between food insecurity and dietary quality in US children with 21 results (16%) suggesting an adverse association but many studies used only a few measures of dietary quality). 30 See Nicole I. Larson & Mary T. Story, Food Insecurity and Weight Status Among U.S. Children and Families: A Review of the Literature, 40 AM. J. PREVENTATIVE MED. 166, 166 (2011); Marilyn S. Townsend et al., Food Insecurity is Positively Related to Overweight in Women, 131 J. NUTRITION 1738, 1742 (2001); J.C. Eisenmann et al., Is Food Insecurity Related to Overweight and Obesity in Children and Adolescents? A Summary of Studies, 1995-2009, 12 OBESITY REV. e73, e73 (2011); Lauren M. Dinour et al., The Food Insecurity-Obesity Paradox: A Review of the Literature and the Role Food Stamps May Play, 107 J. AM. DIETETICS. ASS’N. 1952, 1953 (2007); LISA M. TROY, EMILY ANN MILLER & STEVE OLSON, RAPPORTEURS; INST. MED. NAT’L ACAD., Setting the State for the Coexistence of Food Insecurity and Obesity, in HUNGER AND OBESITY: UNDERSTANDING A FOOD SECURITY PARADIGM: WORKSHOP SUMMARY 13–14 (2011).

31 See Barbara A. Laraia, Food Insecurity and Chronic Disease, 4 ADVANCES NUTRITION 203, 203–205 (2013) (summarizes the literature on the link between food insecurity and the following: 1) diet, 2) weight gain, and 3) chronic disease).

32 Id. at 203, 210.

insecurity and weight status. Another mechanism is competing demands; in other words, tradeoffs between medication for chronic disease management or housing/utility payments and food may exacerbate food insecurity. Chronic stress associated with food insecurity and poverty may also increase chronic disease risk by possibly increasing allostatic load, reducing healthy behaviors (i.e., lack of energy for physical activity), increasing unhealthy coping behaviors (e.g., substance abuse), and diminishing cognitive capacity to make decisions that support long-term health.

This article starts with a brief overview of the evolution of the largest program in the nation’s domestic food security and nutrition safety net. Then, this article analyzes current legislative (One Hundred Fifteenth and initial One Hundred Sixteenth US Congress) and executive (first two years of the Trump administration) branch developments impacting SNAP’s organization, operations at the federal, state and retailer levels, and, ultimately, eating patterns and health outcomes of the United States’ most vulnerable populations. This article focuses on the legal and policy implications and reflects on how each might affect our ability to improve nutrition among participating and eligible children and families, persons with disabilities, and elders.

II. From Breadlines to EBT: SNAP History, Participation, and Impacts

A. History

The seeds of SNAP date back to the stock market crash of October 1929 when our country began the worst economic downturn in our history at that time. During this period known as the Great Depression, farm prices were at record lows and farmers held huge surpluses of leading agricultural products while thousands of poverty-stricken Americans stood in bread lines across the nation’s cities for free food supported by private charities, individuals

34 Daniel Nettle et al., Food Insecurity as a Driver of Obesity in Humans: The Insurance Hypothesis, 40 BEHAV. BRAIN SCI. 1, 19 (2017).
36 Amanda. C. McClain et al., Food Insecurity and Odds of High Allostatic Load in Puerto Rican Adults: The Role of Participation in the Supplemental Nutrition Assistance Program (SNAP) During 5 Years of Follow-up, 80 PSYCHOSOMATIC MED. 737 (2018).
including Al Capone, or government agencies. This contrast of overproduction and under-consumption became known as the “paradox of want amid plenty” or “the paradox of scarcity and abundance” and fueled the development of federal food and nutrition assistance programs in both the Hoover and Roosevelt administrations. Table 1 highlights other policy and programmatic developments emerging from the legislative, executive, and judicial branches of the US Government shaping SNAP. Today, the USDA Food and Nutrition Service (FNS) works with state agencies, schools, food, nutrition, and health professionals, along with neighborhood and faith-based organizations to ensure eligible individuals and households can access federal food and nutrition assistance benefits. FNS also works with state agencies and the retail food industry on program administration and integrity.

B. Participant Characteristics

In fiscal year 2017, the majority of SNAP households (eighty percent) included a child, an elderly individual, or an individual with a disability; these households received eighty-five percent of SNAP benefits. About half of SNAP participants (forty-three percent) live in a household with earnings; some of these working individuals are known as able-bodied adults without dependents (ABAWDs) or technically: a “person between the ages of 18 and 49 who has no dependents and is not disabled.” ABAWDs, which we will discuss further, can only receive SNAP benefits for three months in three years if they do not meet certain special work requirements. The program benefits households in both urban and rural areas and across

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38 Id at 25.  
39 Id. at xvi–xvii; see JONATHAN COPPESS, THE FAULT LINES OF FARM POLICY 1 (2018).  
40 U.S. DEP’T AGRIC. FOOD & NUTR. SERV., supra note 4.  
41 U.S. GOV’T ACCOUNTABILITY OFF., GAO-19-167, SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM: ACTION NEEDED TO BETTER MEASURE AND ADDRESS RETAILER TRAFFICKING (2018), https://www.gao.gov/products/GAO-19-167 (discusses how some authorized SNAP retailers are “selling” cash instead of food, anywhere from $960 million to $4.7 billion and recommends the Administrator of FNS improve the accuracy of the estimates of retailer tracking, assess the benefits and costs of reauthorizing a sample of high-risk stores more frequently than other stores, and increase penalties for retailer trafficking, among others).  
44 Id.
all fifty states, the District of Columbia, and, via block grants, the US territories. Economic conditions and state program policies such as income eligibility criteria, application assistance, online applications, and the extent of outreach activities influence their residents’ SNAP participation. Moreover, the length of SNAP participation and state approaches to renewal varies; one study examining SNAP entrants (between 2008 to 2012) determined twenty-six percent of SNAP households participated for a four month period, fifty-two percent participated for a year or less, and sixty-seven percent participated for two years or less. Improvement in financial circumstances is the most common “exit trigger” for ending SNAP participation.

C. Economic and Health Impacts

An integral component of the evolution of SNAP has been research and evaluation of demonstration projects that examine the impact of SNAP on poverty, food insecurity, dietary intake and quality, weight status, healthcare costs, and academic achievement. Evidence indicates SNAP benefits help lift individuals out of poverty. That is, if SNAP benefits are included as income, 10 percent of SNAP households would move above the federal poverty


48 Id. at 9.

guidelines.⁵⁰ Among women, childhood participation in SNAP increases economic self-sufficiency, including educational attainment, earnings, and income.⁵¹ Emerging evidence is illustrating connections between SNAP participation and reduced health care costs and hospital utilization.⁵² In terms of academic achievements, a 2006 longitudinal study of a nationally representative sample found starting Food Stamp program participation during the four years from kindergarten to third grade was associated with about a three-point greater improvement in reading and mathematics scores compared with stopping Food Stamp program participation during that period.⁵³

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⁵⁰ Cronquist & Lauffer, supra note 42, at xv.
⁵² See Seth Berkowitz, Hilary Seligman, Joseph Rigdon, James Meigs & Sanjay Basu, Supplemental Nutrition Assistance Program (SNAP) Participation and Health Care Expenditures Among Low-Income Adults, 177 J. AM. MED. ASSOC. INTERN. MED. 1642-1649 (2017) (found SNAP participation was associated with reduced health care spending among low-income American adults); Steven Carlson & Brynne Keith-Jennings, SNAP is Linked with Improved Nutritional Outcomes and Lower Health Care Costs (Jan. 17, 2018), https://www.cbpp.org/research/food-assistance/snap-is-linked-with-improved-nutritional-outcomes-and-lower-health-care (discusses how SNAP may promote better health and lower health care costs); Laura J. Samuel, Sarah L. Szanton, Rachel Cahill, Jennifer L. Wolff, Pinchuan Ong, Ginger Zielinski & Charles Betley, Does the Supplemental Nutrition Assistance Program Affect Hospital Utilization Among Older Adults? The Case of Maryland, 21 POPUL. HEALTH MANAG. 88-95 (2018) (estimated that enrolling the forty-seven percent of the 2012 population who were eligible nonparticipants in SNAP could have been associated with nineteen million in hospital cost savings); Chinedum O. Ojinnaka & Colleen Heflin, Supplemental Nutrition Assistance Program Size and Timing and Hypertension-Related Emergency Department Claims Among Medicaid Enrollees, 12 J. AM. SOC. HYPERTENSION e27-e34 (2018) (found higher SNAP benefit amount was associated with a decreased probability of hypertension-related emergency department claims); Rajan A. Sonik, Susan L. Parish & Monika Mitra, Inpatient Medicaid Usage and Expenditure Patterns After Changes in Supplemental Nutrition Assistance Program Benefit Levels, 15 PREV. CHRONIC DIS. E120 (2018) (found changes in SNAP benefit levels were associated with changes in inpatient Medicaid usage and cost problems); Irma Arteaga & Colleen Heflin, SNAP Benefits and Pregnancy-Related Emergency Room Visits, 37 POP. RES. POLICY REV. 1031-1052 (2018) (found that women who received SNAP benefits in the second or third week of the calendar month were less likely to receive pregnancy-related care through the emergency room in the week following benefit receipt).
SNAP also helps individuals and households “put food on the table” and reduces the prevalence of very low food security. For example, an analysis of nearly three thousand households with children found SNAP participation for six months was associated with improved food security. But impacts on dietary intake and quality have been mixed. Although many studies have linked

54 Steven Carlson et al., SNAP Works for America’s Children 2, CTR. ON BUDGET & POL’Y PRIORITIES (Sept. 29, 2016), https://www.cbpp.org/research/food-assistance/snap-works-for-americas-children.
57 See Parke E. Wilde, Paul E. McNamara & Christine K. Ranney, The Effect of Income and Food Programs on Dietary Quality: A Seemingly Unrelated Regression Analysis with Error Components, 81 AM. J. AGRIC. ECON 959, 698 (1999) (used a maximum likelihood estimator and found Food Stamp participation was associated with higher intake of meats, added sugars, and total fats); Steven T. Yen, The Effects of SNAP and WIC Programs on Nutrient Intakes of Children, 35 FOOD POL’Y 576, 579 (2010) (used a system of nutrient equations to examine the effects of SNAP and WIC participation among young children and found SNAP had a small and negative effect on fiber intake); Cindy W. Leung et al., Dietary Intake and Dietary Quality of Low-Income Adults in the Supplemental Nutrition Assistance Program, 96 AM. J. CLINICAL NUTRITION 977, 977 (2012) (finding SNAP participants had lower dietary quality scores than did non-participants); Meenakshi M. Fernandes, Effect of the Supplemental Nutrition Assistance Program (SNAP) on Frequency of Beverage Consumption Among Youth in the United States, 112 J. ACAD. NUTRITION & DIETETICS 1241, 1244 (2012) (reporting SNAP participation did not have a predictive effect on soft drink, 100% fruit juice or milk consumption among youth); Rebecca L. Franckle et al., Transactions at a Northeastern Supermarket Chain: Differences by Supplemental Nutrition Assistance Program Use, 53 AM. J. PREV. MED. e131, e131 (2017) (found transactions with SNAP benefit use in comparison to transactions without SNAP benefit use included higher spending on less healthful food categories including sugar-sweetened beverages, red meat, and convenience foods, and lower spending on more healthful food categories such as fruit, vegetables, and poultry); Anna H. Grummon & Lindsey S. Tallie, Nutritional Profile of Supplemental Nutrition Assistance Program Household Food and Beverage Purchases, 105 AM. J. CLINICAL NUTRITION 1433, 1433 (2017) (determined SNAP participants purchased an additional 15 to 20 more calories per person from sugar-sweetened beverages, and an additional 174 to 195 mg more sodium per person); Cindy W. Leung et al, Associations of Food Stamp Participation with Dietary Quality and Obesity in Children, 131 PEDIATRICS 463, 463 (2013) (SNAP participants were below national recommendations for whole grains, fruits, vegetables, fish, and potassium while exceeding recommended limits for processed meat, sugar-sweetened beverages, saturated fat, and sodium); Cindy W. Leung et al, Few Changes in Food Security and Dietary Intake from Short-term Participation in the Supplemental Nutrition Assistance Program Among Low-Income Massachusetts Adults, 46 J. NUTRITION EDUC. BEHAV. 68, 70 (2014) (found SNAP participants increased refined grain intake by 1.1 serving/day from baseline to follow-up and no other associations were observed with other foods, nutrients, or dietary quality);
SNAP participation to obesity, the most rigorous assessments show no effect of SNAP on body weight. Similarly, differences in

Cindy W. Leung et al, *SNAP Participation and Diet-Sensitive Cardiometabolic Risk Factors in Adolescents*, 52 (2 Suppl. 2) AM. J. PREV. MED. S127, S127 (2017) (SNAP participants had lower Healthy Eating Index scores versus income-eligible non-participants); Lindsey S. Tallie et al., *Nutritional Profile of Purchases by Store Type: Disparities by Income and Food Program Participation*, 55 AM. J. PREVENTATIVE MED. 167, 172 (2018) (reported SNAP households purchased more calories from starchy vegetables, processed meat, desserts, sweeteners and toppings, total junk food, sugar-sweetened beverages, and milk than income-eligible and higher-income SNAP non-participants and SNAP participant purchases were higher in sodium density); Hilary W. Hoynes & Diane W. Schanzenbach, *Safety Net Investments in Children*, BROOKINGS (Mar. 8, 2018), https://www.brookings.edu/bp ea-articles/safety-net-investments-in-children/ (examined a variety of US social safety net program investments including SNAP and found access to safety net programs during childhood improves outcomes for children in the short and long term).

Joseph Rigdon, Seth A. Berkowitz, Hilary K. Seligman & Sanjay Basu, *Re-Evaluating Associations Between the Supplemental Nutrition Assistance Program Participation and Body Mass Index in the Context of Unmeasured Confounders*, 192 SOC. SCI. MED. 112-124 (2017) (determined SNAP participation was associated with increased Body Mass Index); Amy L. Webb, Andrew Schiff, Douglas Currivan & Eduardo Villamor, *Food Stamp Participation But Not Food Insecurity is Associated with Higher Adult BMI in Massachusetts Residents Living in Low-Income Neighborhoods*, 11 PUBLIC HEALTH NUTR. 1248-1255 (2008) (reported participation in the food stamp program twelve months prior to the survey was associated with higher Body Mass Index); Diane Gibson, *Food Stamp Program Participation is Positively Related to Obesity in Low Income Women*, 133 J. NUTR. 2225-2231 (2003) (determined participation in the food stamp program was associated with a 9.1% increase in the predicted probability of current obesity); Stephanie B. Jilcott, Elizabeth D. Wall-Bassett, Sloane C. Burke & Justin B. Moore, *Associations Between Food Insecurity, Supplemental Nutrition Assistance Program (SNAP) Benefits, and Body Mass Index Among Adult Females*, 111 J. AM. DIETETIC ASSOC. 1741-1745 (2011) (reported mean Body Mass Index was significantly greater among women receiving <$150 in SNAP benefits per household member versus those receiving > $150 in benefits per household member); Stephanie B. Jilcott, Haiyong Liu, Katrina D. Dubose, Susan Chen & Sibylle Kranz, *Food Stamp Participation is Associated with Fewer Meals Away From Home, Yet Higher Body Mass Index and Waist Circumference in a Nationally Representative Sample*, 43 J. NUTR. EDUC. BEHAV. 110-115 (2011) (reported food stamp authorization was associated with higher Body Mass Index and waist circumference among females and higher food stamp benefits received were associated with lower Body Mass Index); Binh T. Nguyen, Kerem Shuval, Farryl Bertmann & Amy L. Yaroch, *The Supplemental Nutrition Assistance Program, Food Insecurity, Dietary Quality, and Obesity Among US Adults*, 105 AM. J. PUBLIC HEALTH 1453-1459 (2015) (reported adult SNAP participants with marginal food security from the 2003 to 2010 National Health and Nutrition Examination Survey data had lower Body Mass Index and lower probability of obesity than SNAP participants with low or very low food security); Cindy W. Leung, Susan J. Blumenthal, Elena E. Hoffnalge, Helen H. Jensen, Susan B. Foerster, Marion Nestle, Lilian W.Y. Cheung, Dariush Mozaffarian & Walter C. Willett, *Associations of Food Stamp Participation and Diet Quality and Obesity in Children*, 131 PEDIATRICS 463-472 (2013) (found SNAP participation was not associated with a higher rate of childhood obesity); Cindy W.
dietary intake between SNAP participants and non-participants are small, and the most recent, well-conducted studies show virtually no direct effect of program enrollment on diet quality. In short, the diet quality of most Americans is bad and this is not a poor person’s problem. Moreover, inconsistent findings are due to the majority of published studies not adequately accounting for self-selection into SNAP. Essentially, small differences between SNAP participants and non-participants do not reflect SNAP’s causal effect on obesity or diet quality, but rather: 1) a change in circumstances that both precipitates SNAP enrollment and effects diet and obesity (for example, a pay cut or recent illness), or 2) a greater propensity for people with obesity and poorer diets to enroll in SNAP.

In 2012, FNS published a SNAP profile capturing key accomplishments and lessons learned over the program’s four decade history including strategies used to serve Americans most in need, improve diet quality, promote self-sufficiency, and increase administrative efficiencies. FNS recognized how nationwide standards for eligibility and benefits helped ensure SNAP is available to most households with gross income less than 130 percent of the

Leung, June M. Tester, Eric B. Rimm & Walter C. Willett, *SNAP Participation and Diet-Sensitive Cardiometabolic Risk Factors in Adolescents*, 52 (2 Suppl. 2) AM. J. PREV. MED. S127-S137 (2017) (reported SNAP participants had higher Body Mass Index for age Z scores, waist circumference Z scores, and waist-to-height ratios than higher income nonparticipants but SNAP participation was not associated with most cardiometabolic risk factors); Marlanā J. Kohn, Janice F. Bell, H. Mollie Grow & Galant Chan, *Food Insecurity, Food Assistance and Weight Status in US Youth: New Evidence from NHANES 2007-08*, 9 PEDIATR. OBES. 155-166 (2014) (reported food assistance program participation including SNAP, WIC, and school meals was associated with increased body size in food secure youth but not food insecure youth); Mary T. Gorski Findling, Julia A. Wolfson, Eric B. Rimm, Sara N. Bleich, *Differences in the Neighborhood Retail Food Environment and Obesity Among US Children and Adolescents by SNAP Participation*, 26 OBESITY (SILVER SPRING) 1063-1071 (2018) (determined greater neighborhood access to retail food outlets is associated with higher obesity prevalence for children overall and for children who participate in SNAP).


61 *Id.*

federal poverty guidelines across the country. And then, in 2018, ERS provided historical and analytical perspective on major SNAP design issues under consideration including block grants, restricting SNAP foods and beverages, adequacy and timing of SNAP benefits, retailer eligibility standards, program access and outreach, and work requirements. Rooted in SNAP policy and programmatic history, we will draw on these 2018 ERS analyses, among others, to now focus on current legislative (One Hundred Fifteenth US Congress and initial One Hundred Sixteenth US Congress) and executive (first two years of the Trump administration) branch developments impacting SNAP's organization, operations at the federal, state, and retailer levels, and, ultimately, eating patterns and health outcomes of the nation's most vulnerable populations.

III. 115th US Congress on SNAP - The Farm Bill, Appropriations and Oversight (In)Activities

The One Hundred Fifteenth US Congress met in Washington, District of Columbia (DC) from January 3, 2017 to January 3, 2019, during the final weeks of Barack Obama’s presidency and the first two years of Donald Trump’s presidency. The House, Senate, as well as the Presidency—once Trump took office—were all under Republican Party control; nonetheless, party unity and legislative accomplishments were comparatively modest. Consistent with efforts to erode the American safety net including efforts to roll back provisions of the Affordable Care Act (P.L.111-148) that expand Medicaid, passing the Tax Cuts and Jobs Act (P.L. 115-97) that likely makes low- and middle-income households worse off, and calls for mandatory Medicaid work requirements, the One Hundred Fifteenth US Congress

63 Id. at 2.
65 See JENNIFER E. MANNING, CONG. RES. SERV., R44762, MEMBERSHIP OF THE 115TH CONGRESS: A PROFILE i (Dec. 20, 2018), https://fas.org/sgp/crs/misc/R44762.pdf (presents the profile of the membership of the 115th Congress including data on party affiliation, average age, occupation, education, length of congressional service, religious affiliation, gender, ethnicity, foreign births, and military service).
explored a variety of legislative approaches to gut SNAP including, but ultimately unsuccessfully, the 2018 Farm Bill (See Table 2).

The Farm Bill is a recurring omnibus bill re-approved about every five years by Congress. The 2018 Farm Bill includes twelve titles, ranging from rural development to nutrition. The nutrition title addresses SNAP. As Table 1 illustrates, about six decades ago, a pilot Food Stamp program with less than 380,000 participants was integrated into the Farm Bill to garner urban Congressional members’ support for farming issues.

Now, SNAP is the largest component of the Farm Bill, with about eighty percent of total spending going to fund this entitlement program.

This review will mainly focus on the One Hundred Fifteenth and initial One Hundred Sixteenth Congressional actions taken regarding SNAP during the 2018 Farm Bill deliberations in addition to fiscal year 2017 through 2020 appropriations and oversight (in)activities. The progress made in the 2018 Farm Bill and the negative implications of the recent government shutdown on the USDA Food Distribution Program for Indian Reservations (FDPIR), which continues to lack a shutdown contingency plan, is not within the scope of this law review; nonetheless, policy developments affecting FDPIR have significant implications for SNAP given eligible individuals and families who do not participate in FDPIR.


70 COPPESS, supra note 39.

tend to participate in SNAP.\textsuperscript{72} Moreover, this review does not address specific policy developments and needs affecting SNAP participation among active-duty service members, although more than $21 million SNAP benefits were redeemed at commissaries from September 2014 through August 2015.\textsuperscript{73} Specifically, this review focuses on actions, or the lack thereof, on the following areas: block grants; participant eligibility; benefit adequacy, issuance, and redemption; and strengthening SNAP’s nutritional impacts.

\textit{A. Block Grants}

A block grant is a fixed level of annual funding regardless of need.\textsuperscript{74} A change in this direction would be significant as SNAP is currently an entitlement program that is designed to be responsive to economic fluctuations which allow enrollment to expand rapidly when the economy weakens and shrink when it improves.\textsuperscript{75} Charged in part by a new Federalism to give states more flexibility and control costs, initial 2018 Farm Bill discussions leading up to the One Hundred Fifteenth US Congress’ legislative agenda re-explored combining safety net programs including SNAP into a meta-block


\textsuperscript{74} What is a Block Grant?, GRANTS.GOV (June 15, 2016), https://blog.grants.gov/2016/06/15/what-is-a-block-grant/; ROBERT JAY DILGER & EUGENE BOYD, CONG. RES. SERV., 7-5700, Block Grants: Perspectives and Controversies 1 (July 15, 2014), https://fas.org/sgp/crs/misc/R40486.pdf.

\textsuperscript{75} David Reich et al., Block-Granting Low-income Programs Leads to Large Funding Declines Over time, History Shows, CTR. ON BUDGET & POL’Y PRIORITIES (Feb. 22, 2017), https://www.cbpp.org/research/federal-budget/block-granting-low-income-programs-leads-to-large-funding-declines-over-time.
grant to states.\textsuperscript{76} That is, the “Agenda for Renewed Opportunity” proposed each state would receive a fixed, annual amount of funding for several safety net programs.\textsuperscript{77} A pilot program was also pitched to explore different ways of distributing this federal aid in addition to establishing a commission to examine rigorous analysis of the proposed safety net programs.\textsuperscript{78} Known as the Commission on Evidence-Based Policy Making, this multi-disciplinary group would be tasked with advising Congress on whether or how to create a Clearinghouse for Program and Survey Data that would “facilitate the merging of data on government programs with other administrative data so researchers could link anonymous participants across programs” while maintaining privacy rights of program participants, incorporate outcome measurements, and institutionalize randomized controlled trials into program design, among others charges “without adding to the federal budget deficit (such as through user fees for participating academic and other research institutions).”\textsuperscript{79}

There is precedent for block granting social safety net programs in the US.\textsuperscript{80} In fact, permitted by the Omnibus Budget Reconciliation Act of 1981, the Nutrition Assistance Program (NAP) operates via block grants in a growing number of US territories including Puerto Rico, American Samoa, and the Commonwealth of the Northern Marian Islands, although we will discuss later how a recently introduced Senate bill aims to allow these US territories to finally participate in SNAP.\textsuperscript{81} Research indicates total funding for NAP does not substantially change over time, which results in restricting program eligibility and benefits to the most financially needy individuals and households.\textsuperscript{82} Experience from other safety


\textsuperscript{77} See Ryan, \textit{supra} note 76, at 14.

\textsuperscript{78} Id.

\textsuperscript{79} Id. at 67.

\textsuperscript{80} Reich et al., \textit{supra} note 75, at 1.


\textsuperscript{82} Elizabeth Wolkomir, \textit{How is Food Assistance Different in Puerto Rico Than in the Rest of the United States?}, CTR. ON BUDGET & POL’Y PRIORITIES (Nov. 27, 2017), https://www.cbpp.org/research/food-assistance/how-is-food-assistance-different-
net programs similarly illustrates the generally static impact of block granting on funding levels.\textsuperscript{83} For example, the cash assistance provided by Temporary Assistance for Needy Families (TANF), which replaced Aid to Families with Dependent Children, has steadily declined over time.\textsuperscript{84} One study found the purchasing power of TANF was at least twenty percent lower now than when the program was created in 1996.\textsuperscript{85}

While innovative approaches to lifting Americans out of poverty and promoting food security are needed, the “Agenda for Renewed Opportunity” or the “Opportunity Grant” was deemed to essentially erode SNAP’s long-standing entitlement status; most likely provide weaker and less comprehensive and responsive versions of our existing federal aid programs; and result in large funding declines over time.\textsuperscript{86} According to an ERS report, a block grant approach to SNAP could potentially result in states restricting SNAP eligibility, hinder a state’s ability to respond quickly to increased need during an economic downturn, and increase the prevalence of food insecurity.\textsuperscript{87} Another consideration is that a fixed block grant challenges most states’ disaster SNAP approaches (e.g., hurricanes, tornadoes, or earthquakes), which is problematic given...
the increasing frequency and intensity of natural disasters.\textsuperscript{88} Ultimately, the 2018 Farm Bill did not convert SNAP to a block grant program.\textsuperscript{89} Notwithstanding, work remains to identify more effective ways to consistently alleviate poverty and food security in our country while providing state and local government agencies flexibility to meet their residents’ needs and streamline administrative safety net program processes.\textsuperscript{90}

\textit{B. Participant Eligibility}

Legislative deliberations leading up to the 2018 Farm Bill impacting SNAP participant eligibility included intense consideration but ultimately unsuccessful legislative attempts to eliminate broad-based categorical eligibility (BBCE) and establish stricter work requirements. Other eligibility related legislative actions in the 2018 Farm Bill included simplifying homeless housing cost provisions, preserving states’ option to coordinate SNAP benefits with low-income energy payments assistance (LIHEAP) (i.e., helping households “afford to heat and eat”), rejecting a lifetime ban on individuals convicted of certain felonies, and eliminating state performance bonuses to recognize best or most-improved in SNAP operations that have been historically reinvested in supporting SNAP integrity and effectiveness.\textsuperscript{91} The USDA also recently issued a memo to states urging them to strengthen their policy and programmatic approaches to restrict individuals from participating who have failed to make child support payments.\textsuperscript{92}

\textsuperscript{90} Id.
\textsuperscript{92} U.S. Dept AGRIC. FOOD & NUTR. SERV., State Flexibilities Related to Custodial and Noncustodial Parents’ Cooperation with State Child Support Agencies (May 1,
i. Broad-Based Categorical Eligibility

Since 2000, states have been permitted to use BBCE, which allows them to align the SNAP asset test or gross income eligibility thresholds with certain other non-cash means-tested programs.\[^{93}\] That is, BBCE allows states to grant automatic eligibility for families that receive TANF assistance and meet State-determined income limits.\[^{94}\] According to an ERS report, BBCE simplifies the application process for potential SNAP participants and reduces administrative costs, without significant increases in eligibility.\[^{95}\] Recognizing program integrity concerns and escalating program costs, the US Government Accountability Office stressed improved oversight of state implementation of BBCE is needed.\[^{96}\] A preliminary House version of the 2018 Farm Bill (H.R.2), which was drafted in an untraditional partisan manner and passed by two votes with no support from Democrats, eliminated BBCE and proposed changes to countable resources.\[^{97}\] Countable resources include a portion of the value of a household’s vehicle(s), which states have been able to exclude some or all of, consistent with TANF; however, the preliminary H.R.2 proposed to eliminate the state vehicle policy option and increase the amount of most vehicles’ value that is excluded for countable resources from $4,650 to $12,000.\[^{98}\] On the other hand, the preliminary Senate version of the Farm Bill (S.3042) did not propose significant changes to participant eligibility.\[^{99}\] A 2018 analysis of these proposed participant eligibility changes estimated almost two million households would no longer be eligible


\[^{94}\] AUSSENBERG, *supra* note 7, at 1.

\[^{95}\] OLIVEIRA ET AL., *supra* note 64, at 52–53.


for SNAP benefits or eight percent of those who participated in SNAP in fiscal year 2015. Others estimate more than three million Americans would be impacted and speculate more than 500,000 children’s access to free USDA school breakfast and lunch would be jeopardized since children who live in households that receive SNAP benefits would no longer be directly certified or automatically eligible to participate in the USDA school meal programs. The elimination of BBCE will also impact a school’s use of the Community Eligibility Provision, which allows a school to offer free meals to all students without collecting meal applications based on the school area’s SNAP eligibility numbers. Still, the USDA published a proposed rule on July 23, 2019 in the Federal Register that aims to end “this loophole” and “limits SNAP/TANF automatic eligibility to households that receive substantial, ongoing TANF-funded benefits aimed at helping families move towards self-sufficiency.” Days prior to the release of this rule, the House Agriculture Subcommittee on Nutrition, Oversight, and Department Operations held a hearing regarding the potential implications of eliminating BBCE that included discussion of “the Minnesota millionaire,” Rob Undersander, who applied for and received SNAP benefits while owning one million in assets and then donated the funds to his church and other charities. The House Committee of Education and Labor Chairman Scott also wrote a letter to Secretary Perdue raising concerns about the USDA’s estimates regarding the

103 Revision of Categorical Eligibility in the Supplemental Nutrition Assistance Program (SNAP), 84 Fed. Reg. 142 (July 24, 2019.).
impact of this proposed rule.\textsuperscript{105} The public comment period closes on September 23, 2019.\textsuperscript{106} Given that BBCE was not altered in the 2018 Farm Bill, any final rule could potentially evoke a legislative response.\textsuperscript{107}

ii. Work Requirements

The preliminary House version of the 2018 Farm Bill (H.R. 2) also proposed significant changes to the work requirements imposed on able-bodied adults without dependents (ABAWD) unable to find work.\textsuperscript{108} As explained earlier, ABAWD describes a person between the ages of 18 and 49 who has no dependents and is not disabled that is currently eligible to receive SNAP benefits for three months in three years if they do not meet certain special work requirements.\textsuperscript{109} SNAP work requirements are popular with House Republicans, State Republican leadership, the Trump administration, and the public.\textsuperscript{110} Various Congressional hearings, reports, and mandated pilot projects preceded the proposed SNAP work requirements in the preliminary H.R.2, along with similar legislative and executive branch efforts targeting other social safety net programs, including recent changes to Medicaid.\textsuperscript{111} However, most


\textsuperscript{106} Revision of Categorical Eligibility in the Supplemental Nutrition Assistance Program, supra 103.


\textsuperscript{109} U.S. DEP’T AGRIC. FOOD & NUTR. SERV., supra note 43.


working-age adults in SNAP who can work do, while often for low pay, without benefits, and unstable schedules. The current ABAWD requirements, as set forth in the Food and Nutrition Act of 2008, include registering for work, accepting suitable employment, not voluntarily quitting a job or reducing hours, and participating in workfare (unpaid work through a special state-approved program), or employment and training programs. While several exemptions exist, including permitting states to provide waivers to ABAWD during periods of high unemployment, if work requirements are not met, inability to participate in SNAP may exaggerate an ABAWD’s food insecurity. The preliminary H.R.2 proposed stricter work


requirements called for almost all adult SNAP participants under the age of sixty to work or participate in employment and job training for at least twenty hours per week and permitted states to target limited resources to those who they deem may benefit most from employment and training programs.\footnote{115}{Ed Bolen et al., \textit{House Farm Bill Would Increase Food Insecurity and Hardship}, CTR. ON BUDGET & POL’Y PRIORITIES (2018), https://www.cbpp.org/research/food-assistance/house-farm-bill-would-increase-food-insecurity-and-hardship.}

The Congressional Budget Office estimated more than one million adults would lose SNAP benefits as a result of the preliminary H.R.2’s proposed stricter mandatory work requirements.\footnote{116}{CONG. BUDGET OFF., COST ESTIMATE: H.R. 2 AGRICULTURE AND NUTRITION ACT OF 2018 12 (2018), https://www.cbo.gov/system/files?file=2018-07/hr2_1.pdf.} In addition, the Congressional Budget Office determined other impacts on states including: the likely need for more than the proposed two years to establish new employment and training opportunities that will likely serve relatively few eligible SNAP participants in each state; possible increased costs for tracking SNAP work status or exemptions from work requirements; and potential financial hardships contending with at least seven provisions deemed unfunded mandates (i.e., a regulation(s) that requires a state to perform certain actions with no funding allocated to support its fulfillment).\footnote{117}{Id. at 13, 22.} Notably, states have had the option to implement work requirements in SNAP, but many have stopped or opted not to start as the requirements are burdensome on participants and state agencies.\footnote{118}{FNS CONTROLS OVER SNAP BENEFITS FOR ABLE-BODIED ADULTS WITHOUT DEPENDENTS 4 U.S. DEP’T OF AGRIC. OFF. OF THE INSPECTOR GEN. (2016), https://www.usda.gov/oig/webdocs/27601-0002-31.pdf.} The Heritage Foundation reported, “as of late 2017, six states and the District of Columbia have statewide ABAWD work waivers, 27 states have partial waivers, and roughly 1,300 counties are ‘labor surplus areas’ as designated by the Department of Labor.”\footnote{119}{ROBERT RECTOR & VIJAY MENON, ISSUE BRIEF: SNAP REFORM ACT OFFERS SOUND BASIS FOR WELFARE POLICY 3, HERITAGE F. (2018), https://www.usda.gov/oig/webdocs/27601-0002-31.pdf.} Recent reports indicate that Illinois’ request for a waiver to reinstate a number of cases was denied and resulted in what federal investigators determined as an over-issuance of SNAP benefits during a four-month period.\footnote{120}{Cole Lauterbach, \textit{USDA Says Illinois Over-Issued Food Stamps, May Face Significant Fines}, ILL. NEWS NETWORK. (Sept. 30, 2018), https://www.illinoisnews.org/news/state_politics/usda-says-illinois-over-issued-food-stamps-may-face-significant/article_02f08c50-c422-11e8-a5f3-4b474cacff6d.html.} In a similar situation but for a longer period of time, the State of New Mexico
was fined more than $163 million.\textsuperscript{121} On the other hand, Maine announced in 2014 it would no longer grant waivers from the work requirements for ABAWDs, resulting in eighty percent ABAWD caseload drop in only a few months.\textsuperscript{122} Likewise, in 2014, Indiana reinstated work requirements.\textsuperscript{123} Between October 2017 and March 2018, Georgia ended SNAP benefits for an average of 356 participants for failing to meet work requirements.\textsuperscript{124} Recently, in April 2018, Wisconsin increased work requirements for SNAP recipients, among other provisions to limit the state’s welfare programs.\textsuperscript{125}

Employment and training programs (SNAP E&T) are administered by the USDA, using a formula-based grant program that provides about $300 million annually to support states (or state partners) offering a package of services including, but not limited to, participant assessment, employment and training activities, and supportive services.\textsuperscript{126} SNAP to Skills (S2S) is a USDA project that is designed to provide direct and intensive technical assistance, tools and resources to ten states to help each of them build more effective and job-driven SNAP E&T programs.\textsuperscript{127} While Congressional appropriations to SNAP E&T have grown and USDA has learned a lot about how to provide states technical assistance in developing and operating these programs, preliminary evaluations generally found states only offered basic job search services and have not had significant impacts on helping ABAWD transition into the workforce.\textsuperscript{128} A recent Government Accountability Office report

\textsuperscript{121} Id.
\textsuperscript{123} Reinstatement of Work Requirements for Able-Bodied SNAP Recipients Without Dependents, IND. FAM. & SOC. SERV. ADMIN., https://www.in.gov/fssa/dfr/4929.htm.
\textsuperscript{128} DEBORAH KOGAN ET AL., SNAP EMPLOYMENT AND TRAINING (E&T) BEST PRACTICES STUDY: FINAL REPORT III-23, U.S. DEP’T AGRIC. FOOD & NUTR. SERV.
determined SNAP E&T programs have served a small percentage of SNAP recipients—less than 1% per month on average in 2016; the data regarding these programs and their impacts were limited and of poor quality, and several states have not leveraged work force development system resources.\footnote{U.S. GOV’T ACCOUNTABILITY OFF., GAO-19-56, SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM: MORE COMPLETE AND ACCURATE INFORMATION NEEDED ON EMPLOYMENT AND TRAINING PROGRAMS (2018), https://www.gao.gov/products/GAO-19-56.} A 2017 report by the American Enterprise Institute (AEI)—a conservative think tank—discussed how SNAP work requirements might hinder a state’s ability to respond to local economic conditions and the availability or lack of education and training programs.\footnote{Di\'ane Whitmore Schanzenbach, The Future of SNAP: Continuing to Balance Protection and Incentives 17, AM. ENTER. INST. (2017), http://www.aei.org/publication/the-future-of-snap-continuing-to-balance-protection-and-incentives/ (discussed how SNAP responds quickly to increased need during times of economic downturns and strengthens the macroeconomy but could do more to assist participants with finding employment).} The AEI report also found this punitive approach fails to provide robust investment in more effective pathways to transition ABAWDs into the workforce.\footnote{Id.} The local labor market conditions are an important consideration; to illustrate, an ERS report found “a 10 percent increase in local employment raises the average [SNAP] recipient’s probability of program exit by nearly seven percent.”\footnote{Erik Scherpf et al., Participation in USDA’s Supplemental Nutrition Assistance Program (SNAP): Effect of Local Labor Market Conditions in Oregon 1, ERR-257, U.S. DEP’T AGRIC. ECON. RES. SERV. (2018), https://www.ers.usda.gov/webdocs/publications/90038/err-257.pdf?v=5890.6.} A recent report from the White House Council of Economic Advisors found the proposed work requirements in the preliminary H.R.2 may facilitate the placement of certain ABAWD into the workforce.\footnote{EXPANDING WORK REQUIREMENTS IN NON-CASH WELFARE PROGRAMS 5, EXEC. OFF PRESIDENT COUNS. ECON. ADVISORS (2018), https://www.whitehouse.gov/wp-content/uploads/2018/07/Expanding-Work-Requirements-in-Non-Cash-Welfare-Programs.pdf.} However, evidence from TANF, which has work requirements, suggests that employment gains were inconsistent and participation in the program dropped sharply.\footnote{Marian Jarlenski & Sara N. Bleich, The New Push for Work Requirements in Medicaid and SNAP: Implications for Children and Families, MED. CARE BLOG (May 24, 2018), https://www.themedicalcareblog.com/the-new-push-for-work-requirements-in-medicaid-and-snap-implications-for-children-and-families/.} Ultimately, the 2018 Farm Bill did not include stricter work requirements and included provisions aiming to strengthen employment and training operations such as increasing

funding, expanding the definition of SNAP E&T programs, and requiring state agencies to reach out to private employers in developing their SNAP E&T plans.\footnote{See Agriculture Improvement Act of 2018, Pub. L. No. 115-334 § 4005 (discussing employment and training programs for SNAP recipients).} The 2019 Agricultural Appropriations allocated $487,707 to employment and training programs.\footnote{DIVISION A – AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES APPROPRIATIONS ACT, 2019 30, CONGRESSIONAL DIRECTIVES, \url{https://www.appropriations.senate.gov/imo/media/doc/FY%202019%20Explanatory%20Statement%20for%20Division%20A%20(Ag)%20(1.21.19).pdf}.} On March 6, 2019, as part of its Farm Bill Implementation, the USDA issued an information memorandum on the self-executing Employment and Training provisions.\footnote{Memorandum from the U.S. Dep’t Agric., Food & Nutr. Serv. to the Regional Directors of Food & Nutr. Serv. 1 (Mar. 6, 2019), \url{https://fns-prod.azureedge.net/sites/default/files/Section-4005-Agriculture-Act-2018.pdf}.}

Altogether, the proposed stricter work requirements in the preliminary H.R.2 were one of the most contentious differences between the preliminary House and Senate versions and ultimately was not a part of 2018 Farm Bill approved by both the House (390-47) and Senate (87-13) and signed by President Trump on December 20, 2018. Shortly after the President signed the 2018 Farm Bill, the USDA Food and Nutrition Service (FNS), issued a new proposed rule aiming to strengthen the criteria for mandatory SNAP work requirements and significantly restrict state waiver allowance.\footnote{Supplemental Nutrition Assistance Program: Requirements for Able-Bodied Adults Without Dependents, 84 Fed. Reg. 980 (proposed Feb. 1, 2019) (to be codified at 7 C.F.R. pt. 273); Olivia Paschal, The Farm Bill and the Assault on Poor Families: Stringer New Work Requirements for Food-Stamp Recipients Could Doom Passage of a New Farm Bill, ATLANTIC (Aug. 24, 2018), \url{https://www.theatlantic.com/politics/archive/2018/08/the-farm-bill-and-the-assault-on-poor-families/568441/}.} The USDA proposed rule indicated the widespread use of ABAWD waivers during periods when unemployment rates were low necessitated strengthening the criteria for granting waivers.\footnote{Supplemental Nutrition Assistance Program: Requirements for Able-Bodied Adults Without Dependents, \textit{supra} note 138, at 981; see also U.S. DEP’T OF AGRIC., \textit{SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP): STATUS OF STATE ABLE-BODIED ADULT WITHOUT DEPENDENTS (ABAWD) TIME LIMIT WAIVERS – FISCAL YEAR 2019–2ND QUARTER (Mar. 13, 2019), \url{https://fns-prod.azureedge.net/sites/default/files/snap/FY19-Quarter2-ABAWD-Waiver-Status.pdf} (listing the current ABAWD time limit waivers approved for State agencies, which is updated each fiscal quarter).} The proposed rule also aims to end the unlimited carryover of ABAWD exemptions, which states have used to extend SNAP eligibility for
ABAWDs. The USDA indicated the proposed rule would not apply to the disabled, elderly, or women who are pregnant. Over ten years, the proposed rule is projecting an estimated one billion and half dollar reduction. Close to eight thousand public comments were submitted during a sixty-day period that was only briefly extended for three days due to technical issues with the website, even though, on February 1, 2019 during the historic shutdown, Representative Marcia Fudge requested an extension for the public comment period.

Legislation was introduced during the 115th Congress to prevent the USDA from implementing the proposed rule. In addition, Title 1 of a Rules Committee package (H.Res. 6) directs the House of Representatives’ Office of General Counsel to explore legal options for responding to the proposed SNAP rule, recognizing, in part, Congress had the opportunity to address work requirements in the 2018 Farm Bill and did not. During a Senate hearing on February 28, 2019, Secretary Perdue was asked several contentious questions about the proposed rule and then fired back with a press release reiterating “the need to restore the original intent of SNAP: A second chance, not a way of life.” On April 3, 2019, the House Agriculture Subcommittee on Nutrition, Oversight and Department Operations held a hearing regarding the proposed rule and most members expressed strong opposition, emphasizing Congressional intent was expressed during the 2018 Farm Bill to not impose stricter work requirements and the USDA should await the results of the 2018 Farm Bill provisions aiming to strengthen SNAP E&T programs. The day before the hearing, more than 100 House

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140 Supplemental Nutrition Assistance Program: Requirements for Able-Bodied Adults Without Dependents, supra note 138, at 980.
141 Id. at Enhanced Content – Public Comments.
144 Adopting the Rules of the House of Representatives for the One Hundred Sixteenth Congress, and for other purposes, H.R. Res. 6, 116th Cong. § 103(o) (2019).
Democrats sent a letter to Secretary Perdue urging him to withdraw the proposed rule and demanding detailed demographic data on ABAWDs.\textsuperscript{147} The USDA only provided a publicly available report at this time, which lacked the requested detailed assessment.\textsuperscript{148} In addition, Secretary Perdue acknowledged the definition of ABAWDs might need further refining.\textsuperscript{149} Similarly, close to half of the members of the Senate in a bipartisan effort sent a letter to Secretary Perdue explaining how the proposed rule is “…contrary to Congressional intent, evidenced by the passage of the Agriculture Improvement Act of 2018 (P.L. 115-334), which rejected similar harmful changes to SNAP and passed Congress by a historic vote of 87-13 in the Senate and by 369-47 in the House of Representatives.”\textsuperscript{150}

The proposed rule will likely affect participation rates and participant churn in SNAP, which occurs when a SNAP participant exits and then reenters within four months or less.\textsuperscript{151} Evidence suggests the stronger enforcement of mandatory work requirements and stricter standards for waivers put forth in this proposed rule could potentially affect the food security status of more than one million individuals.\textsuperscript{152} Retail food outlets could also lose millions of
According to a recent Hamilton Project analysis, the proposed rule would likely weaken states’ ability to respond to deteriorating economic conditions and negatively affect the important automatic stabilizer SNAP provides in our fiscal policy toolkit. Likewise, a recent Urban Institute case study of ABAWD in Kentucky found at least 13,122 SNAP participants lost benefits because they reached the three-month time limit after work requirements were reinstated. The study authors expressed concern about this “rapid loss of SNAP benefits associated with a policy change without clear evidence.”

In Wisconsin, a New Food Economy analysis found the state’s expanded work requirements fell short of expectations and was expensive (more than one billion annually was paid to the one company awarded the employment training program contract). On the other hand, The Foundation for Government Accountability contends states have used “loopholes and gimmicks” to waive work requirements, which were “only intended for areas with unemployment rates above ten percent or that otherwise lacked job opportunities for ablebodied adults.”

Future research can further examine how best to utilize a program aimed at preventing food insecurity as a means of transitioning participants with a range of marketable skills and life circumstances into more stable and stronger workforce situations.

156 Id. at 2.
159 See JULIE STRAWN, POLICY BRIEF 6: INTEGRATING SNAP E&T INTO CAREER PATHWAY SYSTEMS TO BOOST OUTCOMES 5, U.S. DEP’T AGRIC. FOOD & NUTR. SERV. (2017), https://snapdocs.fns.usda.gov/sites/default/files/2017-05/S2SBrief6_IntegratingSNAPandPathways.pdf (discusses how States may find an added benefit to integrating SNAP E&T services into existing career pathway systems); Brianna Provenzano, The Implementation of SNAP Work Requirements Could Be Hugely Harmful to the LGBT Community, PAC. STANDARD (Jan. 9, 2019), https://psmag.c
Evidence suggests that food and nutrition assistance is often still needed even when an individual is employed full time. In addition, more state demonstrations might provide better insights on how to provide states flexibility and other administrative supports necessary to meet their constituents’ food security and employment needs through administering SNAP, among other safety net programs. Future research could also focus on how to develop, implement, and scale up more effective and efficient employment and training activities aiming to provide more than basic job searching tips and target developing marketable skills.

C. Benefit Adequacy, Issuance & Redemption

i. Benefit Adequacy

The 2018 Farm Bill did not significantly alter benefit adequacy or issuance, with the exception of establishing an interstate data system to prevent the simultaneous issuance of SNAP benefits to an individual by more than one state. Fortunately, the 2018 Farm Bill did not eliminate the minimum SNAP benefit proposed in President Trump’s 2018 budget. But bipartisan support was not secured for the Closing the Meal Gap Act that aimed to revise the requirements for calculating SNAP benefits using the Low-Cost Food Plan instead of the Thrifty Food Plan. A SNAP benefit allotment is calculated by multiplying an individual’s or household’s net monthly income by 0.3 and then subtracting the result from the

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maximum monthly allotment for an individual or household size. According to a 2006 USDA report, the Thrifty Food Plan is the basis for SNAP benefit allotments and aims to provide a "representative healthful and minimal cost meal plan that shows how a nutritious diet may be achieved with limited resources." This 2006 report updated the 1999 version of the Thrifty Food Plan. The USDA also puts forth three other plans at different costs known as: Low-Cost, Moderate-Cost, and Liberal Food. On a monthly basis, the USDA provides weekly and monthly costs for each of the four food plans. While Closing the Meal Gap was not supported, the 2018 Farm Bill requires the USDA Secretary to re-evaluate and publish the Thrifty Food Plan every five years based on dietary guidance, food prices, food composition data, and consumption patterns. Recently, the Closing the Meal Gap Act was reintroduced in the House (H.R. 1368) to amend the Food and Nutrition Act of 2008 to require SNAP benefits be based on the Low Cost Food Plan. In the Senate, a bill (S.677) proposes to amend the Food and Nutrition Act of 2008 to provide for participation of Puerto Rico, American Samoa, and the Commonwealth of the Northern Mariana Islands in SNAP (instead of NAP, a block grant program explained earlier), which will enable equitable nutrition

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166 Id.
assistance for SNAP eligible individuals and households living in US territories. A legal battle is underway against the USDA, among other federal agencies, regarding “policies awarding lower federal benefits to US citizens who reside in Puerto Rico than to similarly situated and equally needy US citizens residing in any of the 50 states of the US.” The plaintiffs seek an injunction and declaration that these federal laws violate their right to equal protection guaranteed by the Fifth Amendment. At the state level, starting March 1, 2019, Maine enacted a working families supplement benefit that was authorized by the Maine State Legislature in 2011 and is funded through TANF that will more than triple benefits from $15 to $50 per month for approximately 13,000 working families receiving SNAP benefits.

A 2013 Institute of Medicine (IOM) examination of the evidence to define SNAP benefit adequacy concluded it is possible to develop a definition of allotment adequacy that factors in cost-time trade-offs involved in procuring and preparing a safe and nutritious diet, geographic price variations, and access to retail food outlets. The IOM report also found the assumptions regarding a SNAP participant’s time built into the Thrifty Food Plan are “inconsistent with the time available for most households at all income levels, particularly those with a single working head.” Similarly, the ERS determined more attention is needed on how best to balance program costs with benefit adequacy and to make appropriate adjustments for geographic variations in food and beverage prices; cost variations associated with nutrient requirements of household members of varying life stages; and the costs of time spent in food preparation built into the dated Thrifty Food Plan. A 2018 analysis found the SNAP benefit does not cover the cost of a low-income meal in ninety-nine percent of US continental counties and the District of Columbia and suggested Congress consider strategies to better align

175 Martinez, 2018 WL 1795786, at *6.
178 Id.
179 OLIVEIRA ET AL., supra note 64, at iv.
the maximum SNAP benefit with county-level meal costs.\textsuperscript{180} Another recent study determined that SNAP benefits may be insufficient to support eating patterns recommended by the \textit{Dietary Guidelines for Americans}.\textsuperscript{181} Increasing SNAP benefits resulted in increased food expenditures, decreased levels of food insecurity, and modest improvements in dietary quality among school-aged children participating in a Summer Electronic Benefit Transfer for Children demonstration.\textsuperscript{182} Similarly, increases in SNAP benefits following The American Recovery and Reinvestment Act of 2009 (P.L. 111-5) were associated with increased food expenditures and decreased levels of food insecurity.\textsuperscript{183} Recently, the Center on Budget and Policy Priorities conducted a review of the literature on SNAP benefit adequacy and found families in high-cost areas find it especially difficult to afford a healthy diet.\textsuperscript{184} Thus, more timely and sufficient legislative attention is needed towards defining, calculating, and providing adequate SNAP benefits. This work includes improving the evidence base for how minimum wage laws, among other improvements in the social safety net, supports impact SNAP benefit adequacy.

\textbf{ii. Benefit Issuance}

Aside from benefit adequacy, further work is needed to explore how state authority to make decisions about the timing and frequency of benefit issuance impact SNAP participants. Currently, households participating in SNAP receive benefits once monthly,\textsuperscript{185}

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\textsuperscript{180} \textsc{Elaine Waxman et al.}, \textit{How Far Do SNAP Benefits Fall Short of Covering the Cost of a Meal?}, 6, Urb. Inst. (2018), \url{https://www.urban.org/research/publication/how-far-do-snap-benefits-fall-short-covering-cost-meal}.
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and most benefits are spent within two weeks of receipt.\textsuperscript{186} Research consistently shows that early exhaustion of benefits leads to food insecurity at the end of the SNAP benefit month.\textsuperscript{187} This monthly cycle of food insecurity has been called the “SNAP nutrition cycle,” and is linked to a host of negative health and societal outcomes, including reduced caloric intake and diet quality, increased hospital admissions for hypoglycemia, lower standardized test scores, and increased crime.\textsuperscript{188} More frequent issuance (e.g., distributing benefits every two weeks) could potentially help SNAP participants smooth consumption and reduce the severity of food insecurity experienced at the end of the month.\textsuperscript{189} In 2006, a proposal in Michigan aimed to do just this,\textsuperscript{190} but was halted by language in the 2008 Farm Bill, which makes it infeasible for states to issue benefits more frequently than once per month absent an act of Congress.\textsuperscript{191} By contrast, states have authority to decide when, during the course of the month, individual households receive their benefits.\textsuperscript{192} Currently, there is substantial variation across states regarding benefit issuance.\textsuperscript{193} In seven states, all SNAP participants receive their benefits on a single day of the month (single-day issuance); in another seven states, SNAP participants receive their monthly benefits spread over three to seven different days; and in the


\textsuperscript{187} K.S. Hamrick & M. Andrews, SNAP Participants’ Eating Patterns Over the Benefit Month: A Time Use Perspective, 11 PLOS One e0158422 (2016).

\textsuperscript{188} C. Cotti, J. Gordanier, & O. Ozturk, When Does It Count? The Timing of Food Stamp Receipt and Educational Performance, 66 ECONOMICS EDUC. REV. 40-50 (2018).


remaining thirty-six states, benefits are received on eight to twenty-eight different days each month (each beneficiary is assigned a day usually by case number or last name). But these state issuance schedules continue to evolve. Some research suggests that issuance schedules affect retailer behaviors, with retailers operating in states with single-day or short issuance schedules increasing prices or targeting advertisements during the first week of the benefit month. For example, one study found in-store sugar-sweetened beverage marketing was 4.35 times higher during SNAP issuance compared with non-issuance days in census tracts with high SNAP enrollment. Shutdown implications on issuance are discussed in

194 Id.
the appropriations section. More research is needed to better inform federal and state policy and programmatic decisions regarding benefit issuance, along with how best to work with retailers and participants to maximize benefit utilization that preserves SNAP’s mission to promote food security and improve nutrition.

iii. Benefit Redemption

Unlike benefit adequacy and issuance, recent legislative actions have explored approaches to modernizing the redemption of SNAP benefits, particularly at farmers’ markets, restaurants, and through online delivery and during the summer months when child(ren) are not participating in school-based child nutrition assistance programs. Indeed, more than seven thousand farmers’ markets and direct-marketing farmers are now SNAP authorized and $22.4 million (less than 0.1%) of SNAP benefits were redeemed at direct-marketing farmers or farmers’ markets in fiscal year 2017. USDA reported SNAP redemptions at farmers’ markets increased from $2.7 million in fiscal year 2008 to more than $19 million in fiscal year 2015, which is an increase of about 620 percent and, since fiscal year 2008, the number of farmers’ markets authorized to accept SNAP increased by 587 percent. Community Supported Agriculture (CSAs) is another possible innovative mode now eligible to help connect local farmers with SNAP participants. This is tremendous given SNAP participants could potentially improve access to and consumption of fresh fruits and vegetables and these purchases help farmers.

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198 Parke Wilde & Mehreen Ismail, Beyond the Farm in the Farm Bill: What Nutrition Professionals Need to Know about the Nutrition Title, 52 NUTR. TODAY 273, 277 (2017).
202 D.A. Freedman et al., Systematic Review of Factors Influencing Farmers’ Market Use Overall and Among Low-Income Populations, 116 J. ACAD. NUTR. DIET. NUTR. 1136, 1151 (2016); H.M. Black et al., Improving Fruit and Vegetable Consumption: Use of Farm-to-Consumer Venues Among US Adults, 8 PREV. CHRONIC DIS. 1, 2 (2011); R.C. Woodruff et al., Urban Farmers Markets as a Strategy to Increase Access to and Consumption of Fresh Vegetables Among SNAP and Non-SNAP Participants: Results from an Evaluation, 8 J. AGRIC. FOOD SYSTEMS & COMM. DEV.
The Agricultural Act of 2014 (P.L. 113-79) requires authorized SNAP retailers to pay for their own electronic benefit transfer (EBT) equipment but provided an exception for eligible farmers’ markets and direct-marketing farmers, among others. In addition, appropriations were authorized to allow the USDA to provide EBT equipment to eligible markets and farmers. Unfortunately, on July 14, 2018, the FNS Administrator responded to news that a major provider of mobile EBT technology for farmers’ markets would be discontinuing this service and outlined a variety of strategies available to ensure markets and farmers have the equipment needed to continue to process SNAP transactions. FNS recently increased the cost for markets to accept EBT and now requires each farmers’ market location to obtain its own EBT authorization number and machine, even if multiple locations are operated by a single organization. The 2018 Farm Bill only made modest adjustments to EBT system rules including temporarily banning the switching and routing of fees and easing of EBT authorization processes for farmers’ markets serving multiple locations. In other words, the 2018 Farm Bill allows farmers’ market vendors to use a single device to accept SNAP EBT at multiple farmers’ market locations. The current regulations require one device per location. Fortunately, a financial tech company provided a two million dollar lifeline to ensure continuance of EBT cards at farmers’ markets and the company is exploring how to ensure the appropriate technology is in place to enable vendors to use one device at multiple locations, which should lower costs and reduce administrative burdens. Farmers’ market vendors are also


204 Id.


expecting additional support through the Local Agriculture Market Program (LAMP), which was created in the 2018 Farm Bill and provides $50 million annually in permanent, mandatory funding.\footnote{209} LAMP aims to improve coordination for local and regional food systems funding across agencies and streamlines certain existing programs by putting them under one umbrella such as the Farmers Market and Local Food Promotion Program (FMLFPP) and Value-Added Producer Grants (VAPG).\footnote{210}

Restaurants’ redemption is evolving. Back in 1971, in Kentucky Fried Chicken of Cleveland v. United States, the US Supreme Court determined the Secretary of Agriculture acted within his scope of authority granted under the Food Stamp Act of 1964 in denying the applicant fast food restaurant request to participate as a “retail food store” in the Food Stamp Program and only approved grocery establishments which stock a large number of low-cost staples.\footnote{211} In the Food Stamp Act of 1977, states were granted flexibility to authorize certain restaurants as SNAP retailers to enable SNAP redemption for homeless, elderly, and/or disabled.\footnote{212} If states elected to operate a Restaurant Meals Program for certain eligible SNAP participants, the Agricultural Act of 2014 (P.L. 113-79) established requirements for plans and reports to help monitor the program’s effectiveness and integrity.\footnote{213} California, Arizona, and Rhode Island, among others, have well developed Restaurant Meal Programs.\footnote{214} Yet, determining if a state participates in the Restaurant


210 Id.

211 Kentucky Fried Chicken of Cleveland v. United States, 449 F.2d 255, 256 (5th Cir. 1971).


213 H.R. 2642, supra note 203.

Meal Program using a state SNAP website is not always straightforward and even if a state does participate in the program, identifying which restaurants are authorized could be difficult.215 Similarly, using the USDA retailer website to determine if a restaurant participates can be challenging.216 Little is known about the health impacts of this SNAP redemption option.

An emerging redemption innovation being explored is the Summer Electronic Benefits Transfer for Children (SEBTC) demonstration to study the use of SNAP and the USDA Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC) electronic benefits transfer to provide assistance to low-income children during the summer.217 In a recent demonstration project, SEBTC provided certain households with additional resources during the summer months when they were not participating in school meal programs such as the USDA National School Lunch Program and School Breakfast Program.218 The 2010 Agriculture Appropriations Act (P.L.111-80) authorized and provided funding for the USDA to implement and rigorously evaluate demonstrations to reduce summer food insecurity for children.219 The SEBTC demonstration project findings indicate the benefit of $60 per month per child reduced the most severe category of food insecurity among children during the summer by one-third and receiving either a $30 or $60 monthly were both associated with higher fruit and vegetable consumption.220 The 2018 Farm Bill did not address the use of SNAP to provide additional benefits during the summer but future legislative action might occur as the Child Nutrition Reauthorization processes get underway.


216 Id.


218 Id.


Congress has taken steady legislative actions to explore the use of online delivery among SNAP participants, given one-third of SNAP participants use someone else’s car, walk, bike or use public transit to grocery shop.\(^{221}\) The Agricultural Act of 2014 (P.L. 113-79) mandated Online Purchasing Pilots to test the feasibility of online transactions using SNAP benefits.\(^{222}\) FNS recently requested public comments about the evaluation planned for the two-year online transaction pilots taking place with the following retail food outlets (in the following states): Amazon (Maryland, New Jersey, New York), FreshDirect (New York), Safeway (Maryland, Oregon, Washington), ShopRite (Maryland, New Jersey, Pennsylvania), Hy-Vee, Inc. (Iowa), Hart’s Local Grocers (New York), and Dash’s Market (New York).\(^{223}\) These pilots, among other studies, can help better understand the challenges and motivators to successfully implementing an online delivery option for SNAP eligible individuals and families.\(^{224}\) The 2018 Farm Bill directs the USDA Secretary to authorize the use of mobile technologies for the purpose of accessing SNAP benefits, after conducting no more than five demonstration projects to pilot such technologies.\(^{225}\) Put another way, the 2018 Farm Bill requires nationwide implementation of


\(^{222}\) H.R. 2642, supra note 203.


\(^{224}\) See e.g. Olivia Martinez, Barbara Tagliaferro, Noemi Rodriguez, Jessica Athens, Courtney Abrams, & Brian Elbel, EBT Payment for Online Grocery Orders: A Mixed-Methods Study to Understand Its Uptake among SNAP Recipients and the Barriers to and Motivators for Its Use, 50 J. NUTR. EDUC. BEHAV. 396, 396 (2018) (examining “uptake of the pilot program and its impact on SNAP recipients’ food purchases” and concluding that “[e]lectronic Benefit Transfer for online grocery purchases has the potential to increase food access among SNAP beneficiaries,” but “[u]nderstanding online food shopping barriers and motivators is critical to the success of policies targeting the online expansion of SNAP benefits”).

online acceptance for SNAP benefits after the pilots required in the 2014 Farm Bill are implemented. On April 18, 2019, participants in the two-year test (pilot) in New York State were the first ever to select and pay for their groceries online; eventually, the other pilots will get underway. Recent analyses have raised concern about the data privacy requirements set out in the pilot’s Request for Volunteers might not sufficiently safeguard against predatory marketing practices tailored at an already disadvantaged population. Therefore, permitting online transactions might help ensure home bound SNAP participants or those with limited transportation options have modernized redemption alternatives; however, much remains before nationwide implementation.

Another redemption development is the recent legal battle over whether SNAP redemption data at the retailer level (online or brick or mortar) is confidential business information; recently Supreme Court Justice Neil Gorsuch stayed a lower court’s order requiring the disclosure of how much money retail food outlets earn from SNAP transactions until the plaintiff, Argus Leader, responds to the Food Marketing Institute’s request to appeal to the US Supreme Court. On April 22, 2019, the Supreme Court heard oral arguments and, based on the Justices questions, most Justices appear to be leaning towards maintaining the existing standard, centering on the competitive harm that could result from expanding the types of traditional confidential business information that could

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230 Argus Leader Media v. USDA, 889 F.3d 914, 916 (8th Cir. 2018).

231 Arthur Delaney, Big Retailers Don’t Want You to Know How Much Their Stores Earn from Food Stamps, HUFFPOST (Aug. 13, 2018), https://www.huffingtonpost.com/entry/food-stamps-supreme-court_us_5b71d6dfe4b0bd0620bcd00/.
be accessed through potential Freedom of Information Act (FOIA) (P.L. 89-487) requests. On June 24, 2019, the Supreme Court held that commercial information submitted to the federal government qualifies as “confidential” under FOIA’s Exemption 4 when, at a minimum, it is “actually” and “customarily” “kept private” and the federal government provides assurances that the information will be maintained in confidence. Thus, more attention is needed to explore innovative administrative data linkages and public-private partnerships around retail transactional data that protect SNAP participants’ privacy and SNAP authorized retailers’ propriety information while enabling a better understanding of SNAP participants’ purchasing patterns.

D. Appropriations

i. Fiscal Years 2017 and 2018

Agriculture and related agencies’ appropriations for fiscal years 2017 and 2018 provided about $74 billion to SNAP in required mandatory spending plus a reserve fund for any unexpected participation increases. These appropriations are about four billion dollars below the fiscal year 2016 level and more than two million dollars below the President’s budget request. These budget cuts reflect declining enrollment, decreasing food costs, eliminating connections between the Low Income Home Energy Assistance Program and SNAP, and budget cuts laid out in the 2012 Farm Bill that put additional cost burdens on SNAP authorized retailers and state governments.


235 See id. (demonstrating that Congress appropriated $80,849.4 millions in 2016 and $73,610.0 millions in 2018 but that the Administration requested $73,612.5 millions).

ii. Fiscal Year 2019 Including the Historic Government Shutdown

For fiscal year 2019, the House and Senate provided appropriation bills in May 2018 and the House passed the four-bill minibus spending package, H.R. 6147(115) on September 26, 2018 that needed and did not secure President Trump’s signature. For SNAP, H.R. 6147 provided $73.2 billion in required mandatory spending plus a reserve fund, which is $794 million below last year’s level and similar to the President’s budget request. Continuing resolutions kept USDA, among other government agencies, operating until December 20, 2018. Starting December 21, 2018, the government was partially closed for a record-long thirty-five days due to a conflict with Congress regarding the lack of funding of the US-Mexico border wall. In the first days of the 116th Congress, House Democrats passed legislation to reopen the government that put forth six of the seven remaining appropriations bills. To separate the border dispute from the shutdown, the House Democrats proposed funding the Department of Homeland Security through February 8, 2019 without funding allocated to the border wall. But Senator Majority Leader Mitch McConnell indicated the Republican-controlled Senate will only vote on a bill the President

238 See id. at 13 (showing that the Administration requested $73,218.3 million and that the House and Senate approved $73, 219.3 million for SNAP in FY2019).
240 See Appropriations Watch: FY 2019, COMMITTEE RESP. FED. BUDGET, http://www.crfb.org/blogs/appropriations-watch-fy-2019 (“On January 25, a three-week continuing resolution was enacted to reopen the government after a 35-day partial government shutdown, the longest in American history.”).
242 See id. (“[T]he chamber would then vote on a three-week continuing resolution (CR) to fund the rest of the government through Feb. 8 . . . The president has asserted he won’t sign legislation that doesn’t provide border wall funding while Democratic leaders have called on Trump to reopen the government before they negotiate on how to address securing the border.”).
will support. The President showed no sign of supporting any legislation that did not allocate funding for a border wall. Ultimately, a three week short-term continuing resolution was passed to end the longest government shutdown.

The inability to timely finalize fiscal year 2019 Agricultural Appropriations resulted in unprecedented logistical challenges for SNAP benefit issuance. During the historic thirty-five day partial government shutdown, February SNAP benefits were issued by most states at the end of January; specifically January 20th. That is,


244 See id. (“Roughly a quarter of the government has been shut down since Dec. 22 over an entrenched fight on funding for Trump’s proposed wall on the U.S.-Mexico border wall . . . [T]he president walked out of a White House meeting last week when Pelosi told him that Democrats would not consider border wall funding even if he fully reopened the government.”).


some SNAP participants received February benefits more than a month early.\textsuperscript{248} As a result, SNAP-authorized retailers scrambled to meet increased demand, and about one percent of retailers who were not able to renew their SNAP authorization prior to the shutdown were not able to accept SNAP benefits until reauthorized.\textsuperscript{249} This


\textsuperscript{249} Jossie Carbonare, \textit{York County Grocery Store Unable to Process Food Stamps Due to Government Shutdown}, FOX 43 (Jan. 16, 2019), https://fox43.com/2019/01/
change in distribution or the “SNAP Gap” may provide some insight into the role of issuance in early exhaustion of benefits and related health outcomes.\textsuperscript{250} For example, in Vermont, which normally issues benefits to all households on the first of the month, February benefits came nearly two weeks early.\textsuperscript{251} On January 3\textsuperscript{rd}, the average SNAP household in Vermont had a balance of $145; on February 3\textsuperscript{rd}, it was only $88.\textsuperscript{252} Although it is too soon to evaluate the effects of this shift on participant outcomes, there are anecdotal reports of households running out of money weeks before receiving March benefits and reports of spikes in food pantry utilization.\textsuperscript{253}

The continuing resolution enabled the USDA to issue March benefits, which in most states occurred earlier than usual.\textsuperscript{254} While


the status of April benefits and beyond was unclear until the agricultural appropriations were finally finalized, it was speculated that the USDA could use a similar approach as used in February, or some states could use their own budget to issue SNAP benefits, among other approaches. To ensure a reasonable continuation of benefits during a government shutdown, there are possible grounds for legal action by participants and state agencies, given the unique funding provisions of this entitlement program. Namely, Section 5(a) of the Food and Nutrition Act of 2008 gives eligible individuals and households a legal right to continued SNAP benefits and the only exception is that Section 18 allows Congress to pass an appropriation that is insufficient to fund full benefits, which does not apply when Congress has passed no appropriation for SNAP. States could potentially sue the USDA “for reimbursement of the administrative costs necessary to continue issuing SNAP benefits.” Thus, additional work is needed to understand the legal and policy implications of a government shutdown, as well as the USDA contingency plans for an entitlement program—but not an “essential


\footnote{Id.}

\footnote{Id.}
Aside from SNAP benefits, USDA supported SNAP activities, such as SNAP-Ed or SNAP relevant research, were halted during the historically long shutdown. The shutdown also resulted in unpaid federal workers and contractors, among others, who had not been paid for almost two bimonthly pay dates that could potentially have been eligible for SNAP, among other federal food and nutrition assistance programs. This strain was particularly pronounced among Native American tribes, where federal employment is high and the Food Distribution Program on Indian Reservations (FDPIR), an alternative federal food and nutrition assistance program to SNAP, was disrupted. Moreover, these furloughed workers were tapping into the charitable food system that many SNAP participants or SNAP-eligible families depend on.


Several unique charitable offers emerged during the shutdown to help provide food assistance to those affected by the shutdown. These ramifications to SNAP and the charitable food network are important considerations in understanding the short and long term implications of a government shutdown. There are also intriguing short- and long-term knowledge gaps about the food security, health, and financial impacts this thirty-five-day shutdown had on furloughed workers, among others whose salary and business stability are closely tied to affected governmental entities.

Ultimately, four months into the fiscal year and after the historic shutdown, 2019 Agricultural Appropriations bill (H.J.Res.31 (116)) was passed and appropriated about $73.5 billion dollars in mandatory funding to SNAP. As we’ll discuss in various sections...

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of this review, this appropriations bill, along with accompanying Congressional Directives, included a number of SNAP relevant mandates and funding priorities.

iii. Fiscal Year 2020

The shutdown delayed the fiscal year 2020 appropriations process but it is moving forward in the House and the Senate. As explained further under Disaster Assistance, Congress first focused on finalizing a contentious disaster aid package. Then, attention turned to lifting caps on the fiscal year 2020 budget set out in the 2011 Budget Control Act (P.L. 112-25) since there was no bicameral approved budget for fiscal year 2020 to guide the appropriations process. This two-year budget deal to increase budget caps (P.L. 116-37) was critical since without one sequestration would have occurred in fiscal year 2020 for both defense and non-defense programs to meet the caps set out in the 2011 Budget Control Act. The House Appropriations Committee has put forth target funding levels for each of the twelve fiscal year 2020 funding bills, including a proposed $71.1 billion in required mandatory spending for SNAP. The Senate Appropriations Committee has been conducting a series of hearings regarding fiscal year 2020 appropriations. Another partial government shutdown is possible


271 The United States Senate Committee on Appropriations, Hearings, https://www.appropriations.senate.gov/hearings (lists a variety of hearings to review the fiscal year 2020 budget requests of various federal departments and agencies);
as Congress works to finalize spending bills for fifteen agencies after its August recess.

iv. **Congressional Agricultural Appropriation Summary**

Therefore, the agricultural appropriations and appropriation processes, particularly the historic fiscal year 2019 and the now delayed fiscal year 2020 appropriations process, have significant impacts on SNAP at the federal, tribal, state, and local administrative levels, on retailers, the charitable food network, and on those actively participating, eligible to participate, or who may become eligible as a result of not getting paid during a government shutdown.

**E. Oversight**

Congressional oversight is derived from the implied powers of the US Constitution and, when conducted in a bipartisan manner, can be an effective strategy for maintaining the separation of powers. There is not much to report regarding the 115th Congress’ SNAP oversight responsibilities. A record number of hearings reviewing SNAP were held over the course of the 114th Congress, totaling 60 witnesses in 16 hearings and a report was published synthesizing the findings. Congressional letters of inquiry have also been submitted to the USDA regarding the proposed agency moves discussed in the Trump administration section of this article. The 116th Congress has started to hold hearings relevant to SNAP, such as the House Agriculture hearing noted earlier focused on the implications of eliminating broad-based categorical eligibility and a few others which we will discuss in the Trump administration section.

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*see also Appropriations for Fiscal Year 2020, CONGRESS.GOV, https://www.congress.gov/resources/display/content/ Appropriations+for+Fiscal+Year+2020 (last visited Aug. 30, 2019).

272 See U.S. Const. art. I, § 8, cl. 18 (“The Congress shall have Power . . . [t]o make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof.”); ALISSA M. DOLAN ET AL., CRS, RL30240, CONGRESSIONAL RESEARCH SERVICE: CONGRESSIONAL OVERSIGHT MANUAL 24 (2014), https://fas.org/sgp/crs/misc/RL30240.pdf (“Oversight and investigative authority is implied from Article I of the Constitution and rests with the House of Representatives and Senate.”).

F. Strengthening SNAP’s Nutrition Impacts

While not extensively during the 115th session, Congress has been exploring additional, more direct ways to strengthen SNAP’s impact on dietary quality and health; specifically, through restricting product eligibility, incentivizing fruit and vegetable purchases, enhancing minimum stocking requirements for authorized SNAP retailers, and supporting nutrition education and promotion through SNAP-Ed.

i. Restricting Product Eligibility

Although the 115th Congress held a hearing focused on the pros and cons of restricting SNAP purchases in the initial weeks of their session, the 2018 Farm Bill did not put forth any provisions to restrict SNAP purchases. Historically, foods and beverages are eligible for purchase with SNAP benefits except alcoholic beverages and tobacco and hot foods or foods intended to be eaten in the store, except by individuals who cannot cook for themselves. States, most notably New York and Maine, have submitted unsuccessful waiver requests to the USDA to examine the feasibility of restricting the use of SNAP benefits, particularly sugar-sweetened beverages which research suggests about “20 cents out of every dollar are spent

on sweetened beverages, desserts, salty snacks, candy, and sugar.”

Arkansas, California, Delaware, Florida, Illinois, Missouri, South Carolina, Texas, and Wisconsin, among others, have also explored legislative options at the state level to restrict SNAP purchases. Under the Obama and Trump administrations, the USDA has consistently responded to state SNAP waiver requests, generally noting concerns regarding the waivers’ rationale, feasibility, and potential effectiveness. The USDA published a summary of these concerns, which include: no standards exist for defining healthy foods and beverages; implementing restrictions would increase program complexity and costs; no guarantee restricting the use of SNAP would affect food and beverage purchases; and other ways exist to encourage healthier purchases without limiting participant choice.

SNAP is the only federal food and nutrition assistance program that subsidizes sugar-sweetened beverages, which are estimated to account for between $1.7 to $4.2 billion dollars in SNAP spending annually. A randomized trial of adults who were income-eligible but not participating in SNAP found that restricting sugar-sweetened beverages, candy, and sweets from purchase in a

280 Id.
SNAP-like food benefit program led to a reduction in total energy intake, but no differences in consumption of added sugars or sugar-sweetened beverages.\textsuperscript{282} One simulation study suggested restricting SNAP purchases could improve participant diet quality and reduce obesity and type 2 diabetes.\textsuperscript{283} Further, retailers have successfully implemented restrictions required of other federal food and nutrition assistance programs and for state or local tax requirements.\textsuperscript{284} But these possible nutrition improvements are currently deemed to be at the expense of limiting consumer choice and decreasing SNAP participation.\textsuperscript{285} Yet, a qualitative study found SNAP participants were supportive of prohibiting the use of SNAP benefits for purchasing foods and beverages high in added sugars.\textsuperscript{286} Another consideration is if and how SNAP participants might use their own money to purchase the restricted items, especially if they are generally inexpensive items.\textsuperscript{287} However, research has found people are less likely to use cash than SNAP to purchase foods and beverages.\textsuperscript{288} Therefore, more work remains to explore the role of restrictions and likely the combination of restrictions and incentives in SNAP to improve participant diet quality and health.

\textsuperscript{283} S. Basu et al., \textit{Ending SNAP Subsidies for Sugar-Sweetened Beverages Could Reduce Obesity and Type 2 Diabetes}, 33 HEALTH AFFAIRS 1032-1039 (2014).
\textsuperscript{287} OLIVEIRA ET AL., supra note 64.
ii. Incentivizing Fruit and Vegetable Purchases

Even though Congress has not garnered significant support for restrictions on SNAP purchases, there has been growing bipartisan support for incentivizing fruit and vegetable purchases among SNAP participants, which evidence suggests helps increase SNAP participants’ fruit and vegetable purchases.289 An initial milestone was in the 2008 Farm Bill, which provided mandatory funding for the Healthy Incentives Pilot to test point-of-purchase incentives for fruits, vegetables, and other healthful foods.290 The final evaluation indicated Healthy Incentives Pilot participants consumed almost a quarter of a cup more targeted fruits and vegetables per day than did nonparticipants.291 Based on these findings, among others, the 2014 Farm Bill provided $100 million in mandatory funding over 2014 to 2018 to establish the Food Insecurity Nutrition Incentive (FINI) grant program.292 FINI is


administered by the USDA National Institute of Food and Agriculture (NIFA) in cooperation with FNS and aims to improve dietary quality and health by incentivizing the purchase of fruits and vegetables by SNAP participants.\textsuperscript{293}

FINI findings are still emerging but a 2015 report noted FINI-funded SNAP produce incentive programs operated in twenty-seven states in rural and urban communities and at more than nine hundred farmers’ markets, more than fifty grocery stores, and more than seventy farmer-to-consumer retailers.\textsuperscript{294} A 2018 qualitative evaluation with FINI grantees and key stakeholders found many believed FINI was an opportunity for consumers to try new fruits and vegetables and “cited that for every $1 spent with SNAP, $1.80 was generated in economic growth.”\textsuperscript{295} Moreover, a randomized controlled study of a same-day supermarket double-dollar fruit and vegetable incentive program in rural Maine determined that over four months coupons were redeemed among fifty-three percent of eligible baskets and there was greater increases in fruit and vegetable spending among SNAP-eligible participants who redeemed coupons than among non-SNAP eligible participants who redeemed coupons.\textsuperscript{296} Granted, another study recommended stand-alone coupon incentive programs might need complementary strategies to build in vegetable preparation skills.\textsuperscript{297} The 2018 Farm Bill increased mandatory commitments to the program up to $250 million over five years, made the program permanent, and renamed the program to Gus Schumacher Food Insecurity Nutrition Incentive

\textsuperscript{293} \textsc{Id.}


\textsuperscript{295} \textsc{C.A. Parks et al., Gretchen Swanson Ctr. for Nutrition, A Qualitative Evaluation of the United States Department of Agriculture’s Food Insecurity Nutrition Incentive Grant Program 8 (2018), https://static1.squarespace.com/static/58a4dda16a49633eac5e02a1/t/5baaa931e5e5f0b78f5d3ae6/153711107757/HER+FINI-updated.pdf.}

\textsuperscript{296} \textsc{M. Polacek et al., A Supermarket Double-Dollar Incentive Program Increases Purchases of Fresh Fruits and Vegetables among Low-Income Families with Children: The Healthy Double Study, 50 J. Nutr. Educ. Behav. 217, 224–25 (2018).}

\textsuperscript{297} \textsc{M.S. Wetherill et al., SNAP-Based Incentive Programs at Farmers’ Markets: Adaptions Considerations for Temporary Assistance for Needy Families (TANF) Recipients, 49 J. Nutr. Educ. Behav. 743, 743 (2017).}
Program (GusNIP) in honor of an integral champion of this program who recently passed away.\textsuperscript{298} In addition, Congress granted the Secretary of Agriculture the authority to establish the Produce Prescription Program and authorized $4,000,000.00 for each of fiscal years 2019 through 2023 (Sec. 4304). These programs have been shown to improve patient-clinician communication around diet and contribute to patient consumption of fruits and vegetables.\textsuperscript{299} The GusNIP request for applications was recently announced and applications were due in June 2019 for the availability of $41 million in funding for fiscal year 2019 projects for three subprograms: 1) SNAP incentives (competitive grants that use point-of-sale fruit and vegetable incentives); 2) Produce Prescription Program (competitive grants for projects that provide “prescriptions” for fruits and vegetables); and 3) Training, Technical Assistance, Evaluation, and Information Center (cooperative agreements to establish a center to help develop and disseminate best practices).\textsuperscript{300}

For retailer funded incentive programs, the 2018 Farm Bill requires the USDA Secretary to issue guidance clarifying the process for retailers to seek waivers to offer SNAP consumers incentives for purchasing healthy SNAP-eligible staple foods.\textsuperscript{301} Recently, Giant Food’s Pharmacy added fruits and vegetables to its prescription options at a store in Washington, DC, which is available to Medicaid


\textsuperscript{299} See Ridberg, et al., \textit{A Pediatric Fruit and Vegetable Prescription Program Increases Food Security in Low-Income Households}, 51 \textit{J. NUTR. EDUC. BEHAV.} 227 (2019) (finding 72% of the 578 low-income families participating in a pediatric, clinic-based, fruit/vegetable prescription program increased their food security summative score over the course of the program); see also Trapl, et al., \textit{Dietary Impact of Produce Prescriptions for Patients with Hypertension}, 15 \textit{PREV. CHRONIC DISEASE} 138, 138 (2018) (concluding produce prescription program lead to significant changes in dietary behavior); see also Joshi, et al., \textit{Implementing a Produce Prescription Program for Hypertensive Patients in Safety Net Clinics}, 20 \textit{HEALTH PROMOTION PRACT.} 94, 94 (2018) (concluding that program allows for adaptive treatment); see generally H. Swartz, \textit{Produce Rx Programs for Diet-Based Chronic Disease Prevention}, 20 \textit{AMA J. ETHICS} 960 (2018) (exploring the ethical and policy implications of produce prescription programs).


\textsuperscript{301} Id. at § 4008; see also Supplemental Nutrition Assistance Program Provisions of the Agriculture Improvement Act of 2018 – Informational Memorandum, U.S. DEP’T AGRIC. (Mar. 7, 2019), https://fns-prod.azureedge.net/sites/default/files/Farm-Bill-Information-Memo.pdf (noting contact for discussing challenges faced by States implementing Section 4008 – Retail Incentives).
recipients and provides a weekly twenty-dollar coupon for buying fruits and vegetables. More work is needed to understand the short- and long-term, multi-sector benefits of these innovative efforts to improve the consumption of healthier foods and beverages through incentives and prescription programs.

iii. Combining Restricting Product Eligibility and Incentivizing Healthier Purchases

Altogether, a combination of restrictions and incentives might be most effective and supported by SNAP participants, among other stakeholders. That is, a randomized clinical trial reported favorable dietary quality changes in the incentives for purchasing more fruits and vegetables plus restriction on less nutritious foods and beverages condition that were significantly different from changes in the control condition. Likewise, a recent microsimulation study found a combined incentive and disincentive program through SNAP resulted in the largest modeled gains in health and healthcare savings and was cost-effective, with a lifetime incremental cost-effectiveness ratio of approximately $5,200 per quality-adjusted life year. Future research and demonstration projects could further explore the feasibility and effectiveness of using restrictions and incentives to improve the dietary quality and health of SNAP participants. More work is needed to determine how best to target incentives to individuals and households that would most benefit them. Additional work could help determine the

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optimal incentive amount and mix of eligible foods (e.g., fruits, vegetables, whole grains, healthy oils, etc.) that optimize diet quality while containing costs.

iv. Enhancing Minimum Stocking Standards

Congress granted the USDA the authority to authorize SNAP retailers and establish eligibility criteria. Over the last decade, the number of SNAP authorized retailers grew by fifty percent to 250,000, while the demand for food assistance grew during the Great Recession of 2007 to 2009 and because an increase in convenience stores receiving authorization. Having SNAP authorized stores near communities with eligible SNAP participants is essential for promoting food security and nutrition; however, research indicates retailers in SNAP eligible communities tend to sell less fresh fruits and vegetables, whole grain-rich foods, and low-fat dairy products. As one example, a study conducted store audits in 2014 in ninety-one randomly selected, licensed food stores in Minneapolis and St. Paul, Minnesota and found only one-third stocked one or more varieties of fresh vegetables and only one-quarter stocked whole-grain-rich products. Another study assessed a sample of ninety SNAP authorized dollar stores in sixteen


310 M.N. Laska et al., Lack of Healthy Food in Small-Size to Mid-Size Retailers Participating in the Supplemental Nutrition Assistance Program, Minneapolis-St. Paul, Minnesota, 2014, 12 PREV. CHRONIC DIS. 15071, 15071 (2015) (stores selected did not include retailers participating in WIC that are expected to stock prescribed food and beverage items).
counties in southern and western sections of North Carolina in 2014 and found none of these stores sold fresh fruits and vegetables.\textsuperscript{311}

Requiring SNAP authorized retailers to stock certain types of foods and beverages might affect a retailer’s interest or ability to be authorized and, thereby, limit a participant’s ability to redeem SNAP benefits or participate at all.\textsuperscript{312} Even so, the USDA requires WIC authorized retailers stock certain food and beverage items and these changes have been successfully implemented in retailers across the nation without much disruption to retailer or participant participation in the program and has had significant impacts on dietary quality of mothers and infants participating in WIC.\textsuperscript{313} Informed by these findings, the Agricultural Act of 2014 required the USDA to update the stocking standards for authorized SNAP retailers, which only required a store to “sell food for home preparation and consumption and offer for sale at least three different varieties of food in each of the following four staple food groups, with perishable foods in at least two categories, on a daily basis: breads and grains; dairy; fruits and vegetables; and meat, poultry, and fish or at least fifty percent of the total sales (e.g., food, non-food, services, etc.) . . . must be from the sale of eligible staple food.”\textsuperscript{314}

The USDA rule making process involved hosting listening sessions, calls for public comments, and conducting regulatory impact analyses, as well as extensions, delays, and technical assistance.\textsuperscript{315} Ultimately, the staple food requirements put forth in

\textsuperscript{312} See \textit{OLIVEIRA ET AL}, supra note 64, at 49–50 (summarizing the legislative debate on stocking requirements for SNAP authorized retailers).
\textsuperscript{313} 7 C.F.R. § 246.1 (2019); \textit{see also ANDREYEVA ET AL., RUDD CTR. FOOD POL'Y & OBESITY, CHANGES IN ACCESS TO HEALTHY FOODS AFTER IMPLEMENTATION OF THE WIC FOOD PACKAGE REVISIONS 3}, https://naldc.nal.usda.gov/download/48404/PDF (describing significantly increased availability and variety of health foods in subject stores).
the 2016 final rule required authorized stores to meet one of two staple food requirements: Criterion A (staple food inventory) or Criterion B (staple food sales). According to the USDA, “staple foods are the basic foods that make up a significant portion of a person’s diet and are usually prepared at home and eaten as a meal . . . and do not include prepared foods, heated foods, or accessory foods.” Criterion A “requires a store to stock, on a continuous basis, a certain variety and quantity of staple foods in each of the four staple food categories, including some perishable staple foods.” The majority of stores are authorized under Criterion A. Criterion B “requires a store to have more than 50 percent of its total gross retail sales from the sale of staple foods.” These new, enhanced stocking standards emerged despite efforts to weaken them during the 2017 and 2018 Agriculture Appropriations Acts and President Trump’s calls for regulatory rollbacks and delays, including the rollback of the stronger nutrition standards for the USDA National School Lunch Program.

Research indicates these new stocking standards are feasible; as one example, a recent study of 57 small stores in four states that are SNAP authorized determined these stores are capable of stocking healthy products but recommended technical and infrastructure support and incentives be offered to retailers. Nevertheless, the fiscal year 2019 Agricultural Appropriations prohibited funds be used to “implement, administer, or enforce the

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316 7 C.F.R. § 271.2 (defining “Retail food store”); see also 7 C.F.R. § 278.1 (providing Criteria A and Criteria B).  
319 Id.  
320 Id.  
‘variety’ requirements of the final rule . . . until the Secretary of Agriculture amends the definition to increase the number of items that qualify as acceptable varieties in each staple food category. . .”

On April 5, 2019, the USDA published a proposed rule that would provide regulatory flexibility for retailers in SNAP in meeting the 2016 final rule, by only modifying the definition of the term “variety” and thereby permitting “canned spray cheese, beef jerky, and pimiento-stuffed olives [to] count as staple foods.”

More research is needed on how the SNAP authorization process and the new, enhanced stocking requirements affect SNAP participants’ access to SNAP authorized stores, stocked with affordable, healthful options and their dietary quality and health, taking into consideration the cost-benefit analysis for retailers to participate in the program.

v. Expanding Access to Foods through a National Healthy Food Financing Initiative

Expanding on the success of local and state initiatives, the Healthy Food Financing Initiative (HFFI) is an innovative national program that works to increase access to retail food outlets in communities predominantly characterized as low-income, high racial/ethnic minority status, and/or rural which tend to have less access to grocery stores and supermarkets in comparison to higher-income, white, and urban communities.

During fiscal year 2010 through fiscal year 2016, the Departments of Agriculture, Health and Human Services, and Treasury each administered HFFI projects independently and met periodically to share implementation strategies and issues. In the Agricultural Act of 2014 (P.L. 113-79, Sec. 4206), the Secretary of Agriculture was given enhanced

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326 U.S. DEP’T OF AGRIC., NEW PARTNERSHIP, supra note 325.
authority and appropriated $125,000,000 to establish HFFI. In fiscal years 2017 and 2018, Congress appropriated one million to launch HFFI at USDA. Currently, HFFI is administered by the Reinvestment Fund on behalf of USDA Rural Development. In the 2018 Farm Bill (Sec. 12408), slight amendments were made to the HFFI established in the 2014 Farm Bill including expanding eligible projects beyond retail to include food hubs, mobile markets, direct to consumer markets, and food business incubators. In total, over the last eight years, HFFI has leveraged more than $220 million in grants plus more than one billion in additional financing and supported nearly one thousand retail food projects in more than thirty-five states. In Agricultural Appropriations 2019, not less than $22,000,000 is available until September 30, 2020 to provide financial assistance, technical assistance, training, and outreach to community development financial institutions for the purpose of offering affordable financing and technical assistance to expand the availability of healthy food options in distressed communities. In both the House (H.R. 1717) and Senate (S.786), bills have been reintroduced to amend the Internal Revenue Code of 1986 to establish a new tax credit and grant program to stimulate investment and healthy retail options in food deserts. More multi-sectoral, multi-level research is needed to understand the impacts of federal investments aiming to improve access to retail food outlets.

330 Agricultural Improvement Act of 2018, H.R. 2, 115th Cong. §§ 4204; see id. at § 12614 (establishing Food Access Liaison).
331 Healthy Food Financing Initiative, supra note 328.
vi. Supporting Nutrition Education and Promotion

One final way that Congress could strengthen the nutrition impacts of SNAP is to require nutrition education be a mandatory part of the program, with adequate appropriations dedicated to evaluating the program’s impact on dietary quality and health.\textsuperscript{335} Currently, states can participate in SNAP - Education (SNAP-Ed), a federally funded grant program, to develop, implement, and evaluate nutrition education and promotion, social marketing campaigns, and policies, systems, and environmental approaches to improve access to healthy eating (e.g., helping develop a new community garden or implement the federal local school wellness policy at a school or state level).\textsuperscript{336} However, these efforts only reach roughly about five percent of the SNAP population.\textsuperscript{337} SNAP-Ed has evolved since it began in 1988 in Wisconsin and now is being conducted in all fifty states with success.\textsuperscript{338} The estimated SNAP-Ed allocations for fiscal year 2019 illustrate the range of support states and US territories receive; for example, California is estimated to receive $99,284,451 and the Virgin Islands is estimated to receive $182,243.\textsuperscript{339} SNAP-Ed was significantly transformed during the last Child Nutrition Reauthorization process into a formula funded nutrition education and obesity prevention grants program that has increasingly permitted the integration of efforts to promote active living as well.\textsuperscript{340}


\textsuperscript{338} USDA, SNAP-Ed, supra note 336.


Over the years, various efforts have examined—with mixed success—the impacts of USDA investments in nutrition education and promotion.341 As one example, a conference that took place in 1995 convened a broad range of stakeholders to help chart a course for nutrition education and promotion evaluation in USDA food assistance programs.342 Another milestone was the development and evaluation of Statewide Nutrition Education Networks (1995-1999) that found sixty percent of the participating networks achieved their stated objectives and were able to leverage more than $20 million in non-federal funding and identified additional in-kind contributions from non-governmental organizations.343 A 1999 Congressionally requested report identified opportunities and barriers to enhance USDA’s investment in nutrition education and promotion, including: authority and funding levels vary widely by program; state and local infrastructures are necessary to deliver integrated, comprehensive programs; and the evaluation system for USDA’s nutrition education is fragmented and lacks outcome measures.344 A 2000 Food Stamp Nutrition Education Report further illustrated the diversity of state administrative approaches to the program and in the delivery of nutrition education and promotion in addition to the need for stronger coordination and systematic reporting systems.345 Another report released in 2000 provided “circumstantial evidence” for the importance of nutrition education and promotion among Food Stamp participants but emphasized the need for additional research.346 Furthermore, a 2002 Congressionally requested report reiterated the

342 Id.
needs put forth in the 1999 report regarding policy changes and funding disparities. Then, in 2010, USDA committed to Congress to better coordinate nutrition education efforts across its food assistance programs. A recent 2018 analysis of SNAP-Ed...
similarly reported a variety of implementing agencies delivering a variety of nutrition education and promotion approaches, across a variety of settings, and using various reporting metrics. Other efforts have explored how best to deliver nutrition education and promotion through USDA food and nutrition assistance programs and how best to evaluate SNAP-Ed at the local, state, tribal, regional, and national levels. Moreover, the Bipartisan Policy Center worked with a SNAP Task Force to develop recommendations to leverage federal programs for better health and recommended “enhancing technical assistance from the USDA regional offices, reducing planning and reporting burdens, restructuring state reports to focus on program impact, developing new tools and components, and sharing best practices.” The Bipartisan Policy Center SNAP Task Force also suggested realigning the Expanded Food and Nutrition Education Program (EFNEP) to better enable this program and SNAP-Ed to “work synergistically while avoiding duplication.” An estimated $100 million over five years was suggested to support “pilot comprehensive, multipronged interventions that address the core objectives of diet quality, food security, and fiscal responsibility.” A recent GAO study found the USDA lacks information on whether SNAP-Ed is meeting its goals and recommended: 1) the Administrator of FNS improve how the agency gathers information on the effectiveness of SNAP-Ed interventions; 2) the Secretary of Agriculture should direct the Under Secretaries for Food, Nutrition and Consumer Services and for Research, Education, and Economics to develop a formal mechanism, such as a designated individual or group of individuals, for providing cross-departmental leadership for USDA’s nutrition education efforts and facilitating cross-program information sharing; and 3) the Secretary of Agriculture should direct the Under Secretaries for Food, Nutrition, and Consumer Services and for Research, Education, and Economics to identify and implement


350 Id.

351 Id.


353 Id.
mechanisms to fully leverage the department’s nutrition expertise for its nutrition education efforts.\textsuperscript{354}

Ultimately, the 2018 Farm Bill only made modest modifications to SNAP-Ed. The House proposal to merge SNAP-Ed and EFNEP was rejected and instead the 2018 Farm Bill encourages better coordination across the two programs, including requiring an annual report to Congress detailing the evaluation of the level of coordination between SNAP-Ed, EFNEP, and other USDA nutrition education programs.\textsuperscript{355} The 2018 Farm Bill now requires SNAP-Ed programs to use an electronic reporting system to measure and evaluate projects and account for state administrative costs.\textsuperscript{356} In addition, the 2018 Farm Bill establishes an online information clearinghouse to share best practices in planning, implementing, and evaluating SNAP-Ed programs.\textsuperscript{357} The USDA Secretary is required to provide technical assistance to state agencies in developing and implementing SNAP-Ed plans and state agencies are required to submit an annual SNAP-Ed report to the USDA Secretary.\textsuperscript{358} In the 2019 Agricultural Appropriations, $433,000,000 was allocated to SNAP-Ed.\textsuperscript{359} The SNAP-Ed Plan Guidance for fiscal year 2020 has been posted, which provides policy guidance for states regarding the SNAP-Ed operations and estimates funding allocations.\textsuperscript{360}

Taken together, based on USDA’s analyses over the last three decades and the recent GAO report, adequately supported research and evaluation is needed to better understand the role of SNAP-Ed, particularly how the recent transformation of the program impacts SNAP participants’ dietary quality and health. The 2018 Farm Bill lacked strong Congressional investments into research and evaluation that could potentially maximize and better harmonize


\textsuperscript{355} Id.

\textsuperscript{356} Id.


\textsuperscript{358} Id.


existing benefits in SNAP and SNAP-Ed across all fifty States and US territories. But, the annual reporting on coordination between SNAP-Ed and EFNEP could possibly be a foundation for future considerations to make nutrition education across the USDA and across the federal government more effective and efficient.

IV. America’s Harvest Box and Other Outside of the Box Trump Administration Approaches with SNAP Implications

On January 20, 2017, President Donald Trump became the 45th President of the United States and since that date has put forth a variety of executive orders, initiatives, nominations, budget proposals, and tweets with SNAP implications (See Table 3). On May 7, 2019, the Executive Office of the President, Office of Management and Budget requested public comment on the consumer inflation measures produced by federal statistical agencies, which are used to calculate the official definition of poverty used by the Census Bureau to estimate the size of our nation’s poor population and used to determine eligibility for government benefits including SNAP.361

A. America’s Harvest Box

The first and most direct proposal from the Trump administration to change the nature of SNAP is known as the America’s Harvest Box and was put forth in the President’s fiscal year 2019 budget.362 Under this proposed approach to support the President’s leadership on Buy American, all SNAP participating households receiving $90 per month or more in SNAP benefits would receive a package of nutritious, one hundred percent US grown and produced food and the remainder of the benefits would be provided via EBT cards.363 States would be given flexibility in distributing these boxes to participants, through “existing infrastructure, partnerships, and/or directly to residences through


362 Id.

commercial and/or retail delivery services.” Secretary of Agriculture Sonny Perdue believed America’s Harvest Box was “a bold, innovative approach to providing nutritious food to people who need assistance feeding themselves and their families—and all of it is home grown by American farmers and producers.”

A variety of stakeholders criticized the idea, including negative perspectives on feasibility and public health impacts based on past and present efforts of the USDA with distributing federal commodities. Put simply, why take fresh produce, meat, and dairy options out of SNAP for a much higher logistical cost? A recent study found sixty percent of the SNAP participants and food-insufficient non-participants surveyed opposed the America’s Harvest Box proposal. This proposal was tabled but effectively stirred up attention to the President’s severe budget cuts proposed for SNAP during Farm Bill deliberations. Then, the concept reappeared in the Trump administration’s fiscal year 2020 budget.

Recent stories discuss


367 Id.

368 Cindy W. Leung & Julia A. Wolfson, Perspectives from Supplemental Nutrition Assistance Program Participants on Improving SNAP Policy, 3.1 HEALTH EQUITY 81, 82 (2019).


the new “Meals to You” program offered through funding by the USDA FNS, which offers a box including the equivalent of five breakfasts, lunches, and snacks per student delivered to each participating student’s door via UPS during the summer months.  

B. SNAP Budget Cuts

So, what were the proposed SNAP cuts? Citing projected budget deficits, President Trump’s fiscal years 2018, 2019, and now 2020 budgets consistently proposed massive cuts to SNAP and included provisions to reconfigure the program by establishing a state match, limit categorical eligibility and the use of waivers that exempt able-bodied adults without dependents from work, and establish application fees for retailers seeking to participate in SNAP. The President also ordered all federal agencies to cut spending by five percent for fiscal year 2019 and again for fiscal year 2020. These proposals are consistent with Trump’s Executive Order to reform the welfare system, Medicaid work requirements, and the Republican-led 115th House efforts discussed earlier that would significantly alter the nation’s safety net, decrease SNAP participation, and increase food insecurity among vulnerable individuals and households. Fortunately, the President proposes and Congress disposes and so far the severity of Trump’s proposed

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SNAP cuts have not been implemented for fiscal years 2018 and 2019. Notwithstanding, as explained previously, the fiscal year 2019 Agricultural Appropriations were part of the longest government shutdown in our nation’s history. The 116th Congress is not giving the President’s fiscal year 2020 budget proposal much attention, but it does provide signals for where this administration stands, including consistent efforts at USDA’s sister agency, the US Department of Health and Human Services, to redesign assistance programs that focus more on promoting personal responsibility and self-sufficiency.

**C. Disaster Assistance through SNAP**

The Trump administration has responded to a variety of hurricanes, wild fires, floods, and other natural disasters thus far using the USDA’s Disaster Supplemental Nutrition Assistance Program (D-SNAP). This program, which has different income eligibility requirements than SNAP, provides supplemental nutrition assistance similar to SNAP to Americans struggling with the aftermaths of a natural disaster. Hurricanes Irma and Maria ravaged the island of Puerto Rico in the summer of 2017 and presented unique challenges for Puerto Rico’s Nutrition Assistance Program (NAP). The unprecedented length and scale of power outages and internet connectivity issues hindered the operation of EBT, participants’ ability to prepare meals, and safe storage of foods and beverages. On a positive note, innovative approaches

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374 Ebbs, supra note 370.
375 Id.
emerged to “Feed an Island”; specifically, Chef Jose Andres, in collaboration with thousands of volunteers who made up Chefs for Puerto Rico, prepared and delivered more than three million meals to every part of the island for months.\textsuperscript{379} News stories reported the national response was often slow, uncoordinated and inadequate.\textsuperscript{380} As noted earlier, S.677 has been introduced to enable Puerto Rico and other US territories to participate in SNAP and a legal battle is underway against the USDA regarding “policies awarding lower federal benefits to US citizens who reside in Puerto Rico than to similarly situated and equally needy US citizens residing in any of the 50 states of the US.”\textsuperscript{381} The Government of Puerto Rico reached out via a video message to President Trump pleading for support of the country’s NAP, which has experienced drastic increases in applications since Hurricane Maria.\textsuperscript{382} An estimated 670,000 Puerto Rico residents received a twenty-five percent decrease in their SNAP benefits for March 2019.\textsuperscript{383} Supplemental Congressional appropriations have helped provide some relief but a recent political stalemate over additional aid had put all US disaster funding in
Ultimately, on June 6, 2019, a $19.1 billion standalone disaster supplemental bill was enacted, which included $643 million for food and nutrition assistance in Puerto Rico and Pacific territories.\(^{385}\)

Altogether, SNAP can play an integral role in working with intra- and inter-departmental agencies, multi-jurisdictional agencies, and non-governmental organizations such as Red Cross, Feeding America, and the Salvation Army to develop standards and strategies for ensuring safe and nutritious foods and beverages reach vulnerable Americans in an efficient, effective, and consistent manner.\(^{386}\) These strategies need to tackle logistical barriers for preparing, storing, cooking, and cleaning meals and snacks utilizing traditional best practices and emerging technologies, as well as sensitively managing the strong emotional ramifications of enduring a natural disaster.

D. Immigration

President Trump has taken a variety of actions ranging from executive orders, budget cuts, and administrative agency initiatives that raise concern over immigrant participation in federal food and nutrition assistance programs including SNAP.\(^{387}\) The most recent explicit action that involved SNAP was a proposed rulemaking notice by the Department of Homeland Security that indicates immigrants could potentially be denied “lawful permanent residency” if they have received certain government benefits.

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387 President Trump’s Executive Orders on Immigration and Refugees, CTR. Migration Stud., http://cmsny.org/trumps-executive-orders-immigration-refugees/?gclid=CjwKCAjworfdBRA7EiwAKX9HeDr7Dk2m06VsUjcnRpmAV1v0X24Zy4Q_A3hao6m-NjhlBZdKwq2zaxoCK90QAvD_BwE (last visited Aug. 30, 2019); G. Kaufmann, Why Immigrants in California are Canceling their Food Stamps: Confusion and Fear about an Immigration Crackdown are Causing Some Families to Avoid Food Banks and Public Assistance Programs, Nation (Mar. 17, 2017), https://www.thenation.com/article/why-immigrants-in-california-are-canceling-their-food-stamps/.
including SNAP or if the government anticipates they may seek government benefits in the future. Known as the “public charge rule,” the Trump administration would significantly expand the 1999 Interim Field Guidance that defined dependence on government assistance as participation in cash assistance or long-term institutionalized care. An estimated 382,000 people seeking to adjust their immigration status could be subjected to the proposed rule. The sixty-day public comment period closed on December 10, 2018 and more than 216,000 comments have been submitted. Several anti-hunger organizations, along with local and state social service agencies submitted comments expressing concern regarding the short- and long-term implications of expanding the definition of dependence. A final rule was put forth on August 12, 2019 detailing the factors the Department “will consider in the totality of the circumstances when making a public charge inadmissibility determination” beginning October 15, 2019. The rule indicates the Department will not consider public benefits received on behalf of another, such as a citizen child in the household. The National Immigration Law Center, among others, indicated it will file suit and others re-expressed concerns this rule will have on food insecurity and a range of health outcomes.


393 Inadmissibility on Public Charge Grounds, 8 CFR Parts 103, 212, 213, 214, 245 and 248 (Aug. 12, 2019).

394 Id.

The Trump administration indicates it is concerned about declining enrollments in federal food and nutrition assistance programs, particularly for WIC eligible mothers and infants. But the Acting Deputy Under Secretary for Food, Nutrition, and Consumer Services and FNS administrator Brandon Lipps noted the Department is mainly aware of only anecdotal evidence of decreased participation relating to immigration concerns. On March 25, 2019, Mr. Lipps blogged about a series of roundtable meetings he is participating in with WIC directors, participants, retailers, and other partners from across the US to address the obstacles WIC participants and potential participants and how to better support state and local agency staff. Evidence suggests the risk of deportation is negatively associated with participating in WIC and that Mexican-origin families are the most sensitive when it comes to deportations and program use. A recent news report explained how an unprecedented number of women and children are withdrawing from WIC since the proposed public charge rule last fall.

Without question, there is limited nationally representative monitoring and surveillance of immigrant and refugee populations and, particularly, scarce time-sensitive evaluation methodologies and funding support structures in place to objectively track food security or other health related outcomes among these populations as a series of policy actions transpire. More research is needed to understand the breadth and depth of these impacts on immigrants’ short- and

397 Id.
long-term health, as well as financial stability. Attention should also be directed towards evaluating the likely increased burden placed on the charitable food sector (e.g. food banks and soup kitchens) and healthcare system. More work is needed to understand if the likely deterrent effect of this rule is associated with increases in per capita resources available to reduce food security and promote public health.

E. Trade

In an effort to bail out farmers affected by the President’s recent tariffs on Chinese imports and resulting Chinese tariffs on US goods, the Trump administration purchased $1.2 billion commodities from farmers and distributed them through the child nutrition and emergency food assistance programs. This doubles the amount the USDA usually distributes through its food bank network. The plan for trade aid 2.0 includes additional direct payments and commodity purchases. Time-sensitive research is needed to see how these unusually high contributions affect food security among SNAP participants in addition to SNAP eligible non-participating individuals and households. Little is known at this time about the dietary quality of these contributions either or the logistical capacity of food banks to effectively and efficiently manage the influx during non-disaster related periods. A recent story explained how trade mitigation is already shaping the menus of school lunches and food pantry offerings.


404 Calvert, supra note 402.


407 Candice Choi, What’s On School Menus this Fall? Trade Mitigation, ASSOC. PRESS (Aug. 11, 2019), https://news.yahoo.com/whats-school-menus-fall-trade-
F. Administrative

The Trump administration has moved forward a variety of administrative actions affecting the capacity and skill of federal employees most relevant to developing the science that informs SNAP policy or critical to carrying out vital SNAP operations and evaluation. This includes a memo ordering USDA scientists to add a disclaimer to peer-reviewed publications that “the findings and conclusions in this preliminary publication have not been formally disseminated by the U.S. Department of Agriculture and should not be construed to represent any agency determination or policy.”408 This requirement was later revised to include the more traditional federal agency disclaimer: “The findings and conclusions in this [publications/presentation/blog/report] are those of the author(s) and should not be construed to represent any official USDA or U.S. Government determination of policy.”409 Congress directed the Office of Budget and Program Analysis of the USDA to provide an organizational charge for each agency funded in the 2019 Agricultural Appropriations.410

i. Hiring Freeze

On January 23, 2017, President Trump signed a Presidential Memorandum instituting a ninety-day hiring freeze for United States federal employees.411 There is not much data to objectively understand the impacts of this hiring freeze or how severe budget
cuts in fiscal years 2018 and 2019 impacted agencies’ ability to appropriately staff SNAP operations.  

ii. Nominations

Repeated concerns have been raised about the administrative inexperience, lack of scientific expertise, and industry ties Trump nominations and (relatively few) confirmed appointees have brought to the USDA to date. Recently, the 115th Congressional Senate failed to vote on the USDA nominees that had been approved by the Senate Agriculture Committee; therefore, the process had to start over with re-nomination by the 116th Congressional Senate. On January 16, 2019, President Trump re-nominated his selections for the USDA Undersecretary for Food Safety; Undersecretary for Research, Education, and Economics; and Assistant Secretary for Civil Rights. In the interim, Secretary Perdue appointed each of them to deputy positions that does not hold the same authority but does not require Senate approval. The Senate Agriculture Committee advanced these three nominations but a date for a full chamber vote has not been set at this time. No one has been nominated at this point to be the Undersecretary of Food, Nutrition, and Consumer Services, which is the mission area for all the federal food and nutrition assistance programs including SNAP. This


417 Lewis, supra note 413.
means the mission area accounting for seventy percent of the USDA’s budget is not being overseen by a Senate-confirmed appointee.\textsuperscript{418} Notwithstanding, as described throughout this review, Secretary Perdue and other political appointed USDA staff have lead a range of significant policy and programmatic changes at the Department; many of which have been well-received by various agricultural stakeholders and Congressional Republications.\textsuperscript{419}

iii. Relocation to New Department of Health and Public Welfare

The most significant administrative proposal regarding SNAP President Trump has put forth thus far is relocation. In \textit{Delivering Government Solutions in the 21st Century: Reform Plan and Reorganization Recommendations}, put forth by the Executive Office of President Trump, one of the thirty-two organizational realignments to enhance mission and service delivery was to move the non-commodity nutrition assistance programs (i.e., the “near-cash” benefit programs such as electronic benefit transfers or vouchers) from the USDA to a newly named Department of Health and Public Welfare, which is currently known as the Department of Health and Human Services.\textsuperscript{420} These non-commodity nutrition assistance programs include: SNAP, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Child and Adult Care Food Program (CACFP), the WIC Farmers’ Market Nutrition Program (FMNP), and the Senior Farmers’ Market Nutrition Program (SFMNP). The USDA would continue to administer the commodity-based programs (i.e., deliver actual foods and beverages), including the National School Lunch Program (NSLP) and the School Breakfast Programs (SBP), the Emergency Food Assistance Program (TEFAP), and the Commodity Supplemental Food Program (CSFP), among others.\textsuperscript{421} Within the new Department of Health and Public Welfare, SNAP would be moved into an expanded Administration for Children and Families

\textsuperscript{418} Id.
\textsuperscript{421} Id. at 28.
The United States Department of Health and Human Services currently administers Temporary Assistance for Needy Families (TANF) and houses the Center for Medicare and Medicaid Services (CMS), among other social services. This Reform Plan was informed by the Trump administration’s analysis and comments garnered as a result of the Executive Order 13781, entitled “Comprehensive Plan for Reorganizing the Executive Branch.” This Executive Order was issued on March 13, 2017 and directed the United States Office of Management and Budget (OMB) to propose a comprehensive plan to reform and reorganize the Executive Branch and for the OMB to seek input from Executive Branch agencies, as well as public comments on organizational alignment that can help reduce “duplication and redundancy” and improve “efficiency, effectiveness, and accountability of the executive branch.” Reorganization, as discussed in the Reform Plan, is not a new Executive Branch undertaking and one recent effort highlighted was the creation of the Department of Homeland Security and the Office of the Director of National Intelligence after 9/11. Some of the suggestions put forth in response to the Executive Order 13781 and public comment period were included in the fiscal year 2019 budget or were adopted by agencies under existing authorities. The Executive Order 13781 and the Reform Plan, among other inputs, informed the President’s Management Agenda: Modernizing Government for the 21st Century, which identified the following key drivers of transformation: IT modernization; Data, Accountability, and Transparency; and People—Workforce for the 21st Century.

The Trump administration’s rationale for moving SNAP to this new Department of Health and Public Welfare was to better align assistance programs with how they are often managed at the state and local levels. Currently, some states and local governments administer the Federal Government’s major public assistance programs such as TANF and SNAP at a single state agency; however, this single agency has to contend with two sets of

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422 Id. at 27.
423 Id.
425 Id.
“reporting, regulatory, and other administrative requirements—one set imposed by HHS for TANF, and another by USDA for SNAP.” Therefore, the Reform Plan discussed how consolidating public assistance programs could potentially help reduce administrative burden and possible duplication; streamline processes for issuing guidance, putting forth new or modified regulations, and approving waivers; improve coordination among public assistance programs; and increase the likelihood that policies are applied consistently across public assistance programs. In addition, the Trump administration’s Reform Plan proposes the establishment of a permanent Council on Public Assistance, housed in the new Department of Health and Public Welfare that would be composed of all intra- and inter-departmental agencies that administer public benefit programs, including within the new Department (e.g., TANF, CMS, and now SNAP and WIC), the USDA (e.g., remaining commodity-based programs), the Department of Housing and Urban Development, among others. The Council would have “statutory authority to establish certain cross-program policies, including on uniform work requirements.”

While a part of the nation’s safety net, SNAP and the other non-commodity nutrition assistance programs are only one component and attention to each individual program’s interface with other safety net components is essential to overall evaluation and planning for improvement. Indeed, improved coordination and streamlining of eligibility requirements and certification periods across the existing social safety net would likely improve efficiencies and encourage participation. But moving the non-commodity nutrition assistance programs oddly separates the long-standing food assistance approach that now includes a suite of fifteen programs. Opportunity exists to explore how best to streamline these programs but separating them across two Departments is likely not the most efficient and effective way. These non-commodity nutrition assistance programs work with the USDA Center for Nutrition Policy and Promotion to put forth policies and programmatic approaches

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427 Id.  
that aim to align with the latest Dietary Guidelines for Americans.\textsuperscript{430} Granted, the USDA works in partnership with HHS to develop and integrate the Dietary Guidelines for Americans into all relevant federal nutrition policies and programs.\textsuperscript{431} Moreover, these non-commodity nutrition assistance programs have a long-standing history of working with SNAP-Ed, operated from FNS and NIFA, along with other USDA research agencies including ERS and the Agricultural Research Service (ARS), which supports national food consumption surveys, along with eight research centers often concentrating on the implications of federal food and nutrition assistance programs.\textsuperscript{432} A Departmental divide might hinder access to program data, data sharing, analysts with the appropriate program knowledge and analytical skills, and/or introduce other administrative hurdles that might not justify such a significant reorganization. Furthermore, an important but overlooked part of re-envisioning our social assistance approach is how best to provide disaster relief.

Notwithstanding, the Reform Plan acknowledges a proposed reorganization of this nature requires Congressional approvals and the 115\textsuperscript{th} and initial signs from the 116\textsuperscript{th} Congress have given these public assistance reform plans little attention.\textsuperscript{433} Therefore, innovative policy and programmatic approaches to strengthen and streamline our social assistance at the national levels to best serve and support tribal, state, and local efforts, as well as the role of charitable organizations is needed. However, these approaches deserve objective, multidisciplinary analyses and rigorously evaluated demonstration projects to justify dismantling our domestic food and nutrition assistance programs.


\textsuperscript{433} DELIVERING GOVERNMENT SOLUTIONS, supra note 420, at 27–28.
iv. Reorganization of ERS and Proposed Relocations of ERS and NIFA

Secretary of Agriculture Sonny Perdue has proposed significant reorganizations of ERS and relocations of ERS and NIFA. Specifically, Secretary Perdue proposed ERS move out of the USDA’s Research, Education, and Economics Mission Area and back into the Office of the Secretary, Office of the Chief Economist to enhance the effectiveness of economic analysis at USDA. In addition, the Secretary proposed to relocate ERS and NIFA out of the Washington, DC area to possibly the Midwest. The leases for the current headquarter facilities for both agencies are expiring and the Secretary indicated the rational for these relocations were to improve USDA’s ability to attract and retain highly qualified staff with training and interests in agriculture, place these important USDA resources closer stakeholders, and save on employment costs and rent. On the day of the announcement the ERS Administrator—a civil servant—was reassigned to another USDA agency and the position was posted for hire a few weeks later listing a Washington, DC location and this position has not yet been filled with a permanent hire.

Before the shutdown, USDA indicated the exact location would be announced in early 2019, after an external review of the 136 possible options, and both agencies would be relocated by the end of fiscal year 2019. Key Congressional Committees have written to Secretary Perdue expressing concerns about these

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436 Id.
proposals. Although Secretary Perdue has responded to Congressional members emphasizing these reorganization and relocation plans are sound, several former departmental and agency senior staff have criticized these proposals and numerous scientific and statistical societies, advocacy groups, among other stakeholders have as well. During a webinar held on September 20, 2018, former departmental and agency staff called for Congress to delay or stop these proposed administrative changes through the pending agriculture appropriations or Farm Bill. Additional calls were made for Congress to consider holding oversight hearings or request an independent study to evaluate the proposed changes including a cost-benefit analysis that examines, among other aspects of the move, employee hiring, recruiting, and retention data justifying the need for the move and the possible success of the proposed new location. On December 19, 2018, nine House Democrats introduced a bill aiming to prevent the USDA from reorganizing ERS


442 Am. Statistical Ass’n et al., supra note 444.

443 Id.

On December 21, 2018, right before the record-setting government shutdown started, Secretary Perdue announced the criteria the Department developed to evaluate the 136 Expressions of Interest received from parties in thirty-five states in request to the Department’s public solicitation to become the new home to ERS and NIFA.\footnote{Perdue Announces ERS, NIFA Site Selection Criteria [Release No. 0282.18], U.S. DEP’T AGRIC. (Dec. 21, 2018), https://www.usda.gov/media/press-releases/2018/12/21/perdue-announces-ers-nifa-site-selection-criteria.} With the assistance of Ernst & Young, the Department aims to apply a “set of guiding principles, including locations meeting USDA travel requirements, locations with specific labor force statistics, and locations with work hours most compatible with all USDA office schedules.” In addition, the Department has further defined the following criteria to apply to the Expressions of Interests: quality of life (includes Diversity Index, Residential Housing, Access to Healthcare, and Home and Community Safety Rankings); Costs (Capital and Operating includes Cost of Living Adjustment, Commercial Real Estate Costs, Land Costs, and Wage Growth Rate); Workforce (includes Labor Force Growth Rate, Unemployment Rate, and the Labor Force Population); and Logistics/IT Infrastructure (includes Lodging Availability, Proximity to Stakeholders, and Travel Time to/from DC).

The Explanatory Statement of the budget agreement that finalized fiscal year 2019 Agricultural Appropriations called for “an indefinite delay” in reorganizing ERS and required the USDA to include cost estimates and research benefits related to the proposed relocation of ERS and NIFA in the upcoming fiscal year 2020 budget justification.\footnote{DIVISION A – AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES APPROPRIATIONS ACT, 2019, supra note 136, at 4.} Subsequently, more than a dozen House Democrats reintroduced standalone legislation to block the proposed reorganization and relocations, which stipulates the authority to administer ERS and NIFA is with the USDA Under Secretary for Research, Education, and Economics mission area and cannot be given over to another mission area or office within the
Secretary Perdue responded to questions from the Committee’s new member, Representative Jahana Hayes (D-Connecticut) regarding the proposed reorganization and relocations by emphasizing parts of ERS and NIFA will remain in the Washington, DC area. Secretary Perdue also explained during his response to Representative Hayes how he believes aligning ERS with the Office of the Chief Economist will likely lessen any potential political interference since the head of both ERS and the Office of the Chief Economist are civil employees in contrast to ERS reporting to a politically appointed Under Secretary of Research, Education, and Economics. A few days later Politico scooped an internal list of seventy-six staffers from ERS that would remain in Washington, DC while the rest of the agency staff would be relocated.

While the President’s budget proposals have not reflected Congressional appropriations, the fiscal year 2020 budget released on March 11, 2019 asked for relocation funds, significantly reduced ERS’ budget, and cut staff at ERS by more than fifty percent, noting research that duplicates land-grant universities will be eliminated. On March 27, 2019, the Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations Subcommittee held a hearing regarding the ERS and NIFA proposal. During this hearing, the Subcommittee Chairman

449 Id.
450 Id.
Representative Sanford Bishop (D-Ga) acknowledged thirty-two House Republicans wrote him and the Ranking Member a letter indicating their support of the Secretary’s proposed relocations while several House Democrats expressed opposition to appropriating funds to support these relocations. Days later during an appropriations hearing, Secretary Perdue contended with Chairman Bishop (who is from the state Perdue was once Governor) that the proposed reorganization and relocations “maybe one of those areas where you and I are friends but will have to disagree over the issue going forward.”

On April 25, 2019, the Washington Post reported the Trump administration plans to move forward with the reorganization and relocations despite opposition. Secretary Perdue recently announced a “OneNeighborhood” initiative underway to consolidate Departmental offices into nearby workspaces. On May 3, 2019, Secretary Perdue announced a short list of three top locations with sufficient space to meet ERS and NIFA requirements: Indiana, Greater Kansas City Region, and North Carolina Research Triangle Region. During May and June 2019, ERS and NIFA voted to unionize and is represented by the American Federation of Government Employees (AFGE). Politico reported on how ERS employees feel the Trump administration is retaliating against the agency for publishing reports that did not support the

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459 Id.
administration’s agenda such as trade, farm subsidies, SNAP, and the environment.460

On June 13, 2019, Secretary Perdue announced the Kansas City region as the location for ERS and NIFA and ERS would remain in the USDA’s Research, Education, and Economics Mission Area.461 ERS and NIFA employees who do not move to Kansas City will be terminated effective September 30, 2019.462 There continue to be various legislative actions expressing support for or alternatively exploring ways to prevent or, at least at this stage, monitor the relocations.463 In early August, the White House Chief of Staff Mick Mulvaney commented at a Republican party gala:

Now, it’s nearly impossible to fire a federal worker . . . But simply saying to the people, you know what, we’re going to take you outside the bubble, outside the Beltway, outside this liberal haven and move you out into the real part of the country, and they quit. What a wonderful way to streamline government

and do what we haven’t been able to do for a long time.464

But, the USDA Office of Inspector General, among other federal watchdogs, indicate the relocations may have violated the 2018 appropriations act.465 Most recently, and after about two-thirds of affected employees declined relocation, the USDA agreed to key union demands and will allow employees who agree to relocate to telework through the end of the year, with an option to extend and these employees will also be given a bonus equal to one month’s pay to help compensate for the loss of income incurred by the employees moving from the higher wage Washington, DC area to Kansas City region.466

Thus, it’s unknown at this time how these relocations will impact the quality and quantity of research used to inform SNAP policy and programmatic decisions or set precedent for similar federal agency relocations.

v. Reorganization of the USDA Center for Nutrition Policy and Promotion

Using the authority of Executive Order 13781, Secretary Perdue already reorganized the USDA Center for Nutrition Policy and Promotion (CNPP) by eliminating the former politically-appointed Executive Director of CNPP position and merging the


Center into the Food and Nutrition Service (FNS). The Bipartisan Policy Center SNAP Task Force urged that this CNPP reorganization be better leveraged to “consolidate responsibility for overseeing the Food and Nutrition Service’s nutrition and public health missions through a new Food and Nutrition Service deputy administrator/CNPP director position.” Only recently was this new Deputy Administrator, CNPP position announced for hire; there is no requirement for an advanced nutrition or public health degree in the position description. CNPP works with the Department of Health and Human Services Office of Health Promotion and Disease Prevention to develop the Dietary Guidelines for Americans that underlay SNAP nutrition policy. This work includes housing the USDA’s Nutrition Evidence Library (NEL), which “has dedicated staff that collaborates with leading scientists to objectively review, evaluate, and synthesize research using state-of-the-art methodology to answer important food- and nutrition-related public health questions.” NEL was recently renamed to the Nutrition Evidence Systematic Review (NESR).

In the Agricultural Act of 2014, Congress mandated the Dietary Guidelines for Americans expand to infants and toddlers from birth to age two and provide additional guidance for pregnant and lactating women. In addition, as part of fiscal year 2016 appropriations, Congress mandated the review of the guidelines’ developmental process, which resulted in two study reports from the National Academies of Science recommending significant

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473 H.R. 2642, supra note 203.
vi. Reorganization of the USDA Civil Rights Activities

Consistent with Executive Order 13781 calling for Executive Branch reorganization, Secretary Perdue is reorganizing the USDA’s civil rights activities.\textsuperscript{481} These activities include managing complaints regarding the fair and equitable treatment of USDA customers and employees participating in or working on the suite of fifteen federal food and nutrition assistance programs the USDA administers.\textsuperscript{482}

vii. President Trump’s Administrative Actions Summary

Altogether, a variety of administrative proposals and actions taken by the Trump administration to date have direct and indirect SNAP implications and should be monitored to ensure the relevant SNAP personnel and agencies produce the most efficient, effective, and positive impacts on SNAP participants and SNAP-eligible individuals and households. In particular, the short- and long-term implications of the CNPP and Civil Rights activities reorganizations merit further attention and could provide timely insights on the Department’s capacity to reorganize and move much larger agencies, ERS and NIFA.

V. Conclusion

The evolution of the legislative, executive, and judiciary actions aiming to address food insecurity and improve nutrition through the Food Stamp Program now known as SNAP provides fundamental insights. Together, these insights help to analyze the strengths and limitations of the SNAP provisions of the 2018 Farm Bill, recent and pending agricultural appropriations, Congressional oversight (in)activities, along with the actions taken thus far by the Trump administration. Without question, ensuring SNAP promotes food security and improves nutrition requires innovative approaches. Multidisciplinary data from independent, objective sources is a critical ingredient to help sustain or implement new federal food and nutrition assistance policy and programmatic approaches at the federal, tribal, state, and local levels. Evidence demonstrates SNAP directly and indirectly affects participants, farmers, food retailers, food and beverage manufacturers, and taxpayers in the short- and


\textsuperscript{482} Id.
long-term across a variety of economic and health outcomes. More data driven, bipartisan work is needed to positively shape SNAP’s public health impacts—from participation, product, and retailer eligibility to infrastructural, technical assistance, and innovative nutrition education and obesity prevention grant funding. This data must garner interdepartmental and multi-jurisdictional insights and ideally factor in participant and retailer perspectives. And gradually, we will hopefully see an evolution of SNAP and the nation’s social safety net that better meets participant and stakeholder needs and adapts, as necessary, to modern technology, up-to-date science, and ever-changing circumstances.

Table 1: Selected policy and programmatic developments emerging from the legislative, executive, and judicial branches of the United States Government shaping the United States Department of Agriculture Supplemental Nutrition Assistance Program⁴⁸³

<table>
<thead>
<tr>
<th>Agricultural Adjustment Act – 1935 (P.L. 74-320)</th>
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<td>Provided funding to encourage domestic consumption of agricultural commodities.</td>
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<th>The First Food Stamp Program (FSP) – 1939</th>
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<td>Secretary of Agriculture cites problems with the commodity distribution program and initiates the first, experimental food stamp program where people on relief were able to buy orange stamps equal to their normal food expenditures and for every $1 worth of orange stamps purchased that could be used to buy any food, 50 cents worth of blue stamps were received and could be used to buy food determined by the Department to be surplus.</td>
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Agricultural Trade Development and Assistance Act – 1959 (P.L. 86-341)
Authorized the Secretary of Agriculture to distribute surplus food and issue food stamps redeemable by eligible needy persons through January 31, 1962. But this authority was not used by the Eisenhower administration.

President Kennedy’s First Executive Order 10914 – Providing for an Expanded Program of Food Distribution to Needy Families - 1961
Authorized the Secretary of Agriculture to expand and improve the program of food distribution throughout the US and initiated Food Stamp pilot programs which required participants to purchase food stamps but eliminated special stamps for surplus foods and ultimately expanded to forty counties and three cities in twenty-two states with 380,000 participants.

Food Stamp Act – 1964 (P.L. 88-535)
Authorized the Secretary of Agriculture to administer a permanent food stamp program that would provide eligible households to obtain a nutritionally adequate diet through the issuance of a coupon allotment which shall have a greater monetary value than their normal expenditures for food; required states to develop participant eligibility standards; and established eligibility standards for foods permitted to be purchased with food stamps.

The Food Stamp Act Amendment – 1970 (P.L. 91-671)
Established uniform national standards for eligibility and work registration requirements; required that allotments be equivalent to the cost of a nutritionally adequate diet; and instituted an outreach requirement.

Kentucky Fried Chicken of Cleveland v. United States – 1971 (449 F.2d 255)
Secretary of Agriculture acted within his scope of authority granted under the Food Stamp Act of 1964 in denying the applicant fast-food restaurant request to participate as a “retail food store” in the Food Stamp Program and only approved grocery establishments which stock a large number of low-cost staples.

United States Department of Agriculture v. Moreno – 1973 (413 U.S. 528, 93 S. Ct. 2821, 37 L. Ed. 2d 782, 1973)
An amendment to the Food Stamp Act prevented households made up of unrelated individuals from participating in the federal food stamp program and a class action suit was brought and the amendment was found to violate the Due Process clause of the Fifth Amendment since it is without any rational basis for not allowing unrelated people to participate in the program.
Agriculture and Consumer Protection Act – 1973 (P.L. 93-86)
Required states to expand the program to every political jurisdiction; expanded program to individuals in treatment and rehabilitation centers for substance abuse; established bi-monthly issuance; authorized the USDA to establish temporary eligibility standards for disasters; and added a new category of seeds and plants as eligible purchases with SNAP benefits.

Agriculture and Consumer Act Amendments – 1974 (P.L. 93-347)
Authorized the USDA to pay fifty percent of all states’ costs for administrating the program and established the requirement for efficient and effective administration by the states.

Authorized the food stamp program to operate nationwide.

The Food and Agriculture Act – 1977 (P.L. 95-113)
Eliminated the purchase requirement; eliminated categorical eligibility; established statutory income eligibility guidelines at the poverty line and a number of other provisions related to eligibility; established a job search requirement for nonexempt work registrants; restricted eligibility for students and aliens; established that authorized stores must sell a substantial amount of staple foods; introduced demonstration project authority; and established various access and integrity provisions.

Established various income eligibility provisions and prohibited program funds supporting outreach activities.

Omnibus Budget Reconciliation Act – 1982 (P.L. 97-253)
Established various income eligibility provisions; adjusted the Thrifty Food Plan; and permits alternative issuance system.

Emergency Food Assistance Act – 1983 (P.L. 93-86)
Grants authority to the Secretary of Agriculture to establish temporary emergency standards of eligibility for the direction of an emergency without regard to income and other financial resources.

The Food Stamp Act – 1985 (P.L. 99-198)
Required states to implement an Employment and Training program.

The Hunger Prevention Act – 1988 (P.L. 100-435)
Permitted pilot projects to test whether the use of benefit cards or other automated or electronic benefit delivery systems could enhance efficiency and effectiveness of operations for both program administrators and receipts.
| **The Food, Agriculture, Conservation, and Trade Act – 1990 (P.L. 101-624)** | Established electronic benefit transfers as an issuance alternative and allowed for electronic benefit transfer demonstration projects; and authorized food stamp program nutrition education cost sharing option with states, which only seven states utilized in fiscal year 1992. |
| **The Mickey Leland Childhood Hunger Relief Act – 1993 (P.L. 103-66)** | Encourages state agencies to develop and establish electronic benefit transfer systems. |
| **Aiman Ghatts, Doing Business as A & M Food Shop v. United States Department of Agriculture – 1994 (40 F.3d 281, 8th Cir. 1994)** | The court reversed the Secretary of Agriculture’s permanent retailer disqualification of the plaintiff that was imposed by the Secretary under the authority granted by the Food Stamp Act, as a result of the plaintiff’s employee’s role in trafficking benefits and remanded the case for further administrative proceedings addressing the alternative monetary sanction issue. |
| **The Personal Responsibility and Work Opportunity Reconciliation Act and Other Legislative Actions – 1996 (P.L. 104-193)** | Mandated states implement electronic benefit transfer systems; placed a time limit on able-bodied adults without dependents who are not working at least twenty hours a week or participating in a work program; restricted benefits for legal immigrants; and reduced maximum benefits. |
| **The Balanced Budget Act – 1997 (P.L. 105-33)** | Put forth provisions for how to fund state agencies’ nutrition education plans and employment and training activities. |
| **The Agricultural Research, Education, and Extension Act – 1998 (P.L. 105-185)** | Reduces funding of employment and training programs and payments for administrative costs to State agencies; revises eligibility for certain disabled aliens, Indians, elderly individuals, children, and Hmong and Highland Laotians. |
| **Agriculture Appropriations – 2001 (P.L. 106-387)** | Increased the excess shelter cap and indexed the cap to changes in the Consumer Price Index for all consumers; and allowed states flexibility in the vehicle limit. |
The Farm Security and Rural Investment Act – 2002 (P.L. 107-171)
Restored eligibility to qualified aliens and immigrants meeting specified criteria; allowed states options to simplify the program; reduced employment and training funding; eliminated the cost neutrality requirement for electronic benefit transfer systems; and allowed group homes and institutions to redeem electronic benefit transfer benefits through banks in areas where electronic benefit transfer systems had not been implemented.

The Food, Conversation, and Energy Act – 2008 (P.L. 110-234)
Changed the name of the Food Stamp Program to the Supplemental Nutrition Assistance Program (SNAP) to emphasize the program’s nutrition impacts; institutionalized various policies to enhance program access, administration, and integrity; provided mandatory funding for the Healthy Incentives Pilot to test point-of-purchase incentives for healthful foods; and stipulated states must issue monthly benefit allotments to individuals in one lump sum unless a benefit correction is necessary.

American Recovery & Reinvestment Act – 2009 (P.L. 111-5)
Increased SNAP benefit levels between April 1, 2009 and October 31, 2013.

Healthy, Hunger-Free Kids Act – 2010 (P.L. 111-296)
Restructured SNAP-Ed as the Nutrition Education and Obesity Prevention Grant Program, allowing states to focus on policy, systems, and environmental change interventions.

Agricultural Act – 2014 (P.L. 113-79)
Required the USDA to update the stocking standards for authorized SNAP retailers; required retailers pay for electronic benefit transfer equipment; required states to submit plans and reports if they elect to operate a restaurant meals program for the homeless, elderly, and/or disabled; and permitted physical activity as a nutrition education activity.

Workforce Investment Act – 1998 (P.L. 113-128)
Amended employment and training program provisions of the Food and Nutrition Act of 2008.

Argus Leader v. United States Department of Agriculture – 2018 (740 F.3d 1172-75 (8th Cir. 2014) and 2018 appeal from Intervenor Defendant, Food Marketing Institute)
Ruled Exemption 3 and 4 of the Freedom of Information Act does not apply to data showing how much retailers participating in SNAP receive each year. The Supreme Court Justice Neil Gorsuch stayed the lower court’s order requiring the disclosure of how much money retail food outlets earn from SNAP transactions until the plaintiff, Argus Leader, responds to the Food Marketing Institute.
Institute’s request to appeal to the US Supreme Court. On June 24, 2019, the Supreme Court held that commercial information submitted to the federal government qualifies as “confidential” under the Freedom of Information Act’s Exemption 4 when, at a minimum, it is “actually” and “customarily” “kept private” and the federal government provides assurances that the information will be maintained in confidence.

**The Agricultural Improvement Act – 2018 (P.L. 115-334)**
Establishes an interstate data system to prevent the simultaneous issuance of SNAP benefits to an individual by more than one state; increased mandatory commitments to the Food Insecurity Nutrition Incentive Program over five years and proposed to rename the program to Gus Schumacher Food Insecurity Nutrition Incentive Program in honor of an integral champion of this program who recently passed away and requires the USDA Secretary to issue guidance clarifying the process for retailers to seek waivers to offer SNAP consumers incentives for purchasing SNAP-eligible staple foods, which were expanded to include whole grains and dairy; preserves states’ option to eliminate asset tests; enhances and increases funding for SNAP Employment and Training operations; requires Secretary of Agriculture to reevaluate and publish The Thrifty Food Plan every five years; makes slight modifications to SNAP Nutrition Education (SNAP-Ed) including directs the Administrator of USDA’s Food and Nutrition Service to consult with the Director of the National Institute of Food and Agriculture (NIFA); eliminates state performance bonuses; makes slight adjustments to electronic benefit transfer system rules; and establishes a pilot Produce Prescription Program.

**Table 2:** A summation of the emerging legislative branch developments affecting the United States Department of Agriculture Supplemental Nutrition Assistance Program

<table>
<thead>
<tr>
<th>Legislative Development</th>
<th>Status</th>
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<tbody>
<tr>
<td>Block Grants</td>
<td>Initial 2018 Farm Bill discussions re-explored combining safety net programs into a meta-block grant to States where each State would receive a fixed, annual amount of funding for several safety net programs including SNAP, an entitlement program. The 2018</td>
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Participants Eligibility

**Broad-Based Categorical Eligibility**

Since 2000, States have been permitted to use Broad-Based Categorical Eligibility (BBCE), which allows States to grant automatic eligibility for families that receive TANF assistance and meet State-determined income limits. A preliminary House version of the 2018 Farm Bill (H.R.2) eliminated BBCE and proposed changes to countable resources. On the other hand, the preliminary Senate version of the Farm Bill (S.3042) did not propose significant changes to participant eligibility. Ultimately, the 2018 Farm Bill did not eliminate BBCE. However, on July 23, 2019, the USDA published a proposed rule to limit SNAP/TANF automatic eligibility. Any final rule could potentially evoke legislative response, recognizing BBCE was not put forth in the 2018 Farm Bill.

**Work Requirements**

The preliminary House version of the 2018 Farm Bill (H.R. 2) proposed stricter work requirements for almost all able-bodied adults without dependents (ABAWD) unable to find work and permitted States to target limited resources to those who they deem may benefit most from employment and training programs but ultimately was not a part of 2018 Farm Bill. Shortly after the President signed the 2018 Farm Bill, the USDA Food and Nutrition Service issued a new proposed rule...
Aiming to strengthen the criteria for mandatory SNAP work requirements and significantly restrict State waiver allowance. Legislation has been introduced to prevent the USDA from implementing the proposed rule. In addition, Title 1 of a Rules Committee package (H.Res. 6) directs the House of Representatives’ Office of General Counsel to explore legal options for responding to the proposed SNAP rule, recognizing, in part, Congress had the opportunity to address work requirements in the 2018 Farm Bill and did not.

Other eligibility related legislative actions in the 2018 Farm Bill included simplifying homeless housing cost provisions, preserving states’ option to coordinate SNAP benefits with low-income energy payments assistance (i.e., helping households “afford to heat and eat”), rejecting a lifetime ban on individuals convicted of certain felonies, and eliminating state performance bonuses to recognize best or most-improved in SNAP operations that have been historically reinvested in supporting SNAP integrity and effectiveness.

The 2018 Farm Bill requires the USDA Secretary to re-evaluate and publish the Thrifty Food Plan every five years based on dietary guidance, food prices, food composition data, and consumption patterns. A legal battle is underway against the USDA regarding SNAP benefit adequacy.
awarding lower benefits to US citizens who reside in Puerto Rico than to similarly situated and equally needy US citizens residing in any of the fifty states of the US. The Closing the Map Gap Act (H.R. 1368) was reintroduced in the House to amend the Food and Nutrition Act of 2008 to require SNAP benefits be based on the Low Cost Food Plan. In the Senate, a bill (S.677) proposes to amend the Food and Nutrition Act of 2008 to provide for participation of Puerto Rico, American Samoa, and the Commonwealth of the Northern Mariana Islands in SNAP instead of the Nutrition Assistance Program (NAP), a block grant program.

### Issuance

The 2008 Farm Bill prohibited jurisdictions from issuing SNAP benefits more than once per month absent special circumstances. The 2018 Farm Bill established an interstate data system to prevent the simultaneous issuance of SNAP benefits to an individual by more than one state.

### Redemption

The 2018 Farm Bill only makes modest adjustments to electronic benefit transfer system rules, including temporarily banning the switching and routing of fees and easing of EBT authorization processes for farmers’ markets serving multiple locations. The 2018 Farm Bill makes no changes to the SNAP Restaurant Meal Program. The 2018 Farm Bill did not address the use of SNAP to provide additional benefits during
the summer but future legislative action might occur as the Child Nutrition Reauthorization processes get underway. The 2018 Farm Bill requires nationwide implementation of online acceptance for SNAP benefits after the pilots required in the 2014 Farm Bill are implemented. A Supreme Court decision protected SNAP redemption data at the retailer level (online or brick or mortar) as confidential business information; maintaining the existing standard and protecting traditional confidential business information that could be accessed through Freedom of Information Act (FOIA) requests.

| Appropriations | Appropriations for fiscal year 2017 and fiscal year 2018 provided about $74 billion to SNAP in required mandatory spending plus a reserve fund for any unexpected participation increases. For fiscal year 2019, the government was partially closed for a record-long thirty-five days due to a conflict between President Trump and Congress regarding the lack of funding of the US-Mexico border wall. Ultimately, a three week short-term continuing resolution was passed to end the shutdown. The inability to timely finalize fiscal year 2019 Agricultural Appropriations resulted in unprecedented SNAP benefit issuance logistical, communication, and health implications. In addition, the record long shutdown resulted in unpaid federal workers, contractors, among others, who had |
not been paid for almost two bimonthly paid dates that could potentially have been eligible for SNAP, among other federal food and nutrition assistance programs. Moreover, these furloughed workers were tapping into the charitable food system that many SNAP participants or SNAP eligible families depend on regularly. Near the end of the short-term resolution, fiscal year 2019 appropriations were finally passed and provided about $74 million to SNAP plus a reserve fund, along with accompanying Congressional Directives relevant to SNAP. A two year budget deal was approved to increase budget caps (P.L. 116-37). The House Appropriations Committee proposed $71.1 billion in required mandatory spending for SNAP. The Senate Appropriations Committee has conducted hearings regarding fiscal year 2020 appropriations. Another partial government shutdown is possible as Congress works to finalize bills for fifteen agencies after its August recess.

| Oversight | A record number of hearings reviewing SNAP were held over the course of the 114th Congress, totaling sixty witnesses in sixteen hearings and a report was published synthesizing the findings. Congressional letters of inquiry have been submitted to the USDA regarding the proposed relocation of the Economic Research Service (ERS) and the National Institute of Food and Agriculture (NIFA) and a recent hearing regarding the proposed changes was held by the |
| **Strengthening SNAP’s Nutrition Impacts** | 
|---|---|
| **Restricting Product Eligibility** | The 115th Congress held a hearing focused on the pros and cons of restricting SNAP purchases in the initial weeks of their session but the 2018 Farm Bill did not put forth any provisions to restrict SNAP purchases. |
| **Incentivizing Produce Purchases** | The 2018 Farm Bill increased mandatory commitments up to $250 million over five years to the program, made the program permanent, and renamed the program to Gus Schumacher Food Insecurity Nutrition Incentive Program in honor of an integral champion of this program who recently passed away. The implementation timeline for the new Gus Schumacher Nutrition Incentive Program was impacted by the recent government shutdown and the uncertainty regarding the relocation of the NIFA. The 2018 Farm Bill also established a pilot Produce Prescription Program. Specifically, the Secretary of Agriculture was granted authority to establish a grant program, in coordination with the Department of Health and Human Services, to award eligible entities such as federally qualified health centers to conduct pilot projects that demonstrate and evaluate the impacts of a produce prescription program. The |
Enhancing Minimum Stocking Standards

Secretary of Agriculture was authorized to use $4,000,000 for each of fiscal years 2019 through 2023. For retailer funded incentive programs, the 2018 Farm Bill requires the USDA Secretary to issue guidance clarifying the process for retailers to seek waivers to offer SNAP consumers incentives for purchasing healthy SNAP-eligible staple foods.

The Agricultural Act of 2014 required the USDA to update the stocking standards for authorized SNAP retailers. The USDA rule making process involved hosting listening sessions, calls for public comments, and conducting regulatory impact analyses, as well as extensions, delays, and technical assistance. Implementation of the final rule that now requires SNAP authorized stores to meet one of two staple food requirements was completed in January 2018. Fiscal Year 2019 Agricultural Appropriations prohibited the use of any funds to be used to implement, administer, or enforce the “variety” requirements of this final rule until the Secretary of Agriculture amends the definition of the term to increase the number of items that qualify as acceptable varieties in each staple food category. On April 5, 2019, the USDA published a proposed rule that would provide regulatory flexibility for retailers in SNAP in meeting the 2016 final rule, by only modifying the definition of the term “variety”. 
National Healthy Food Financing Initiative

In the Agricultural Act of 2014, the Secretary of Agriculture was given enhanced authority and appropriated $125,000,000 to establish HFFI. In fiscal years 2017 and 2018, Congress appropriated one million to launch HFFI at USDA. The 2018 Farm Bill made slight amendments to the HFFI, including expanding eligible projects beyond retail to include food hubs, mobile markets, direct to consumer markets, and food business incubators. In fiscal year 2019, not less than $22,000,000 was appropriated. In both the House (H.R. 1717) and Senate (S.786), bills have been reintroduced to amend the Internal Revenue Code of 1986 to establish a new tax credit and grant program to stimulate investment and healthy retail options in food deserts.

Nutrition Education and Promotion

The 2018 Farm Bill only made modest modifications to SNAP-Ed. The House proposal to merge SNAP-Ed and the Expanded Food and Nutrition Education Program (EFNEP) was rejected and instead the 2018 Farm Bill encourages better coordination across the two programs, including requiring an annual report to Congress detailing the evaluation of the level of coordination between SNAP-Ed, EFNEP, and other USDA nutrition education programs. The 2018 Farm Bill requires SNAP-Ed programs to use an electronic reporting system to measure and evaluate projects and account for state administrative costs. In addition, the 2018 Farm Bill establishes an online information

Table 3: A summation of the emerging executive branch developments affecting the United States Department of Agriculture Supplemental Nutrition Assistance Program

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<th>Executive Development</th>
<th>Status</th>
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<td>America’s Harvest Box</td>
<td>The America’s Harvest Box was put forth in the President’s fiscal year 2019 budget and reappeared again in Secretary Perdue’s fiscal year 2020 budget discussions. Under this proposed approach to support the President’s leadership on Buy American, all SNAP participating households receiving $90 per month or more in SNAP benefits would receive a package of nutritious, one hundred percent US grown and produced food and the remainder of the benefits would be provided via electronic benefit transfer cards. States would be given flexibility in distributing these boxes to participants. Recent stories discuss the new “Meals to You” program offered through funding by the USDA FNS, which offers a box including the</td>
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equivalent of five breakfasts, lunches, and snacks per student delivered to each participating student’s door via UPS during the summer months.

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<tr>
<th>SNAP Budget Cuts</th>
<th>President Trump’s fiscal years 2018, 2019, and 2020 budgets consistently proposed massive cuts to SNAP and included provisions to reconfigure the program by establishing a State match, limit categorical eligibility and the use of waivers that exempt able-bodied adults without dependents from work, and establish application fees for retailers seeking to participate in SNAP. The President also ordered all federal agencies to cut spending by five percent for fiscal year 2019 and again for fiscal year 2020.</th>
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<tr>
<th>Disaster Assistance through SNAP</th>
<th>The Trump administration has responded to a variety of hurricanes, wild fires, floods, and other natural disasters thus far using the USDA’s Disaster Supplemental Nutrition Assistance Program (D-SNAP). Congressional supplemental appropriations have also helped provide relief and on June 6, 2019 a $19.1 billion standalone disaster supplemental bill was enacted.</th>
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| Immigration | President Trump has taken a variety of actions ranging from executive orders, budget cuts, and administrative agency initiatives that raise concern over immigrant participation in federal food and nutrition assistance programs including SNAP. The most recent explicit action that involved SNAP was a |
proposed rulemaking notice by
the Department of Homeland
Security that indicates
immigrants could potentially be
denied “lawful permanent
residency” if they have received
certain government benefits,
including SNAP, or if the
government anticipates they may
seek government benefits in the
future. Known as the “public
charge rule,” the Trump
administration would
significantly expand the 1999
Interim Field Guidance that
defined dependence on
government assistance as
participation in cash assistance
or long-term institutionalized
care. The sixty-day public
comment period closed on
December 10, 2018 and more
than 216,000 comments have
been submitted. A final rule was
put forth on August 12, 2019.

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<td>In an effort to bail out farmers affected by the President’s recent tariffs on Chinese imports and resulting Chinese tariffs on US goods, the Trump administration purchased $1.2 billion commodities from farmers and distributed them through the child nutrition and emergency food assistance programs. Another similar bailout followed.</td>
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<th>Administrative Actions</th>
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<td><strong>Hiring Freeze</strong></td>
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<td>On January 23, 2017, President Trump signed a Presidential Memorandum instituting a ninety-day hiring freeze for United States federal employees.</td>
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There is not much data to objectively understand the impacts of this hiring freeze or how severe budget cuts in fiscal years 2018 and 2019 impacted agencies’ ability to appropriately staff SNAP operations.

Recently, the 115th Congress Senate failed to vote on the USDA nominees that had been approved by the Senate Agriculture Committee; therefore, the process had to start over with re-nomination by the 116th Congress Senate. On January 16, 2019, President Trump re-nominated his selections for the USDA Undersecretary for Food Safety; Undersecretary for Research, Education, and Economics; and Assistant Secretary for Civil Rights. And, Secretary Perdue appointed each of them to deputy positions in the interim that does not hold the same authority but does not require Senate approval. The date of a full chamber vote has not been set at this time. No one has been nominated at this point to be the Undersecretary of Food, Nutrition, and Consumer Services (the mission area for SNAP), resulting in a mission area accounting for seventy percent of the USDA’s budget not being overseen by a Senate confirmed appointee.

In Delivering Government Solutions in the 21st Century: Reform Plan and Reorganization Recommendations put forth by the Executive Office of President
Trump, one of the thirty-two organizational realignments to enhance mission and service delivery was to move the non-commodity nutrition assistance programs (i.e., the “near-cash” benefit programs such as electronic benefit transfers or vouchers) from the USDA to a newly named Department of Health and Public Welfare, which is currently known as the Department of Health and Human Services. These non-commodity nutrition assistance programs include: SNAP, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Child and Adult Care Food Program (CACFP), and the Farmers’ Market Nutrition Programs. In addition, the Trump Administration’s Reform Plan proposes the establishment of a permanent Council on Public Assistance, housed in the new Department of Health and Public Welfare that would be composed of all intra- and inter-departmental agencies that administer public benefit programs, including within the new Department (e.g., TANF, CMS, and now SNAP and WIC), the USDA (e.g., remaining commodity-based programs), and the Department of Housing and Urban Development, among others. The Council would have statutory authority to establish certain cross-program policies, including on uniform work requirements. The Reform Plan
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<th>Reorganization of ERS and Proposed Relocations of ERS and NIFA</th>
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<td>Secretary Perdue proposed ERS move out of the USDA’s Research, Education, and Economics (REE) Mission Area and back into the Office of the Secretary, Office of the Chief Economist to enhance the effectiveness of economic analysis at USDA. In addition, the Secretary proposed to relocate ERS and NIFA out of the Washington, District of Columbia area to possibly the Midwest. Congressional letters of inquiry and a recent hearing have debated the rationale for these proposals. On June 13, 2019, Secretary Perdue announced the Kansas City region as the new location for ERS and NIFA and that ERS will remain in the REE Mission Area.</td>
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<th>Reorganization of the USDA Center for Nutrition Policy and Promotion</th>
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<td>Consistent with Executive Order 13781 calling for Executive Branch reorganization, Secretary Perdue already reorganized the USDA Center for Nutrition Policy and Promotion (CNPP).</td>
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<th>Reorganization of the USDA Civil Rights Activities</th>
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<tr>
<td>Consistent with Executive Order 13781 calling for Executive Branch reorganization, Secretary Perdue is reorganizing the USDA’s civil rights activities, which would include complaints</td>
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from the suite of federal food and nutrition assistance programs it administers.