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IRVINE

Bread and Butter Policy: Food Identity Standards in the United States, 1938-2022

DISSERTATION

submitted in partial satisfaction of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

in History

by

Clare Gordon Bettencourt

Dissertation Committee:
Professor Yong Chen, Chair
Associate Professor Allison Perlman
Professor Kavita Philip
Professor Steven C. Topik

2022

DEDICATION

To

Hugo, my darling companion

TABLE OF CONTENTS

	Page
LIST OF TABLES	v
ACKNOWLEDGEMENTS	vi
VITA	vii
ABSTRACT OF DISSERTATION	viii
INTRODUCTION	1
Key terms: Defining identity, purity, and authenticity	7
Historiography	16
Archives and chapter structure	43
CHAPTER 1:	
Pure Imagination: The first decade of food identity standards	47
Standards-craft	50
Classifying Consumers	55
Conclusion	64
CHAPTER 2:	
Food Standards enter the Golden Age of Food Processing	66
Mono & Diglycerides in Bread	69
Sliced Bread vs. Sliced Cheese	80
Imitation Jam	85
Conclusion	87
CHAPTER 3:	
Cold War Food Aid Policy and the Food Identity Standards at Home and Abroad	89
Fish Flour to Feed the Hungry Earth	91
A Fish Flour/ Dry Milk Arms Race	101
Hunger in America	107
Conclusion	109
CHAPTER 4:	
The Business of Food Identity Standards	113
Dairy in the United States	114
Elimination of Competition: Margarine	118
Industry vs. Industry: The Great Ice Cream Battle of 1977	124

	Brand Identity: Pasteurized Prepared Cheese Product & Frozen Dairy Dessert	131
	Conclusion	137
CHAPTER 5:	The Pure Food Movement in the 20 th and 21 st Centuries	140
	The Federation of Homemakers	141
	The Counterculture & Pure Food	147
	Purity by any other name...	149
	Conclusion	157
CONCLUSION		159
BIBLIOGRAPHY		164

LIST OF TABLES

	Page
Table 2.1 Full Text of the Standard for White Bread	75

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"Like Oil and Water: Food Additives and America's Food Identity Standards in the Mid-Twentieth Century" in *Proteins, Pathologies and Politics: Dietary Innovation and Disease from the Nineteenth Century*. Edited by David Gentilcore and Matthew Smith. London: Bloomsbury Academic Publishing, 2018.

"Encouraging a Broader Narrative of Pure Food Legislation: Understanding the Federal Food, Drug, and Cosmetics Act of 1938." *Retrospectives* 4, no. 1: 33-44.

ABSTRACT OF THE DISSERTATION

Bread and Butter Policy: Food Identity Standards in the United States, 1938-2022

by

Clare Gordon Bettencourt

Doctor of Philosophy in History

University of California, Irvine, 2022

Professor Yong Chen, Chair

In the history of American food legislation, the Pure Food and Drug Act of 1906 and its famous muckraking origins dominate the narrative. What is less known, is that the Pure Food and Drug Act of 1906 was ineffective and was soon replaced as a part of the New Deal by the Food, Drug and Cosmetic Act of 1938 (FDCA). The new law featured a novel update: instead of telling food manufacturers what *not* to do, the new law allowed the Food and Drug Administration (FDA) to stipulate what food manufacturers *must* do. This new power, known as the standard of identity provision, allowed the FDA to legally establish formulation and naming requirements to ensure that products matched purity expectations. Over the course of the 80-year history of the FDCA, the FDA has created more than 300 standards of identity for foods like bread, milk, and peanut butter.

According to the FDCA, the food identity standards are intended to “promote honesty and fair dealing in the interest of consumers,” however the FDA’s limited educational campaigns about the food identity standards, opaque framing process, and

preference for protecting Anglo-American foods have hampered consumers from understanding or engaging with the food identity standards. Government documents, periodicals, court cases, and consumer information reveal that food identity standards have more effectively represented state and industry interests through preferential access in proposing standards, participation in hearings and amending standards. Nevertheless, tracing the history of the food identity standards also demonstrates the presence of a long pure food movement. While existing scholarship on the pure food movement ends in 1906 or 1938, the history of the food identity standards links threads of post-1938 pure food activism among housewives, the counterculture, class actions and more to demonstrate a long pure foods movement that continues into the 21st century.

INTRODUCTION

Today in the supermarkets of the United States, food packaging offers consumers assurances on an ever-growing spectrum of product claims. Products promise health benefits with associations to diets like “keto,” “paleo,” “gluten free,” or simply “healthy.” Certifications like “organic,” “vegan,” “non-GMO,” “certified humane,” or “fair trade” provide ethical and environmental guarantees for shoppers. Sometimes these claims promise authenticity, as consumers learn of rampant fraud in global production chains like in olive oil, honey, and seafood.¹

This 21st century hunger for information and transparency about industrial food is the latest evolution in the long history of the U.S. pure food movement. While the vernacular may be different today, U.S. consumers have sought formal oversight and assurances on the safety and quality of their food since the middle of the nineteenth century. Despite decades of grassroots organizing, the *longue durée* of the U.S. pure food movement is typically distilled down to Upton Sinclair’s muckraking sensation *The Jungle*, and the subsequent passage of the Pure Food and Drug Act of 1906 (PFDA). Yet soon after the passage of the Pure Food and Drug Act of 1906, the jungle grew back due to low fines, loopholes, and limited resources for inspection and enforcement. The situation grew so dire that in 1933, the Food and Drug Administration (FDA) organized a traveling exhibit called the “Chamber of Horrors” that showcased the rampant deception and danger in the consumer marketplace. Five years later, still without revamped consumer protection

¹ “Economically Motivated Adulteration (Food Fraud),” *U.S. Food and Drug Administration*, last modified November 4, 2021, <https://www.fda.gov/food/compliance-enforcement-food/economically-motivated-adulteration-food-fraud>.

legislation in place, 100 people in 15 states were killed due to the use of the unregulated drug Elixir of Sulfanilamide.² To understand the present pure food movement, it is vital to understand that the Pure Food and Drug Act is not the end of the story.

In 1938, Congress responded to the calls for revamped consumer protections with the Food, Drug and Cosmetic Act (FDCA). This legislative overhaul sought to close the loopholes of the 1906 law to offer new regulatory oversight of the continually-industrializing consumer marketplace. The new law featured a novel update: instead of telling food manufacturers what *not* to do (as the PFDA had done), the new law included a provision that allowed the Food and Drug Administration (FDA) to stipulate what food manufacturers *must* do.³ This new power, known as the standard of identity provision, empowered the FDA to establish formulations (which often looked like recipes) to ensure that products matched purity expectations. Over the 80-year history of the FDCA, the FDA has created more than 300 standards of identity for foods like bread, milk, and peanut butter.

Today, and for nearly the entire existence of the food identity standards, most consumers have had no idea they exist.⁴ Standardized foods have never included any label information about their standardization or what the standard meant for the name and

² Carol Ballentine, "Taste of Raspberries, Taste of Death: The 1937 Elixir Sulfanilamide Incident," The U.S. Food and Drug Administration, June 1981, accessed December 2, 2015, <http://www.fda.gov/AboutFDA/WhatWeDo/History/ProductRegulation/SulfanilamideDisaster/default.html>

³ The oversight of the FDCA and FDA focus on food manufacturers who produced packaged foods sold directly to consumers. Fresh meat and produce items are governed by the USDA.

⁴ Joseph M. Vallowe, "Informing Consumers of the Existence and Significance of Food and Drug Administration Food Standards of Identity," *Food, Drug, Cosmetic Law Journal* 38, no. 3 (1983): 256-72. Vallowe, Joseph M. "Informing Consumers of the Existence and Significance of Food and Drug Administration Food Standards of Identity." *Food, Drug, Cosmetic Law Journal* 38, no. 3 (1983): 256-72. Accessed December 2, 2020. <http://www.jstor.org/stable/26658550>. <http://www.jstor.org/stable/26658550>.

Anecdotally, I worked at Whole Foods Market for 6 years as a cashier, vitamin/bodycare clerk, and sample specialist and never learned about food identity standards.

formulation of the products.⁵ The standards have remained unknown, even as consumers have sought greater food oversight, product transparency, and purity guarantees. Concomitantly, food manufacturers have used the standards to their advantage, and in recent years the standards have become a site of cultural tension. Food industry interests, dairy farmers, ranchers, and rural Americans have invoked the standards in response to the growing popularity of plant-based foods. In 2016, the American Egg Board joked about “pooling our money to put a hit” on the CEO of a vegan mayonnaise company.⁶ Manufacturers of plant-based butters, cheeses and milks have faced legal challenges, with dairy interests arguing that plant-based dairy products violate food identity standards, despite the use of qualifiers such as plant butter or almond milk.⁷ In 2018, the National

⁵ While the FDA did some informational campaigns in the 1940s through consumer newsletters, over the course of the 20th century, consumer awareness and media coverage of the food standards has declined. 1940s FDA consumer outreach is discussed in chapter 1.

Food identity standards initially were not required to include a comprehensive ingredient list, only the standardized name, and optional ingredients as stipulated by each standard, while non-standardized foods were required to bear a full ingredient list. While legislators initially thought that the common or usual name would be meaningful enough to communicate the composition to consumers, consumers increasingly sought full ingredient labeling.

⁶ Geoffrey Mohan, “The egg industry launched a secret two-year war against a vegan mayonnaise competitor,” *Los Angeles Times*, October 7, 2016, <https://www.latimes.com/business/la-fi-egg-board-investigation-20161007-snap-story.html>.

⁷ Elaine Watson, “‘This is a huge victory...’ Judge rules in Miyoko plant-based butter case,” *Food Navigator USA*, August 24, 2020, <https://www.foodnavigator-usa.com/Article/2020/08/23/Judge-rules-in-Miyoko-plant-based-butter-case-This-is-a-huge-victory>.; “Defending the Good Name of Milk,” National Milk Producers Federation, July 31, 2018, <https://www.nmpf.org/defending-the-good-name-of-milk/>.

A similar ethos can be seen in legislation passed in Arkansas, Mississippi, Louisiana, South Dakota, and other states to limit the use of “veggie” “vegan” and “plant based” qualifiers on products such as sausage, burgers, and roasts. While these products are not regulated by the FDA, they still demonstrate the trend towards using regulation to limit speech relating to plant-based foods.

“Federal Court Blocks ‘Veggie Burger’ Censorship Law,” ACLU, December 11, 2019, <https://www.aclu.org/press-releases/federal-court-blocks-veggie-burger-censorship-law>.; Sam Danley, “IFT20: Plant-based labeling debate continues,” *Food Business News*, July 20, 2020, <https://www.foodbusinessnews.net/articles/16451-ift20-plant-based-labeling-debate-continues> Jay Sjerven, “F.D.A. announces ‘down payment’ on modernizing food standards of identity,” *Food Business News*, October 30, 2018, <https://www.foodbusinessnews.net/articles/12787-fda-announces-down-payment-on-modernizing-food-standards-of-identity>.; “Use of the Names of Dairy Foods in the Labeling of Plant-Based Products; Extension of Comment Period,” *Food and Drug Administration*, November 20, 2018, <https://beta.regulations.gov/document/FDA-2018-N-3522-4873/comment>

Milk Producers Federation adopted Donald Trump’s rhetoric of “fake news” and referred to plant based products as “fake food.”⁸ Globally, European and Australian markets have sought similar protections for dairy and meat products, and plant-based food startups in China and India are seeking to compete with products from the U.S. and Europe.⁹ In 2021 the European Union nearly banned the use of dairy terminology, certain packaging associated with dairy, and environmental claims on plant based product packaging. The controversial Amendment 171 was favored to pass until critiques from the World Wildlife Fund, Greenpeace, the European Consumer Organisation, Greta Thunberg, and a petition signed by 450,000 consumers outweighed endorsements from the European dairy industry.¹⁰ The domestic and global implications of low consumer awareness of food identity standards, fractured beliefs on the meaning of food purity, and polarized discourse on the regulation of plant-based foods, demonstrate that the standards, and food purity more broadly, are a part of the 21st century culture wars.

By linking the post-1938 pure food movement to the pure food crusaders of the 19th and early 20th centuries, regulators, consumers, and organizers can address the strengths and limitations of the food identity standards model. Aspiring to standardize the

“Use of the Names of Dairy Foods in the Labeling of Plant-Based Products,” *Food and Drug Administration*, September 27, 2018, <https://beta.regulations.gov/document/FDA-2018-N-3522-0001/comment>.

⁸ “Defending the Good Name of Milk,” National Milk Producers Federation.

⁹ Zen Soo, “China becoming battleground for plant-based meat makers,” *Associated Press*, last modified September 10, 2020, <https://apnews.com/article/95ce6d9875c255ee6ab8ea3e0a4a3823>; Crystal Reid, “China’s appetite for meat fades as vegan revolution takes hold,” *The Guardian*, last modified March 9, 2021, <https://www.theguardian.com/world/2021/mar/09/chinas-appetite-for-meat-fades-as-vegan-revolution-takes-hold>; “Labelling of Plant-based meats,” *Processed Food Industry*, last modified August 24, 2021, <https://www.pfionline.com/labelling-of-plant-based-meats/>; “European Parliament Allows for ‘Creamy’ and ‘Buttery’ Plant-Based Dairy,” *National Law Review*, last modified June 11, 2021, <https://www.natlawreview.com/article/european-parliament-allows-creamy-and-buttery-plant-based-dairy>.

¹⁰ “European Parliament Allows for ‘Creamy’ and ‘Buttery’ Plant-Based Dairy,” *National Law Review*, last modified June 11, 2021, <https://www.natlawreview.com/article/european-parliament-allows-creamy-and-buttery-plant-based-dairy>.

American food marketplace has always been an innovative yet unwieldy prospect. How could the FDA represent the multitude of preferences, tastes, and expectations in a single name and corresponding recipe when standards inherently rely on eliminating diversity and variance in favor of creating consistency and regulation?¹¹ As the president of the National Canners Association argued in the 1930s, “standardized grades contemplate a standardized humanity.”¹² Thus, for food standards to work, consumers, industry, and the marketplace at large must also have some degree of standardization or shared beliefs. The collective fracturing of the meaning of food purity has grown more apparent over the course of the 20th century, and calls into question the regulatory viability of food identity standards in the 21st century.

This dissertation makes two interventions in the history of the U.S. pure food movement, and pure food regulations. First, this study argues that the food identity standards are more representative of state and industry interests than consumer interests. According to the FDCA, the food identity standards are intended to “promote honesty and fair dealing in the interest of consumers,” however the FDA’s limited educational campaigns about the food identity standards, opaque framing process, and preference for protecting Anglo-American foods have hampered consumers from understanding or engaging with the food identity standards.¹³ Instead, food identity standards have more effectively protected state and industry interests over consumers through preferential access in proposing standards, participation in hearings and amending standards. As

¹¹ Martha Lampland and Susan Leigh Star, *Standards and Their Stories: How Quantifying, Classifying, and Formalizing Practices Shape Everyday Life* (Ithaca: Cornell University Press, 2009.), 7-10.

¹² Anna Zeide, *Canned: The Rise and Fall of Consumer Confidence in the American Food Industry*, (Berkeley: University of California Press, 2019), 121.

¹³ 34 Stat. 768 (1938).

consumer beliefs about food purity have evolved and fragmented, the disconnect between the food identity standards and the people they are intended to protect has widened.

Today, the FDA's current approach to food identity standards cannot meaningfully address current consumer beliefs about food purity.

Second, the history of the Food and Drug Administration's food identity standards demonstrate the existence of a long pure food movement. Existing scholarship on the pure food movement suggests that the movement ended in 1906 or 1938.¹⁴ However, tracing the history of the food identity standards connects the threads of post-1938 pure food organizing to demonstrate consistent consumer engagement in issues of food purity that have not previously been included in the pure food movement. Elements of the post-1938 pure foods movement overlap with the consumer, counterculture, sustainability, and home economics movements; however, the persistent themes of food value, safety, and authenticity demonstrate resurgences in the pure food movement from 1938 to the present.

¹⁴ Ilyse D. Barkan, "Industry Invites Regulation: The Passage of the Pure Food and Drug Act of 1906," *American Journal of Public Health* 75, no. 1 (1985): 18-26.; Andrea T. Borchers, Frank Hagie, Carl L. Keen, and M. Eric Gershwin, "The History and Contemporary Challenges of the U.S. Food and Drug Administration", *Chemical Therapeutics* 29, no. 1 (January 2007): 1-16.; Lizabeth Cohen, *A Consumers' Republic: The Politics of Mass Consumption in Postwar America*, (New York: Alfred A. Knopf, 2003).; Arlene Finger Kantor, "Upton Sinclair and the Pure Food and Drugs Act of 1906," *The American Journal of Public Health* 66, no. 12 (1976): 1202-1205.; Marc T. Law, "How do Regulators Regulate? Enforcement of the Pure Food and Drug Act 1907-1939," *The Journal of Law, Economics and Organization* 22, no. 2 (December 2005): 459-489.; Marc T. Law, "The Origins of State Pure Food Regulations," *The Journal of Economic History* 63, no. 4 (2003): 1103-1130. Marc T. Law, "History of Food and Drug Regulation in the United States," EH.Net Encyclopedia, ed. Robert Whaples, last modified October 11, 2004, <http://eh.net/encyclopedia/history-of-food-and-drug-regulation-in-the-united-states/>; Lorine Swainston Goodwin, *The Pure Food, Drink, and Drug Crusaders, 1879-1914*, (Jefferson: McFarland & Company, 1999).; James Harvey Young, *Pure Food: Securing the Federal Food and Drugs Act of 1906*, (Princeton, NJ: Princeton University Press, 1989).; James Harvey Young, "The Pig That Fell into the Privy: Upton Sinclair's The Jungle and the Meat Inspection Amendments of 1906.," *Bulletin of the History of Medicine* 59, no. 4 (Winter 1985): 467-480.; Benjamin R. Cohen, *Pure Adulteration: Cheating on Nature in the Age of Manufactured Food*, (Chicago: The University of Chicago Press, 2019).

To support these arguments, this introduction will first define the terminology central to this study: purity, authenticity, and identity. Subsequently, this introduction will discuss historiography, followed by the sources and methods used to complete this research, and a chapter overview.

Key Terms: Defining Identity, Purity, and Authenticity

Beliefs about food purity can encompass economic value, healthfulness, wholesomeness, and closeness to nature. Despite a popular belief that concerns over the purity and integrity of food are unique to the modern era, anxiety over food adulteration has existed for thousands of years, as have pure food regulations.¹⁵ According to Anthropologist Mary Douglas, pollution or impurity can be defined as “matter out of place.”¹⁶ Historically, “matter out of place” causes anxiety, something humans have responded to by creating a positive structure of rules or order. In the wake of the Great Depression, the framers of the FDCA emphasized economic fairness as their metric of

¹⁵ For example, in the 4th century, Romans were worried that Sicilians were selling subpar bread, herbs and honey. As urbanization emerged during the Middle Ages, concerns about food adulteration, and prompted the creation of commodity and bread laws like the Frankfurt Capitulare in the 8th century and the Assize of Bread in the 14th century to prevent German and British bakers (respectively) from cheating consumers on loaf size when commodity prices went up.

Barry Baldwin, “Sordid Bread: More Food for Thought,” *Hermes* 124, no. 1 (1996): 127–29.; Alan S. C. Ross, “The Assize of Bread,” *The Economic History Review* 9, no. 2 (1956): 332–42.; Madeleine Ferrières, *Sacred Cow, Mad Cow: A History of Food Fears*, (New York: Columbia University Press, 2006), 5.

¹⁶ Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*, (London: Routledge, 2015), 50, 4, 196.

Just as purity is steeped in issues of morality, so too is the common expression of impure food: adulteration. Additionally, as Douglas argues, notions of purity are historically contingent. This can also be seen in the history of risk, particularly Claas Kirchhelle’s work on antibiotics. According to Kirchhelle’s study, risks are created and prioritized based on cultural conditions.

Kirchhelle, Claas, *Pyrrhic Progress: The History of Antibiotics in Anglo-American Food Production*, (New Brunswick: Rutgers University Press, 2020), 8.

purity.¹⁷ Yet, over the course of the 20th century, consumers increasingly linked purity with the natural world, a return to 19th century beliefs about food purity.¹⁸ Late 20th and 21st century consumers have, in some ways, come full circle in their belief that “pure” and “natural” are synonymous.¹⁹ A key difference in 19th and 21st century beliefs in the purity of the natural world is the degree to which consumers are directly engaged with agriculture and food production. Unlike 19th century consumers who linked purity to nature through their personal knowledge of food production and provenance, consumers today are looking for the industrial processed food landscape to become natural. This expectation suggests a new idealized disconnection from food production that recalls pre-industrial notions of purity.

While ensuring a pure food marketplace is central to understanding pure food laws broadly, food standards also sought to guarantee something more: authenticity. Concerns over the increasingly blurry line between the real and unreal reflected broader anxieties about who in America had the power to determine ethics in the United States. The trajectory of the search for authenticity aligns with the growth of the pure food movement in the United States, as the industrialization of the 19th century sparked a broader cultural

¹⁷ Issues of food purity are typically divided into two categories: economic cheats and public health risks. Economic cheats may technically be harmless, like cheapening honey with glucose, health risks included adulterations that use dangerous ingredients like lead-based food coloring.

¹⁸ B.R. Cohen has charted the moral anxieties that underpinned the 19th and early 20th century pure food movement. Where pure food had once been rooted in the environment through knowledge of agriculture, community, and cooking, Cohen argues that by the late 19th century consumers now looked to chemists, storefronts, and labels on grocery shelves to determine food purity, thus signaling that purity had become technical rather than agricultural or culinary.

Benjamin R. Cohen, *Pure Adulteration: Cheating on Nature in the Age of Manufactured Food*, (Chicago: The University of Chicago Press, 2019) xiv.

¹⁹ My assertion is informed by Kendra Smith-Howard’s arguments that the purity of milk had to be constructed by distancing milk from the risks of natural while highlighting bucolic associations on the packaging.

Kendra Smith-Howard, *Pure and Modern Milk: An Environmental History Since 1900*, (Oxford: Oxford University Press, 2013), 4-5.

reckoning with the idea of authenticity.²⁰ Yet in the post-WWII period, the search for authenticity shifted to a postmodern embrace of facsimiles, and a counterculture movement that embraced natural foods as a path to authenticity.²¹ Today, marketers believe that Millennials and Gen-Z are prioritizing authenticity in all elements of their lives, especially food.²²

The history of food identity standards reveals that Douglas' definition of "matter out of place" was persistent, yet the matter in question, and the degree to which consumers viewed preparations and ingredients as authentic evolved and challenged the fixed-in-amber function of food identity standards. As the meaning of purity and authenticity splintered beginning in the post-WWII golden age of food processing and into the 1960s, with the counterculture ushering in a "natural" foods movement that created innumerable purity designations from organic, non-GMO, gluten-free, cruelty-free, vegan, paleo, and so on, food purity had an increasingly fractured meaning in the collective imaginary.

²⁰ As industrialization made imitations and reproductions easily accessible, Americans initially embraced access to furniture, architecture and art facsimiles that looked just like the real thing, but by the end of the 19th century there was a growing concern over a loss of authenticity. Orvell argues that the inverse of authenticity is fraud, a concern that not only impacted 19th century consumption, but arts and culture as well. In response to industrialization and mechanization, the modernism of 1900 to 1940s saw greater anxiety over perceived losses in authenticity as mass culture grew thanks to the spread of technology like telephones, phonographs, toys, cars that prompted the creation roads, motels, that rapidly reshaped the United States spatially and created a singular information environment. He argues that by the 1940s, ersatz goods had permeated the marketplace, and advertisers of the 1940s capitalized on fears of lost authenticity by reassuring consumers that products were "real" on packages and in slogans.

Miles Orvell, *The Real Thing: Imitation and Authenticity in American Culture, 1880-1940*, (Chapel Hill: University of North Carolina Press, 2014), xxvii, 145.

²¹ Orvell, *The Real Thing*, xxxv, 299.

²² Scheherazade Daneshku, "How millennials' taste for 'authenticity,' is disrupting powerful food brands," *Financial Times*, last modified June 18, 2018, <https://www.ft.com/content/09271178-6f29-11e8-92d3-6c13e5c92914>.; Mary Ellen Shoup, "Reaching Gen-Z: 'It has to feel organic, and it has to feel natural,' says IRI," *Food Navigator USA*, last modified July 21, 2021, <https://www.foodnavigatorusa.com/Article/2021/07/02/Reaching-Gen-Z-It-has-to-feel-organic-and-it-has-to-feel-natural-says-IRI>.; "Meet Generation Z: Shaping the future of shopping," *McKinsey & Company*, last modified August 4, 2020, <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/meet-generation-z-shaping-the-future-of-shopping>.

The categories of food identity, consumer identity, and national identity are also central to understanding food identity standards. For the framers of the FDCA, the path to guaranteed purity and authenticity was thought to be by establishing the identity of a protected food. Rather than selecting “food purity standards” or “food formulation standards,” lawmakers invoked identity. This distinction also suggests that lawmakers were worried not only about the health or economic risks posed by food adulteration, but also about the risk of a lost identity. Though not defined in the FDCA itself, the FDA has interpreted food identity as the ingredients and preparations that make a food itself or distinct. According to this definition, identity seems incongruous with the idea of standardization, yet numerous definitions of identity from the Oxford English Dictionary invoke sameness, oneness, or repetition. A definition from 1616 describes identity as “the selfsame thing.” This definition is notable because “self” and the idea of individuality is combined with “same” or standardization.²³ Here we see the idea of individuality or personality represented in a way that is constant, reliable or replicable or “the fact that a person or thing is itself and not something else.”²⁴

Second, imagined consumer knowledge is also central to how consumers interpret the labels of standardized foods. The goal of the standards, as stated in the FDCA, is to establish identities for foods as a way to “promote honesty and fair dealing in the interest of consumers.”²⁵ For the established identity of foods to have meaning, an imagined community of consumers must have a shared level of culinary and marketplace literacy

²³ "identity, n," OED Online. Oxford University Press, accessed December 19 2020, <https://www.oed.com/view/Entry/91004?redirectedFrom=identity&>.

²⁴ "identity, n.". OED Online.

²⁵ *21 U.S. Code § 341 - Definitions and standards for food*, Public Law 75-717, *U.S. Statutes at Large* 52 (1938): 513.

where formulations and names match consumer expectations.²⁶ This element of personal imagination and knowledge operated through the pairing of “common or usual names” to a standard formulation.²⁷ Because standardized products do not state on the package that they are standardized, and until 1991 often didn’t include a comprehensive ingredient list, the entire premise of the standards relied on what the name selected for standardized foods invoked in the imagined consumer’s mind.²⁸ This relies on a standardized set of consumer knowledge that eliminates the potential for the knowledge variations of racial, ethnic, or regional identities. During the creation of the FDCA, as with other New Deal programs, politicians and regulators imagined the consumers they were protecting as American housewives who did not work outside the home.²⁹ Despite the emergence of

²⁶ In this dissertation, I focus on the shared consumer knowledge about pantry ingredients and products rather than gastronomic knowledge. While this project is not a culinary history, culinary knowledge is closely linked to ingredient and product knowledge. How a home cook uses the foods they purchase helps inform their knowledge and preferences. Consumer knowledge of health and nutrition trends is also an important factor in imagined consumer knowledge.

²⁷ The FDA created the common or usual name format to discourage manufacturers from creating made up names that sounded fancy or expensive, and also to offer clarity to people with allergies. Kleinfeld notes at the time the source was written in 1961 that housewives continued to be the primary audience engaging with the food marketplace and interpreting common or usual names. Vincent A. Kleinfeld, "Common or Usual Name - Its Meaning, If Any," *Food, Drug, Cosmetic Law Journal* 16, no. 8 (August 1961): 514.

²⁸ Standardized products were not required to list full ingredient lists until 1991 under the Nutrition Labeling and Education Act of 1990

²⁹ This will be discussed more comprehensively in chapter 1. FDA attention to the preferences of homemakers aligns with an ongoing hegemony of Anglo-American foodways in the American national consciousness. Despite the colonial creolization of native ingredients with European preparation methods described by Donna Gabaccia, immigrant foods typically become viewed as “American” once the immigrant group reached mainstream social acceptance such as, German hamburgers and Italian pizza. The acceptance of immigrant foodways can often be linked to declining rates of xenophobia towards the group, for example, in the 20th century xenophobia targeting German and Italian immigrants declined as acceptance of hamburgers, hot dogs, pasta and pizza grew. During the waves of nineteenth century European and Chinese immigration, Anglo-American anxieties spread about the nutritional suitability of low-income, immigrant, and Black cuisine. State-sponsored nutritional education and reform efforts continued up until WWII, yet USDA dietary advice programs still assume dietary homogeneity, despite being nutritionally incomplete for many ethnic groups as many Black Americans, Mexican Americans, and Asian Americans are often lactose intolerant. Public health scholars Judy Perkin and Stephanie F. McCann argue that the history of U.S. government nutritional policy has created dietary directives under the assumption of cultural and dietary uniformity. Brown and Mussell, *Ethnic and Regional Foodways in the United States*, 41-43, 239-242.

targeted surveying data, New Deal agencies imagined that consumers were synonymous with an invented, and increasingly nonexistent homemaker stereotype.³⁰ As the 20th century progressed, market segmentation by identity diminished the unity of the mass market and held monumental consequences for American political culture.³¹

Finally, food identity standards are a state action that reflect assumptions and aspirations about national identity. In this dissertation I invoke national identity in the ethno-cultural sense to mean a collective belief that certain cultural expressions, beliefs, and traditions are constitutive of American culture. In the case of food identity standards, FDA officials solicited industry and public opinion to understand popular beliefs about food names and ingredients in the national American marketplace. Because the FDCA is a federal law, food standards are applied to any product that enters interstate transit, so regulators were tasked with developing definitions that applied to consumers nationally.³² Thus, standardized foods formalized informal beliefs about what foods were common or mainstream in American foodways, and how they should be formulated.³³ Food identity

³⁰ Although nearly a quarter of women worked outside the home in the 1930s, homemakers still captured the FDA's imagination as those primarily responsible for consumer decisions. This approach, according to Anna Zeide, is linked to the belief that homemakers, and the domestic sphere more broadly, were consumers rather than producers in the economy in the way that men in the public sphere were. This stereotype likely persisted in part due to the visibility of middle-class and upper-class educated women activists from groups like General Federation of Women's Clubs, the National League of Women Voters, and the National Council of Women who remained involved in pure food activism, and Progressive organizing more broadly, throughout the 19th and early 20th centuries. This view also obscured the importance of household labor to the broader economy.

Zeide, *Canned*, 111-119.

³¹ Lizabeth Cohen, *A Consumer's Republic: The Politics of Mass Consumption in Postwar America*, (New York: Vintage Books, 2003), 308-343.

³² Foods that are not sold in interstate transit are not subject to food identity standards.

³³ Benedict Anderson argues that "imagined communities" such as national identity are created through shared knowledge circuits such as print capitalism and state bureaucracies that promote the development of a national consciousness. I believe that informal beliefs about American foodways, rooted in the imagined community of American national identity shaped formal standards creation.

Benedict Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism*, (London: Verso, 2006).

standards represent a version of “seeing like a state” in which legislators created state-standardized meaning.³⁴ By establishing culinary identities, the FDA eliminated competing discourses around food names and preparations, thus creating a dominant discourse with the power to be perceived as a universal truth.³⁵ These beliefs are often rooted in the “dominant culture” or “core society,” which, since the creation of the United States, has been Anglo-American.³⁶ Thus, this dissertation refers to mass or mainstream culture as primarily a representation of dominant Anglo-American cultural mores.³⁷

³⁴ Anthropologist Elizabeth Cullen Dunn links this process to James Scott’s notion of utopian high modernism. In her view, the process of standardization is a form of high knowledge (or a full faith in science and technology) that replaces *mētis*, or the Greek notion of knowledge embedded in local experience. The standards are a way of “seeing like a state” or making production legible, while also creating regulatory barriers for small producers and making localized or standardizing individual knowledge. Elizabeth Cullen Dunn, “Standards without Infrastructure,” in *Standards and Their Stories: How Quantifying, Classifying, and Formalizing Practices Shape Everyday Life*, ed. Martha Lampland and Susan Leigh Star (Ithaca: Cornell University Press, 2009), 118-121.; James C. Scott, *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*, (New Haven: Yale University Press, 1998), 311.

³⁵ Cultural theorist Katharina Vester has studied the role of identity and power in American culinary knowledge. Vester applies Foucaultian theories to foodways, in particular the idea that power relations occur when discourses compete to create bodies of knowledge. She explains that food discourses create and reinforce identity by governing practices and behavior, a process Vester argues occurs most directly through recipes. While Vester focuses on this process on an individual scale, the same dynamic can be seen in food identity standards. Since each standard, particularly in the first years of the food standards (as discussed in chapter 1) is associated with a recipe or a formula, Vester’s argument that identity becomes encapsulated through recipes can be seen as not only a domestic process, but an exercise in state power. Vester, *A Taste of Power*, 5-9.

³⁶ Susan J. Dicker, “U.S. Immigrants and the Dilemma of Anglo-Conformity,” *Socialism and Democracy* 22, no. 3 (2008): 52-74.

³⁷ In this dissertation I invoke mainstream and mass culture as collective, national circuits of knowledge that influence and inform a mass audience. While this can include mass-media such as films and television, in the case of food standards, mass culture and mainstream food ideas were most directly shaped by popular books, radio, newspapers, magazines and household products. Mass culture and mainstream are typically thought to be standardized and homogenized forms of knowledge which can be an element in reinforcing the hegemony of dominant groups or cultures in capitalist systems.

In the case of American foodways, the cultures of other non-dominant groups present in the United States can become part of the dominant culture (such as hamburgers, pizza and taco), but typically this entails assimilation or adaptation to the dominant culture, particularly for groups outside of European ancestry. “mass culture,” *Oxford Reference*, Accessed November 23, 2020, <https://www.oxfordreference.com/view/10.1093/oi/authority.20110803100138730>.

Ultimately, this study argues that linking identity and food purity has been consistently interpreted in ways that privilege national and mainstream Anglo-American identity.³⁸ The United States does not have any regionally protected foods in the way that France has champagne and Italy has Parmigiano Reggiano, and has been critical of these designations in discussions of 21st century trade policy.³⁹ Yet the food identity standards suggest that protecting the quality and reputation of American foods was a concern of state actors, similar to the global trade aims of Geographical food indications.

Defining purity, authenticity, food identity, consumer identity, and national identity in the context of the U.S. pure foods movement suggests that the standards were more than just recipes for pantry foods, they were symbols of beliefs, knowledge, culture, and identity.

³⁸ In this dissertation I use Anglo-American to mean mass mainstream U.S. culture and identity. U.S. foodways are the product of Indigenous, colonial (Spanish, French, British), African, and immigrant foodways (particularly the regional and national impact of German, Italian, and Chinese immigrants in the 19th and early 20th centuries and Mexican, Indian, and Japanese immigrants in the 20th centuries). During the colonial period, Indigenous, African and colonial European influence created “multi-ethnic creole foodways” (Gabaccia p. 35) that combined European culinary techniques with American ingredients, with regional variations like pies in New England and jambalaya in New Orleans. In the 19th century, industrial food production and distribution created one national food marketplace that relied on a standard American diet. If immigrant products were introduced into the mass market, they were presented as generally “American,” such as Oscar Meyer’s marketing of German wieners as American hot dogs (Gabaccia p. 161). Additionally, products were typically adjusted to appeal to the Anglo-American palette like chop suey, a dish invented by Chinese American restaurateurs to appeal to American diners (Chen p. 141). Richard Pillsbury describes this process “The initial western European food traditions set a pattern that still dominates the American national cuisine. New foods have been added to the culinary soup, but most often traditional ethnic favorites reach popularity only after significant modification...” (Pillsbury p. 162). For more on the hegemony of Anglo-American cuisines in mass U.S. culture see:

Charlotte Biltekoff, *Eating Right in America: The Cultural Politics of Food and Health*, (Durham, North Carolina: Duke University Press, 2013).; Linda Keller Brown and Kay Mussell, *Ethnic and Regional Foodways in the United States: The Performance of Group Identity*, (Knoxville: University of Tennessee Press, 2001).; Yong Chen, *Chop Suey USA: The Story of Chinese Food in America*, (New York: Columbia University Press, 2014).; Donna R. Gabaccia, *We Are What We Eat: Ethnic Food and the Making of Americans*, (Cambridge, Massachusetts: Harvard University Press, 1998).; Richard Pillsbury, *No Foreign Food: The American Diet in Time and Place*, (Boulder, Colorado: Westview Press, 1998).; Helen Zoe Veit, *Modern food, Moral Food: Self-Control, Science, and the Rise of Modern American Eating in the Early Twentieth Century*, (Chapel Hill: University of North Carolina Press, 2013).; Katharina Vester, *A Taste of Power: Food and American Identities*, (Berkeley: University of California Press, 2015).

³⁹ “Geographical Indications (GIs) in U.S. Agricultural Trade,” *Congressional Research Service*, July 21, 2016, <https://sgp.fas.org/crs/row/IF10188.pdf>.

Throughout the 20th century, the growing disunity of food, consumer and national identity tested the central logic of the food identity standards. Without shared beliefs about the meaning of food purity, the standards could not provide meaningful protections for all Americans. Instead, the history of the food identity standards reflects divisions in food knowledge, consumer expectations, and national identity from 1938 to the present.

As outlined above, the food identity standards are powerful shapers of knowledge and discourse, yet no comprehensive historical studies have been conducted on these regulations. In fact, most historical studies of the pure food movement in the United States end at the turn of the 20th century. With this gap in the literature in mind, we will now discuss the existing literature relevant to this project, and the historiographical contributions of this study.

Historiography

In 1929, the father of the pure food movement in the United States, Harvey W. Wiley, implored future historians to study “the fight for the enactment of the pure food law.”⁴⁰ In many ways, historians and legal scholars have succeeded in this charge; there is a rich body of literature charting the 19th century emergence of the pure food movement and the passage of the PFDA.⁴¹ Yet, the historiography of the pure food movement of the

⁴⁰ Harvey Washington Wiley, *The History of a Crime Against the Food Law*, (Washington D.C.: Harvey W. Wiley, M.D., Publisher, 1929), 23.

⁴¹ Vivek Bammi, “Nutrition, the Historian and Public Policy: A Case Study in U.S. Nutrition Policy in the 20th Century,” *Journal of Social History* 14, no. 4 (1981): 627-648.; Ilyse D. Barkan, “Industry Invites Regulation: The Passage of the Pure Food and Drug Act of 1906,” *American Journal of Public Health* 75, no. 1 (1985): 18-26.; Andrea T. Borchers, Frank Hagie, Carl L. Keen, and M. Eric Gershwin, “The History and Contemporary Challenges of the U.S. Food and Drug Administration”, *Chemical Therapeutics* 29, no. 1 (January 2007): 1-16.

20th century, and the passage of the FDCA is more limited. This section will discuss the historiography of the U.S. pure food movement, pure food legislation, and broader themes relating to public policy, consumer activism, and industrialization in the 20th century.

The Origins of the Pure Food Movement

The history of industrialization is most widely thought to have transformed the public market sphere. The imagery of the Industrial Revolution often portrays steam engines, factories, and Charlie Chaplin's Little Tramp stuck performing the same bolt turning motion over and over again in the 1936 film *Modern Times*. Yet industrialization did not only occur in public spaces; Ruth Schwartz Cowan's work contends that kitchens industrialized just as much as factories and coal mines did.⁴² In *More Work for Mother*, Cowan points to the year 1860 as a turning point in the history of household technology, when homes went from "pre-industrial" housework, to the majority of Americans living in industrialized homes performing industrialized labor.⁴³ This process transformed every aspect of how Americans ate, from procuring, storing, preparing and serving each meal.

Arlene Finger Kantor, "Upton Sinclair and the Pure Food and Drugs Act of 1906," *The American Journal of Public Health* 66, no. 12 (1976): 1202-1205.; Marc T. Law, "How do Regulators Regulate? Enforcement of the Pure Food and Drug Act 1907-1939," *The Journal of Law, Economics and Organization* 22, no. 2 (December 2005): 459-489.; Marc T. Law, "The Origins of State Pure Food Regulations," *The Journal of Economic History* 63, no. 4 (2003): 1103-1130.; Marc T. Law, "History of Food and Drug Regulation in the United States," EH.Net Encyclopedia, ed. Robert Whaples, last modified October 11, 2004, <http://eh.net/encyclopedia/history-of-food-and-drug-regulation-in-the-united-states/>.

Goodwin, *The Pure Food, Drink, and Drug Crusaders*.

James Harvey Young, *Pure Food: Securing the Federal Food and Drugs Act of 1906*, (Princeton, NJ: Princeton University Press, 1989).; James Harvey Young, "The Pig That Fell into the Privy: Upton Sinclair's The Jungle and the Meat Inspection Amendments of 1906.," *Bulletin of the History of Medicine* 59, no. 4 (Winter 1985): 467-480.

⁴² Ruth Schwartz Cowan, *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave*, (New York, NY: Basic Books, 2008) 4.

⁴³ Cowan, *More Work for Mother*, 4.

Industrialization transformed household labor, particularly for women.⁴⁴ As Tracey Deutsch and Katherine J. Parkin note, women and food have long been linked, as the female responsibility for food preparation and the household's health has been a "ubiquitous norm."⁴⁵ The ready-made products and tools that emerged due to industrialization like processed foods, ready-made fabric, and kerosene are often thought to have made women's lives easier, however Cowan argues that they changed labor but did not eliminate it.⁴⁶ While homes stopped milling flour and instead purchased it, food was still produced in the home, even if it was prepared from purchased, processed ingredients. A part of the labor of procurement mentioned only briefly in Cohen's study is the issue of food purity and safety. She links domestic work to the production of healthy people: "Households are the locales in which our society produces healthy people, and housewives are the workers who are responsible for almost all of the stages in that production process."⁴⁷ Industrialization changed how women fed, clothed, and nursed their families by transforming how they cooked, cleaned, traveled and shopped, Within this shift, the rise of adulteration in the

The word housewifery can be traced to the 13th century. At the end of the feudal period and the beginning of capitalism the terms "husband" and "housewife" bonds middle class homeowners to their homes (16). During the 18th century men and women's labor was needed to grow food, create tools needed for food preparation, yet women were expected to cook and clean (24-25).

⁴⁴ While the household gendered division of labor existed prior to Industrialization and persisted after, it was during the nineteenth century that the home became the feminine sphere, and work became the masculine sphere in the United States. Cowan explains that many of the labor-saving outcomes of industrialization eliminated tasks that had been traditionally reserved for men, thus allowing them to enter the workforce. Men and boys stopped learning how to do tasks like preparing fuel, mending ironware, leatherwork, building fireplaces, making cider, and butchering, and instead focused on the skills that were needed to work for wages. This allowed men to transition to professional knowledge, while women and girls were tied to housework more closely than ever before. Cowan, *More Work for Mother*, 19, 67.

⁴⁵ Tracey Deutsch, *Building a Housewife's Paradise: Gender, Politics and American Grocery Stores in the Twentieth Century*, (Chapel Hill: University of North Carolina Press, 2010), 9.; Katherine J. Parkin, *Food is Love: Advertising and Gender Roles in Modern America*, (Philadelphia: University of Pennsylvania Press, 2006), 1. Quoted text is from Parkin.

⁴⁶ Cowan, *More Work for Mother*, 71, 99.

⁴⁷ Cowan, *More Work for Mother*, 101.

industrialized food marketplace increased women's responsibility to scrutinize foods for safety, authenticity, and value.

While Cowan's work describes industrialization as a process that occurred throughout most American homes, Laura Shapiro's work highlights those who embraced new industrial ideas of scientific household management. The domestic reform movement, known by the names "scientific housekeeping," "home science," "progressive housekeeping," and the most widely used "domestic science" believed that housekeeping could bring about positive social reforms. Alternatively, improper home management was thought to be directly linked to poverty, disease, unemployment, alcoholism and other "social miseries."⁴⁸ During the second half of the 19th century domestic scientists (primarily middle and upper class white women), organized clubs, cooking schools, lecture tours, and published domestic science magazines.⁴⁹ After the turn of the 20th century, the movement continued to formalize by opening degree granting institutions, creating professional organizations, and going by the new name, home economics.⁵⁰

Despite the concomitant emergence of first-wave feminism, Shapiro argues that the domestic reform movement never aligned with the feminist movement. Instead, she

⁴⁸ Laura Shapiro, *Perfection Salad, Women and Cooking at the Turn of the Century*, (Berkeley: University of California Press, 2009) 4.; Katherine Leonard Turner, *How the Other Half Ate: A History of Working-Class Meals at the Turn of the Century*, (Berkeley: University of California Press, 2014) 142.

⁴⁹ This profile also applies to participants in pure food activism, for the most part. As Katherine Leonard Turner points out in *How the Other Half Ate: A History of Working-Class Meals at the Turn of the Century*, working class Americans were unable to participate in these movements due to time, material, and financial restraints. Many working-class Americans lived in boarding houses that provided meals, so they could not practice household management in the same way. Working class women in urban areas often purchased prepared food from delis, bakeries, and saloons to save their time. These prepared foods, pizza, bagels, pretzels, were food businesses run by immigrant entrepreneurs. Rural poor Americans had more space to grow food, yet the work demands of industrialization meant many did not have time to sustain a garden. This, coupled with the limited market choices of isolation meant that many rural poor Americans ate very limited diets and were at risk for malnutrition.

Turner, *How the Other Half Ate*, 104.

⁵⁰ Shapiro, *Perfection Salad*, 7.

suggests that participants sought participation in the modern world and did so by bringing the industrial transformation to the domestic sphere, a sphere they believed should remain feminine.⁵¹

Within the broader goals of scientific household management, procuring and preparing pure food soon became a central pillar. As early as the 1870s, figures in domestic science were partnering with food companies to endorse products that aligned with their views. The Boston Cooking School magazine listed branded products in some of their recipes, such as Red Robin pudding made with Red Robin wheat. Cleveland's Baking Powder marketed their product with the names of seven prominent women in domestic science with the banner "A Bright Galaxy of Stars in the Domestic Firmament Shines Approval on Cleveland's Baking Powder."⁵² One of these stars went on to lend her name to a product: Mrs. Lincoln's Baking Powder, because she believed in promoting "pure food manufacturers."⁵³ Overall, early adherents to the domestic science movement embraced industrialized food as more hygienic, predictable and scientific, and aligned themselves with products that promised purity. Domestic scientists also became part of the business of pure food as employees of food manufacturers.

By the 1890s, the home economics movement further aligned with food marketers by participating in new pure food marketing fairs. Displays from food companies emphasized their modern production facilities and packaging, and featured lectures and

⁵¹ Shapiro, *Perfection Salad*, 9.

⁵² Shapiro, *Perfection Salad*, 194.

⁵³ Shapiro, *Perfection Salad*, 195.

demonstrations from domestic scientists. Domestic scientists commended the exhibitions as spaces of education and social betterment.⁵⁴

Domestic scientists saw new industrial products as the future of American cookery, and believed that savvy consumers could catch dealers in the act of adulterating food.⁵⁵

Ellen Richards, chemist and founder of the academic wing of the home economics movement advocated that women keep a “housekeepers laboratory” to detect adulterants in their food.⁵⁶ This movement popularized the belief that individual consumers could protect themselves from adulteration by educating themselves, reading labels, and purchasing products from companies promising purity. The tactics of this movement appealed to more educated consumers, as many 19th and early 20th century housewives were illiterate.

While home economists favored education as a way to navigate the new industrial consumer marketplace, the same period saw grassroots activism among a similar demographic of middle- and upper-class white women, agitating for pure food. In *The Pure Food, Drink, and Drug Crusaders, 1879-1914*, Lorine Swainston Goodwin contends that grassroots organizing around issues like sanitation and adulteration in production facilities like slaughterhouses and packinghouses grew during the 1870s.⁵⁷ Some campaigns began as small community groups, while others emerged through more formal, existing organizations like the Women’s Christian Temperance Union or the Federation of Women’s

⁵⁴ Shapiro, *Perfection Salad*, 197-200.

⁵⁵ This differed greatly from figures like Harvey Washington Wiley who believed that consumers could no longer spot adulteration, only trained chemists could do this. Ellen Richards believed consumers should be their own chemists and test their own food.

⁵⁶ Shapiro, *Perfection Salad*, 196.

⁵⁷ Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 22.

Clubs. As concern over pure food, drugs, and alcohol consumption grew in these circles, organizations like the Health and Heredity Normal Institute of Michigan started to teach pure food, drink, and drug activism to club members in the region.⁵⁸ The initiative was led by Ella Eaton Kellogg of the Battle Creek Sanitarium (and wife to Dr. John Harvey Kellogg of Kellogg cereal fame).⁵⁹ The curriculum of the Normal Institute promoted eugenics, and many of the quack medical beliefs of the Battle Creek Sanitarium (such as the belief that pungent sauces caused stomach muscles to lose their “natural tone”) while also teaching delegates to engage in local campaigns to promote pure food, drink and drug campaigns.⁶⁰ This early activism of the 1870s emphasized the dangers of adulterated food and unsafe drugs to public health, particularly children, a theme that remained central to the movement as it grew, formalized and gained greater influence.⁶¹ Other social clubs initially focused on literature, art, or history expanded their scope to include current affairs, which, in many cases, prompted pure food activism.

As the movement continued to grow in the 1880s and 1890s, most pure food organizers adopted the tactics of the Progressive movement. Women’s organizations like the General Federation of Women’s Clubs, and the Consumers’ Union included pure food as a central pillar in their vision for community betterment. Additionally, the Women’s Christian Temperance Union argued that the same social ills brought about by alcohol were also the result of impure food and drugs.⁶² These groups rallied around the idea of “home

⁵⁸ Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 27.

⁵⁹ Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 27.

⁶⁰ Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 30-31.

⁶¹ Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 34.

⁶² Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 35.

protection” which allowed women to engage in activism through their roles as wives and mothers without upsetting traditionalists.

Women’s clubs employed similar organizing tactics. They began by organizing committees to study the problem, then developed specific calls for action, publicized through events, pamphlets, articles, petitions, and word of mouth.⁶³ With growing membership, women’s clubs leveraged their networks to circulate petitions and influence policy. In addition to supporting the creation of legislation, these groups carefully observed the enforcement of the limited local regulations that did emerge and reported violations.

By the turn of the 20th century, temperance unions and women’s clubs had joined chemists like Harvey Washington Wiley, along with some journalists, politicians, and bureaucrats to call for comprehensive federal pure food and drug legislation. Goodwin notes that women’s organizations did not have the political power to secure this legislation alone, while other pure food campaigners did not have the organizing capabilities of the women’s clubs.⁶⁴ Between 1889 and 1905, dozens of pure food and drug laws were proposed in Congress, but never garnered enough support to pass both chambers. Ultimately, the work of journalist Upton Sinclair was the final push lawmakers needed to pass the Pure Food and Drug Act in 1906. In the end, Wiley received the bulk of the credit for the passage, yet women’s groups knew that their work advancing awareness of the issue and ensuring constant political pressure was vital in the passage of the law.

Historian Helen Zoe Veit has studied the connection between industrialization and morality in early 20th century food and nutrition to understand the history of food

⁶³ Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 80.

⁶⁴ Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 213.

modernization in the United States.⁶⁵ She argues that beliefs about food modernization were impacted by the Progressive reform ethos, the emergence of nutrition science, and World War I food policy. According to Veit, Progressives looked to “experts” to create solutions to issues that they believed were social problems like sanitation, immigrant behavior, temperance, and food purity.⁶⁶ Many Progressive reform efforts were also influenced by the popularity of eugenics and Lamarckism at this time. Progressive women elevated household management to a professionalized discipline and claimed that white middle- and upper-class women (rather than working class white Americans, recent immigrants, or African Americans) had the intellectual capacity necessary to practice successful household management.⁶⁷

According to Veit, the Progressive reverence for professionalization and eugenic beliefs also impacted their views about how non-Anglo Americans cooked and ate. For example, reformers drew a contrast between using a formalized recipe, a practice favored by white Progressive women, and preparing recipes from memory, as most African American cooks did. Progressive reformers used this practice to argue that instinctual culinary prowess among Black Americans meant they were best suited to jobs as cooks and farmers.⁶⁸ Additionally, Progressive reformers attempted to create and popularize a unified “American” cuisine based on an imagined combination of pioneer foods and foods from New England to reform the diets of immigrants from Southern and Eastern Europe.

⁶⁵ Veit, *Modern food, Moral Food*, 8.

⁶⁶ Veit, *Modern Food, Moral Food*, 4.

⁶⁷ Veit, *Modern Food, Moral Food*, 82.

⁶⁸ This argument was also invoked to keep Black Americans from moving north in the Great Migration to pursue industrial jobs and flee the segregation and violence of the Jim Crow South. Veit, *Modern Food, Moral Food*, 116-118.

Veit also argues that the discovery of calories in 1896, and vitamins in 1910, changed how individuals and the state thought about diet.⁶⁹ She explains that during this period the U.S. federal government popularized the idea that national strength depended on diet, and thus public health depended on creating a citizenry that was educated about nutrition science.⁷⁰ This belief intensified as the United States entered World War I, and half a million young men were rejected from military service due to physical insufficiency.⁷¹ The temporary wartime agency, the Food Administration, claimed that “food will win the war” but stated that this would only be possible if Americans won “victory over ourselves” through “self-control.”⁷² To achieve this, Anglo-American reformers campaigned to make rationing compulsory rather than optional because they did not believe that immigrants and black Americans were capable of self-discipline.⁷³ Overall Veit’s study details the centrality of Anglo-American identity to Progressive reforms, from the personal level to the state level.

According to Lizbeth Cohen, consumer identity was harnessed by Progressive organizers as a key element of the progressive reform ethos.⁷⁴ The Progressive era witnessed the passage of the first federal consumer protection legislation (the PFDA), which demonstrated the importance of consumers in the eyes of Progressive legislators. Cohen argues that this sentiment continued during the Depression years. Franklin Roosevelt’s administration enacted further consumer protections, including the FDCA, as a

⁶⁹ Veit, *Modern Food, Moral Food*, 26.

⁷⁰ Veit, *Modern Food, Moral Food*, 3, 20.

⁷¹ Veit, *Modern Food, Moral Food*, 51.

⁷² Veit’s work offers an early 20th century contribution to the long history of patriotic consumption in the U.S. Concern over American self-sufficiency and anti-British sentiment during independence prompted restrictions on imported goods, particularly tea. Veit, *Modern Food, Moral Food*, 4.

⁷³ Veit, *Modern Food, Moral Food*, 30.

⁷⁴ Cohen, *A Consumer’s Republic*, 21.

way to protect everyday people while still working within and maintaining a capitalist system.⁷⁵ As Americans moved into the WWII era, Cohen argues that consumerism became linked to patriotism. She describes how small tasks like preparing meals and planting victory gardens gained civic and political importance. Despite the pride Americans took in the little ways they could help the war effort, the end of the war ushered in an era characterized by consumption. Cohen states that individuals viewed consumption as an integral part of building the standard of living people wanted for post-WWII America.⁷⁶

With this trajectory of American consumer patterns in mind, Cohen outlines key periods of consumer activism. She characterizes the Progressive Era as America's "first wave consumer movement."⁷⁷ Cohen states that the "second wave consumer movement" grew during the years of the Great Depression.⁷⁸ By the early 1960s, Cohen describes a third cycle of consumer awareness that emerged as shoppers became disillusioned with the consumer goods of the 1950s, and felt empowered by President John F. Kennedy's call for a Consumer's Bill of Rights.⁷⁹ Cohen notes that this wave differed from previous iterations of the consumer movement because it focused on larger cultural issues relating to consumption and capitalism rather than the small problems consumers faced day to day.⁸⁰

Food Adulteration

⁷⁵ Cohen, *A Consumer's Republic*, 24.

⁷⁶ Cohen, *A Consumer's Republic*, 101.

⁷⁷ Cohen, *A Consumer's Republic*, 21.

⁷⁸ Cohen, *A Consumer's Republic*, 21.

⁷⁹ Cohen, *A Consumer's Republic*, 345.

⁸⁰ Cohen, *A Consumer's Republic*, 359.

The pure food activism of the 19th century emerged in response to a growth in food adulteration. In the most comprehensive text on the history of food adulteration, *Swindled: The Dark History of Food Fraud, From Poisoned Candy to Counterfeit Coffee*, Bee Wilson defines food adulteration as deliberate act of tampering with the product, and can take the form of poisoning or cheating.⁸¹ Harvey Levenstein, Kristin L. Hoganson, Suzanne Junod, and Vivek Bammi argue that food adulteration became a widespread problem in the United States as a result of nineteenth century urbanization. Prior to the shift to urban living, Hoganson states that American food was mostly homegrown, or at least produced very nearby.⁸² Levenstein outlines broad systematic and dietary changes that occurred throughout the century. Americans switched from rural to urban living, food had to travel greater distances, was produced on a larger scale, and was sold among strangers, all of which contributed to the spread of food adulteration.⁸³

Marc T. Law argues that the creation of a national food marketplace transformed foodways and the food industry. Large, multi-state food corporations like Heinz, Armour and National Biscuit edged out local and regional companies to become the most powerful voices in the food marketplace.⁸⁴ Law also notes that large meat packers and dairy producers began to dominate the market. This change diminished the power of local slaughterhouses and dairies, and increased the distance food traveled, thus also increasing

⁸¹ Bee Wilson. *Swindled: The Dark History of Food Fraud, from Poisoned Candy to Counterfeit Coffee*, (Princeton: Princeton University Press, 2008).

⁸² Kristin L. Hoganson, *Consumers' Imperium: The Global Production of American Domesticity, 1865-1920* (Chapel Hill: The University of North Carolina Press, 2007) p. 106.

⁸³ Harvey A. Levenstein, *Revolution at the Table: The Transformation of the American Diet* (Oxford: Oxford University Press, 1988) 31.

An example of this is the Chicago stockyards described in William Cronon's *Nature's Metropolis*. William Cronon, *Nature's Metropolis: Chicago and the Great West*, (New York: W.W. Norton, 1997).

⁸⁴ Law, "The Origins of State Pure Food Regulations," 1105-1106.

the risk of contamination.⁸⁵ With all of the changes happening to the food landscape, Wilson asserts that from 1870 to 1900, one out of every six deaths was the result of contaminated or impure food.⁸⁶ Bammi suggests that the risks of food adulteration disproportionately affected the poor and low income, as cheaper foods were more likely to be adulterated.⁸⁷ Lorine Swainston Goodwin challenges Bammi's view by arguing that food adulteration was so pervasive during the last three decades of the nineteenth century that it was impossible to avoid, no matter one's social standing.⁸⁸

By 1906, the passage of the PFDA was expected to wipe out food adulteration all together. In reality, the PFDA mitigated the most harmful forms of adulteration, but food adulteration persisted in new and subtler ways.⁸⁹ Foods were no longer adulterated with overt poisons like lead, but the emergence of pesticides and new food additives ushered in what Harvey Levenstein has characterized as "the golden era of food processing."⁹⁰ Wilson notes that between 1950 and 1952, a Congressional task force ordered the testing of 840 chemicals used in food to determine if they were safe. The study found that only 420 could be deemed as safe.⁹¹ Additionally, Wilson explains that the safety of food additives was further challenged in 1969 when Ralph Nader organized an additional investigation of food additives, published the findings in the popular book *The Chemical Feast*, and advocated that the FDA should prohibit additives that had not been fully tested for safety.⁹² Wilson

⁸⁵ Law, "The Origins of State Pure Food Regulations," 1105-1106.

⁸⁶ Wilson, *Swindled*, 155.

⁸⁷ Vivek Bammi, "Nutrition, the Historian, and Public Policy: A Case Study of U.S. Nutrition Policy in the 20th Century," *Journal of Social History* 14, no. 4 (1981): 30.

⁸⁸ Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 42.

⁸⁹ Goodwin, *The Pure Food, Drink, and Drug Crusaders*, 146-147.

⁹⁰ Wilson, *Swindled*, 228.

⁹¹ Wilson, *Swindled*, 231.

⁹² Wilson, *Swindled*, 261.

argues that food additives, colors, and pesticides had become the food adulterants of the twentieth century, and their widespread use had made determining food purity ambiguous.

Historian Benjamin R. Cohen's book *Pure Adulteration: Cheating on Nature in the Age of Manufactured Food* considers the history of food adulteration and industrialization through the lens of environmental history. Like Wilson, he traces the history of food adulteration back to the bible, Plato, and the Assize of Bread, because "people have forever wanted to know what is in their food."⁹³ He argues that American colonists developed a new relationship with purity, as subsistence in colonial America meant an intimate place-based knowledge of the environment and agriculture.⁹⁴ Cohen argues that Americans viewed adulteration not only as the food's distance from nature, but it was also linked to whether the food on the plate was an honest representation of nature.⁹⁵ During the nineteenth century this place-based environmental knowledge was challenged as urban consumers had to trade their personal knowledge of agrarian provenance for grocers and food labels.⁹⁶

The first federal body to govern food purity was the USDA, created in the late 1850s. The first decades of the USDA centered on testing purity on the production end, including testing the purity of fertilizer, and soil integrity, but by the late 1880s the agency began testing consumer products through the creation of the Division of Chemistry, (later known as the Bureau of Chemistry by 1901, and the Food and Drug Administration by 1930).⁹⁷ In 1883 the Division of Chemistry hired chemist Harvey Washington Wiley to analyze sugar

⁹³ Cohen, *Pure Adulteration*, 28.

⁹⁴ Cohen, *Pure Adulteration*, 33.

⁹⁵ Cohen, *Pure Adulteration*, 15.

⁹⁶ Cohen, *Pure Adulteration*, 16.

⁹⁷ Cohen, *Pure Adulteration*, 203.

and fertilizer, but soon transitioned to focus on food adulteration. According to Cohen, Wiley brought food adulteration to a national audience with the USDA bulletin #13 *Foods and Food Adulterants*.⁹⁸ By the turn of the 20th century Wiley had gained a national profile thanks to his Poison Squad experiment in which he fed preservatives and food additives to test subjects over the course of five years.⁹⁹

Throughout the second half of the 19th century, a new generation of chemists emerged to serve food purity-minded interests. These chemists worked with individual consumers seeking to have their products tested, grocer-aligned trade chemists, and governing bodies. This growing link between chemistry and purity prompted a new trust in scientifically verified “analytical knowledge” that came to supersede agrarian knowledge.¹⁰⁰ Purity was once associated with the origins of a product, and rooted in agrarian knowledge, but new scientific testing shifted purity to something that was determined at the end of the supply chain.¹⁰¹ Furthermore, Cohen argues that industrial purity came to mean a product whose chemical composition matched the vendor’s description. In sum, purity had become technical, not agricultural, or culinary.¹⁰²

Historian Anna Zeide’s work examines the impact of technology on the American food marketplace through her study of canning. She explains that canned foods offer an important window into the history of industrialization because they were the first nationally marketed, processed, packaged food.¹⁰³ Like B.R. Cohen, she links the

⁹⁸ Cohen, *Pure Adulteration*, 209-211.

⁹⁹ Cohen, *Pure Adulteration*, 218.

¹⁰⁰ Cohen, *Pure Adulteration*, 16.

¹⁰¹ Cohen, *Pure Adulteration*, 16, 196.

¹⁰² Cohen, *Pure Adulteration*, 229.

¹⁰³ Zeide, *Canned*, 3.

emergence of canned foods in the early 19th century to changes in consumer relationships to their foods. First, canning transformed how people related to the seasons because it created a new way to preserve seasonal foods. This also meant that the traditional ways consumers selected their foods were disrupted, because shoppers could no longer evaluate by looking, touching, or smelling goods.¹⁰⁴ Without opportunities to evaluate foods for themselves, consumers had to trust the quality and safety of canned foods. Initially, consumers were wary of canned foods due to the literal and figurative opacity of the product, from the packaging to the lack of information on processing and quality. Zeide explains, “This story about trust, then, is a story about knowing and not knowing about first feeling powerless in the face of impersonal structures and then finding ways to push back and exert control.”¹⁰⁵ She argues that the tension between trust and opacity reflects broader food system changes, and political institutions that feel incomprehensible and impenetrable to average Americans.¹⁰⁶

By the middle of the 20th century, the pure food movement’s leadership shifted from activist housewives to the counterculture. Warren Belasco charts the impact of the counterculture movement on the food landscape in his work, *Appetite for Change: How the Counterculture Took on the Food Industry*. He outlines how the counterculture movement of the 1960s and 1970s “rediscovered” organic food and holistic healing as an offshoot of the burgeoning environmental movement.¹⁰⁷ The movement focused on returning to “natural” foods free from artificial ingredients or plastic packaging. The counterculture also believed

¹⁰⁴ Zeide, *Canned*, 2.

¹⁰⁵ Zeide, *Canned*, 5.

¹⁰⁶ Zeide, *Canned*, 5.

¹⁰⁷ Warren J. Belasco, *Appetite for Change: How the Counterculture took on the Food Industry*, (Ithaca: Cornell University Press, 2007), 15-16.

that natural food must take time. The “countercuisine” favored foods that were old fashioned or old world, from brown rice to homemade breads to stews. Finally, they believed that natural foods could not be standardized. To move away from suburban food preferences, the “countercuisine” rejected convenience and processed foods in favor of whole foods found in co-ops and ethnic markets.¹⁰⁸

Belasco argues that newspaper columns were a primary way that the “countercuisine” movement was spread in the counterculture community. Food columns, mostly written by women, focused on changing food habits for environmental and personal health, but also because of a broader fear of impending doom. Belasco writes that the columns had an “apocalyptic urgency” that implored readers to stockpile healthy foods and maintain a fit physique to survive after the onset of a complete global Cold War atomic meltdown.¹⁰⁹ Despite the power that these women writers had in influencing counterculture food discourse, Belasco cites some unease among some members of the counterculture with the promotion of traditional gender roles.¹¹⁰

Ultimately Belasco contends that the counterculture’s interest in food stemmed from a belief that food was emblematic of what was wrong with U.S. society; these activists believed that if they could fix the food system they would be on their way to fixing society.¹¹¹ In reality, Belasco argues that the “countercuisine’s” greatest success was bringing some foods like granola to the mainstream, but could have made a greater impact if the organics movement had gained mainstream success when it first emerged in the

¹⁰⁸ Belasco, *Appetite for Change*, 41.

¹⁰⁹ Belasco, *Appetite for Change*, 30.

¹¹⁰ Belasco, *Appetite for Change*, 34.

¹¹¹ Belasco, *Appetite for Change*, 39.

1960s and 1970s.¹¹² Additionally, Belasco argues that by seeking to create their own alternative food system, from developing new foodways to growing their own food and starting their own co-op markets, rather than reforming the existing framework, the impact of the counterculture was hampered. Had the activists created lasting change, Belasco contends that “natural” in the food marketplace would be better defined, the organics movement would have grown throughout the 1970s (possibly preventing the farm crisis of the 1980s), and that illnesses from exposure to pesticides might be lower.¹¹³

While the historiography of food adulteration is limited, it does establish the long history and pervasive history of food fraud. The aforementioned texts have built an excellent narrative of the common adulterants of nineteenth century America but become less comprehensive when addressing America in the twentieth century. While Wilson’s survey is indispensable, it is just that, a survey. Greater in-depth research is needed to better understand twentieth century food adulteration issues and is warranted because of the shifts that occurred throughout the century in agriculture and food production. Establishing a more comprehensive body of work on food adulteration globally in the twentieth century will help build an understanding of how individuals have defined food purity, and how attitudes towards pesticides, food additives and processed foods have evolved.

Pure Food Legislation

¹¹² Belasco, *Appetite for Change*, 112.

¹¹³ Belasco, *Appetite for Change*, 245.

The historiography of American pure food legislation is primarily focused on the passage and function of the Pure Food and Drug Act of 1906. Despite the narrow focus of the existing literature, pure food legislation has existed in the United States since the seventeenth century. Marc T. Law writes that Massachusetts and Virginia passed laws that required inspections of meat and fish and regulated the purity of bread.¹¹⁴ Ilyse D. Barkan notes that state and federal laws were passed as early as 1831 for the regulation of foods and medicines but argues that these laws had a limited regulatory scope. In contrast to Barkan's timeline, Borchers, Hagie, Keen, and Gershwin argue that the regulation of food and drugs was handled by individual states until the 1880s.¹¹⁵ ¹¹⁶ Law argues that the fragmented nature of state-level laws made them difficult to enforce, as interstate transit became more common.¹¹⁷ In a subsequent article, Law explains that, because each state enacted slightly different legislation, many companies that operated across numerous states found it difficult to ensure compliance with each state's unique requirements.¹¹⁸ The earliest federal laws were passed in the 1880s, and regulated imported tea, oleomargarine manufacturing, and meat inspection.¹¹⁹

The Pure Food and Drug Act has the most developed historiography of any event in the history of U.S. pure food regulation. Due to the public outcry prompted by Upton Sinclair's *The Jungle*, and President Theodore Roosevelt's push to pass federal regulation,

¹¹⁴ Law, "History of Food and Drug Regulation in the United States." <http://eh.net/encyclopedia/history-of-food-and-drug-regulation-in-the-united-states/>.

Borchers, Hagie, Keen, Gershwin, "The History and Contemporary Challenges of the U.S. Food and Drug Administration," 2.

¹¹⁶ Ilyse D. Barkan, "Industry Invites Regulation: The Passage of the Pure Food and Drug Act of 1906," *American Journal of Public Health* 75, no. 1 (1985): 18.

¹¹⁷ Law, "The Origins of State Pure Food Regulations," 1103-1108.

¹¹⁸ Law, "How do Regulators Regulate?" 464.

¹¹⁹ Borchers, Hagie, Keen, Gershwin, "The History and Contemporary Challenges of the U.S. Food and Drug Administration," 2.

this history is often included in broader studies of Progressive era reforms. The multitude of books and articles on the Pure Food and Drug Act establish a consistent historical narrative.

One of the most widely discussed figures of this historiography is Harvey Washington Wiley. As discussed earlier, Wiley served as the nation's chief chemist for the Department of Agriculture beginning in 1883, and later went on to be the first commissioner of the Food and Drug Administration. Wiley consistently appears in the historiography of this era because he was involved in government, scientific testing, and activism.

Junod devotes specific attention to Wiley's philosophy on food standards in achieving pure food. She states that Wiley was specific in how he believed food adulteration should be regulated. Because of Wiley's scientific background, Junod contends that Wiley believed food identity standards were essential in the fight against food adulteration. He believed that in order to have the authority to prosecute a manufacturer or merchant for selling adulterated food, the characteristics of the genuine product must first be established.¹²⁰ As a part of Wiley's campaign for pure food legislation, he worked with the Association of Official Agricultural Chemists to create standards to be included in the proposed pure food legislation.¹²¹ In the end, Wiley's standards were cut because of the

¹²⁰ Suzanne Junod, "Food Standards in the United States: The Case of the Peanut Butter and Jelly Sandwich," in *Food, Science, Policy and Regulation in the Twentieth Century: International and Comparative Perspectives*, ed. David F. Smith and Jim Phillips (London: Routledge, 2000) 166.

¹²¹ Junod, "Food Standards," 168.

industry pressure against them.¹²² Ultimately, Wiley believed that the PFDA was weakened by the omission of food identity standards.¹²³

One of Wiley's most widely discussed acts was his "Poison Squad" experiment. Borchers, Levenstein, and Wilson have all highlighted the significance and the spectacle of Wiley's 1902 investigation.¹²⁴ In this study, Wiley tested the effects of chemical preservatives on live human volunteers, which led him to argue that these substances were overused. Levenstein links the study to the Embalmed Beef Scandal of the Spanish American War. He states that the chemicals tested were the same ones that had been used on poorly preserved meat that made soldiers sick. Borchers argues that Wiley's study was flawed by today's scientific standards (a control group was not used), yet the experiment was vital in building public pressure for a federal food purity law to be enacted.¹²⁵

Popular imagination and broader historiographies of the period attribute the passage of the Pure Food and Drug Act to Upton Sinclair's 1906 socialist novel, *The Jungle*. While the scholarly body demonstrates that the narrative is slightly more complicated than the popular mythology surrounding this text would have people believe, there is a general consensus that the book was essential in moving the issue of food purity into the mainstream.¹²⁶ James Harvey Young offers an in-depth analysis of the research Sinclair undertook in writing *The Jungle*, and the months between its publication and the

¹²² Junod, "Food Standards," 169.

¹²³ Junod, "Food Standards," 169.

¹²⁴ Levenstein, A. *Fear of Food: A History of Why We Worry About What We Eat*, (Chicago: The University Of Chicago Press, 2013), 62-64.

¹²⁵ Borchers, Hagie, Keen, Gershwin, "The History and Contemporary Challenges of the U.S. Food and Drug Administration," 5.

¹²⁶ Kantor, "Upton Sinclair and the Pure Food and Drugs Act of 1906," 1204.

Levenstein, *Fear of Food*, 64.; Borchers, Hagie, Keen, Gershwin, "The History and Contemporary Challenges of the U.S. Food and Drug Administration," 5.

ratification of the law.¹²⁷ Young focuses on Sinclair's socialist aims for the work, and his disappointment when readers focused more on his discussions of meat production rather than the plight of the worker.

Although the PFDA has received extensive scholarly attention, historical analysis of the function of the Pure Food & Drug Act demonstrates that its enduring significance is largely symbolic. Several writers note the modest achievements of the law; Andrea Borchers states that the Pure Food and Drug Act was the first federal law in America that asserted government oversight over all food and drugs and established the government as responsible for protecting consumers.¹²⁸ Law and Young, though both critical of the overall effectiveness of the law, do note some minor achievements. Young argues that the FDA was often able to enforce the law successfully when food purity was assessed using chemistry-based tests.¹²⁹ Law states that enforcement was most effective when it partnered with industries to offer consultation and regulatory services. He argues that this strategy was effective because the FDA was able to increase the safety of food in a way that was favorable to manufacturers.¹³⁰

Despite the landmark status of the law, Junod and Young detail the many ways that the law was ineffective. Focusing on the text of the law, Junod is critical of the lack of precedents for defining pure foods in addition to adulterated foods. She argues that this meant that there was no way to ensure that imitation foods were identified properly.¹³¹ She

¹²⁷ Young, "The Pig That Fell into the Privy" 467.

¹²⁸ Borchers, Hagie, Keen, Gershwin, "The History and Contemporary Challenges of the U.S. Food and Drug Administration," 6.

¹²⁹ James Harvey Young, "From Oysters to After-Dinner Mints: The Role of the Early Food and Drug Inspector," *The Journal of the History of Medicine and Allied Sciences* 42, no. 1 (1987): 47-48.

¹³⁰ Law, "How do Regulators Regulate?" 480.

¹³¹ Junod, "Food Standards," 170.

also notes that the law allowed a further loophole by permitting foods with proprietary or distinctive names to go unregulated. Her example of this is the product “Bred-Spred,” a colored jelly made from pectin and sugar which, despite never claiming to be jam, successfully deceived customers into believing it was fruit-based due to the packaging and marketing of the product.¹³² Junod ultimately argues that these oversights allowed manufacturers to use the imitation and proprietary name loopholes to exploit consumers through vague and misleading claims.¹³³

Young’s critique of the law is rooted in its practical functionality, rather than its framing. He describes how insufficient resources for inspectors, lenient penalties, and conflicts within the FDA led to continued challenges in the enforcement of the law.¹³⁴ He also notes that changing technologies in food adulterants further challenged regulations. Finally, Young describes how many companies saw the law not as a deterrent, but as a challenge to get better at fooling inspectors and the public.¹³⁵

In contrast, historiography on the FDCA is much more limited than the work on its predecessor. Just as *The Jungle* served as a catalyst for the passage of the Pure Food and Drug Act, a similar incident spurred action on overhauling the Pure Food and Drug Act. Carol Ballentine describes the Elixir of Sulfanilamide incident of 1937, in which over one hundred people were killed, mostly children, across fifteen states by a product that

¹³² Junod, “Food Standards,” 172.

¹³³ Richard A. Merrill and Earl M. Collier Jr., “‘Like Mother Used to Make’: An Analysis of FDA Food Standards of Identity,” *Columbia Law Review* 74, no. 4 (1974): 565.

Junod, “Food Standards,” 172.

¹³⁴ Young, “From Oysters to After-Dinner Mints,” 32-35.

Law, “How do Regulators Regulate?” 461-474.

¹³⁵ Young, “From Oysters to After-Dinner Mints,” 51.

contained diethylene glycol (more widely known as antifreeze).¹³⁶ The tragedy occurred because drug manufacturers were not required to test their products for safety under the PFDA. Ballentine argues that, as result of this event, pressure from consumer groups for new legislation continued to build, and the following year the Food, Drug and Cosmetic Act was passed. Despite the significance of the Sulfanilamide incident, it has received limited historiographical attention, especially when compared to the discourse surrounding *The Jungle*.

Within the limited historiography on the Food, Drug and Cosmetic Act, a handful of scholars have looked specifically at the food identity standards provision. There is a consensus within this group that the food identity standards clause was the most significant regulatory innovation in the Food, Drug and Cosmetic Act.¹³⁷ In examining the provision, Wilson states that Congress imagined that the food identity standards would serve as “national recipes” that would allow consumers to buy goods prepared to the same specifications of the homemade version.¹³⁸ Junod explains that the language of the law technically permitted three separate types of standards: standards of identity, quality, and fill of container. She states that all three were intended to ensure consumers received the value they expected from their food.¹³⁹

In sum, the historiography of American pure food legislation presents a strong, yet uneven body of work focused primarily on the passage, implementation and function of the

¹³⁶ Carol Ballentine, “Taste of Raspberries, Taste of Death: The 1937 Elixir Sulfanilamide Incident,” The U.S. Food and Drug Administration, June 1981, accessed December 2, 2015, <http://www.fda.gov/AboutFDA/WhatWeDo/History/ProductRegulation/SulfanilamideDisaster/default.html>

¹³⁷ Merrill and Collier Jr., “Like Mother Used to Make,” 566.; Wilson, *Swindled*, 225.; Junod, “Food Standards,” 180.

¹³⁸ Wilson, *Swindled*, 225.

¹³⁹ Junod, “Food Standards,” 180.

Pure Food and Drug Act. While Upton Sinclair famously lamented, "I aimed at the public's heart and by accident I hit it in the stomach," he certainly captured the hearts of historians.¹⁴⁰ In contrast, the historiography of the Food, Drug and Cosmetic Act is quite limited, despite the fact that it is America's longest-standing pure food law. While some excellent work has been done on individual food identity standards, such as Angie Boyce's study of the peanut butter standard hearings, further work is needed, especially investigating the mid-century period through the present.¹⁴¹

Public Policy

This research also engages with the historiography of public policy. Most broadly, discussions of the state by Joanna Grisinger, Theda Skocpol, and Meg Jacob explain 20th century social policy and the rise of bureaucratic agencies like the FDA.¹⁴² Cass R. Sunstein's work contextualizes the regulatory ethos behind the creation of the FDCA. Sunstein argues that regulations are aspirational and performative actions for a state. In his view, the New Deal and the 1960s-1970s were periods of governmental expansion in what he calls the "rights revolution". Through the New Deal, FDR introduced the idea that the

¹⁴⁰ Kantor, "Upton Sinclair and the Pure Food and Drugs Act of 1906," 1202.

¹⁴¹ Angie M. Boyce, "When does it stop being peanut butter? FDA Food Standards of Identity, Ruth Desmond, and the Shifting politics of Consumer Activism, 1960s-1970s," *Technology and Culture* 57, no. 1 (January 2016): 54-79.; Junod, "Food Standards in the United States: The Case of the Peanut Butter and Jelly Sandwich."

¹⁴² Joanna Grisinger, *The Unwieldy American State: Administrative Politics Since the New Deal*, (New York: Cambridge University Press, 2012).; Theda Skocpol, *Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States*, (Cambridge, MA: Belknap Press of Harvard University Press, 1992).; Meg Jacobs, "'How About Some Meat?': The Office of Price Administration, Consumption Politics, and State Building from the Bottom Up, 1941-1946," *The Journal of American History* 84, no. 3 (1997) 910-41.

government should provide security and prosperity through jobs and adequate income to protect citizens from the hazards of industrial society.¹⁴³

The creation of the regulatory state with the New Deal, and the rights revolution that followed, promoted the rise of a “massive bureaucratic apparatus” that strengthened the power of the presidency through political appointments.¹⁴⁴ Within this shift in power, numerous scholars have looked to the issue of regulatory capture, or the idea that, in the words of Carpenter and Moss, “agencies tasked with protecting the public interest come to identify with the regulated industry and protect its interest against that of the public”.¹⁴⁵ This results in regulations serving the industries they are tasked with regulating, rather than the public.¹⁴⁶

Carpenter and Moss are cautious about making accusations of capture because they believe that the phenomenon is often misdiagnosed, mistreated, or used as an explanation for every regulatory problem.¹⁴⁷ For example, they make the distinction that an industry can be well served by regulation without it being an example of capture. They state that unless the industry (or elements of it) actively and knowingly push regulation away from the public interest there can be no capture¹⁴⁸ They explain that regulations can be evaluated by asking who gains, who loses, and by how much. Using this framework reveals

¹⁴³ Cass R. Sunstein, *After the Rights Revolution: Reconceiving the Regulatory State*, (Cambridge, Mass: Harvard Univ. Press, 2010) 12-13.

¹⁴⁴ Sunstein, *After the Rights Revolution*, 227.

¹⁴⁵ Daniel Carpenter and David A. Moss, “Preventing Regulatory Capture,” in *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*, eds. Daniel Carpenter and David A. Moss, (New York: Cambridge University Press, 2014) 1.

¹⁴⁶ Carpenter and Moss, “Preventing Regulatory Capture,” in *Preventing Regulatory Capture*, 13.

¹⁴⁷ Carpenter and Moss, “Preventing Regulatory Capture,” in *Preventing Regulatory Capture*, 3.

¹⁴⁸ Carpenter and Moss, “Preventing Regulatory Capture,” in *Preventing Regulatory Capture*, 14.

that capture prevails by degree rather than the binary or presence or absence. They contend that some amount of weak capture is ubiquitous in federal agencies.¹⁴⁹

Robert Britt Horwitz argues that a 20th century “irony” of regulatory reform was liberal advocacy of deregulation to counteract regulatory capture. He contends that this confusion occurred because determining the extent to which regulations protect public interest can be a “a sort of black box whose meaning or representation is the terrain for struggle.”¹⁵⁰ Like Sunstein, Horwitz argues that regulations are a state response to instability and distrust created by industrialization and corporatization. For example, during the New Deal, regulations were created to mitigate the scale of chaos created by the Great Depression, while still protecting corporate capitalism.¹⁵¹ In contrast, the reforms of the 1960s and 1970s addressed the social impacts of businesses, not just the economic impact. Finally, he makes the distinction that during the Reagan era, “social” regulatory agencies were cut (like the EPA, Occupational Health and Safety), but they were not deregulated.¹⁵²

Finally, Allison Perlman’s study *Public Interests: Media Advocacy and Struggles Over U.S. Television* offers a model for studying the role of social movements on public policy. Perlman’s work on the Black Freedom Movement’s campaigns against racism in broadcasting demonstrates the way that public policy is often reliant on a singular “general public,” and how policy activism can challenge this construct.¹⁵³ Additionally, activism by

¹⁴⁹ Carpenter and Moss, “Preventing Regulatory Capture,” in *Preventing Regulatory Capture*, 12.

¹⁵⁰ Robert Britt Horwitz, *The Irony of Regulatory Reform: The Deregulations of American Telecommunications*, (New York: Oxford University Press, 1989), 9.

¹⁵¹ Horwitz, *The Irony of Regulatory Reform*, 10.

¹⁵² Horwitz, *The Irony of Regulatory Reform*, 6.

¹⁵³ Alison Perlman, *Public Interests: Media Advocacy and Struggles Over U.S. Television*, (New Brunswick: New Jersey: Rutgers University Press, 2016), 48.

the National Organization of Women challenged policymakers to reform and regulate media representations of women.¹⁵⁴ Overall Perlman argues that identity-blind policies perpetuate social inequality.¹⁵⁵

In sum, the historiography of public policy offers a framework for evaluating the extent to which the standards represented public interest. While there is ample scholarship on public policy of the 20th century, particularly on the legacy of New Deal welfare programs, the Food, Drug, and Cosmetics Act has received limited engagement from food policy historians. Additionally, regulatory agencies like the FDA have also seen few historian studies. This dissertation will contribute to this historiography by studying the food identity standards from below, with a focus on consumer activism, representation, and identity.

Archives and Chapter Structure

This project primarily draws from governmental primary sources relating to the creation and implementation of food identity standards. A standard is first announced and proposed in the Federal Register, the daily journal of the U.S. government. Discussions of standards also appear in the Congressional record. Once a standard is ratified it becomes part of the U.S. Code of Federal Regulations. At times, the creation or revision of food identity standards is discussed in popular publications, particularly newspapers and

¹⁵⁴ Perlman, *Public Interests*, 66.

¹⁵⁵ Perlman, *Public Interests*, 184.

magazines. Additionally, food identity standards are considered widely in legal cases. All these sources are central to this project.

The bulk of my sources were accessed digitally, thanks to the wide availability of digitized Federal documents, legal cases, and periodicals. In addition to these sources, I utilized the Lawrence B. Romaine Trade Catalog Collection at UC Santa Barbara's Special Collections, and the San Francisco-based archives of the California Historical Society.

This project is organized thematically and chronologically. Chapter 1 discusses the early years of the food identity standards. Using FDA consumer publications, court cases, and the standards themselves, this chapter considers how the FDA implemented food identity standards during the first ten years of the provision. To make this argument, this chapter considers the congressional, Food and Drug Administration, and Department of Agriculture (USDA) discourses relating to the formation of early food standards, and the FDA's engagement with consumers through outreach programs like newsletters and radio programs. This chapter contends that this set a precedent for calibrating the standards based on the foods of the Anglo-American mainstream, and a conflation among lawmakers of consumer and housewife identity.

Chapter 2 looks to the post-WWII period, and the emergence of the golden age of food processing to understand how the food identity standards, and notions of food purity more broadly, adapted to the industrialization of the post-WWII marketplace. This chapter draws from newspaper and magazine articles to trace the adoption of emulsifiers in the bread and cheese standards. This section also looks at a court case regarding jam to understand the growing acceptance of ersatz foods. All together, these case studies reveal a new distrust of processed foods among some consumers that undermined the prevailing

hegemony of chemists to determine food purity. More broadly, this moment represents the beginnings of popular anxieties about industrialization and food purity that has continued to grow into the 21st century.

Chapter 3 expands the post-WWII consideration of food identity standards to the Global Cold War. This chapter builds upon the historiography of Cold War food aid to argue that domestic food identity standards were viewed as a key element in selling U.S. food aid overseas. Two foods, fish flour and dry milk, were touted as solutions to the global hunger crisis, yet industry and lawmakers believed that these foods would only be accepted overseas if they had standards of identity. The belief that food identity standards had global relevance reveals their power in legitimizing foods and demonstrates how food standards were invoked in the ideological battle to sell American identity through capitalism and democracy.

Chapter 4 considers the role of the food industry in influencing the creation and enforcement of food identity standards. This chapter focuses on the dairy industry, with case studies on margarine standards of identity, additives in ice cream, and the role of brand identity. This chapter argues that the food industry engages with food identity standards in several key strategic ways. First, the dairy industry invoked an agrarian American identity to justify regulations against margarine, thus creating a narrative that standards should protect farmers rather than consumers. Second, in the case of the Great Ice Cream Battle of 1977, competing interests within the dairy industry used the nostalgic power of ice cream to argue for FDA oversight that favored their interests. Finally, food industry interests sought to advance consumer knowledge of their brand name products over the common or usual name of food standards. Overall, this chapter demonstrates how

the dairy industry relied upon consumer imagination and emotion relating to farming, staples of mainstream American foodways like ice cream, and brand identity versus product identity.

Chapter 5 considers how the pure food movement continued in the second half of the 20th century and into the 21st century. Through case studies on the activism of the Federation of Homemakers in the 1960s through the 1980s, the pure foodists of the counterculture, and pure food class action lawsuits of the 2010s, this chapter argues that the pure food movement did not end with the passage of the FDCA. Instead, group publications, congressional documents, alternative newspapers, cookbooks, and court cases demonstrate a continuous attention to safety, authenticity, and value that has defined the pure food movement since the nineteenth century.

Finally, this project concludes with a consideration of the present and future of food identity standards. Today, the food identity standards are hardly known by consumers at all, yet attention to food purity issues like food additives, organic farming, GM foods, and fair-trade certifications is growing. At the same time, interests like the dairy industry are capitalizing on the limited mainstream knowledge of food identity standards to use them to their advantage, such as the dairy industry's recent calls for strict regulations of terminology like butter and milk. Nevertheless, in response to the FDA's docket "Use of the Names of Dairy Foods in the Labeling of Plant-Based Products," consumers submitted 8,412 comments. This example demonstrates that when given the opportunity, 21st century pure foodists are eager to contribute to the discourse of food identity standards. To better promote honesty and fair dealing in the interests of consumers, regulators must

recenter the voices of consumers. Additionally, contextualizing the 21st century pure food movement in its progressive roots could offer strategies to grow and unify the movement

Chapter 1

Pure Imagination: The first Decade of the Food Identity Standards

In such a situation as has grown up through our rising level of living and our multiplication of goods, consumers are prevented from choosing intelligently and producers are handicapped in any attempt to maintain higher standards. Only the scientific and disinterested activity of Government can protect this honor of our producers and provide the possibility of discriminating choice to our consumers.¹

“A Message to the Congress on Pure Foods and Drugs”

March 22, 1935

President Franklin Delano Roosevelt

In June of 1938, the United States Congress passed the Federal Food, Drug and Cosmetic Act (FDCA) as a part of President Franklin Delano Roosevelt’s (FDR) Second New Deal. In the midst of the Great Depression, lawmakers believed that the food marketplace had grown too corrupt for consumers to make informed decisions about the purity and safety of their food and voted to create greater oversight of the safety and quality of commonly adulterated products.²

The identity standards marked a new approach to U.S. pure food regulations, and was a direct attempt by lawmakers to address the limitations of the PFDA.³ A 1941 report

¹ Kenneth F. Davis, *FDR: The New Deal Years 1933-1937*, (New York: Random House, 1986), 485-486.

² Richard A. Merrill and Earl M. Collier Jr., “‘Like Mother Used to Make’: An Analysis of FDA Food Standards of Identity,” *Columbia Law Review* 74, no. 4 (May 1974): 567.; William F. Cody, “Food Standards and the White House Conference on Food and Nutrition,” *The Food Drug and Cosmetic Act Law Journal* 26, no. 8 (August 1971): 349.

After years of debate about implementing a federal food standards power, and the creation of some individual standards like oleomargarine, Congress opted to include a food standards provision in the new FDCA.

³ Although the use of food standards had been considered in the framing of the PFDA, and selectively implemented for foods like oleomargarine in earlier decades, the Great Depression convinced legislators.

produced by the FDA stated that the PFDA was “largely negative in its provisions” as “it named certain practices as taboo, but did not list the affirmative requirements of honesty and safety in the merchandising of food and drug products.”⁴ Instead the food identity standards provision outlined an affirmative regulatory model:

Whenever in the judgement of the Secretary such action will promote honesty and fair dealing in the interest of consumers he shall promulgate regulations fixing and establishing for any food under its common or usual name so far as practicable, a reasonable definition and standard of identity, a reasonable standard of quality and/or reasonable standards or fill of container.⁵

In short, this provision granted the FDA commissioner the power to standardize food quality, packaging fill, and recipes for commonly recognized foods. These three types of standards were meant to ensure that consumers received the value they expected from their food. However, it was the food identity standards that offered the greatest potential for transforming the food marketplace by granting the federal government control over the names of foods that entered interstate commerce.⁶

The standards provision was reported widely by the news media. Journalists of the period saw the food standards provision as one of the most significant innovations of the new law, ranking it alongside the new federal oversight of cosmetics, and mandatory safety testing of new drugs.⁷ Consumers agreed, characterizing the law as a “great advance”.⁸

⁴ Mary Taylor, “Consumers’ Guide,” *Agricultural Adjustment Administration* 5, (1938).

⁵ 21 U.S. Code § 341 - Definitions and standards for food, Public Law 75-717, *U.S. Statutes at Large* 52 (1938): 513.

⁶ Suzanne Junod, “Food Standards in the United States: The Case of the Peanut Butter and Jelly Sandwich,” in *Food, Science, Policy and Regulation in the Twentieth Century: International and Comparative Perspectives*, ed. David F. Smith and Jim Phillips (London: Routledge, 2000) 180.

⁷ “New Food and Drug Bill Given to House,” *Los Angeles Times*, April 16, 1938.; “President Breaks Deadlock on Food and Drug Bill,” *Los Angeles Times*, June 12, 1938.

⁸ Louise G. Baldwin and Florence Kirlin, “Consumers Appraise the Food, Drug and Cosmetic Act,” *Law and Contemporary Problems* 6, no. 1 (Winter 1939): 144.

With the new law in place, this chapter examines the first decade of the food standards program to understand how the first standards were created, how the standards impacted consumers, and how consumers engaged with the food identity standards. This chapter uses government publications to argue that the FDA's food identity standards of the late 1930s and early 1940s prioritized foods that had entered the mainstream and become accepted as American. This trend towards Anglo-American foodways reflected contemporary nutritional anxieties about creating "healthy" citizen consumers that grew in WWII and intensified in the Cold War era, such as the fish flour standard debate discussed in chapter 3. Ultimately, these early standards, particularly the alimentary paste standards, demonstrate how food identity standards served state nutritional aims outside of promoting honesty and fair dealing in the interest of consumers. Finally, this chapter studies FDA and U.S. Department of Agriculture consumer outreach about food standards from the 1930s to the late 1940s. While this period marks the only sustained educational campaign about food standards, the publications reveal that these agencies focused on engaging homemakers, who they believed were the primary consumers in the food marketplace. This section examines two government publications, the Consumers' Guide, and the Homemakers' Chat, to understand how government agencies engaged with consumers about food standards. These sources demonstrate that agencies targeted housewives with information about food standards.

Standards-Craft

With the power to create food standards in place, the FDA began drafting regulations with the stated goal of freeing consumers from adulteration and requiring truthful labeling.⁹ A good example of this is the canned pea standard enacted in 1940:

- Canned peas are the food prepared from one of the following optional pea ingredients:
- (1) Shelled, succulent peas (*Pisum sativum*) of Alaska or other smooth skin varieties;
 - (2) Shelled, succulent peas (*Pisum sativum*) of sweet, wrinkled varieties;
 - (3) Shelled, dried peas (*Pisum sativum*) of Alaska or other smooth skin varieties;
 - (4) Shelled, dried peas (*Pisum sativum*) of sweet, wrinkled varieties.
- (b) To one such optional pea ingredient water is added.
- (c) The following optional ingredients may be present:
- (1) Salt;
 - (2) Sugar;
 - (3) Dextrose;
 - (4) Spice;
 - (5) Flavoring;
 - 6) Artificial coloring.
- (d) The food may be seasoned with one or more of the following optional seasonings:
- (1) Green peppers;
 - (2) Mint leaves;
 - (3) Onions;
 - (4) Garlic;
 - (5) Horseradish.
- (e) The food is sealed in a container and so processed by heat to prevent spoilage¹⁰

Though the standard contains some technical language like the scientific names for the acceptable pea varieties, and the option to include ingredients like dextrose and artificial coloring, for the most part the ingredients and method of this standard would

⁹ Food and Drug Administration, "Enforcement of the Federal Food, Drug, and Cosmetic Act," 1.

¹⁰"Canned Peas: Definitions and Standards of Identity," *Code of Federal Regulations: 1940 Supplement*, title 21 (1940): 1629-1632.

have likely made sense to a home cook in 1940.¹¹ By treating the identity standards as a way of bringing homemade preparations to America's grocery shelves, Congress also created a market in which foods would be familiar, and that from brand to brand, store to store, products would be consistent and meet their expectations.¹² While industrialization was seen as a marker of advancement in the public sphere, in food preparation, the domestic sphere was still seen as the ideal.

The ideal of the home pantry can also be seen in the first standards selected. From 1938 to 1940, the FDA created standards for canned tomato products, egg products, canned vegetables, canned fruits, cream products, jam and jelly, all foods that would have been familiar to a mainstream consumer. During WWII, the FDA's new standards focused on a variety of flour and chocolate standards.¹³ This period also saw the controversial creation of a standard of identity for oleomargarine, a decision that prompted swift criticism from the dairy industry that the FDA was protecting a so-called ersatz food (this legal challenge will be discussed further in chapter 4).

¹¹United States Department of Agriculture, "Home Canning Methods," (Washington DC: United States Department of Agriculture, Office of Information, Radio Service, 1936) 2, <https://archive.org/details/homecanningmetho1936unit/page/n3>.

¹² H. Thomas Austern, "Food Standards: The Balance Between Certainty and Innovation," *Food Drug and Cosmetic Law Journal* 24, no. 9 (September 1969): 441.

¹³ From 1941 to 1943 the FDA created more expansive collections of standards in the flour, cheese and chocolate categories with more specialized products. The standards for flours included white flour, enriched flour, bromated flour, durum flour, self-rising flour, enriched self-rising flour, phosphated flour, whole wheat flour, bromated whole wheat flour, whole durum wheat flour, crushed wheat, cracked wheat, farina and enriched farina (more on the enriched farina standard in the next section). Like the flour standards, the chocolate standards also reveal a turn to products used in food manufacturing. The FDA created standards for cacao nibs, chocolate liquor, breakfast cocoa, cocoa, low-fat cocoa, sweet chocolate, milk chocolate, skim milk chocolate, buttermilk chocolate, mixed dairy product chocolates, sweet chocolate and vegetable fat (other than cacao fat), and sweet cocoa and vegetable fat (other than cacao fat). The body of the standards for many of the cacao products like chocolate and cocoa made with vegetable fat describe the use of these ingredients in the manufacture of confectionary as coatings, suggesting that the FDA was imagining food standards as ingredients in manufactured foods, not just protections for individual products

After six years of mainstream standards, the FDA introduced their first non-Anglo food standard. In 1944 the FDA began considering the creation of standards of identity for “alimentary pastes” or pasta. Acting FDA Administrator Watson B. Miller described “alimentary pastes” as a group of products “prepared from semolina, durum flour, farine, flour or any combination of two or more of these, made into a dough with water.”¹⁴ Miller stated that the naming conventions of noodles and macaroni are based on Italian names and are:

“Usually understood by consumers of Italian origin or descent, but most of the designations such as ‘zitoni,’ ‘capellini,’ ‘maruzze,’ ‘farfale,’ are meaningless to American consumers generally... Specific designations which appear to be understood by the public generally are ‘macaroni’ and ‘spaghetti’... Some persons of non-Italian origin understand the designation ‘vermicelli’. These names have been included in the advisory standards under the Food and Drugs Act of 1906 since 1917 and appear in current dictionaries of the English language.”¹⁵

This passage confirms that the FDA was calibrating the language of food identity standards for an imagined mainstream consumer. Miller acknowledged the Italian origins of the pasta names but clarifies that he is seeking to make the language intelligible to “American consumers generally” by consulting current American English dictionaries. Additionally, the report differentiates between general consumers and Italian Americans. For example, in the discussion of per capita alimentary paste consumption, the report lists a general

¹⁴ Watson B. Miller, “Title 21-Food and Drugs; Chapter I-Food and Drug Administration; Part 16-Alimentary Pastes; Definitions and Standards of Identity; Macaroni and Noodle Products,” *Federal Register* 9, no. 256 (December 23, 1944): 14881, https://heinonline.org/HOL/Page?collection=fedreg&handle=hein.fedreg/009256&id=7&men_tab=srchresults.

¹⁵ Miller, “Title 21,” 14882.

figure of 5 pounds. This figure is contrasted with the habits of “persons of Italian extraction” who were thought to far exceed the 5-pound mark.¹⁶

Miller’s statement also studies the nutritional implications of macaroni products enriched with milk. Miller believed that the marketing of enriched macaronis could deceive consumers into thinking these products had an exaggerated nutritional profile. In response the FDA permitted the use of liquid milk to create a pasta in the style of a milk bread but stated that the addition of milk solids, particularly dried skim milk, misled consumers. They also concluded that the use of carotene to enrich alimentary pastes could deceive consumers into thinking the product had eggs in it due to the color. Additionally, the FDA also limited the use of water-soluble vitamins in enriched macaroni products due to concerns that the nutritional profile would change once the pasta was boiled in water.

Ultimately, the FDA enacted eight standards in the alimentary paste category: macaroni products, milk macaroni products, whole wheat macaroni products, wheat and soy macaroni products, vegetable macaroni products, noodle products, wheat and soy noodle products, and vegetable noodle products. The process of writing the alimentary paste standards demonstrate a dedication to promoting honesty and fair dealing in the interest of consumers by limiting deceptive ingredient and enrichment practices.¹⁷ At the same time, the FDA formulated these standards for imagined mainstream consumer knowledge.

Two years later in 1946, the Alimentary paste standards were amended (except whole wheat macaroni products), and standards for enriched noodles and macaroni were

¹⁶ Miller, “Title 21,” 14884.

¹⁷ Miller, “Title 21,” 14882-14884.

added.¹⁸ Despite the FDA's initial belief that enriched alimentary paste products might deceive consumers regarding the loss of nutrients in the pasta water, they now thought that enriched macaroni could address the widespread vitamin deficiency in the United States.¹⁹ The FDA's research claimed that "inadequate diets" were most widely found among low-income families.²⁰ They highlight the conditions of Italian Americans, who they characterized as living in low-income urban communities, consumers of large amounts of bread and pasta, and at risk for nutritional deficiencies. Because of this, the report states that "their [Italian Americans] diet would be materially improved by the enrichment of macaroni and noodle products."²¹

All in all, the first three years of the food standards suggest an effort to create standards in the image of the Anglo-American pantry. The first foods standardized, like jam, cream and eggs, suggest an attention to standardizing mainstream pantry items, while the adoption of the recipe formal suggests a desire to model the national food marketplace

¹⁸ "Appendix- Findings of Fact and Conclusions [Added]; Findings of Fact and Conclusions Re Docket No. FDC 33 (B)," *1946 Supplement to the Code of Federal Regulations of the United States of America*, title 21(1946): 2956,

https://heinonline.org/HOL/Page?collection=cfr&handle=hein.cfr/cfr1947003&id=19&men_tab=srchresults. The amendments affected all original alimentary paste standards by permitting the optional use of gluten to account for deficiencies and varying gluten content in raw materials. The FDA maintained that they were not creating standards for glutenous macaroni, a product that had become popular in health food circles and "reducing" diets. The FDA stated that "the use of alimentary pastes containing added gum gluten for supplementing the protein content of the diet is irrational and uneconomical"

¹⁹ "Appendix," *1946 Supplement to the Code of Federal Regulations*, 2958.

²⁰ "Appendix," *1946 Supplement to the Code of Federal Regulations*, 2957.

²¹ The enriched corn product standards of 1947 demonstrated a similar concern for dietary deficiencies. The statements of fact included in the Code of Federal Regulations explain that dietary survey in states with high corn consumption revealed that people in low-income brackets were often deficient in thiamine, riboflavin, niacin and iron, thus putting them at risk for Pellagra. The report explains that, prior to the creation of standards of identity for corn products, some southern states required the enrichment of corn products made from which parts of the germ had been removed. Those states were Alabama, Georgia, Mississippi, North Carolina, and South Carolina.

"Appendix- Findings of Fact and Conclusions; Findings of Fact and Conclusions Re Docket No. FDC 44," *1947 Supplement to the Code of Federal Regulations of the United States of America*, title 21(1947): 3513-3514, https://heinonline.org/HOL/Page?collection=cfr&handle=hein.cfr/cfr1948003&id=641&men_tab=srchresults.

after the standards of a housewife. The alimentary paste standards reveal how the FDA conceptualized the mainstream, and how nutritional anxieties about non-Anglo populations prompted the creation of enriched versions of standards.

Classifying Consumers

The Food Standards Committee is not concerned with difference of quality, but with identity. It tries to determine the consumer understanding of the nature of the produce-- what ingredients the consumer thinks are in it when he buys it.

Homemakers' Chat Radio Program
USDA Radio Service
March, 1940²²

Just as legislators began crafting identities for foods, there was also a reciprocal process of identifying the audience who would engage with the new food standards. Government and industry imagined consumers as homemaker middle class women.²³ Because the grassroots pure food movement was primarily led by housewives, lawmakers saw these identities as one in the same.²⁴ The FDA and USDA targeted their consumer

²² "Food Standards," *Homemakers Chat*, United States Department of Agriculture Office of Information Radio Service, March 11, 1940, 4,

<https://archive.org/details/foodstandards1940unit/page/n1?q=standard+of+identity>.

²³ Zeide, *Canned*, 18

²⁴ Consumer identity during the 1930s was linked to housewives, since they were not seen as "producers" in the economy, in the way that men who worked outside the home might have. Housewives who did not work outside the home were typically more affluent and came from Anglo backgrounds.

"Although nearly a quarter of women worked outside the home in the 1930s, women were still generally pictured primarily as homemakers, responsible for consumer decisions and less concerned with production. Thus, much of the New Deal conversation about consumers- and certainly about grade labeling- focused primarily on American housewives who did not work outside the home. This was a convenient way of collapsing a more complicated body of consumers into a single stereotype, which was easy to make assumptions about as a target of marketing and economic policy."

Anna Zeide, *Canned: The Rise and Fall of Consumer Confidence in the American Food Industry*, (Berkeley: University of California Press, 2019) 111.

outreach publications, *Consumers' Guide* and *Homemakers' Chat* to housewives as well. Initially, these publications focused their advice on Depression-era budgeting and food-cost concerns. Yet, as the United States entered WWII, publications like the *Consumers' Guide* increasingly offered consumer and nutritional advice in service of advancing wartime aims of creating a robust and healthy citizenry. In the post-WWII period, these publications increasingly focused on global hunger issues as a reflection of growing Cold War tensions. These sources represent the only consistent consumer education initiatives about the food identity standards. Their focus on housewives appealed to consumers who might have already been involved in pure food activism but were not designed to reach new demographics of consumers.

The *Consumer's Guide* was first published in 1933 by the Consumers' Counsel Division of the Agricultural Adjustment Administration. The publication promised to be "a bi-weekly bulletin to aid consumers in understanding changes in prices and costs of food and farm commodities and in making wise economical purchases."²⁵ This newsletter was introduced at a time when the United States was still experiencing the dual crises of the Great Depression and the Dust Bowl, and promised to help readers navigate increasing food prices by advising them to read labels and ask merchants to implement quality grades.²⁶ When the food identity standards were introduced five years later, the *Guide*

²⁵ Consumers' Counsel of the Agricultural Adjustment Administration, "Food Facts for Consumers," *Consumers' Guide* 1, no. 2 (September 28, 1933): 24, <https://babel.hathitrust.org/cgi/pt?id=mdp.39015082284293&view=1up&seq=24>.

²⁶ Bureau of Agricultural Economics, "Food Facts for Consumers," 23.

regularly updated readers about new standards and how they would affect the marketplace.²⁷

At first, the *Consumers' Guide* alerted readers to the legislative function of the law, and later issues detailed the significance of new standards. For example, the February 1939 issues highlighted the FDA's plans to create standards of identity for chocolate, and explained that learning the differences in formulation between the standards for a "chocolate drink" and a "chocolate milk" could save consumers money.²⁸ An article from the March 1939 edition of the *Consumers' Guide* explained that the FDA created a standard of identity for mayonnaise to "lend a hand when producers and consumers alike were stumped in deciding when mayonnaise ceased being mayonnaise and became just salad dressing."²⁹ The article went on to caution consumers about salad dressings, as they were not governed by any government oversight. These case studies demonstrate that knowledge of food identity standards was an important element in how the USDA and FDA conceptualized smart consumer habits.

The United States Department of Agriculture also attempted to reach consumers through their radio program *The Homemakers' Chat* that ran from 1926 to 1946. During

²⁷ A copy of the Consumers' Guide newsletter published one month (July 1938) after the FDCA was enacted described how the new law differed from its predecessor, the PFDA: "Continued shifting in food preparation away from the home to the factory... aggravated problems in regulation of those products which were covered by the old law." They explain that the new law monitors food sold in interstate commerce, and that FDA officials will enforce the law by seizing products in violation of the law, applying increased criminal penalties for violations, and inspecting factories (a new power for the FDA).

Consumers' Counsel of the Agricultural Adjustment Administration, "New Rules for Foods and Drugs: An interpretation of the provisions in the new law protecting the Nation's food, drug, and cosmetic supplies," *Consumers' Guide* V, no. 6 (July 1938): 3-7, <https://babel.hathitrust.org/cgi/pt?id=coo.31924065130787&view=1up&seq=114&skin=2021>.

²⁸ Consumers' Counsel of the Agricultural Adjustment Administration, "On the Consumer Front: Notes from Government Agencies at work for consumers," *Consumers' Guide* V, no. 18 (February 27, 1938): 14, <https://babel.hathitrust.org/cgi/pt?id=coo.31924065130787&view=1up&seq=439&skin=2021>.

²⁹ Consumers' Counsel, "On the Consumer Front," 14.

this time, the series regularly discussed the significance of food identity standards and how listeners could participate in the creation of standards.³⁰ The *Homemakers' Chat* also explained the significance of identity in food identity standards:

The popular idea of a 'standard' is that the word refers to a very high grade. The Food Standards Committee is not concerned with difference of quality, but with identity. It tries to determine the consumer understanding of the nature of the produce-- what ingredients the consumer thinks are in it when he buys it.³¹

The presenters linked the centrality of consumer views to participation, particularly by attending hearings, to ensure "that the record will contain direct evidence of their views."³²

While it can be difficult to trace engagement with these programs and publications, a March 1939 edition of the *Consumers' Guide* discussed the demographics of their readership based on responses to a "Consumer I.Q." contest they ran about weights and measures. Of their 428 responses, they had readers in nearly every state, with the largest proportions in New York, Illinois, Pennsylvania, New Jersey, and California. In terms of income analysis, they described their readers as socioeconomically diverse: "We have no

³⁰ On January 29, 1940, the Homemakers' Chat aired an episode titled "Foods Under the New Food, Drug and Cosmetic Act" the broadcaster focused almost entirely on food identity standards. The announcer encouraged listeners to carefully read product labels and explained that food standards were gradually being written. Another episode that aired on March 11th, 1940 explained what food identity standards were, and solicited listener's input on new standards for bread, ice cream and jam.

"Foods under the new Food, Drug, and Cosmetic act", *Homemakers Chat*, United States Department of Agriculture Office of Information Radio Service, January 29, 1940, 2, <https://archive.org/details/foodsundernewfoo1940unit/mode/2up?q=standard>.

"Food Standards," *Homemakers' Chat*, 2-3, <https://archive.org/details/foodstandards1940unit/page/n1/mode/2up?q=standard>.

On February 21, 1941, the Homemakers' Chat included a feature on making cherry desserts to celebrate George Washington's birthday. The episode detailed the standard of identity for canned cherries and how they might affect "you as a cherry shopper," including the different types of cherries (red tart, red sour, dark sweet, light sweet), what distinguishes these different types of cherries, how they might be used, and how the cherry standards fit in to the other standards of identity for canned fruit.

"Cherries," *Homemakers Chat*, United States Department of Agriculture Office of Information Radio Service, 2, <https://archive.org/details/cherries1941unit/page/n3?q=standard+of+identity>.

³¹ "Food Standards," *Homemakers Chat*, 4.

³² "Food Standards," *Homemakers Chat*, 6.

way of telling how the contestants fitted into low- or high-income groups. But a check of their occupations indicates that consumers of both slim and fairly bulging purses are interested in correct weight and honest measure when they go to buy.”³³ Almost half of the respondents identified as housewives, however the agency described the vocations represented as “more varied than the files of an employment agency.”³⁴ The survey doesn’t address gender, however the four winners of the contest do suggest some gender diversity: Mrs. Paul Clumpner (housewife from Metaline Falls, Washington), Reverend Mr. Ora Huston (minister, Oklahoma City, OK), Wilfrid Rall (high school student from Washington DC), and Mrs. Sidney Schwartz (housewife, New York City).³⁵ Despite this purported diversity, the publication refers mostly to housewives and uses the pronouns “she/her” throughout their articles, suggesting that women were their imagined reader.³⁶

The *Consumers’ Guide* was created as a part of numerous New Deal programs intended to study and reach consumers. Consumers were viewed as a key driver of the economic recovery from the Depression, yet regulators found consumers were difficult to quantify because buying tended to occur on an individual or household level. Instead, Americans during this period were more likely to organize around other facets of identity,

³³ Consumers’ Counsel of the Agricultural Adjustment Administration, “The Winners,” *Consumers’ Guide* V, no. 19 (March 13, 1939): 11-12, <https://babel.hathitrust.org/cgi/pt?id=coo.31924065130787&view=1up&seq=469&skin=2021>.

³⁴ Consumers’ Counsel, “The Winners,” 12.

³⁵ Consumers’ Counsel, “The Winners,” 11.

³⁶ An example of this is the article “Researching for Consumers” (full citation below) in which consumers and homemakers are used interchangeably throughout the article.

Consumers’ Counsel of the Agricultural Adjustment Administration, “Researching for Consumers: Putting science to work for homemakers, State Experiment Stations produce new rules for selecting, preparing and handling of foods,” *Consumers’ Guide* V, no. 1 (April 11, 1938): 12-14, <https://babel.hathitrust.org/cgi/pt?id=coo.31924065130787&view=1up&seq=24&skin=2021>.

such as labor or industry affairs.³⁷ To better understand consumers, the Agricultural Adjustment Administration contacted mayors and asked them to create local consumers' councils. These local consumer organizations disseminated AAA data and were encouraged to subscribe to the *Consumers' Guide*.³⁸

In addition to individual and group subscriptions to the guide, stories were also reprinted in newspapers and magazines, and shared on radio programs.³⁹ By 1935, housewife leagues were multiplying rapidly, and the *Consumers' Guide* had a circulation rate of 55,000 subscribers.⁴⁰ Additionally, the Consumers' Council reported growing interest in radio programming. By 1935 they provided 150 radio stations with weekly talks on advice for consumers, and had received consumer requests to expand into 10 additional municipalities.⁴¹ By March of 1938, the circulation of the *Consumers' Guide* had grown to 105,000 subscribers, primarily housewives in North Central states, and by October of 1938,

³⁷ Mildred Adams, "On the Trail of the Elusive Consumer: The Mythical Creature Whose Cooperation is Needed for the Recovery Program Is Subject of Deep Study," *New York Times*, October 15, 1933. While some National Women's Organizations represented consumers by monitoring legislative activity, these organizations were not solely focused on consumer issues.

³⁸ Reprintings of the *Consumers' Guide* appeared regularly in local newspapers nationwide like the *Utah Labor News* (Salt Lake City), *Muscatine Journal and News-Tribune* (Muscatine, Iowa), *The Freeport Journal-Standard* (Freeport, Illinois) and the *Indiana Gazette* (Indiana, PA).; Adams, "On the Trail of the Elusive Consumer," *New York Times*.

³⁹ Reprintings and aggregations of the *Consumers' Guide* appeared consistently in local newspapers nationwide. For example: "Consumer Notes," *Utah Labor News*, May 20, 1938; "Junior Bureau Arranges Events for Remainder of Year; Schedule Listed," *Muscatine Journal and News-Tribune*, May 3, 1938. "The *Consumers' Guide*," *The Indiana Gazette*, November 9, 1933, 4.; "AAA Briefs from your Department of Agriculture: Market News for Housewives Told by *Consumers' Guide*," *Freeport Journal-Standard*, November 22, 1934.; The *Consumers' Guide* was also mentioned in women's magazines. For example: "Fish Leads to Food Bargains: *Consumers' Guide* Also Lists Green Vegetables at Low Price," *New York Times*, April 13, 1934.; "A Defense Program 25 Weeks Long," *Parents' Magazine*, June 1942. Eva Selden Banks and Cecily Brownstone, "How to Eat in Hot Weather," *Parents' Magazine*, July 1942. Anna M. Wolf, "Group Study Course: Study Course on the School-Aged Child," *Parents' Magazine*, February 1940.; Elizabeth Bussing, "Marriage Makes the Money Go: Number 6 In The Course on Marriage Relations," *Good Housekeeping*, February 1938, 122.

⁴⁰ Frank George, "Study of the Consumer: Washington Watches His Response to Rising Prices and Shifts in Diet," *New York Times*, February 3, 1935.

⁴¹ George, "Study of the Consumer," *New York Times*.

the circulation pool of the *Consumers' Guide* had grown to 130,000.⁴² In a representative sample of housewives conducted in 1940, fourteen out of nineteen were aware of the *Consumers' Guide*.⁴³ It is unclear how many of these subscriptions were shared among consumer groups, and how many went to individual households.⁴⁴

Several *Consumers' Guide* articles reveal how the food standards were invoked to advance government aims beyond honesty and fair dealing in the interest of consumers. Beginning in 1940, the *Consumers' Guide* began including narrative articles focused on the diets and consumption habits of low-income Americans. These new articles linked concerns about nutritional deficiency and thrift among low-income Americans to wartime anxieties about national vitality. A 1940 article titled "Bringing Up Consumers" focused on a Black low-income housing development in Washington DC, however the article copy did not discuss race and instead focused on economic circumstances. The article explains that this community represents the middle of the American income range, which the *Guide* classified as "low-income".⁴⁵ The tone of this article differs from the informative shopping guides more common in earlier issues and instead focuses on reforming the behavior of those outside of the *Consumers' Guide* readership. The author links "smart" consumption as a path to cultural citizenship stating, "Low-cost diets can finish the work of making sturdy

⁴² Shaeffer, "Government Widens its Aid to the Housewife," *New York Times*.

⁴³ "Nineteen Housewives Turn Experts to Judge the Products They Use," *New York Times*, May 11, 1940.

⁴⁴ By comparison, *Better Homes and Gardens* grew from a circulation rate of roughly 1 million in 1930 to roughly 2.4 million subscribers by 1945. *Woman's Home Companion* had roughly 2500K readers in 1932, and 3500K readers in 1945.

Ed Timke and Wenyue (Lucy) Gu, "Comparing Major Women's Magazine Circulation Across the 20th Century," *Circulating American Magazines: Visualization Tools for U.S. Magazine History*, James Madison University, accessed October 29, 2021, <https://sites.lib.jmu.edu/circulating/2020/03/15/comparing-major-womens-magazine-circulation-across-the-20th-centuryby-ed-timke-and-wenyue-lucy-gu/>.

⁴⁵ Consumers' Counsel of the Agricultural Adjustment Administration, "Bringing Up Consumers," *Consumers' Guide* VII, no. 2 (October 5, 1940): 3, <https://babel.hathitrust.org/cgi/pt?id=mdp.39015082284079&view=1up&seq=29>.

young citizens if they're planned to pack in balanced supplies of food nutrients economically."⁴⁶ The Consumers' Council facilitated this process by creating a Study Circle on smart shopping in the community. They likened their curricula to a "magician with his bag of tricks" and state that their teachings were met with "gasps of amazement."⁴⁷ Throughout the article, the participants in the study were referred to as "families", "group members," "study circle buyers," and "women" while "consumer" was invoked to refer to what participants were aspiring to. Comparatively, other articles focused on shopping tips referred to readers as homemakers and consumers. As such, the language in this article suggests that not all shoppers or women were considered consumers or homemakers in the eyes of the USDA or FDA.

The link between consumption habits, class, race, and citizenship can also be seen in numerous narrative articles presented in the Consumers' Guide.⁴⁸ For example, the article "The South Looks to the Soil," presents a discussion of the nutritional concerns associated with the diets of low-income Americans. The article explains that half of Americans eat a

⁴⁶ Consumers' Counsel, "Bringing Up Consumers," 3.

⁴⁷ Consumers' Counsel, "Bringing Up Consumers," 3.

⁴⁸ Early issues of the Consumers' Guide focused more on prices and referred generally to consumers (such as the meat prices index of v.1 no. 2 (1933) and the "Your Food Bill" article in v.1, no. 16 (1934). There were limited calls for the reform of personal dietary and consumption practices of people outside of readers. Calls for reform focused on agricultural issues like "Saving Land for Tomorrow's Consumers" in Vol. III, No. 5 (1936). However, during WWII the Guide moved away from information for readers to more articles about the shopping habits of other consumers. This evident in the framing of the article "Consumers Work for More Milk: They're doing it in other cities too, but here is how some Washington consumers are trying to help low-income families get more of this vital food." Here consumers are represented as activists promoting milk consumption, while low-income families are not given the same title of "consumer." Consumers' Counsel of the Agricultural Adjustment Administration, "Consumers Work for More Milk," *Consumers' Guide* VII, no. 4 (November 15, 1940) 6, <https://babel.hathitrust.org/cgi/pt?id=mdp.39015082284079&view=1up&seq=64&skin=2021> In the post-WWII period, volume 12 highlighted global hunger issues regularly in articles like "Food-the last word," "Your garden, a famine fighter" and "Famine Stalks the Earth" (Volume XII, Number 5) and "Bread on the waters" (volume XII, number 4). These articles aren't written to help readers experiencing hunger, they are written to food secure consumers/ homemakers to raise awareness about Cold War hunger issues outside of the United States.

nutritionally deficient diet for a “vigorous, sturdy life” with 4 of 10 rural white southerners are undernourished and over half of low income Black southerners are undernourished.⁴⁹ The article goes on to state, “If a Nation’s greatest wealth is its people, if a Nation’s greatest liability is its badly nourished people, America has a job to do.”⁵⁰ This statement reveals the widespread link regulators and reformers saw between diets of individuals, and national vitality.⁵¹

In 1946, the *Housekeepers’ Chat* went off the airwaves.⁵² By July of 1947, the *Consumers’ Guide* ceased publication.⁵³ The final issue explained that funding was cut for USDA outreach and information activities like the *Consumers’ Guide*.⁵⁴ The end of these publications also reflects the close of the second wave of U.S. consumer activism. Where the first issue of the *Consumers’ Guide* focused on helping consumers in the midst of the Great Depression, the final issue celebrated wartime innovations like new pesticides, and taking advantage of the growing popularity of home freezers to preserve food.⁵⁵

⁴⁹ Consumers’ Counsel, “Bringing Up Consumers,” 3.

⁵⁰ Consumers’ Counsel, “Bringing Up Consumers,” 3.

⁵¹ This was also made clear in a quote from Secretary of Agriculture Claude R. Wickard, printed in the December 2, 1940 issue of the *Consumers’ Guide*: “I submit that our democracy, if it is to be strong and unassailable, must give serious and continuous attention to the problem of bettering the lot of the low-income groups in cities and on farms... We are our brothers’ keepers. And they are also our keepers. We will be economically stronger and also morally and psychologically stronger as we make the American dream come true for more Americans.”

Consumers’ Counsel of the Agricultural Adjustment Administration, *Consumers’ Guide* VII, no. 5 (December 2, 1940) 2,

<https://babel.hathitrust.org/cgi/pt?id=mdp.39015082284079&view=1up&seq=76&skin=2021>.

⁵² The show never stated this; however the USDA archive ends in 1946.

⁵³ The final issue of the *Consumers’ Guide* explained that the newsletter was ending and encouraged people to continue listening to a Department of Agriculture radio show similar to *Housekeepers’ Chat* titled *Consumer Time*. According to the USDA archive the *Consumer Time* show ended a year later in 1947.

“*Consumer Time*,” USDA National Agricultural Library, Internet Archive, accessed December 29, 2021, <https://archive.org/details/usda-consumertime>.

⁵⁴ U.S. Department of Agriculture, “Yearbook,” *Consumers’ Guide* XIII, No. 7 (July 1947): 2,

<https://babel.hathitrust.org/cgi/pt?id=mdp.39015082283949&view=1up&seq=294&skin=2021>.

⁵⁵ U.S. Department of Agriculture, “Yearbook,” *Consumers’ Guide*, 2.

Services like the Consumers' Guide and the Homemaker's Chat demonstrate the most sustained and in-depth educational initiative about food identity standards (as a part of resources about consumer issues) made by the Department of Agriculture and the FDA to reach consumers and keep them informed about food identity standards.⁵⁶ These sources also reveal how government agencies imagined consumers. The *Consumers' Guide* and the *Homemakers' Chat* were not only intended to advance personal health and economic wellbeing, but also national success, by creating healthy, informed citizens.

Conclusion

We have come to a clear realization of the fact that true individual freedom cannot exist without economic security and independence. "Necessitous men are not free men." People who are hungry and out of a job are the stuff of which dictatorships are made.

Franklin Delano Roosevelt
State of the Union Message to Congress
January 11, 1944⁵⁷

In FDR's 1944 State of the Union address, he made the case that the United States Congress must implement a second bill of rights- an economic bill of rights. In just six years since the ratification of the FDCA, the United States had entered World War II, and

⁵⁶ According to census data, radio adoption occurred unevenly nationwide. Americans most likely to own a radio receiver in 1940 were whites living in urban areas (particularly the Northeast) where radio signals were stronger. The rural south represented the slowest rates of radio adoption, yet 78.8% of households owned a radio by 1940.

Steve Craig, "Daniel Starch's 1928 Survey: A First Glimpse of the U.S. Radio Audience," *Journal of Radio & Audio Media* 17, no. 2 (November 19, 2010): 182-194, <https://www.tandfonline.com/doi/full/10.1080/19376529.2010.519654>.

⁵⁷ Franklin D. Roosevelt, "State of the Union Message to Congress," Franklin D. Roosevelt Presidential Library and Museum, accessed December 29, 2021, http://www.fdrlibrary.marist.edu/archives/address_text.html.

Roosevelt argued that guaranteeing the financial prosperity of all Americans was vital not just to bring the U.S. out of the Great Depression, but also as a national security measure. The Roosevelt administration argued the centrality of home-front consumer practices to the WWII effort, from rationing to victory gardens, yet the food identity standards offer a fresh illustration of the link his administration crafted between consumer practices, nutrition, and national security.

This chapter traced the first decade of the food identity standards to understand how the FDA wrote and implemented the first standards, and how consumers engaged with these new laws. The design and early years of the standards reflect a desire to standardize foods that were part of the mainstream. For example, the framing of the macaroni standards demonstrates how lawmakers calibrated standards around an imagined mainstream base of knowledge. Additionally, the FDA and USDA's consumer outreach publications the *Consumers' Guide* and the *Homemakers' Chat* reflect efforts to educate consumers about the food standards, and the role state health aims played in consumer outreach. While the conclusion that national dietary advice reflects the State's anxieties and aspirations about health and citizenship are not entirely new, their application to standards of identity marks goes from dietary advice to law. As the U.S. transitioned from WWII to the Cold War, the food standards remained a tool in the strategic concerns of the Cold War

Chapter 2: Food Standards enter the Golden Age of Food Processing

The Things You'll Eat! Watermelon in December, canned 'burgers, and frozen coffee--they're all headed for your table.

Better Homes and Gardens
April 1946¹

Just months after the end of World War II, popular media in the United States promised consumers an exciting postwar marketplace after years of sacrifice on the home front. *Better Homes and Gardens* encouraged readers to plan a dream “victory vacation,” and offered strategies for readers struggling with “one of the most persistent, aggravating post-war shortages,” a labor deficit of household help.² Appliance brand Norge advertised, “Now that your waiting days are over... what a thrill you will have! You can keep that postwar date you made with yourself to see the wonders that Norge would offer in major household appliances,” encouraged readers to treat themselves to a new stove or refrigerator.³ A major thread of the excitement about the post-WWII moment was the emergence of new processed foods developed for the war effort. *Better Homes and Gardens* promised readers that the American way of eating would undergo a technological revolution thanks to the war: “Canned whole meals, until recently the Army’s private

¹ Win McCall, “The Things You’ll Eat!: Watermelon in December, Canned ‘burgers, and Frozen Coffee--They’re All Headed for Your Table,” *Better Homes and Gardens*, April 1946, 79.

² Louisa M. Comstock, “How to Get Your Household Help Back: One of the Most Persistent, Aggravating Postwar Shortages Is That in Household Help. It’s Two Problems in One: Yours and Your Helper’s. And There’s Ample Evidence That in Order to Solve Yours, You Must First Help Her to Solve Hers,” *Better Homes and Gardens*, April 1946, 27, 134-137; Carol Aichele, “Vacation 1946: What Are the Chances You Can Make That Victory Vacation Dream Come True? Better Homes Burdens’ Travel Department Surveys Travel Prospects for the Summer Ahead,” *Better Homes and Gardens*, April 1946, 23, 130-133.

³ “See Norge Before You Buy,” *House Beautiful*, January 1946, 19.

protégé, will stock civilian shelves,” along with dehydrated foods, air-shipped produce, and thermo-stabilized eggs (another U.S. Army invention).⁴

The confluence of mainstream access to wartime technology with the growth of post-WWII consumer culture prompted what Harvey Levenstein has characterized as the golden age of food processing.⁵ This reshaping of the food marketplace was part of a larger post-WWII transformation of the U.S. spatially, culturally, and economically. Veterans’ assistance programs like the G.I. Bill reshaped America economically and geographically by offering support to pursue education and homeownership that spurred the growth of the middle class and the suburbs.⁶ Furthermore, the growth of suburbs, increased access to automobiles, and the creation of the interstate highway system transformed American communities. Instead of neighborhood markets, Americans were increasingly shopping in supermarkets made possible by the spread of suburban shopping plazas.⁷ The marketers of the golden age of food processing targeted busy women with the promise that their new products would save time and labor thanks to extended shelf life, more processing, pre-

⁴ McCall, “The Things You’ll Eat!,” *Better Homes and Gardens*.

⁵ Harvey Levenstein, *Paradox of Plenty: A Social History of Eating in Modern America*, (New York: Oxford University Press, 1993), 100.; Harvey A. Levenstein, *Revolution at the Table: The Transformation of the American Diet* (Oxford: Oxford University Press, 1988).

⁶ G.I. Bill benefits were not offered to all returning veterans. Many benefits were restricted based on race, meaning that white male veterans saw the greatest benefit from these programs. Despite the post-WWII cultural turn inward and focus on the nuclear family depicted in cultural representations of this period, like the popularity of General Mills’ homemaker character Betty Crocker, by 1953, 30% of women were working outside the home. Levenstein, *Paradox of Plenty*, 105.

⁷ From the nineteenth century to the early 20th century, urban Americans shopped at small neighborhood stores and public markets. Additionally, peddlers traveled through neighborhoods selling produce, dairy, seafood, prepared foods, and other household items.

Deutsch, *Building a Housewife’s Paradise*, 23-29

Supermarkets emerged in the 1930s. This retail format gained popularity with the expansion of suburban communities, the post-WWII emphasis on the nuclear family, and the rise of processed foods.

Levenstein, *Paradox of Plenty*, 113.; Robert O. Self, *All in the Family: The Realignment of American Democracy since the 1960s*, New York: Hill and Wang, 2013.

cooking and packaging.⁸ To counteract the diminished flavor and texture that came with increased processing, chemists developed over four hundred new food additives between 1949 and 1959.⁹

As new convenience foods hit the market, the FDA regulated many of these products by creating new standards of identity. Unlike the standardized foods of chapter 1, these new processed foods were completely new inventions with no homemade analogue. Because of this, the FDA shifted from writing identity standards like a recipe, to writing longer standards that incorporated more legal and scientific terminology.¹⁰ Many food producers urged the FDA to allow new food additives into standardized foods in order to offer “innovative” new products they argued consumers wanted.¹¹ The FDA’s expansion of food standards as a means to regulate America’s changing food marketplace meant that by the middle of the 20th century half of all food purchased by Americans had a food identity associated with it.¹²

This chapter argues that the golden age of food processing upended the regulatory approach established in the first 10 years of the food identity standards and prompted some renewed consumer engagement with pure food activism. First, this chapter studies the creation of standards of identity for bread. Consumers organized against the proposal to approve the use of a new industrial ingredient, mono and diglycerides, in the bread standards, but the FDA ultimately included them in the final standard. Second, this chapter

⁸ Levenstein, *Paradox of Plenty*, 108.

⁹ Levenstein, *Paradox of Plenty*, 110.

¹⁰ For an example of this change see the bread standard printed in full on page __ of the bread section of this chapter.

¹¹ Merrill and Collier Jr., “Like Mother Used to Make,” 568.

¹² Merrill and Collier Jr., “Like Mother Used to Make,” 561.

contrasts the bread standards with new standards for process cheese to argue that the FDA managed new food additives by writing them into standards, and consumers accepted emulsifiers in process cheese because the FDA maintained separate traditional cheese standards, and process cheese marketers appealed to women's need for time-saving products. The chapter concludes with a discussion of a legal battle regarding imitation jam that set a precedent to loosen regulations on imitation foods. Together, these studies reveal a shift in the FDA's regulatory approach that accepted new processed foods and additives as pure, a resurgence in pure food activism in response to the proposed use of emulsifiers in the bread standards, and legislative precedent that broadened the interpretation of the FDCA's "common or usual" naming convention beyond the initial focus on home cookery.

Mono & Diglycerides in Bread

Emulsion: When two or more liquids may be virtually insoluble in each other and yet may be formed into a stable mixture by proper dispersion

Atlas Chemical Company, 1949

In 1948, the Atlas Powder Company, one of America's foremost manufacturers of explosives, presented a pamphlet to the FDA clarifying why they believed that chemical emulsifiers were a wholesome and necessary ingredient in bread. The pamphlet was produced after the FDA's hearings on proposed standards of identity for bread generated 7,000 pages of testimony about the suggested inclusion of chemical emulsifiers as an approved ingredient in bread. Mr. Isaac Fogg, President of Atlas, argued that his chemical emulsifiers were wholesome ingredients that were simply meant to improve the cohesion

of oil and water in bread production, while also prolonging bread-box life, and improving the taste and softness of bread.

Despite Fogg's argument that 20th-century bread required industrial additives, this staple food had existed for millennia without the benefit of food technology. Bread has long been thought of as the staff of life, a food with vast historical, cultural, religious, and culinary significance. Humans have produced bread since transitioning from hunting and gathering to agricultural cultivation during the Neolithic period. Bread has been produced in European cultures by professional bakers since the second century BC, when the first baker's guild was formed in Rome.

With the long history of bread in mind, why was an explosives salesman advising the federal government on what additives should be permitted in the nation's bread supply? In following the trail of emulsifiers, the breadcrumbs lead us to the intersection of advancements and changes in science, consumer habits, methods of bread production, gender roles, and government food regulations. First, how did chemical emulsifiers end up in industrial bread recipes? Emulsifiers generally are an ingredient that is nearly as old as bread itself. Historically, ingredients like eggs have been used to emulsify oil and water in preparations like mayonnaise, and the Greek physician Galen used beeswax as an emulsifier in the second century AD.¹³ Chemically produced emulsifiers, on the other hand, were first created by the French chemist Barthelot in 1853. These chemical emulsifiers (the most recognizable types being mono and diglycerides) are made by modifying naturally occurring fats and oil molecules known as triglycerides. Chemical emulsifiers are made by

¹³ Viggo Norn, *Emulsifiers in Food Technology* (Chichester: John Wiley and Sons, 2014), 73. Steve Ettlinger, *Ingredients: A Visual Exploration of 75 Additives and 25 Food Products* (New York: Regan Arts, 2015), 104.

combining vegetable oil, glycerin, and an alkali into a hot slurry that is either cooled and used wet, or dried into flakes.¹⁴ The earliest use for chemical emulsifiers in food was margarine, but food manufacturers soon saw widespread value in their ability to create small, uniform air bubbles and create smooth mixtures of fat and water.¹⁵ When applied to bread specifically, emulsifiers change the size of gas bubbles in the fermenting dough. As the dough rises, the dough volume expands more than in natural fermentation, thus creating a softer crumb texture, and a loaf that resists staling longer.¹⁶

Atlas Powder Company, an explosives company, found themselves in the food additive business following WWI. The Atlas Powder company was first incorporated in Delaware in 1912, as an offshoot of E.I. du Pont de Nemours and Company, after their explosives trust was broken up.¹⁷ From 1912 to 1917, Atlas focused exclusively on explosives, but later diversified into manufacturing other chemicals. Atlas became the leading manufacturer of ammonium nitrate, and during World War I supplied 100,000 tons of it annually to the federal government.¹⁸ In addition to serving as an explosive, nitrate of ammonium can also be used as a high nitrogen fertilizer. Because Atlas had increased its production capabilities to meet wartime demands for this substance, once the war ended, Atlas sought to market the chemical in new ways. In 1919 Atlas published the book, *Better Farming with Atlas Farm Powder* which suggested that farmers should use their explosive

¹⁴ John S. Marchant, Bryan G. Reuben, and Joan P. Alcock, *Bread: A Slice of History* (Gloucestershire: The History Press, 2008), 174.; Ettlinger, *Ingredients*, 104.

¹⁵ Norn, *Emulsifiers*, 73.

¹⁶ Marchant, *Bread*, 174.

¹⁷ "Atlas Powder Company Records," Hagley Museum and Library, accessed March 4, 2016, <http://findingaids.hagley.org/xtf/view?docId=ead/1516.xml>.

¹⁸ William Bradford Williams, *History of the Manufacture of Explosives for the World War, 1917-1918* (Chicago: Chicago University Press, 1920) 39.

products to blast ditches, stumps, boulders, and soil. The book also recommended Atlas products for soil treatment and fertilization, specifically nitrogen fertilizers.¹⁹

Between World War I and World War II, Atlas expanded their reach from farming chemicals to industrial food ingredients. They discovered their emulsifiers as a byproduct in the process of hydrogenating corn sugar to create the sugar alcohols mannitol and sorbitol.²⁰ Between 1938 and 1942, Atlas created four types of emulsifiers which they marketed with catchy names. Span and Arlacel were launched first, followed by Tween (an easy-mix formula with greater hydrophilic properties) and Myrj (meant to work without water). According to Atlas, these products could disperse, wet, and whip ingredients in food formulations. Atlas stated that Myrj was best suited for bread-making while Span and Tween were meant for use in ice cream and cake.²¹

Atlas' branding of food additives for simple, staple foods signals the continued intensity with which the American food system was industrializing. Atlas was among a myriad of new food additive companies that offered food manufacturers new ways of producing foods whose recipes had remained fairly static for hundreds, if not thousands of years. Within the history of the industrialization of America's food supply, bread specifically had remained largely unchanged until the early twentieth century. Since the neolithic period, bread had been made with the same basic ingredients: flour, water, salt and yeast. Sandwich style sliced breads are often enriched with milk or fat for a richer, sweeter loaf. Despite the industrialization of many foods during the nineteenth century, in

¹⁹ Atlas Powder Company, *Better Farming with Atlas Powder* (Wilmington: Atlas Powder Company, 1919), 3.

²⁰ Atlas Powder Company Industrial Chemicals Department, *The Nature, Suitability For and Uses in Foods and Pharmaceuticals of Sorbitol and Emulsifiers (Including Those Sold Under the Trade Marks Span, Arlacel, Tween and Myrj)*, (Wilmington, Atlas Chemical Company, 1949), 7.

²¹ Atlas Chemical Company, *Food Emulsifiers* (Wilmington: Atlas Chemical Company, 1948) 1-8.

1890, 90% of American bread was baked at home due to fears about adulteration and sanitation.²²

By the turn of the 20th century, Progressive reverence for professionalism led to a shift from homemade bread to store bought.²³ Bread manufacturers touted the scientific cleanliness of their products and offered tours of their facilities.²⁴ As a result, consumers saw mass produced bread as more scientifically advanced, purer, and safer. Fears over germs led women's and consumer organizations to push bread manufacturers to sell their loaves wrapped. In 1912, bread producers responded with the first pre-wrapped bread, and by 1920 all store-bought bread was sold wrapped.²⁵ The wrapping of bread favored larger, more automated bakeries, as they could afford to invest in wrapping materials and equipment. Additionally, large scale bakeries that sold wrapped bread painted unwrapped bread made by smaller bakeries as unsanitary.

In 1928 the automatic bread slicing machine was invented in Missouri. This innovation further advantaged large bread manufacturers over local producers.²⁶ With the advent of wrapping and slicing, consumers shifted from choosing their bread using look and smell, to seeking out “squeezability”. Advertising and packaging design emerged as a vital tool in selling product attributes and generating public trust when packaging obscured the product inside. At the same time, bakers sought new ways to make production more

²² Chris Otter, “Industrializing Diet, Industrializing Ourselves: Technology, Food and the Body since 1750,” in *The Routledge History of Food*, ed. Carol Helstosky (Abingdon: Routledge, 2015), 227.

²³ Bobrow-Strain, *White Bread*, 32.

²⁴ Bobrow-Strain, *White Bread*, 40.

²⁵ Bobrow-Strain, *White Bread*, 43-44.

²⁶ Bobrow-Strain, *White Bread*, 55.

cost effective. In Harry Snyder's 1930 volume *Bread: A Collection of Popular Papers on Wheat, Flour and Bread*, he states,

The public is constantly demanding cheaper bread, and the baker is frequently called upon to explain why he does not make or sell cheaper bread, or some special kind of bread... The baker would like to make and sell a cheaper loaf if it were economically possible to do so.²⁷

With consumer demands for more economical bread, and the importance of bread "squeezability," food chemists were perfectly poised to address this need among bakers, however regulatory and consumer attitudes soon posed a new challenge.

In 1949, the FDA began drafting standards of identity for bread products and asked a Congressional committee to explore public opinion about the use of emulsifiers in bread. The hearings occurred throughout the 1940s; they began in 1941, paused due to WWII, resumed in 1943 and paused once again, reopened for a third time in 1948 to consider "new optional ingredients" and closed finally on September 20, 1949.²⁸ The committee found that consumers believed emulsifiers were used as an inexpensive substitute for wholesome ingredients, and generally disliked any deviation from traditional baking techniques. Journalism of the period supported this sentiment by echoing the skepticism consumers felt over the use of additives in bread.²⁹ Holmes Alexander, a journalist writing in the *Los Angeles Times*, described the new recipes as "one pound of this gook, plus five pounds of water, can be used to replace six pounds of natural fats and oils in bread".³⁰

²⁷ Harry Snyder, *Bread: A Collection of Popular Papers on Wheat, Flour and Bread* (New York: The MacMillan Company, 1930), 228.

²⁸ U.S. Congress, House, Committee to Investigate the Use of Chemicals in Food Products, *Chemicals in Food Products*, House Committee to Investigate the Use of Chemicals in Food Products, 81st Cong., 2nd sess., 1950. 49.

²⁹ Holmes Alexander, "What is in Some Bread? Congressmen Will Ask," *Los Angeles Times*, November 27, 1949.

³⁰ Alexander, "What is in Some Bread?" *Los Angeles Times*.

Despite a general popular reverence for new technology, consumers distrusted the motives of industrial bread producers.

Consumer fears were echoed by government and some industry voices (particularly competitors). At a Senate meeting of the Subcommittee on Agriculture and Forestry, a letter was read from C.B. Heinemann of the Independent Meat Packers Association:

I would like to call your attention to the importance of food content of bread made with these emulsifiers. One pound of fat contains 4,080 calories. To replace this fat with 5 pounds of water would replace the caloric food value with water. This would short change the public in food value.³¹

While the Independent Meat Packers Association likely feared a decline in the use of animal fats in enriched bread, their concern over decreased nutritional density in foods was echoed by others. Congressman Frank Keefe, a Republican from Wisconsin, argued:

It is apparent that such usage [of chemical emulsifiers] will grow as price competition invariably created through the nutritional debasement of the original food is developed. These conditions will force other manufacturers to adopt similar practices. It may be claimed by some that these chemical emulsifying agents improve the physical properties of certain foods. However the possibility of nutritional debasement and deception is so great that these factors should not be ignored when evaluating the true purposes behind the use of these materials.³²

Outrage over the use of emulsifiers in bread continued to build, and in October of 1949 the General Federation of Women's Clubs petitioned Congress to adopt an amendment to the FDCA that would ban non-nutritive ingredients.³³ The petition was very specific, and

³¹ U.S. Congress, Senate, Committee on Agriculture and Forestry, *Utilization of Farm Crops: Fats and Oils*, 81st Cong., 1st sess., 1949, 15.
<https://babel.hathitrust.org/cgi/pt?id=mdp.39015049796041&view=1up&seq=7&skin=2021&q1=heinemann>

³² U.S. Congress, Senate, Committee, *Utilization of Farm Crops*, 20.

It is possible that Keefe was looking out for the interests of dairy producers in his state, however not every type of bread contains milk or butter, only enriched breads.

³³ U.S. Congress, House, Select Committee to Investigate the Use of Chemicals in Food Products, *House Select Committee to Investigate the Use of Chemicals in Food Products*, 81st Cong., 2nd sess., 1950, 831-834,

explained the exact ingredients, monoglycerides and diglycerides, that their members believed were not suitable for use in bread. Though Congress did not adopt the proposed amendment, members of Congress issued a statement advising the FDA to make their decision regarding the inclusion of chemical emulsifiers in the bread standards carefully: “the introduction of chemicals into foods in order to make a cheaper product resemble a better one deserves a very thorough study.”³⁴

In the end, the FDA elected to permit the use of emulsifiers in bread. When the identity standard for bread was adopted in 1952, the FDA permitted the use of lecithin, monoglycerides, diglycerides, or diacetyl tartaric acid esters of mono- and diglycerides, all different types of emulsifiers.³⁵ They stated that these ingredients were suitable for use in bread because they derived from natural fats and oils.³⁶

Table 2.1: Full text of the standard for white bread. The FDA enacted similar standards for enriched bread, milk bread, raisin bread and whole wheat bread ³⁷ :
17.1 Bread, white bread, and rolls, white rolls, or buns, white buns; identity; label statement of optional ingredients.
(a) Each of the foods bread, white bread, rolls, white rolls, buns, white buns is prepared by baking a kneaded yeast-leavened dough, made by moistening flour with water or with one or more of the optional liquid, ingredients specified in this section or with any mixture of water and one or more of such ingredients. The term "flour," unqualified, as used in this section, includes flour, bromated flour, and phosphated flour.

https://books.google.com/books?id=LJFh47IxlNcC&pg=PA832&lpg=PA832&dq=federation+of+women%27s+clubs+%2B+bread+1947&source=bl&ots=iHHvt1ugM_&sig=ACfU3U0YLjK4OALcQ014n5QkAPN5_u-xw&hl=en&sa=X&ved=2ahUKEwjgKartZb1AhVGJzQIHd0WBR0Q6AF6BAGJEAM#v=onepage&q=federation%20of%20women's%20clubs%20%2B%20bread%201947&f=false

³⁴ ‘Senators Caution on Bread Contents’, *New York Times*, 2 August 1951.

³⁵ “Bakery Products; Definitions and Standards of Identity,” *Code of Federal Regulations*, title 21 (1955): 110-113.

³⁶ Bess Furman, “New U.S. Bread Standards Bar Chemical Softeners as Deceptive: New Standard Set for Bakers’ Bread,” *New York Times*, May 15, 1952.

³⁷ “Bakery Products; Definitions and Standards of Identity,” *Code of Federal Regulations*, title 21 (1955): 110-113.

The potassium bromate in any bromated flour used and the monocalcium phosphate in any phosphated flour used shall be deemed to be optional ingredients in the bread or rolls. Each of such foods is seasoned with salt, and in its preparation one or more of the optional ingredients prescribed by subparagraphs (1) to (14), inclusive, of this paragraph may be used:

(1) Shortening, in which or in conjunction with which may be used lecithin, mono- and diglycerides of fat-forming fatty acids (except laurie acid), or diacetyl tartaric acid esters of mono- and -diglycerides of fat-forming fatty acids (except lauric acid), or a combination of two or more. The total weight of mono- and diglycerides, including diacetyl tartaric acid esters of mono- and diglycerides of fat-forming fatty acids, used does not exceed 20 percent by weight of the combination of such a preparation and the shortening, and the total amount of monoglyceride in such mixture does not exceed 8 percent by weight of the combination; but if purified or concentrated monoglyceride is used the amount of such a preparation does not exceed 10 percent by weight of the combination of such preparation and the shortening. For the purposes of this section the lecithin may include related phosphatides derived from the corn or soya-bean oil from which the lecithin was obtained.

(2) Milk, concentrated milk, evaporated milk, sweetened condensed milk, dried milk. skim milk. concentrated skim milk, evaporated skim milk, sweetened condensed partly skimmed milk, sweetened condensed skim milk. nonfat dry milk solids, or any combination of two or more of these; except that any such ingredient or combination, together with any butter and cream used. Is so limited in quantity or composition as not to meet the requirements for milk or dairy ingredients prescribed for milk bread by 17.3.

(3) Buttermilk, concentrated buttermilk, dried buttermilk, sweet cream buttermilk, concentrated sweet cream buttermilk, dried sweet cream buttermilk, cheese whey, concentrated cheese whey, dried cheese whey. milk proteins, or any combination of two or more of these.

(4) Liquid eggs, frozen eggs, dried eggs, egg yolks, frozen egg yolks, dried yolks, egg white, frozen egg white, dried egg white, or any combination of two or more of these.

(5) Sugar, invert sugar (in congealed or sirup form), light-colored brown sugar, :refiner's sirup, dextrose, honey, corn sirup, glucose sirup, dried corn sirup, dried glucose sirup, nondlastatic malt sirup, nondiastatic dried malt sirup, molasses (except blackstrap molasses), or any combination of two or more of these.

(6) Malt sirup, dried malt sirup, malted barley flour, malted wheat flour, each of which is diastatically active;harmless preparations of enzymes obtained from *Aspergillus oryzae*, or any combination of two or more of these.

<p>(7) Inactive dried yeast of the genus <i>Saccharomyces cerevisiae</i>; but the total quantity thereof is not more than 2 parts for each 100 parts by weight of flour used.</p>
<p>(8) Harmless lactic-acid producing bacteria.</p>
<p>(9) Corn flour (including, finely ground corn meal), potato flour, rice flour, wheat starch, cornstarch, milo starch, potato starch, sweet potato starch (any of which may be wholly or in part dextrinized), dextrinized wheat flour, soy flour, or any combination of two or more of 'these; but the total quantity thereof is not more than 3 parts for each 100 parts by weight of flour used.</p>
<p>(10) Ground dehulled soybeans, which may be heat-treated and from which oil may be removed, but which retain enzymatic activity; but the quantity thereof is not more than 0.5 part for each 100 parts by weight of flour used.</p>
<p>(11) Calcium sulfate, calcium lactate, calcium carbonate, dicalcium phosphate, ammonium phosphates, ammonium sulfate, ammonium chloride, or any combination of two or more of these; but the total quantity of such ingredients is not more than 0.25 part for each 100 parts by weight of flour used.</p>
<p>(12) Potassium bromate, potassium Iodate, calcium peroxide, or any combination of two or more of these; but the total quantity thereof (including the potassium bromate in any bromated flour used) Is not more than 0.0075 part for each 100 parts by weight of flour used.</p>
<p>(13) (1) Monocalcium phosphate, but the total quantity thereof, including the quantity In any phosphated flour used and any quantity added, is not more than 0.75 part by weight for each 100 parts by weight of flour used; or (i) A vinegar, in a quantity equivalent in acid strength to not more than 1 pint of 100-grain distilled vinegar for each 100 pounds of flour used; or (ill) Calcium proplonate, sodium proplonate, or any mixture of these, but the total quantity thereof is not more than 0.32 part for each 100 parts by weight of flour used; or (iv) Sodium diacetate, but the quantity thereof is not more than 0.4 part for each 100 parts by weight of flour used; or (v) Lactic acid, in such quantity that the pH of the-finished bread is not less than 4.5.</p>
<p>(14) Spice, with which may be included spice, oil and spice extract. Each of such foods contains not less than 62 percent of total solids, as determined by the-method prescribed in "Official Methods of Analysis of the Association of Official Agricultural Chemists," Seventh Edition, 1950, page 209, section 13.70. under "Total Solids in an Entire Loaf of Bread." except that if the baked unit weighs 1 pound or more one entire unit is used for the determination, and if the baked unit weighs less than 1 pound, such number of entire units as weigh 1 pound or more is used for the determination.</p>

(b) Bread, white bread is baked in units each of which weighs one-half pound or more after cooling. Rolls, white rolls, and buns, white buns are baked in units each of which weighs less than one-half pound after cooling.

(c) (1) When any optional ingredient; permitted by paragraph (a) (13) of this section is used, except a vinegar and except monocalcium phosphate in a, quantity less than 0.25 part for each 100 parts by weight of flour, the label shall bear the statement ". added to retard spoilage," the blank being filled in with the name by which the ingredient used is designated in such paragraph.

(2) When an optional ingredient permitted by paragraph (a) (14) of this section is used, the label shall bear the statement "spiced" or "spice added" or "with added spice"; but in lieu of the word "spice" in such statements, the common or usual name of the spice may be used.

(3) Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words and statements specified in this paragraph shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter.

Despite the permission of numerous chemical additives, the FDA banned a new Atlas emulsifier called polyoxyethylene because they thought it was unnatural and made with the intent to deceive consumers.³⁸ The FDA stated that the new bread standards would protect consumers from "fad" ingredients, prevent fraud by setting requirements for the amount of flour used in bread, and promote truthful labeling. Despite concerns about nutritional debasement levied during the congressional bread hearings, no specific health claims were made by the FDA about emulsifiers or the bread standards overall.

While the creation and application of emulsifiers in America's bread is the story of one additive in one food, the story reveals the FDA's approach to consumer protests against food additives and industry pressure to include them during the golden age of food processing. As the next section will demonstrate, in the midst of the changes to the

³⁸ The commercial name for this emulsifier was Myrj 45.

American food industry that occurred in the post-WWII period, the FDA managed the growing number of new industrial products by writing them into standards or creating standards for new foods.

Sliced bread vs. sliced cheese

In the case of emulsifiers in bread, consumers and some legislators reacted swiftly and forcefully in opposition to the inclusion of emulsifiers in the standard of identity for a staple food, but what about the standardization of a new “processed” food? Did consumers display the same distrust in the face of manufacturers claiming that the food offered convenience and scientific advancement? Was the standardization process covered by newspapers or magazines? The creation of a standard of identity for pasteurized process cheese and pasteurized process cheese food presents a foil to the story of the bread standards and suggests that the marketing campaign behind Kraft cheese and the dairy industry more broadly successfully convinced consumers that pasteurized process cheese, despite containing emulsifiers just like bread, was a wholesome post-WWII wonder food.

Process cheese was first invented and patented by James L. Kraft in 1916.³⁹ He wanted to extend the shelf life of cheese so that it could be shipped, so he whisked cheddar cheese for fifteen minutes at 175 degrees Fahrenheit to pasteurize and stabilize. This transformed cheese product was named process cheese. James’ brother Norman Kraft spent fifteen years engineering the pre-sliced block of process cheese, just in time to hit the

³⁹ The literature of the period and the standards refer to the product as process cheese (rather than processed cheese) for this reason, this chapter applies the same terminology.

post-WWII processed food renaissance. Kraft's new pre-sliced cheese blocks were so popular, some grocery stores at the time reported a 150% increase in their cheese sales.⁴⁰

In 1950, the FDA added 51 new cheese standards to the existing 7 cheese standards enacted in 1941.⁴¹ The 51 added in 1955 represented a variety of categories, from regional cheeses like Roquefort and edam to cheeses intended specifically for manufacturing in the use of process cheese products.⁴² Of the new standardized cheeses, the FDA created nine standards for process cheeses like pasteurized process cheese, pasteurized process cheese food, and pasteurized process cheese spread. The standard of identity enacted in 1950 for process cheese prescribed that it be created by mixing or heating cheese or cheeses with an emulsifying agent, pasteurizing the mixture and then adding optional ingredients like flavors, spices, or artificial color. The standard describes the acceptable emulsifiers as:

The emulsifying agent referred to in paragraph (a) of this section is one or any mixture of two or more of the following: Monosodium phosphate, disodium

⁴⁰ Charles Wilson, "Who Made That Kraft Single?," *New York Times*, June 1, 2012, <https://www.nytimes.com/2012/06/03/magazine/who-made-that-kraft-single.html>

⁴¹ The 51 new cheese standards were created to account for the growing number of imported cheeses in the U.S., and the slight variations in aging, fat content, milk type and geographic origin. Food and Drug Administration, Proposed Rule Making, "Cheeses, processed cheeses, cheese foods, cheese spreads, and related foods; Definitions and Standards of Identity," *Federal Register* 14, no. 77 (April 22, 1949): 1960-1992, https://heinonline.org/HOL/Page?collection=fedreg&handle=hein.fedreg/014077&id=20&men_tab=srchresults; Food and Drug Administration, Rules and Regulations, "Cheeses, processed cheeses, cheese foods, cheese spreads, and related foods; Definitions and Standards of Identity," *Federal Register* 15, no. 164 (August 24, 1950): 5656-5690, https://heinonline.org/HOL/Page?collection=fedreg&handle=hein.fedreg/015164&id=4&men_tab=srchresults; Public Health Service, Department of Health, Education and Welfare, Food and Drug Administration, *Annual Reports 1950-1974*, (Washington DC, 1976), 48.; "Cheeses, processed cheeses, cheese foods, cheese spreads, and related foods; Definitions and Standards of Identity," *Code of Federal Regulations*, title 21 (1955): 115-153, https://heinonline.org/HOL/Page?collection=cfr&handle=hein.cfr/cfr1955008&id=131&men_tab=srchresults.

⁴² The FDA created various types of cheeses designated for manufacturing, or unpasteurized. Manufacturing cheeses were unpasteurized cheeses intended to be used in process cheese (a procedure in which the cheese is heated). The FDA proposed that cheese to be used for manufacturing be coated with greed colored paraffin to ensure it would not be mistaken for a ready-to-eat cheese. Food and Drug Administration, Proposed Ruse Making, "Cheeses, processed cheeses, cheese foods, cheese spreads, and related foods; Definitions and Standards of Identity," *Federal Register* 14, no. 77 (April 22, 1949): 1964.

phosphate, dipotassium phosphate, trisodium phosphate, sodium metaphosphate (sodium hexametaphosphate) sodium acid pyrophosphate, tetrasodium pyrophosphate, sodium citrate, potassium citrate, calcium citrate, sodium tartrate, and sodium potassium tartrate, in such quantity that the weight of the solids of such emulsifying agents is not more than 3 percent of the weight of the pasteurized process cheese.

Like mono and diglycerides, emulsifiers in the phosphate family are used broadly to ensure that baked goods rise, spices avoid caking, deli meats bind, and processed cheeses melt evenly. Specifically, in the case of processed cheeses, phosphates ensure that the natural cheese melts evenly in the initial heating process to combine with the ingredients, forms into a “homogenous plastic mass” as stipulated by the standard, and melts smoothly.⁴³

Many of the arguments levied against chemical emulsifiers in bread could have also been applied to the use of emulsifiers in process cheese, yet there is no evidence that they were. The Federal Register, Congressional Record, and mainstream newspapers published no stories about the promulgation of food standards for process cheese. Perhaps this was because process cheese standards were part of a large docket of tens of cheese standards, of which process cheeses were just one category. If consumers were concerned about the ingredients in process cheese, conventional cheeses like cheddar and Swiss still existed with their own standards of identity. In the case of the bread standards, the inclusion of chemical emulsifiers was proposed for nearly every bread category, so the standards would have affected all bread sold across state lines.

It is also likely that process cheese was viewed favorably by consumers in the post-WWII period thanks to magazine and newspaper articles highlighting its convenience and

⁴³ Lucina E. Lampila, “Applications and functions of food-grade phosphates,” *Annals of the New York Academy of Sciences*, last modified August 26, 2013, <https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/nyas.12230>.

versatility.⁴⁴ Articles appeared frequently in the media explaining the benefits of process cheese, and suggesting recipes for dinners, hors d'oeuvres, and lunches.⁴⁵ Additionally, similar informative articles and recipes appeared for other process cheese products standardized by the FDA like “process cheese food,” particularly in advertisements for the Kraft process cheese food Velveeta.⁴⁶ While Kraft prominently displayed the name

⁴⁴ Mary Meade, “‘Process’ Type of Cheese Has Its Points, Too,” *Chicago Daily Tribune*, March 22, 1947.

⁴⁵ A 1949 New York Times article announced the publication of a new Kraft recipe leaflet titled “Cheese Classics” after the success of the 1948 publication “And Then-The Cheese Tray”. The announcement included a sample recipe for cheese souffle that used pasteurized process cheese.

Jane Nickerson, “News of Food: New Booklet Presents ‘Cheese Classics’; Ten Recipes With Color Illustrations,” *New York Times*, March 3, 1939.

The 1950 Good Housekeeping article titled “Miracles from the Pantry Shelf” suggested that housewives keep process cheese on hand for evenings when the reader’s husband unexpectedly brings “the boss” for dinner. The article continues: “Here are 2 dinner plans that make life easier, thanks to modern canning, freezing, and food-packaging industries. They’ll save your disposition and enhance your reputation as a cook” by preparing a process cheese omelet with tasty shrimp topping.

Camille Stewart and Katharine Fisher, “Miracles from the Pantry Shelf,” *Good Housekeeping*, 1950, 169-170, <https://search.proquest.com/docview/1846743917?accountid=14509>.

In addition to being the heroes of the new post-war dinner table, process cheeses were also widely touted for their use in lunches. A 1950 Chicago Tribune article titled “Lunch Box Glamour” suggested that women put more effort into the taste and appearance of their husband’s and children’s lunches through dishes like a “luscious” frankfurter-cheese sandwich filling.

Mary Meade, “Lunch Box Glamour,” *Chicago Daily Tribune*, January 15, 1950.

A 1951 Parent’s magazine article suggested that housewives need not be overwhelmed by the many cheese options because every type of cheese contains the same vital nutrients from milk. The article suggests that using ingredients like process cheese and canned soups can be a win-win by appealing to the time constraints of mothers and the tastes of children.

“Family Lunches for May: Cheese steps to the food front for May lunches,” *Parents’ Magazine*, May 1951

⁴⁶ Pasteurized process cheese food was a version of process cheese, but with a higher moisture content to make the product slightly softer. Would the distinction food adequately communicate the differences between pasteurized process cheese and pasteurized process cheese food? The name “process cheese food” began appearing widely in advertisements for Kraft’s Velveeta products in 1951 after Velveeta began marketing a reformulated product under the name “Pasteurized Process Cheese Food”. Newspapers throughout the 1940s (Specifically cited in The Capital Times of Madison Wisconsin from 31 January, 1946, but appeared in newspapers nationwide) show that a product known as Ched-o-bit Process Cheese Food was consistently marketed in A&P Super Market’s full-page national advertisements. It wasn’t until Velveeta’s reformulation that the name was used in recipes. An advertisement titled “What a Helper You have in handy Velveeta!” published in the March 1951 issue of Ladies’ Home Journal touts Velveeta’s quality as “good for the whole family” including its digestibility, richness in food values and purity by stating “PROTECTED! From fresh whole milk to sealed package this pasteurized process cheese food is protected every step of the way by strict Kraft Quality control”.

“What a Helper you have in handy Velveeta!” *Ladies Home Journal*, March 1951.

In subsequent advertisements like one titled “For after-school snacks... this good-for-’em cheese food that’s digestible as milk itself” Kraft portrayed a block of Velveeta with the name “pasteurized process cheese food” displayed prominently.

“processed cheese food” in Velveeta advertisements, as we will see in Chapter 4, food companies moved away from this practice in the coming decades, as food manufacturers avoided displaying food identity standard names on their packaging in favor of selling product and brand identity.⁴⁷

The marketing efforts of food manufacturers, along with prevailing belief in the superiority of scientifically engineered products helps explain the popularity of foods like process cheese and the continued consumption of mass-produced bread, despite consumer reticence about the safety and suitability of additives. However, the increasing rates of women working outside the home also suggest that for better or for worse women relied on processed ingredients to keep up with domestic responsibilities. Consumers of the period held concerns about how food additives impacted the identity and safety of foods, while also relying on the convenience that they promised. This tension demonstrates a fracturing in who consumers looked to as the authorities on food purity. As we will see in chapter 5, the U.S. never regained a unified authority on food purity trusted by all consumers.

“For after-school snacks... this good-for-'em cheese food that's digestible as milk itself,” *Parents' Magazine*, May 1951, 13.

A 1953 recipe feature in *Parents' magazine* titled “Egg and cheese combos for good family lunches” suggested a recipe called “Humpty Dumpty” that called for process cheese food by name. The first line of the recipe states “melt the cheese food in the top of a double boiler”.

“Egg and cheese combos for good family lunches,” *Parents' Magazine*, March 1953, 64.

The specific use of the name cheese food in the ingredients and recipe suggests that the name did have meaning to consumers. A March 1956 article of *Good Housekeeping* titled “The Wonderful World of Cheese: Cheese Mainstays” lists Process Cheese Food among other cheeses like Münster and Camembert for use in snacks and main dishes. The October 1956 article “Easy trims with cheese” article suggests creating a “curvy trim” by slicing a roll process cheese food.

Mary Eckley, “The Wonderful World of Cheese Mainstays,” *Good Housekeeping*, March 1956, 88.; “Easy trims with cheese,” *Better Homes and Gardens*, October 1956, 196-199.

⁴⁷ While consumers of the 1950s may have had some awareness that Velveeta was a process cheese food, ultimately the Velveeta brand identity overtook the food identity and Kraft changed the formulation of the product so that it did not meet a standard of identity for any cheese product. Today Velveeta does not adhere to any FDA food identity standards for cheese and instead goes by the imitation name “pasteurized recipe cheese product”.

Imitation Jam

The golden age of food processing also impacted how existing standards of identity were interpreted and enforced. In 1951, the case, *62 Cases of Jam v. United States* reached the Supreme Court after first being introduced in the District Court in New Mexico in 1949.⁴⁸ Federal regulators seized the imitation jam as misbranded, even though it stated that the product was sold as “imitation jam.” Regulators believed that invoking the standardized name, even with the qualifier “imitation,” improperly drew a connection with the standard of identity. Per the standards enacted in 1940, jam/preserves must contain at least 45% fruit by weight, jelly must contain at least 45% fruit juice, and fruit butter must contain five parts fruit to two parts sweetener.⁴⁹ In contrast, the imitation jam seized in this case only contained 25% fruit.⁵⁰

The final opinion of the court argued that the product should be permitted to be sold because it was “wholesome” and “in every way fit for human consumption.”⁵¹ The Judge stated:

We see no justification so to distort the ordinary meaning of the statute. Nothing in the text or history of the legislation points to such a reading of what Congress wrote. In § 403 (g) Congress used the words “purport” and “represent” - terms suggesting the idea of counterfeit. But the name “imitation jam” at once Connotes precisely what the product is: a different, an inferior preserve, not meeting the defined specifications.”⁵²

⁴⁸ *62 Cases of Jam v. United States*, 363 U.S. 593, (10th Cir. 1951).

<http://cdn.loc.gov/service/ll/usrep/usrep340/usrep340593/usrep340593.pdf>

⁴⁹ Food and Drug Administration, Rules and Regulations, “Regulation Fixing and Establishing Definitions and Standards of Identity for Preserves, Jams,” *Federal Register* 5, no. 173 (September 5, 1940): 3554-3564, https://heinonline.org/HOL/Page?collection=fedreg&handle=hein.fedreg/005173&id=16&men_tab=srchresults.

⁵⁰ *62 Cases of Jam v. United States*, 363 U.S. 594, (10th Cir. 1951).

⁵¹ *62 Cases of Jam v. United States*, 363 U.S. 595, (10th Cir. 1951).

⁵² *62 Cases of Jam v. United States*, 363 U.S. 595, (10th Cir. 1951).

The conflict boils down not to the integrity of the food, but to how that integrity was communicated to consumers. In the case of imitation jam, the court ruled that the product itself posed no medical harm, only economic harm, which was mitigated by using “imitation” on the package.

As discussed in chapter 1, the standards of identity were meant to create a black and white world of food purity; the creation of standards dictating what purity meant could make it easier to discern impurity. Yet this jam ruling set a precedent for a gray area in which ersatz foods were permitted, so long as they met the subjective ideal of being wholesome yet economically inferior. As the 1950s progressed and new processed foods continued to hit the market, this precedent meant that it would become increasingly difficult to identify what was genuine food and what was an imitation food. Additionally, this new gray area that challenged the logic of food identity standards that creating and upholding standards of identity was the best way to prevent adulteration in the marketplace.

Conclusion

We are at present dependent upon the products of chemical technology in food production, and modern production cannot be maintained without the cooperation of the chemical industry, the food industry, and the government... Progress in the food industry is dependent upon the wise use of the discoveries of the agriculturalist, the food technologist, the chemist, the biologist, and the engineer.

Science Magazine
September 1954⁵³

In many ways, the forces that made the post-WWII period of prosperity and the golden age of food processing possible were the same: the chemical industry. In the period from WWI to the end of WWII, America's industrial and chemical productions shifted from coal-tar in the middle Atlantic states to petro-chemistry in the Midwest and on the Gulf Coast, and the WWII chemical boom was just beginning.⁵⁴ Between 1927 and 1952, the American chemical industry grew at a rate of 10% per year, while the rest of American industry grew 3%.⁵⁵ To manage this growth, the Manufacturing Chemists Association believed that they would need to create more plants to meet both defense and "normal" industrial needs. In 1952 the association claimed that they would need to invest \$14,500,000,000 in the production of plastics, synthetic fibers, detergents, and agricultural and medicinal chemicals.⁵⁶

The growth of the chemical industry is directly tied to the transformation of the food industry, and in the process, a national reshaping of beliefs about the meaning of food purity for regulators, lawmakers, and consumers. The case studies of the bread standards,

⁵³ C. N. Frey, "Chemicals in Food," *Science* 120, no. 3117 (September 24, 1954): 7A, <http://www.jstor.org/stable/1682441>.

⁵⁴ John Stuart, "Chemicals Emerge From 'Coal Tar' Age To Become Giant Sprawling Across Nation," *New York Times*, November 23, 1952.

⁵⁵ William M. Freeman, "Chemical Industry Set for Peace, War: Survey of Association Shows Plants Are Ready to Make Major Contribution," *New York Times*, June 29, 1952.

⁵⁶ Stuart, "Chemicals Emerge," *New York Times*.

cheese standards, and jam regulations represented a broader change among regulators to imagine more broadly what constituted honesty and fair dealing in the interest of consumers. When faced with a changing spectrum of ingredients, regulators opted to include new industrial ingredients in the standards for foods, despite clear evidence from the bread standards that customers were concerned about the use of new food additives in pantry staples. In contrast, additives in foods native to the industrial marketplace prompted less concern because regulators also created standards for additive-free cheese products like cheddar and Swiss. Furthermore, the case *62 Cases of Jam v. United States* offered ersatz foods legitimacy in the marketplace that undermined the power of the common or usual names. With these changes to the framing and enforcement of identity standards, food companies began emphasizing brand identity over food identity, as we will see in chapter 4. Finally, activist consumers expressed concern about the safety of ingredients like emulsifiers in some foods like bread, while allowing emulsifiers in other industrial foods like process cheese. These trends demonstrate a shift away from the unified authority of chemists to determine food purity, and towards a fractured view with diminished mainstream agreement.

As the wartime technology transformed the American food marketplace, it also ratcheted up Cold War tensions. Even domestic policies like food identity standards took on global implications in the Cold War fight, as we will see in chapter 3.

Chapter 3:

Cold War Food Aid Policy and the Food Identity Standards at Home and Abroad

The greatest affairs of state never get very far from the soil... the devastation of war has brought us back to the point where we see clearly how short is the distance from food and fuel either to peace or to anarchy.

Dean Acheson
Undersecretary of the U.S. Department of State
Speech at the Delta Council
1947¹

As the world entered the atomic age, America's new standing as a geopolitical and technological power prompted a new approach to foreign aid.² Acheson's speech, given during the launch of the Marshall Plan to rebuild European post-WWII economies, reflects the role of food access in the burgeoning Cold War.

The United States first engaged in food relief during the Irish potato famine of the mid nineteenth century. During World War I, when President Woodrow Wilson created the Food Administration to use food relief to promote America's global standing and cultivate a positive view of America overseas, particularly among children. After WWI, food administrators switched from the slogan "food will win the war" to "food will win the world" to signal that food aid could be used to cultivate economic and moral power. During the Cold War era, U.S. food aid was designed to serve geopolitical, agricultural, and ideological interests.³ President Truman's Point Four Program, launched in 1949, sought to

¹ Barry Riley, *The Political History of American Food Aid: An Uneasy Benevolence*, (New York: Oxford University Press, 2017) 141.

² Riley, *The Political History of American Food Aid*, 118.

³ The United States has been involved in food relief since the mid-19th century when agricultural commodities were extended to Ireland in 1848 in the wake of the potato famine. Wilson's program focused mostly on European allies like the French, despite appeals from Iran for aid and famines in the Ottoman Empire, Middle East and India. Historian Helen Zoe Veit argues that the highly selective nature of Woodrow's relief efforts demonstrates the strategic rather than philanthropic nature of the roots of American food aid.

contain the spread of communism by sharing U.S. food science that could increase agricultural yields. Concomitantly, Cold War food relief programs also offered a solution to the agricultural commodities surplus of the 1950s.⁴ During the 1950s, U.S. agricultural production grew but prices decreased, which led the federal government to purchase stocks of surplus to bolster American farms.⁵

Using the Congressional record and historical newspapers, this chapter argues that the food identity standards were invoked during the Cold War as a geopolitical tool to sell the capitalist and democratic safeguards of the American mass marketplace. This can be seen through the case studies of fish flour and dried skim milk powder, two products made from surplus or byproducts of American food production that promised to solve world hunger. Yet these promises hinged on food identity standards. In the case of fish flour, manufacturers believed that a standard of identity was essential to selling the legitimacy of a (potentially unappealing) ground whole fish flour to consumers overseas, despite limited consumer approval domestically. Without proof that fish flour was fit for American consumers, lawmakers feared that the product could backfire and prompt anti-American propaganda. In the case of dried skim milk powder, the common or usual name convention of the standards of identity prompted milk interests to argue that the FDA's regulation of

During WWII, FDR's administration used Lend-Lease appropriations and the United Nations Relief and Rehabilitation Administration (founded in 1943 and later incorporated into the United Nations in 1945) to organize food aid through commodities. While the motivations to offer food aid were never entirely altruistic, additional considerations like utilizing agricultural surplus and influencing global relationships became larger factors in the post-WWII period.

⁴ Riley, *The Political History of American Food Aid*, xxii.

Historian Diane B. Kunz argues that the Cold War period is unique in the way that domestic economic policy, the Cold War security strategy, and the global economic framework secured prosperity for the United States and other capitalist nations.

Diane B. Kunz, *Butter and Guns : America's Cold War Economic Diplomacy*, (New York: Free Press, 1997).

⁵ Riley, *The Political History of American Food Aid*, 165, 193.

their product was stifling the product's potential as a nutritional wonder. Food producers and lawmakers saw food identity standards as the gold standard to legitimize new foods, create the perception that American consumers accepted the product, and imbue the product with the approval of the American capitalist and democratic systems.

Fish Flour to Feed the Hungry Earth

All the information we have indicates we are years ahead of the Soviet Union. But, it is important that we stay ahead. If we do not push boldly on, we expect Russia will be ready in a short time with an acceptable process and once its fish flour is available we are sure there will be no delay in Russia pouring its production out to all corners of the hungry earth.

Senators Saltenstall and Smith
Congressional Record
June 19, 1961⁶

In the years following WWII, newspapers worldwide began reporting on a new food product that was touted as a possible solution to global hunger: fish flour. In one of the first articles published on fish flour, *The Age Newspaper* of Melbourne, Australia reported in 1946 that fish flour, a protein supplement ground from whole fish, could be “a godsend for supplementing the diets of colored people.”⁷ For nearly two decades, fish flour was imagined as a product that could bring an end to starvation globally, while bolstering profits for the fishing industry.⁸ For politicians like Senators Saltenstall and Smith, the rush to perfect fish flour even became a part of the Cold War technological and cultural arms

⁶ U.S. Congress, House, *Fish Flour: Extension of Remarks of Hon. Hastings Keith of Massachusetts in the House of Representatives*, 87th Cong., 1st sess., 1961, 10730.

⁷ Australian Associated Press, “Fish Flour is the Latest,” *The Age*, April 2, 1946, 1.

⁸ UP, “U.S. Helping Indonesia With Food Experiment,” *Edwardsville Intelligencer*, March 31, 1954. Associated Press, “Fish Flour Is Tested on Underprivileged Children,” *The Corpus Christi Caller-Times*, February 25, 1954, 22.

race. Yet one thing stood in the way of this utopia: food identity standards. *The Age's* description of fish flour reveals a trend in the discourse surrounding fish flour, and a sticking point in the marketing: would people of any race eat a product made from *whole* fish, (fins, eyes, bones, intestines, and all)?⁹

Previous American food aid campaigns, particularly during World War I, were built upon the idea of Americans sacrificing their food to feed others. In the case of fish flour, the fishing industry and legislators imagined feeding people in developing nations with food that many Americans, and the FDA, did not think was fit for human consumption. Furthermore, proponents of fish flour suggested that technology could save Americans from sacrificing their lifestyle while still promoting American geopolitical power.¹⁰ The debate around fish flour reveals that American pure food regulations had a global impact in terms of popular perception of food safety and quality.

Throughout most of the 1950s, domestic American news coverage of fish flour focused on the production company VioBin, and its founder Ezra Levin. Levin was represented as a hero intent on eradicating hunger and malnutrition through uplift.¹¹ One quoted Levin's vision: "We have a new conception for 'have not' nations to create new wealth. They need only harvest the sea and themselves produce stable fish meal, fish flour and fish oil."¹² This quote highlights Levin's interest in generating economic uplift not just

⁹ Humans globally have been eating whole fish since approximately 3,000 BCE. For example, mediterranean civilizations fermented fish scraps, including intestines, into garum sauce. Additionally, the dish whitebait, or small young whole fish, is been popular in Europe, Oceania, East Asia, and the Caribbean.

¹⁰ Viet, *Modern Food, Moral Food*, 66.

¹¹ International News Service, "New Fish Processing Method May Solve Food Problems," *Lubbock Evening Journal*, December 16, 1954.

¹² "Fish Flour- Protein for World," *The Decatur Daily Review*, January 25, 1959.

through aid but in the adoption of American technology using his patented fish flour production methods.

By early 1957, VioBin was courting legislators to promote the adoption of their fish flour in national aid programs. With the help of Senator Paul Douglas of Illinois (VioBin was based in Monticello, Illinois), the fish flour manufacturer hosted a luncheon at the Capitol with dishes made from fish flour.¹³ Senate chefs prepared mushroom soup, bread rolls, and creamed chicken with fish flour in each dish. The luncheon also offered diners the opportunity to sprinkle fish flour directly onto rice to test the flavor claims made by VioBin. The lunch was intended to promote fish flour to eight foreign embassy representatives from India, Indonesia, Burma, Turkey, Iran, Mexico, Brazil, and Costa Rica, identified for the potential need for food aid in their respective countries. At the time the lunch was hosted, VioBin was in the process of building a plant in New Bedford, Massachusetts capable of processing 70 tons of fish per day.

Just as VioBin was promoting fish flour in the wake of their new plant construction, media outlets began to grow critical of Levin's production methods. Although he claimed that his method of "pressing" the fish produced an odorless and palatable supplement, by the middle of 1957, articles began referring to the seafood used as "trash fish."¹⁴ This critical media coverage foreshadowed the legislative fight over fish flour that intensified in 1961.

¹³ Associated Press, "Fish Flour Luncheon: Viobin Has Remedy for Food Lack," *Decatur Review*, January 30, 1957, 4.

¹⁴ United Press International, "Trash Fish to be Used in Fish Flour," *Medford Mail Tribune*, October 17, 1957.; United Press International, "Plant to Make Fish Flour Is Established," *The Paducah Sun*, May 10, 1957.

For the next several years, fish flour marketers continued to push for use of the product in American aid programs overseas. In April of 1961, Secretary of the Interior Stewart L. Udall hosted another fish flour tasting; this time a luncheon in which guests were fed cookies made with fish flour. News outlets reported that the cookies were “quite good.”¹⁵ Stories continued to appear in domestic papers about the testing and acceptance of fish flour overseas, including reports that fish flour added to bread in Peru was enjoyed by local children but not adults, and Moroccans were willing to eat bread made with fish flour so long as spicy peppers were added.¹⁶ Fish Flour Remarks published in the Federal Register detailed plans to push the marketing and sale of fish flour in Brazil, Mexico, and India, or, more broadly, places that were seen as vulnerable to both communism and starvation.¹⁷ By August of 1961 news outlets reported that competition between the U.S. and Russia to produce fish flour had intensified: “Both [Russia and the United States] intend to use fish flour for shipment to needy nations. Each hopes for a cold war victory as a result.”¹⁸ At this moment, but the U.S. and the U.S.S.R believed that fish flour could win the world.

By September of 1961, fish flour interests decided that a standard of identity for fish flour was needed to sell the product overseas. In their minds, a standard of identity was the best way to demonstrate that fish flour was something that American consumers would eat. A standard for whole fish flour was drafted in September 1961, but the bid was blocked

¹⁵ United Press International, “Udall Luncheon Features Cookies of Fish Flour,” *La Grande Observer*, April 6, 1961, 7.; United Press International, “Udall Serves Cookies Made of Fish Flour,” *Pasadena Independent*, April 6, 1961, 30.

¹⁶ “New Nonfarm Product Fish Flour,” *Daily Mountain Eagle*, April 26, 1961, 4.

¹⁷ U.S. Congress, House, *Fish Flour: Extension of Remarks*, 10730.

¹⁸ Editorial Comment, Eugene Register-Guard, “Fish Flour,” *News-Review*, Roseburg, Oregon, 21 Aug 1961, 4.

by the FDA with support from housewives who testified at public hearings against fish flour.¹⁹ The FDA's order cited section 402(a) of the Food, Drug, and Cosmetic Act: qualities of adulteration. The order described fish flour as containing "whole or in part of any filthy, putrid, or decomposed substance, or if it is otherwise unfit for food."²⁰ Congressman Otis G. Pike of New York referred to the clause as a "blunderbuss," suggesting that it did not allow for the nuance of the fish flour case to be properly evaluated. Pike went on to argue that private industry, not the government, was taking the initiative to address global hunger, but industry was being blocked from being able to "perform a service to mankind."²¹ Similar to the state nutritional concerns of the WWII era, Pike argued that food aid (and fish flour in particular) must be deployed swiftly to win the Cold War. Republican Congressman Hastings Kieth from Massachusetts further critiqued the FDA's ruling:

I am not overstating the case when I say that fish flour can be more than a food. It can be an effective weapon in our global war for peace, in the free world's struggle against powerful forces in the world today which trade on human privation, on hunger and on discontent.²²

Keith's framing of the "global war for peace" highlights the heightened militarism of the Cold War period, when peace could be won through global war, and nations like Vietnam could be spared from communism through genocide. With production overseas increasing, fish flour interests went back to the drawing board, and in September of 1961, Paul H. Douglas organized another luncheon to feature fish flour, this time in the private dining room of the New Senate Office Building and with a new invited guest: FDA Commissioner

¹⁹ Richard Spong, "Fish Flour Again Up for Argument", *Northwest Arkansas Times*, March 4, 1966.

²⁰ *Fish Flour*, September 14, 1961, 87th Cong., 1st sess., *Congressional Record* 107, 19571.

²¹ *Fish Flour*, September 14, 1961, 87th Cong., 1st sess., *Congressional Record* 107, 19570.

²² *Fish Flour*, September 14, 1961, 87th Cong., 1st sess., *Congressional Record* 107, 19571.

George P. Larrick. Commissioner Larrick was invited to partake in a meal in which every element contained fish flour. Reporter George Dixon described the scene:

The pure foodist said the host and his Congressional colleagues began the meal by sprinkling fish flour on their soup, the way folks sprinkle grated cheese on minestrone. Larrick did no sprinkling, but passed up on the soup anyway for fear Senator Douglas had snuck some of the fish powder into it beforehand. The others also attacked the casseroles with simulated gusto, and did a lip-smacking job over the fishy pie. Commissioner Larrick said he just sat there and courted malnutrition.²³

Dixon's account suggests that Larrick's opposition to fish flour was not purely ideological; for him the idea of sprinkling dried whole fish flour on his food was deeply unappetizing.

By late September, the FDA's ruling against a fish flour standard gained the support of Senator Frank Carlson from Kansas who believed that the fish flour lobby and potential inclusion of "putrid" substances would debase the central purpose of the Food, Drug and Cosmetic Act (FDCA). He argued that industry pressure was attacking the integrity of the American food marketplace in two main ways: first by attempting to obtain the approval of the product by the FDA, and second by attempting to force an amendment to the FDCA to exempt fish flour from the requirements of the act.²⁴ The popular media echoed Carlson's skepticism. The column "Among Us Consumers" of Brooklyn New York stated:

The U.S. Food and Drug Administration is worried about fish flour. You ought to be worried about it too, because a major effort is now under way to foist this garbage on the American public. The effort has substantial political backing in very high places.²⁵

The author of the column, Roy Lindberg, encouraged readers to send in comments expressing their concern that the implications of creating a standard that allowed "filth"

²³ George Dixon, "Washington Scene," *Fairbanks Daily News-Miner*, September 15, 1961, 4.

²⁴ Senator Frank Carlson, speaking on fish flour, on September 26, 1961, 87th Cong., 1st sess., *Congressional Record* 107, 21751.

²⁵ Roy Lindberg, "Among Us Consumers," *Bay Ridge Home Reporter*, September 29, 1961, 7.

could be far reaching. Lindberg concluded by saying that “if the FDA is forced to adopt a standard for fish flour as proposed by the manufacturer, the nation’s whole food sanitation program will be dealt a blow from which it may never recover.”²⁶ While proponents of fish flour believed it was the key to winning the Cold War, opponents believed it could dismantle American food regulation.

At the same time as criticism of fish flour was growing, VioBin was no longer the main non-Soviet promise for production. A new fish flour production method was developed at Texas A&M University, and a new production plant was being built in Sweden, sponsored by the Food and Agriculture Organization of the United Nations. Levin expanded his humanitarian angle by announcing: “experiments in Salvador, Mexico, Union of South Africa and Venezuela have confirmed the value of fish flour as made by us.” Despite the rise in fish flour production, non-governmental organizations were beginning to question whether fish flour was worthwhile. In September 1961, the United Nations sponsored a nine-day conference on using fish to address global hunger. Jean Mayer of the Harvard School of Public Health challenged the idea that fish flour was necessary:

West African populations, for example, like fish and are used to consuming dried fish with a strong smell and taste... in most areas it seems to me that the production of fish flour has been a waste of time and it would have been more useful to teach mothers to use dried fish to make an acceptable food for small children.²⁷

²⁶ Lindberg, “Among Us Consumers,” 7.

²⁷ George Weeks, United Press International, “Parley Opened on Fish Diet,” *The Bridgeport Post*, September 19, 1961, 32.

Mayer's point highlights the persistent question of the suitability of fish flour, not only as an appealing product but one that would be culturally appropriate to the foodways of the populations receiving aid.²⁸

By November 21, 1961, a syndicated column by the *Chicago Daily News* reported that the FDA had received 2,000 letters commenting on the fish flour standard proposal, and the letters were split about 50/50 for and against. Among those in favor of creating a standard of identity for fish flour was former first lady Eleanor Roosevelt.²⁹ Even with some popular support behind the creation of the standard, the press reported that American consumers did not intend to consume fish flour themselves. The *News-Palladium* of Benton Harbor, Michigan stated:

Many Americans might though with small reason, feel somewhat finicky about adding fish flour to their diet. Hungry millions abroad have no such reservations concerning a diet supplement which, added to flour or meal, provides animal protein especially valuable to those who subsist mainly on cereal grain.³⁰

The divide between what Americans were willing to eat, and what they imagined hungry populations overseas were willing to eat persisted in the discourse about fish flour.

By early February 1962, the FDA upheld its charge that fish flour constituted an adulterated product due to "filth." In response, Congressional proponents of the fish flour

²⁸ While the intent of fish flour manufacturers to create markets for a product mainstream American consumers would not eat suggests differing considerations for aid recipients overseas, the resistance of South American and African people to incorporate fish flour into their diets aligns with Heidi Tinsman's critique of one-sided dependency during the Cold War. Tinsman challenges the idea that the United States "acts upon" Latin America by arguing that Cold War era consumption was not one sided. With Tinsman's model in mind, the narrative of food aid can be seen as the United States "acting upon" developing nations. Yet VioBin's desire to create overseas markets for fish flour didn't work. Aid operated differently from the consumer market in Tinsman's study, yet fish flour demonstrates that some level of reciprocal interest must exist for the aid, and the underlying political outcomes to occur.

Heidi Tinsman, *Buying into the Regime: Grapes and Consumption in Cold War Chile and the United States*, (Durham: Duke University Press, 2014) 11.

²⁹ William McGaffin for the *Chicago Daily News*, "Flour Maker Using Fish-The Whole Fish," *The Corpus Christi Caller-Times*, November 21, 1961, 6.

³⁰ "Fish Flour Dispute," *The News-Palladium*, December 12, 1961, 2.

standard increased their pressure and linked the creation of a standard more overtly to the fight against communism. Senator Greuning characterized the situation with the headline “Bureaucratic Squeamishness Impedes the Fight Against Communism.”³¹ Despite sustained pressure from fishing interests, the FDA formalized their view that fish flour was adulterated and issued a standard of identity for fish flour that stipulated that product must be made from cleaned fish after discarding heads, tails, fins, viscera, and intestinal contents.³²

Increasingly FDA representatives bristled at pressure from fishing interests to approve a whole fish flour standard. An entry from the Federal Register from March 1962 explains that the driving force behind the pressure to approve the standard was coming from VioBin and Menhaden fisheries and mentions that the FDA was seeking an impartial party to run the fish flour hearings.³³ The FDA also suggested that the Department of the Interior send fish flour overseas without FDA approval. The State Department and the Food for Peace agency discouraged this approach because they feared the optics of sending a product not cleared for American consumers.³⁴ This fear was supported by a report at the United Nations Food and Agriculture Organization conference in Rome that same year, that communist propaganda was being circulated abroad that claimed the U.S. used fish products in overseas aid that were “prohibited” from domestic consumption.³⁵

³¹ U.S. Congress, Senate, *Fish Protein: Bureaucratic Squeamishness Impedes the Fight Against Communism*, 87th Cong., 1st sess., 1961, 2091

³² U.S. Congress, House, *Fish Protein Concentrate*, 88th Cong., 1st sess., 1963, 8096.

³³ U.S. Congress, Senate, *Fish Flour: Extension of Remarks of Hon. Paul H. Douglas in the Senate of the United States*, 87th Cong., 2nd sess., 1962, 3796-3797.

³⁴ “Fish Flour Fracas,” *The Washington Post*, May 8, 1963.

³⁵ A. Robert Smith, “Food and Drug Administrators Think Something Fishy About Food Project”, *The Bend Bulletin*, October 30, 1963.

Nevertheless, proponents of fish flour continued to believe that “the hungry man is not fussy about his food”.³⁶

With fatigue over the long fish flour fight setting in, fishing interests attempted to rebrand by selling a new version of fish flour that had been “chemically cleaned” to be “pure and wholesome.”³⁷ The rebrand was seemingly unsuccessful as public hearings once again yielded criticism from housewives opposed to fish flour.³⁸ Yet by March of 1966, the fish flour fight was rejuvenated by a new FDA commissioner and 5 million dollars appropriated by the Senate to speed up fish flour research,³⁹

Finally, on February 2, 1967, an agreement was reached and whole fish flour was deemed suitable for human consumption as a food additive, though it was not granted a standard of identity.⁴⁰ An FDA press release from 1967 stated:

The use of Whole Fish Protein Concentrate as a food additive was approved by the government today. The high-protein powder, manufactured from the hake or hake-like fish, may be distributed for domestic household use in packages up to one pound in weight under the provisions of a regulation issued by the Food and Drug Administration.⁴¹

The agreement secured FDA approval for the product but did not offer the symbolism that fish flour interests saw in a standard of identity.

Later that year, the first large-scale shipment of fish flour was sent to Korea.

Ultimately, the shipment was not made as a part of state food aid; the deal was made

³⁶ “Fish Flour Controversy”, *The Progress*, August 13, 1964.

³⁷ “Fish Flour Again”, *The Troy Record*, August 14, 1964.

Associated Press, “Cheap Fish Flour Could End Protein Starvation in the World”, *San Bernardino County Sun*, December 26, 1965.

³⁸ Richard Spong, “Fish Flour Again Up for Argument”, *Northwest Arkansas Times*, March 4, 1966.

³⁹ Spong, “Fish Flour Again.”; “Fish Flour Research Approved”, *Bennington Banner*, June 28, 1966.

⁴⁰ Food and Drug Administration, Rules and Regulations, “Whole Fish Protein Concentrate,” *Federal Register* 32, no. 22 (February 2, 1967): 1173.

⁴¹ U.S. Congress. Senate. Select Committee on Nutrition and Human Needs. *Nutrition and Private Industry: Food From the Sea.* 90th Cong., 1st sess., July 31, 1969, 4899.

among private businesses.⁴² Poong Jun Pharmaceutical Co. of Seoul signed a contract with VioBin for 300 tons of fish protein concentrate at a cost of \$120,000. Part of the plan was to introduce the food supplement to the Korean market. Despite the acceptance of fish flour as a food additive, the State dept frowned upon large shipments of fish flour overseas because they feared the food would continue to fuel communist propaganda about being given food that was too “filthy” for Americans.⁴³

A Fish Flour/ Dry Milk Arms Race

Fish Flour Tested in U.N. As Substitute for Milk:

Fund officials, experimenting with the foodstuff, have reported that [fish flour] can be combined successfully with cereals, or baked into bread or biscuits that would be twice as high in protein as an equal quantity of dry milk and rich in vitamins needed for growth.

The New York Times
March 21, 1953⁴⁴

Fish flour wasn't the only food thought to have transformative power in the Cold War era.⁴⁵ Like the fishing industry, the dairy industry and legislators from dairy states believed that dry milk had the potential to solve world hunger. As fish flour received global attention, dairy industry interests began positioning dry milk as a better product for the job. Yet once again the FDA was a crucial body in the adoption of dry milk in food aid.

⁴² CDN News, “Fish Protein Concentrate Goes to Korea Soon,” *The Cincinnati Enquirer*, June 18, 1967.

⁴³ Kenneth McCaleb, “Conversation Piece: ‘Fish Flour’: Progress Report,” *The Corpus Christi Caller-Times*, March 17, 1967, 18.

⁴⁴ Special to the New York Times, “Fish Flour Tested in U.N. as Substitute for Milk,” *The New York Times*, March 21, 1953.

⁴⁵ A standard was created for dry milk in 1941, but the naming of the standard received consistent challenges from dairy interests. This legal challenge came after a contentious framing process in which legislators disagreed about an appropriate common or usual name for the product.

Dried milk was first sold on a commercial scale in 1868 as “desiccated milk.”⁴⁶ It was developed to extend the shelf life of milk and cut shipping costs. It soon found use in other food products like baked goods.⁴⁷ Dried milk is produced by evaporating a thin layer of milk over a heated drum or injecting a fine mist of milk into a heated chamber where it evaporates immediately and falls to the ground.⁴⁸ Dried skim milk in particular was widely available, because it was made with the skim milk generated as a byproduct of butter churning.⁴⁹

The first standard of identity for the product was created in July 1940 under the name “dried skim milk,” but the dairy industry mobilized almost immediately in opposition of the characterization “skim”.⁵⁰ While the FDA maintained that “skim” was the common

⁴⁶ Prior to the industrial period, foods were dried using the sun and wind as early as 12,000 B.C.E. in the Middle East and Asia.

Brian A. Nummer, “Historical Origins of Food Preservation,” *National Center for Home Food Preservation*, last modified May 2002, https://nchfp.uga.edu/publications/nchfp/factsheets/food_pres_hist.html.

⁴⁷ “Dry Milk Products,” *Britannica*, accessed November 12, 2021, <https://www.britannica.com/topic/dairy-product/Dry-milk-products>.

⁴⁸ “Dried Milk Powder: A Review of British Experience.” *Public Health Reports* 33, no. 26 (1918): 1052. <http://www.jstor.org/stable/4574831>.

⁴⁹ “Dry Milk Products,” *Britannica*.

⁵⁰ The case *Twin City Milk Producers Association vs. Paul McNutt, Federal Security Administrator* reached the 8th circuit court of appeals in 1941. The case challenged the FDA’s new standard for dry milk products under the names “dried skim milk” “powdered skim milk,” and “skim milk powder” on the basis that these names held a negative connotation for consumers. In this case the imperative to decide the naming of standards of identity came under scrutiny; while the administrator was charged with applying names in order to establish “the promotion of honesty and fair dealing in the interest of consumers,” the milk producers argued that characterizing their product as “dry skim milk” as opposed to “dry milk solids not over 1 1/2% fat” did not represent the “common or usual name” of the food. The court suggested that this argument was more about the milk producer’s profit margin and the negative connotation the word “skim” held with consumers than accurately communicating the product information to consumers. Ultimately this case was sent back to the Federal Security Administrator so that he could provide further clarification on his nomenclature decisions. McNutt argued that skim milk was more in line with a common or usual name familiar to consumers than “dry milk solids not over 1 1/2% fat.” McNutt responded by issuing an amendment to the dry skim milk standard clearly stating that the standard was created to promote honesty and fair dealing in the interest of consumers. This first legal challenge to the dry skim milk standard was ruled in favor of the FDA, but challenges to the naming of this product would persist for the next decade.

Food and Drug Administration, “In the Matter of the Definition and Standard of Identity for Dried Skim Milk: Amendment of Order,” *Federal Register* 6, no. 190 (September 30, 1941) 4933.; *Twin City Milk Producers Ass’n et al. v. McNutt, Federal Security Adm’r (American Dry Milk Institute, Inc., et al., Interveners)*, 122 F.2d 564, (8th Cir. 1941).

name among consumers, in 1944, hearings were held to discuss the renaming of the product. Proponents of renaming cited nutritional reasoning, like Senator Clark of

Missouri:

...the use of the term 'skim milk' is and still remains a very considerable barrier to the most efficient use of this great reservoir of splendid, nutritious food for human consumption.⁵¹

Clark argued that the nutritional power of dried skim milk was being hindered by popular bias against the word skim, particularly in the context of hunger relief programs.

Supporters of removing "skim" from the name argued that the word discouraged the consumption of a product that "is now recognized by all nutritionists as the most valuable part of milk".⁵² Ultimately this initiative was not successful, and the FDA maintained that the only acceptable names for dry milk solids without fat were "dried skim milk", "powdered skim milk", and "skim milk powder".

The nutritional arguments about dry milk naming intensified during the Cold War period, as dairy interests pushed for another renaming. In March of 1955, Senator Hubert Humphrey of Minnesota proposed changing the standardized name from "nonfat dry milk solids" or "defatted milk solids," to "non-fat dry milk." Humphrey initially explained his reason for the change: "My objective in seeking this change is to encourage efforts to stimulate popular consumption of this nourishing product which is providing an ever-increasing outlet for our milk and holds promise of becoming an even more important market" but went on to clarify that "Both the Dry Milk Institute and the National Federation

Twin City Milk Producers Ass'n et al. v. McNutt, Federal Security Adm'r (American Dry Milk Institute, Inc., et al., Interveners), 123 F. 2d 396, (8th Cir. 1941).

⁵¹ *Standard of Identity of Dry Milk Solids*, HR 149, 78th Cong., 2nd sess., *Congressional Record* 90 (February 21, 1944): 1909.

⁵² *Standard of Identity of Dry Milk Solids*, HR 149, 1909.

of Milk Producers feel it would help marketing of this product if it could be legally labelled as “nonfat dry milk” without the use of the extra word ‘solids.’”⁵³ The alignment between agricultural interests and the charge to feed the world reflects similar dynamics in the fish flour conversations that emerged at the same time.

On October 4th, 1955, an amendment was proposed to create a new standard titled “certain dry milk solids.”⁵⁴ Legislators representing the interests of agricultural associations, the dairy industry, baker’s associations, home economics programs, argued that the word “skim” held a negative connotation among consumers, and discouraged the consumption of a nutritious product. Legislators representing the National Congress of Parents and Teachers Associations, and The Federation of Women’s Clubs (with support from Mrs. Harvey W. Wiley, in her role as the “chairman of legislation” for the Federation of Women’s Clubs) were opposed to the change on the grounds that the name change was meant to deceive consumers. Senator John H. Overton from Louisiana ardently opposed the renaming because he believed it did not represent the “common or usual name” of the product. In a statement before Congress, Overton argued: “Instead of calling the product by its usual name, with which everyone is familiar- skim milk- it is sought to give it some ‘hifalutin’ name with which very few purchasers and very few users are familiar”. Ultimately, the proposal failed, and the Code of Federal Regulations continued to list dry milk under the names “dried skim milk”, “powdered skim milk”, and “skim milk powder” in the 1962 edition, just as fat free foods were gaining favor with consumers.⁵⁵

⁵³ “Definition of Certain Dry Milk Solids,” S. 1614, 84th Cong., 1st sess., *Congressional Record* (March 30, 1955), 3989.

⁵⁴ *Fixing a Reasonable Definition and Standard of Identity of Certain Dry Milk Solids, HR 149*, 78th Cong., 2nd sess., *Congressional Record* 89 (October 4, 1944): H 8038.

⁵⁵ “Milk and Cream: Definitions and Standards of Identity,” *Code of Federal Regulations*, title 21 (1962): 71.

In the milk industry's bid to position dry milk as the product that could feed the world through food aid contracts, they targeted fish flour with negative campaigns. Since the beginning of the fish flour marketing campaign, milk interests like The National Milk Producers' Federation (NMPF) launched a media campaign that fish flour was "putrid" and argued, "there is no current or foreseeable need to resort to fish offal as a source of protein".⁵⁶ Groups like the NMPF suggested that there was only room for one wonder food that could solve global hunger.

Unlike fish flour, dry milk products were more popular among American consumers. Historically consumers had distrusted skim milk because it was associated with the 19th century adulteration practice of watering down milk.⁵⁷ Among consumers in the nineteenth and early twentieth centuries, skim milk also bore the perception as a byproduct often used to feed hogs. Yet the discovery of vitamins in the 1910s shifted consumer views, as nutritionists and marketers began to argue that skim milk, particularly a new powdered dry version could prevent pellagra, and offer protein, calcium, phosphorus, and riboflavin.⁵⁸ Prior to U.S. involvement in WWII, the U.S. Secretary of Agriculture ordered that production of dry milk increase to be used in lend-lease and war relief programs. Nutritionists during WWII touted dry skim milk as a readily available alternative protein source, and the federal government ordered 2 hundred million pounds of dry skim milk in 1941 for Allied food relief. The military cited the transportability and shelf life of dry skim

⁵⁶ A.Robert Smith, "Food and Drug Administrators Think Something Fishy About Food Project", *The Bend Bulletin*, October 30, 1963.

⁵⁷ Kendra Smith-Howard, *Pure and Modern Milk: An Environmental History Since 1900*, (Oxford: Oxford University Press, 2013) 76.

⁵⁸ Smith-Howard, *Pure and Modern Milk*, 76.

milk as a major factor in the move to shift away from evaporated milk, which was used for relief purposes during WWI.⁵⁹

As with many products used by the military during WWII, dried skim milk was marketed during the post-WWII period as a convenience wonder food.⁶⁰ By 1953, sales of dry milk powder had increased 70% due to the introduction of a new instant dry milk that was easier to mix.⁶¹ The spike in popularity reflects changing trends in nutrition advice at the time. When dry skim milk was first introduced, manufacturers sought to hide the fact that the product contained no fat, because consumers of the 1920s and 1930s saw fat as the most valuable element of dairy. By the 1940s, coronary heart disease had risen to be the number one cause of death in the United States. Several influential studies, including the work of physiologist Ancel Keys and the National Heart Institute's Framingham Heart Study, linked cardiovascular disease and diets high in saturated fats and cholesterol.⁶² By the 1950s, nutrition advice shifted to recommend low fat and low-calorie foods. In 1983, a Framingham study linked obesity to heart disease, thus bolstering low-fat dietary advice to not only prevent coronary heart disease, but also promote weight loss.⁶³

In comparing the popular media representations of dry milk and fish flour, the difference is striking. The newspaper articles promoting fish flour presented it as a food to be consumed by *others*. While some nutritionists suggested it could be used in nutrition assistance programs domestically, the only Americans *choosing* to eat fish flour were doing

⁵⁹ Smith-Howard, *Pure and Modern Milk*, 77.

⁶⁰ Jane Nickerson, "Powdered Milk Magic." *New York Times*, October 17, 1954.

"Nonfat Dry Milk- It's Economical, Handy and Nutritious", *The Capital Times*, May 6, 1954.

⁶¹ "New Instant Dry Milk Big Help to Homemakers," *The Times Record*, June 30, 1955.

⁶² Ann F. La Berge, "How the Ideology of Low Fat Conquered America," *Journal of the History of Medicine and Allied Sciences* 63, no. 2 (April 2008): 145, <https://doi.org/10.1093/jhmas/jrn001>.

⁶³ La Berge, "How the Ideology of Low Fat Conquered America," 147.

so for cameras at a Congressional tasting. It seems that fish flour was never meant to be invited into the homes of American consumers. Alternatively, dry milk fit into the post-WWII media conversations about convenience foods for homemakers, while also representing a practical pantry item for consumers without refrigerators.

Hunger in America

In May 1968, CBS News aired a special report “Hunger in America.” The 10-month investigative report profiled people and communities suffering from hunger in America. According to CBS, the United States was spending 1.5 billion dollars on food aid overseas, yet out of a population of 200 million, 30 million Americans were living in poverty and, of that, 10 million were hungry.⁶⁴ The report prompted public outcry for federal nutrition and hunger programs. By July, Senator George McGovern of South Dakota was appointed chair of the new Select Committee on Nutrition and Human Needs.⁶⁵ McGovern was previously the inaugural director of President Kennedy’s Food for Peace program from 1960 to 1962 when he was elected to the Senate.

The Select Committee on Nutrition and Human Needs convened a variety of hearings on food aid programs, including the July 31, 1969, gathering “Nutrition and Private Industry: Food from the Sea”. According to Senator Claiborne Pell of Rhode Island, the hearings were intended to “pursue the question of the nutritional value of seafoods and

⁶⁴ “CBS Reports: Hunger in America”, Peabody, accessed January 9, 2022, <http://www.peabodyawards.com/award-profile/cbs-reports-hunger-in-america>.

⁶⁵ Marion Nestle, *Food Politics: How the Food Industry Influences Nutrition and Health*, 2nd ed., (Berkeley: University of California Press, 2007), 38.

their potential for improving the nutritional condition of the malnourished in the United States.”⁶⁶ Naturally, fish flour came up. The FDA’s Deputy Associate Commissioner for Compliance, Reo E. Duggan described the current state of the fish flour fracas. He detailed the stalemate between the FDA and the Department of Interior over fish “viscera” that lasted, by his account, from 1962 to 1967. Once Whole Fish Protein Concentrate was approved for consumption as a food additive, Duggan explained that the FDA received over one hundred written objections to the product on the grounds that the FDA had legalized a “filthy” food.⁶⁷ Additionally, objections were filed by the American Dry Milk Institute because dry milk products “are a principal source of protein in the diet of millions of American homes.”⁶⁸ Duggan included letters in the record from the attorney for the American Dry Milk Institute, Charles M. Fistere. Fistere detailed the Institute’s grievances with approval of Whole Fish Protein Concentrate as a food additive:

The regulation in question, if placed in effect, would adversely affect the Institute and its members in that it would authorize the production and distribution of competitive food products containing easily avoidable filth (i.e., the head, fins, tails, viscera and intestinal content of the fish). Whole fish protein concentrate is used or intended for use in the household as a protein supplement in food. This use is one which is presently supplied by dry milk products, especially nonfat dry milk in the preparation of many foods in the home. The order saves producers of whole fish protein concentrate the expense of removing these objectionable materials thereby giving them an unnecessary, undesirable and unfair economic advantage over the producers of competitive products including dry milk products who must adhere under threat of enforcement action to more aesthetic standards in the preparation of food.⁶⁹

⁶⁶ U.S. Congress, Senate, Select Committee on Nutrition and Human Needs, *Nutrition and Private Industry: Food From the Sea*, 90th Cong., 1st sess., 1969, 4855.

⁶⁷ U.S. Congress, Senate, Committee, *Nutrition and Private Industry*, 4899.

⁶⁸ U.S. Congress, Senate, Committee, *Nutrition and Private Industry*, 4899.

⁶⁹ U.S. Congress, Senate, Committee, *Nutrition and Private Industry*, 4900.

Ultimately, the FDA Commissioner decided that the American Dry Milk Institute's protests were "not supported by sufficient legal grounds".⁷⁰ Duggan concluded by stating that FDA Commissioner Dr. Herbert L. Ley saw the fish protein concentrate as a possible additive to other standardized foods like spaghetti and macaroni, and was interested in "bona fide experimentation in ways of adding this product to the diet of undernourished people" despite previous statements of disapproval from the bread industry over proposals to create fish flour-enriched bread products.⁷¹

Conclusion

While children starve in urban ghettos and migrant labor camps, claims of victory are empty. The object is to end hunger. That has not occurred.

Senator George McGovern's Opening Statement
White House Conference on Food and Nutrition and Health
March 2, 1971

In the end, neither dried milk nor fish flour fed the world. Despite tremendous pressure from fishing and dairy interests, fish flour was never given the standard of identity Levin and Udall desired, and dried skim milk maintained its common or usual name, as designated by the FDA. By 1971, fish flour and dry milk had fallen by the wayside, and new wonder foods were being touted for their world-changing potential.

⁷⁰ U.S. Congress, Senate, Committee, *Nutrition and Private Industry*, 4907.

⁷¹ U.S. Congress, Senate, Committee, *Nutrition and Private Industry*, 4907.; A.Robert Smith, "Food and Drug Administrators Think Something Fishy About Food Project", *The Bend Bulletin*, October 30, 1963.

At the Congressional Nutrition and Human Needs Hearings in 1971 General Mills unveiled their newest product: textured vegetable protein foods.⁷² They branded their product made from raw agricultural commodities as “Bontrae”.⁷³ Campbell’s also announced that they were developing a textured vegetable protein made from soy. And a standard of identity for textured vegetable protein products had been drafted and published in the Federal Register.⁷⁴ Bontrae went on to be best known as Bac*Os bits, and textured soy and vegetable proteins were mostly used as industrial ingredients, or in niche health food and vegetarian contexts.⁷⁵

While these foods were not the immediate solution to global hunger that manufacturers touted, they continued to capture the popular imagination. Food scientists and journalists of the 1960s looked to the year 2000, and with a predicted global population of 6 billion people and envisioned a world in which so-called synthetic foods were a dietary staple: “soybeans, fish flour from the sea, pounds of pure protein from clover, wheat and mustard will be on our tables. The food will not smell quite so good or taste quite so good, but it will keep us healthy.”⁷⁶ Commentators expected that the world of food processing would only intensify, with reports that Standard Oil was testing lab grown protein, and the Atomic Energy Commission was developing foods that could survive irradiation with gamma rays and atomic particles.⁷⁷

⁷² U.S. Congress, Senate, Select Committee on Nutrition and Human Needs, *Nutrition and Human Needs: Hearings before the Select Committee on Nutrition and Human Needs of the United States Senate: Part 1 - Review of the Results of the White House Conference on Food, Nutrition, and Health*, 92nd Cong., 1st sess., 1971, 179.

⁷³ U.S. Congress, Senate, Committee, *Nutrition and Human Needs*, 179.

⁷⁴ U.S. Congress, Senate, Committee, *Nutrition and Human Needs*, 250-253.

⁷⁵ Nadia Berenstein, “A Taste of Futures Past: The Rise and Fall of Spun Soy Protein,” *Flavor Added: Undercooked and Overheated Notes on the History of Synthetic and Artificial Flavors*, last modified June 7, 2017, <http://nadiaberenstein.com/blog/category/Environment>.

⁷⁶ “The Year 2000,” *The Times Record*, December 16, 1968.

⁷⁷ Joan S. Gimlin, “Synthetic Foods,” *Ironwood Daily Globe*, December 14, 1968.

The stories of fish flour, dried skim milk, and even textured vegetable protein, despite never fulfilling their promise, reveal key dynamics about Cold War nutrition aspirations and policy. First, overseas food aid was tied to domestic agricultural interests, not just in the potential for profit, but also in generating favorable responses from aid recipients. In the minds of producers and regulators, food identity standards were the gold standard in legitimizing new foods, creating the perception that American consumers accepted the product, and imbuing the food with the approval of the American capitalist and democratic systems.

While the FDA's view of filth stymied the "moonshot" that was fish flour, the process reveals the influence of the Cold War on food identity standards, and how popular conceptualizations of purity shifted with a domestic and global audience. Fish flour marketers and aligned lawmakers argued that food identity standards should be used as a foreign policy tool, while FDA officials and consumers believed that food identity standards were meant to protect domestic consumers. As discussed in chapter 1, a standard of identity represented a food's acceptance into mainstream Anglo-American foodways. Fish flour marketers knew that their product would not appeal to domestic consumers but wanted to use the food identity standard as a symbol that the product was good enough for U.S. consumers. Additionally, just as food identity standards were invoked in the 1940s by regulators and politicians seeking to create healthy domestic citizens, by the 1960s this belief evolved to represent the Cold War anxieties of Domino Theory.

The food identity standards contributed to the Cold War ideological battle to promote democracy and capitalism overseas, however these case studies suggest an uneasy relationship between these two supposed pillars of American superiority:

government regulators and industry. In the next chapter we will explore this relationship further, as we look to the impact of food identity standards on the food industry.

Chapter 4

The Business of Food Identity Standards

Throughout the history of food identity standards, there is one industry that has consistently been at the center of hearings, lawsuits, and standards themselves: the dairy industry. This trend reflects the power that dairy holds in the American food industry, foodways, and culture more broadly. Food studies scholarship on the dairy industry has argued that dairy holds a unique power in American culture through associations with nutritional perfection and purity.¹

This chapter includes three sections that each represent a different dynamic between the dairy industry and food identity standards: margarine regulation, the Great Ice

¹ E. Melanie DuPuis states “milk is more than a food, it is an embodiment of the politics of American identity over the last 150 years.” Milk was viewed as a nutritionally perfect food beginning in the nineteenth century. DuPuis argues that this belief was a reflection of Anglo-American power; with widespread lactose intolerance in mind, the notion that milk was perfect mirrored white northern European beliefs in their own perfection by being one of a small group who were able to consume milk’s perfection. Milk also became linked to moral perfection through the advocacy of milk consumption by the pure food and temperance movements in the nineteenth century. Both Progressive campaigns saw origins in the Second Great Awakening and American “obsession” with the idea that human behavior could be perfected. Finally, American infrastructures like technology, science, and government intervention gave consumers the ability to drink milk every day because of the perfection narrative that underpinned the growth of milk consumption. Dupuis, 8-11, 21-23, 40.

Smith-Howard argues that the popularity of dairy, and milk specifically, represents a complicated dynamic with nature and the environment. Pasteurization and farm inspections, according to Smith-Howard, helped increase public belief in milk purity and by 1920 milk had become a staple food for children and infants that was widely referred to as “nature’s perfect food.” Conversations about butter were also linked to ideas of nature, as dairy interests tried to differentiate themselves by speaking to the “nature” of butter and claimed oleomargarine as artificial. For example, the idea of nature was central to conversations of the color of oleomargarine and butter. While these representations linked butter to a pastoral ideal, and oleomargarine to industrialization, both were the product of an agrarian environment. The reason this common origin was overlooked was the power of the agrarian to invoke purity. Despite beliefs that “unnatural” oleomargarine was artificially colored yellow, the use of palm oil “naturally” added a yellow hue. At the same time, butter was also widely colored (depending on the season) with less awareness or criticism. Ultimately, Smith-Howard links milk’s popularity not simply to marketing, but to the way public health reformers reconfigured the nature of dairy landscapes and milk as a product. Smith-Howard, *Pure and Modern Milk*, 8-9, 34-35, 58-60.

Cream Battle of 1977, and product naming in the late 20th and early 21st centuries.² First, the oleomargarine standard of identity helped shift public perception of oleomargarine from an ersatz industrial butter substitute to a spread in its own right. This standard helped bring an end to decades of restrictions and taxes on oleomargarine that benefitted the dairy industry. The loss of these taxes led dairy interests to invoke dairy farmers as sympathetic figures in need of protection. During the Great Ice Cream Battle of 1977, dairy interests sought changes to the standard of identity for ice cream to permit new dairy additives. In this case, two interests in the same industry, ice cream manufacturers and milk producers fought to revise the ice cream standard to their advantage. When neither side secured the outcome they wanted, they agreed that food identity standards were too restrictive. Finally, by the late 20th century, the branding strategies of Kraft cheese and Breyers ice cream demonstrate that marketing efforts shifted the power of food names away from the standardized common or usual names. Together these case studies illustrate how the dairy industry has navigated the standards on a case-by-case basis to protect their interests. While FDA officials and lawmakers checked industry power in the oleomargarine and ice cream case studies, oversight loosened under the Neoliberal policies of the 1980s and 1990s.

Dairy in the United States

Commercial dairy production began during the nineteenth century. As the United States urbanized, most households no longer had space to keep cows for home dairy

² Prior to 1950 “oleomargarine” was the common name for the product. After 1950, “margarine” became more common. This chapter will use the name that corresponds to the time period being discussed.

production.³ Despite the widespread industrialization of food production at this time, the dairy industry, and milk in particular, maintained local “milksheds” to serve metropolitan areas.⁴ After the Civil War, dairy cooperatives spread nationally, with particular concentrations in midwestern states like Minnesota and Wisconsin. By the early decades of the twentieth century, groups like The Dairymen’s League Cooperative Association of New York, The Tillamook County Creamery Association of Oregon, the Twin-City Milk Producers’ Association of Minnesota, and Land O’ Lakes Creameries Inc. represented tens of thousands of members each. Local organizations grew into national dairy organizations, like the National Dairy Association, founded in 1905 in Illinois with the goal of advancing and promoting the dairy industry and the cause of dairying.⁵ This group spawned numerous national dairy advocacy groups, including the National Dairy Council, the World’s Dairy Congress Association, and the American Dairy Federation. In 1886, national dairy groups were instrumental in crafting America’s first federal anti-adulteration law regulating oleomargarine.⁶

³ Chester Linwood Roadhouse and James Lloyd Henderson, *The Market Milk Industry*, (New York: McGraw Hill, 1941) 4.; DuPuis, *Nature’s Perfect Food*, 5.

Cattle first arrived in what is now the United States as a result of the Columbian Exchange. During the colonial period, Anglo American dairy consumption centered on butter, cheese, and buttermilk, as fresh milk spoiled quickly without refrigeration. Compared to cultured foods like butter and cheese, fluid milk consumption grew in popularity much later. Milk first became widely consumed in the mid-nineteenth century as a breast milk substitute among urbanities. Despite the rise of milk consumption as a result of industrialization and urbanization, consumers historically have been hesitant to adopt processed milk products like concentrated or powdered milk.

⁴Technology did impact the local act of dairy production, particularly machine milking. In the nineteenth century, herd size and thus production output was determined by the amount of labor available to milk cows. By the 1890s a variety of milking machines had become mainstream, thus allowing farmers to grow their herd size and produce more milk without having to pay for additional labor. This change increased average herd sizes from 40 at the end of the 19th century to over 1,000 by the end of the 20th.

DuPuis, *Nature’s Perfect Food*, 8-9.; Mark Kulansky, *Milk! A 10,000-Year Food Fracas*, (New York: St. Martin's Press, 2018) 205-208.

⁵ T. R. Pirtle, *History of the Dairy Industry* (Chicago: Mojonner Bros. Co, 1926) 146.

⁶ Cohen, *Pure Adulteration*, 77.

During the nineteenth century, dairy was one of the most heavily regulated industries in America due to widespread adulteration and spoilage risks. The Dairy Division of the USDA was organized in 1891 (and made a bureau in 1924) to “aid and encourage this rapidly growing industry.”⁷ These nineteenth century regulating bodies initially focused on dairy supply and sanitation. The dairy supply in urban areas was vulnerable to food safety issues, adulteration (often milk was watered down and thus susceptible to water-borne bacteria and illnesses like cholera), and production methods like “swill milk”, watery milk produced by cows fed with spent grains from urban breweries.⁸

While dairy consumption grew steadily in the 19th and early 20th centuries, it began to decline in the middle of the 20th century.⁹ In the 1950s, Dr. Ancel Keys linked rising rates of heart disease to calories from dietary fat, particularly red meat and dairy.¹⁰ This moment marked a shift from American consumers fearing dairy due to its potential to spoil or spread disease, to new anxieties that the nutritional profile of milk may be harmful to health.¹¹ In addition to new links to heart disease, changes in the dairy industry like the

⁷ Pirtle, *History of the Dairy Industry*, 142.

⁸ Cohen, *Pure Adulteration*, 68.

⁹ Kurlansky, *Milk!*, 209-2011.

¹⁰ Keys’ advice gained widespread acceptance, and by the early 1960s the dairy industry went on the offensive by attempting to discredit the purported link between heart disease and dietary fats, and also by introducing new diet products.

¹¹ Smith-Howard, *Pure and Modern Milk*, 117.

use of antibiotics,¹² nuclear testing,¹³ pesticides,¹⁴ and growth hormones,¹⁵ during the second half of the 20th century also impacted the American dairy market.

Elimination of competition: Margarine

¹² In the 1950s and 1960s, the use of antibiotics increased after electric milking machines led to the spread of the disease mastitis among cows. Not only did this new use of antibiotics diminish the bacterial strains needed to make products like cheese, the use of drugs like penicillin prompted allergic reactions among some consumers upon ingesting dairy with antibiotic residues. In the 1990s and 2000s, anxieties about antibiotics shifted to fears about the overuse of antibiotics and the creation of “superbugs” that no longer responded to medication.

Smith-Howard, *Pure and Modern Milk*, 124.; Kurlanski, *Milk!*, 328.

¹³ Following the U.S. bombing of Hiroshima in 1945, the testing of Atomic weapons intensified as a part of a global arms race. With each test, miniscule radioactive particles, notably strontium-90 and iodine-130 entered the atmosphere, landed on plants, were eaten by cows and became milk. These substances bioaccumulated in the bones of milk drinkers, particularly children, and led to increased risks for birth defects, premature aging and cancers like leukemia. By 1958, a study of milk in 48 American and Canadian cities found that strontium-90 levels had doubled in just one year, and in 1962, residents of Salt Lake City, Utah were advised to avoid milk after regulators found increased levels of iodine-130. By 1963, the United States, along with Britain and the Soviet Union agreed to stop above ground nuclear testing. This health scare associated with dairy sparked distrust among consumers globally, thus linking dairy with fears about nuclear radiation in food particularly in moments of crisis like Chernobyl and Fukushima.

Kurlansky, *Milk!*, 325-326.; Matthew L. Wald, “Low Levels of Radiation Found in American Milk,” *New York Times*, March 30, 2011, <https://www.nytimes.com/2011/03/31/us/31milk.html>.

¹⁴ In 1949, the FDA and USDA jointly banned the use of DDT in dairy farming after studies linked to the accumulation of cancer-causing chemicals in dairy fats. The FDA aggressively regulated pesticide residue because they claimed that dairy played a central part in the American diet, particularly in feeding “the weak, the sick, the young, and the aged.” Yet by 1960, FDA and Borden Milk Company studies found that a significant portion, as much as 25% of the milk sampled, still contained traces of pesticides. While farmers during this period understood the toxicity of DDT, many farmers continued to use it because it controlled stable fly and house fly populations. Dairy farmers had long thought of flies as a barrier to producing a pure and sanitary product, so it was difficult for them to see DDT as a contaminant and cause of disease. Ultimately, pesticide regulations were meant to protect consumers, but farm families also experienced challenges due to their own exposure to pesticides that prompted a greater appreciation for these consumer protections.

Smith-Howard, *Pure and Modern Milk*, 137-144.

¹⁵ In 1993 the FDA approved the growth hormone rBST, or recombinant bovine growth hormone, a product that promised to boost a cow’s milk production by 25%. The hormone was created at Cornell University in conjunction with Monsanto Agrochemical Company, and prompted a swift outcry from consumers who feared the health implications of the product. While the National Institutes of Health concluded that milk produced from cows injected with rBST posed no greater health risks, consumers began demanding products that were hormone or rBST free. Cows treated with rBST often required increased antibiotics to counter indigestion and teat infections prompted by the hormone, thus increasing consumer anxieties about consuming milk.

Smith-Howard, *Pure and Modern Milk*, 153; Kurlansky, *Milk!*, 327.

The dairy industry must set as its goal the complete extermination of oleomargarine. It must never rest until the manufacture and sale of oleomargarine have been outlawed in this country.

The Dairy Record magazine, June 18, 1941¹⁶

On June 7, 1941, the FDA enacted a standard of identity for oleomargarine. This decision came after nearly 60 years of taxes and color restrictions on the sale of oleomargarine.¹⁷ Federal Security Administrator Paul V. McNutt explained the FDA's decision to create an oleomargarine standard: "users of margarine were entitled to receive a product of acceptable food value, honestly labeled."¹⁸ Despite the FDA's affirmation and protection of the integrity of oleomargarine (once viewed as an ersatz food), there was still a federal margarine tax in effect intended to protect the dairy industry.¹⁹ As lawmakers, industry representatives and consumers debated the tax during two years of hearings, the testimony suggests that the food identity standards helped legitimize the integrity of oleomargarine to consumers and regulators. In response, dairy interests argued that dairy farmers were disadvantaged by consumer protections.

Oleomargarine was first developed in France from animal fats as a butter substitute or *beurre économique*. Emperor Napoleon III sponsored food chemist Hippolyte Mège-Mouriès to develop a butter alternative that was cheaper than butter and offered a longer

¹⁶ *Reduction of Income-Tax Payments*, S. 2182, 80th Cong. 2nd. sess., *Congressional Record* 94 (March 18, 1948): S 3043.

¹⁷ James Harvey Young, "'This Greasy Counterfeit': Butter Versus Oleomargarine in the United States Congress, 1886," *Bulletin of the History of Medicine* 53, no. 3 (1979): 392-395, 413-414.; Cohen, *Pure Adulteration*, 87-105

¹⁸ U.S. Department of Agriculture, *Daily Digest* LXXXIII, no. 47 (September 5, 1941) 3.

¹⁹ Representative Poage, speaking on oleomargarine, 80th Cong., 2nd sess., *Congressional Record* 94 (January 14, 1948): 192.

shelf-life.²⁰ The French later tightly regulated the product to ensure that it could only be marketed and sold as oleomargarine, not butter. When oleomargarine reached the United States in the early 1870s, butter producers mobilized to differentiate butter from oleomargarine based on purity and quality. While proponents of oleomargarine argued that the product was a healthful godsend for poor consumers, critics saw the product as counterfeit, unsanitary, and unnatural. In February of 1886, butter interests from 26 states drafted a bill to institute a two-cent tax per pound on oleomargarine, and by July it was signed into law.

In 1948, several years after the oleomargarine standards were enacted, a bill to repeal oleomargarine taxes was introduced in the House of Representatives.²¹ The proposal generated numerous Congressional hearings for two years, from 1948 to 1950. During these hearings, testimony from industry, government and consumer groups debated a range of topics from the economic consequences of the taxes to whether the dairy industry could claim ownership over the color yellow or the word “butter.”²²

²⁰ Young, “‘This Greasy Counterfeit,’” 394.

²¹ Mainstream consumer acceptance of margarine grew during wartime, and in the post-WWII era. In wartime, butter was saved for the troops, so consumers grew more familiar and comfortable with eating oleomargarine. Yet the Oleomargarine Act of 1886 remained in effect, which, in 1941, required that uncolored oleomargarine be taxed at ¼ cent per pound and colored oleomargarine was taxed at 10 cents per pound. Imported oleomargarine (colored and uncolored) was taxed at 15 cents per pound. Manufacturers, distributors and sellers of oleomargarine were also taxed.

Cohen, *Pure Adulteration*, 15, 104.

By the middle of the 20th century some producers began dropping the “oleo” from the name to reflect a new product formulation made from vegetable fats rather than animal fats known as margarine.

W. T. Mickle, “Margarine Legislation,” *Journal of Farm Economics* 23, no. 3 (1941): 571.; U.S. Congress, House, Committee on Agriculture, *Oleomargarine Tax Repeal*, 80th Cong., 2nd. sess., 1948, 5-6.

²² Of the economic consequences, Hon. A. Lee M. Wiggins, Under Secretary of the Treasury stated, “The legislative history of these taxes and the considerations advanced in their defense during their long history indicate that the purpose is to buttress the competitive position of the dairy industry by discouraging the consumption of a substitute commodity... the taxing power is used as a punitive measure against one industry to advance the interests of another. In the process, the public is deterred from the free exercise of its consumer preferences.” Similar economic critiques were submitted from the National Education Association who stated that they were opposed to the tax because many teachers “subsist at a near-poverty level,” the American Veterans of World War II who stated “the oleomargarine tax law works as an unnecessary hardship

At a hearing in 1949, Mrs. Harvey W. Wiley, Legislative Chairman, The District of Columbia Federation of Women's Clubs, and wife of Harvey W. Wiley, linked the debate over margarine taxation to margarine's status as a standardized food:

I think there can be no adulteration now of margarine or butter. I know there is a definition of a standard of identity for margarine passed in 1941 already referred to. When that definition and standard of identity was passed, I felt that margarine had just as much right to stand on its own feet as butter. It has just as much right to be colored as butter. It is no more of a substitute than rayon is for silk.²³

In Wiley's view, standardization offered margarine a legitimate identity separate from butter, yet the dairy industry continued to represent margarine as an illegitimate food.

In response to the various arguments against margarine taxes, dairy interests argued that repealing the taxes would destroy American family farms. Speaking on the floor of the Senate in January of 1950, Wisconsin Senator Alexander Wiley characterized the repeal of margarine taxes as "the rape of the butter industry."²⁴ Wiley went on to state that "the fate of the country depends upon this vote."²⁵ Proponents in the Senate of

on all veterans as consumers", and the League of Women Voters who critiqued the tax as being discriminatory and unnecessary, as the revenue only represented 1% of the money collected by the Internal Revenue Service.

U.S. Congress, House, Committee, *Oleomargarine Tax Repeal*, 5-6, 153-167.

Interests in favor of the margarine tax argued that the yellow color was butter's "trademark" despite the common practice of coloring butter depending on the seasonal diet of the herd and the natural yellow hue present in some margarine depending on the fat source (for example palm oil was known to add a yellow tone). In addition to the dishonesty some critics levied against the coloring penalties for margarine, others questioned the underlying philosophy behind the words associated with each product. Mrs. O.S. Gibbs, Chairman, Consumers' Advisory Committee of Memphis, Tenn questioned the butter industry's hold on the word butter itself: "I would like to 'go a step further and ask whether the dairy people have a monopoly on the word "butter"? Webster's Dictionary defines butter as " * * any substance resembling butter in consistency." We have peanut butter, apple butter, cocoa butter. Why don't we call margarine "vegetable butter" and ask that the dairy product be called "creamery butter" or "dairy butter"?"

U.S. Congress, House, Committee on Agriculture, *Oleomargarine Tax Repeal*, 81st Cong., 1st sess., 1949, 30-31, 180, 382-383.

²³ U.S. Congress, Senate, Committee on Agriculture, *Oleomargarine*, 81st Cong., 1st sess., 1949, 78.

²⁴ *Repeal of Oleomargarine Taxes*, HR 2023, 81st Cong., 2nd sess., *Congressional Record* 96 (January 17, 1950) 439-440.

²⁵ *Repeal of Oleomargarine Taxes*, HR 2023, 439-441.

repealing the margarine taxes like South Carolina Senator Burnet R. Maybank argued that the taxes discriminated against manufacturers and consumers.²⁶ Maybank's testimony addressed the existence of the margarine standard of identity and explained that standards guaranteed the purity and nutritional profile of margarine.²⁷

As the butter industry slowly lost the taxation argument, they shifted their tactics to coloring. With numerous proposed laws to repeal margarine taxes sitting on the desks of legislators, The Land O' Lakes collective proposed that margarine taxes be repealed and replaced with a law to prohibit the sale of yellow margarine.²⁸ While laws regulating the color of margarine held on for a few more years, in 1950, the Oleomargarine Act of 1886 was repealed and replaced with the Margarine Act of 1950. The change meant that the product was no longer referred to as "oleomargarine", a term deemed by some as misleading, all taxes and fees were removed, and the job of overseeing margarine regulation moved from the Internal Revenue Service to the FDA.²⁹

Once taxes and restrictions were removed from margarine, consumption grew throughout the post-WWII period. This trend correlates with emerging popular public health beliefs that linked dietary fats to heart disease. State laws regulating margarine coloring began to disappear in the 1950s and were eliminated nationwide in 1967 when Minnesota and Wisconsin lifted their bans.³⁰ The perceived healthfulness, price point, and

²⁶ *Repeal of Oleomargarine Taxes*, HR 2023, 439, 444.

²⁷ *Repeal of Oleomargarine Taxes*, HR 2023, 445.

Margarine was required to contain 80% fat. Fortified margarine was required to contain 9,000 U.S.P. units of Vitamin A per pound.

²⁸ Representative E.C. Gathings, speaking on Oleomargarine Taxes, on February 9, 1949, 81st Cong., 1st sess., *Appendix to the Congressional Record* 95, A658-A659.

²⁹ Richard A. Ball and J. Robert Lilly, "The Menace of Margarine: The Rise and Fall of a Social Problem" *Social Problems* 29, no. 5 (1982): 490.

³⁰ Ruth Dupré, "'If It's Yellow, It Must Be Butter,' Margarine Regulation in North America Since 1886" *The Journal of Economic History* 59, no. 2 (1999): 353-371.

repeal of taxes and restrictions prompted margarine consumption to grow from the 1950s to the 1990s.

Scholars of 19th and 20th century margarine regulations have debated the motivations of the dairy industry in this moment, including economic and cultural reasons for continuing to fight mainstream margarine acceptance.³¹ The history of the margarine standard of identity and taxes reflects the dairy industry's goal of eliminating competition. In some ways, this case study is an example of the butter industry seeking to eliminate competition, yet the role of food identity complicates the narrative.³² First, this case study demonstrates a shift from nineteenth to twentieth century beliefs about butter and margarine. During the nineteenth century, the identities of butter and margarine were both rooted in perceptions of purity. Butter, and dairy more broadly, were viewed as pure

³¹ Ruth Dupré argues that the regulations were economic, while Smith-Howard, Cohen, and Ball and Lilly contend that these anxieties were likely rooted in fears about industrialization. Ball and Lilly argue that butter, and dairy more broadly, was tied to a romanticized view of bucolic, agrarian life. Smith-Howard is also skeptical that the dairy industry attacked margarine simply out of financial interest. Like Ball and Lilly she links the "margarine-butter battles" to the relationship between the goods of the country and urban marketplace. She suggests that the dairy industry was disillusioned that the larger, consolidated urban marketplace because it didn't offer an improved agrarian future. Cohen argues that the controversy surrounding oleomargarine was due to the way it disrupted the agrarian practices of butter production. Cohen argues that this environmental context reveals that the dairy industry's fight to regulate oleomargarine was more than just about self-interest; it reflects the competitive nature of the globalizing trade market, anxieties about continued agrarian land use, and beliefs that purity and nature go hand-in-hand. Ball and Lilly, "The Menace of Margarine," 492.; Smith-Howard, *Pure and Modern Milk*, 64.; Cohen, *Pure Adulteration*, 78, 87, 103-104.

³² Ruth Dupré contends that margarine regulations were often represented as being in the public interest. However, private stakes likely drove legislative action. She contends that margarine fell into Joel Mokyr's model of the political economy of technological change: industries affected by innovation often react with resistance when faced with obsolescence. The dairy industry consistently applied pressure on legislators, who Dupré, invoking George Stigler, argues often represent the will of their most well-organized interest groups who tend to be industry rather than citizens. Dupré notes that dairy wasn't always alone in exerting this pressure, such as during WWII when animal fats were scarce, the use of soybean and cottonseed oil drew the influence of the American Soybean Association and the National Cotton Council who lobbied for the repeal of the 1902 Oleomargarine Bill. Dupré concludes that despite some influence from soybean, cotton, and beef producers, butter manufacturers exerted considerable influence on margarine policy from 1886 to 1949, particularly among legislators from butter producing states. Overall Dupré contends that the economic theory of regulation confirms that these policies were meant to protect the dairy industry rather than consumers. Dupré, "If It's Yellow, It Must Be Butter," 354-365.

because they were associated with natural or agrarian production practices. Alternatively, margarine was viewed as a symbol of the opposite, industrialization, and particularly the meat industry, food adulteration and contamination.³³ For decades margarine was considered ersatz butter, until growing consumer acceptance, the creation of a standard of identity, and changing nutrition science legitimized margarine, and prompted skepticism about the healthfulness of butter.

Second, mainstream ideas about the purity and identity of margarine and butter represent shifting consumer attitudes towards margarine. The standard of identity for oleomargarine sent a message to industry and consumers that margarine was an acceptable product. This standard, coupled with changing nutrition science about dairy and heart disease, changed consumer feelings about margarine as a product, as evidenced by the testimony of progressive activists. Progressives, particularly home economists and women activists who once fought for access to pure butter as a matter of citizens' rights had shifted to fight for an end to margarine taxation.³⁴

Finally, in addition to product purity, the dairy industry invoked pre-industrial views of Americans as yeoman farmers, and the perceived nobility of farmers in the American imagination. This approach is evident in the testimony of dairy aligned politicians like Wisconsin Senator Alexander Wiley who argued that margarine would mean the elimination of American dairying. This argument highlights the way that dairy interests situated the economic circumstances of the industry, with farmers as the central symbolic figure to regulations, rather than the choices or economic circumstances of

³³ Ball and Lilly, "The Menace of Margarine," 492.

³⁴ Smith-Howard, *Pure and Modern Milk*, 65.

consumers. By placing farmers at the center of what was being protected through margarine regulations, they were weaving together economic interests with anti-industrial agrarian romanticism, and a view of purity linked to nature and traditional products. While this argument was not successful in maintaining margarine taxes and restrictions, focusing on the circumstances of American dairy farmers is a narrative that has remained central to dairy industry arguments about regulations, including food identity standards, as we will see later in this chapter.

Industry vs. Industry: The Great Ice Cream Battle of 1977

Mr. Speaker, there is a battle raging in this town over the subject of ice cream. The Food and Drug Administration is proposing to change the standard of identity for ice cream which will allow casein and whey solids to be substituted for the current requirement that ice cream contain a percentage of nonfat milk solids. Nondairy creamers are basically casein. If casein in coffee must be called nondairy creamer, how can ice cream manufacturers be allowed to make casein ice cream and not call it "nondairy ice cream"?

Rep. Charles Rose III of North Carolina
Wednesday, July 13, 1977³⁵

In the summer of 1977, a battle raged in Washington DC over proposed amendments to the standards of identity for ice cream. At the center of the fight was the proposal to permit casein and whey solids, the two primary proteins in milk, to replace nonfat dry milk solids in the existing standard of identity.³⁶ The proposal grew contentious

³⁵ Representative Rose, speaking on ice cream, on July 13, 1977, 95th Cong. 1st sess., *Congressional Record* 123, 22850.

³⁶ Milk protein is made up of 80% casein and 20% whey. To process casein, dairies separate milk into curds and whey using hydrochloric acid. This process is similar to the rennet enzymes used to separate curds and whey in cheesemaking. The curds are washed using sodium solution and spray dried. Whey is also produced industrially by being separated and dried. During the 19th century casein was used to make paint, glue and

because two dairy interests were pushing for different outcomes. The International Association of Ice Cream Manufacturers were in favor of the use of casein and whey solids, while the National Milk Producers Federation were opposed. This case study demonstrates how companies sought to use the food standards to protect their interests, and how ice cream was invoked as a symbol of nostalgia and wholesomeness.

The FDA created five categories of frozen dessert standards in 1960: ice cream, frozen custard, ice milk, fruit sherbets, and water ices.³⁷ The process of drafting and enacting the first standards for ice cream products took nearly 20 years, from 1942 to 1961.³⁸ This extended timeframe was in part due to interruptions caused by WWII, and in part over disagreements over the most expensive ingredient in ice cream: milk fat.³⁹ Despite disagreements over the fat content from the dairy industry, the FDA's initial

plastics. By the 20th century, casein was typically used for pig feed or thrown out. By the 1970s, food producers found new uses for casein as a food additive that could add protein, emulsify, and disperse ingredients in industrial foods. Similarly, whey was thought of as a waste product until the 1970s when it was repurposed as an additive in processed foods to mimic expensive eggs and milk without the cost. Dwight Eschliman and Steve Ettlinger, *Ingredients: A Visual Exploration of 75 Additives & 25 Food Products* (New York: Reagan Arts, 2015), 40-41, 182-183.

³⁷ "Frozen Desserts; Definitions and Standards of Identity [Added]," *Code of Federal Regulations*, title 21 (1962): 117-124.

³⁸ Hearings for standards on ice cream, frozen custard, sherbet, water ices, and related foods were first held in January and April of 1942. Further action was delayed because ice cream products contained raw materials that were under restriction by the War Food Administration. When the standards were picked up again after the war, the FDA elected to hold new hearings in November of 1950. In advance of the 1950 hearings, the FDA published drafts of the standards that stipulated that ice cream must contain 10% milk fat minimum in the finished product. Hearings were held in 1951 and 1952, and the presiding office extended the period for comment into May 5, 1953.

Food and Drug Administration, Proposed Rule Making, "Ice cream, Frozen Custard, Sherbet, Water Ices, and Related Foods; Definitions and Standards of Identity," *Federal Register* 15, no. 152 (August 8, 1950): 5112-5113.; Food and Drug Administration, Notices, "Ice cream, Frozen Custard, Sherbet, Water Ices, and Related Foods; Definitions and Standards of Identity," *Federal Register* 18, no. 85 (May 2, 1953), 2593.

Standards of identity for ice cream were enacted on July 1, 1961. Prior to this, several states and the District of Columbia enacted minimum standards for milkfat contents in ice cream. Four states and the District of Columbia required 10%, fifteen states required 12%, one state required 13% and three states required 14%. The standard that went into effect on July 1, 1961, set the required milkfat at 10%.

The Borden Company v. L. B. Liddy, Secretary of Agriculture of the State of Iowa, 309 F.2d 871 (8th Cir. 1962).

³⁹ Food and Drug Administration, Proposed Rule Making, "Ice cream, Frozen Custard, Sherbet, Water Ices, and Related Foods; Definitions and Standards of Identity," *Federal Register* 15, no. 152 (August 8, 1950): 5114,

standard set the minimum fat content at 10%.⁴⁰ When the ice cream standard was finally formalized, the final ruling maintained the 10% fat minimum, though the industry did secure the inclusion of nonfat dry milk solids in the “ice cream” standard. Just one year after the ice cream standards were finalized, the Atlas Powder Company began pushing for amendments to permit mono and diglycerides in ice cream, French ice cream, ice milk, and fruit sherbets.⁴¹ Their appeal was successful, and an amendment went into effect in June of 1961.⁴²

During the framing process, as the dairy industry pushed for lower fat content and the use of food additives, the FDA made the unusual decision to conduct a study on homemade ice cream. Mass produced ice cream was new to the post-WWII marketplace, and the FDA believed that homemade ice cream best represented consumer expectations.⁴³

The report stated that commercially produced ice cream differed greatly from the

⁴⁰ When the framing process began after the war, dairy interests pushed for lower fat requirements, arguing that from a nutritional standpoint, low-fat ice cream was “more desirable” than high fat due to new research linking dairy fat to heart disease. A widely circulated Associated Press story from December of 1952 suggests that the framing process was extended due to disagreements about the fat content in ice cream standards. The article states that a representative for milk on the food and nutrition board of the National Research Council, Dr. D.B. Hand, reported that the reporting of Dr. Hand’s testimony goes on to state, “He said it was the committee’s view that there should be ‘encouragement of consumption’ and of the desirability of consumption of nonfat milk solids. Nonfat milk solids formerly were called dried skim milk.” Industry representatives pushed for a use for dried skim milk (a persistent narrative, as we have seen in past chapters) and argued that nutrition science favored low fat products as well. The FDA turned to home ice cream preparations for comparison. The Associated Press, “Dispute Over Fat Content in Ice Cream,” *The Petaluma Argus-Courier*, December 9, 1952.

⁴¹ Food and Drug Administration, Rules and Regulations, “Frozen Desserts; Definitions and Standards of Identity,” *Federal Register* 26, no. 67 (April 8, 1961): 3022.

⁴² Food and Drug Administration, Rules and Regulations, “Frozen Desserts; Definitions and Standards of Identity,” *Federal Register* 26, no. 67 (April 8, 1961): 3022.

⁴³ Prior to WWII, ice cream was primarily made at home or purchased in small amounts because most Americans didn’t have a way to store it. After WWII, the adoption of home freezers, the baby boom, and the rise of supermarkets changed the way Americans consumed ice cream, but likely meant that many Americans were more familiar with homemade ice cream than store bought when ice cream standards were first introduced.

Smith-Howard, *Pure and Modern Milk*, 100.

homemade version in ingredients and preparation, but the FDA believed that the mass producer could create a finished texture that came close to homemade.⁴⁴ The study concluded that the path to promoting honesty and fair dealing in the interest of consumers meant that ice cream should contain a minimum of 10% milk fat. Consumers seeking a product with less fat should have the option under the name “ice milk.”⁴⁵ The FDA’s attention to homemade ice cream reflects the cultural significance ice cream held in the American imagination. According to Smith-Howard, making ice cream together was a hallmark of summer gatherings, thus linking ice cream to sentimentality.⁴⁶ This sentimentality appeared once again in the summer of 1977 as the so-called Great Ice Cream Battle erupted.

At the heart of the battle was disagreements among dairy industry stakeholders. Ice cream manufacturers requested that the FDA allow them to use caseinates (a water-soluble casein derivative) and whey solids instead of nonfat milk solids in ice cream. At the time, caseinates and whey solids were only produced overseas, so the move prompted major opposition from the National Milk Producers Federation (NMPF) who feared that the change would adversely affect domestically produced nonfat dry milk solids.

A month later, in July of 1977, the ice cream “battle” reached the floor of the House of Representatives. Chair of the Subcommittee on Dairy and Poultry, Charles Rose proclaimed that there was a battle raging in Washington DC over ice cream. Rose expressed concern that allowing ice cream manufacturers to swap nonfat dry milk solids with casein

⁴⁴ Food and Drug Administration, Proposed Rule Making, “Frozen Desserts; Definitions and Standards of Identity,” *Federal Register* 23, no. 60 (March 26, 1958): 1991.

⁴⁵ Food and Drug Administration, Proposed Rule Making, “Frozen Desserts; Definitions and Standards of Identity,” *Federal Register* 23, no. 60 (March 26, 1958): 1997.

⁴⁶ Smith-Howard, *Pure and Modern Milk*, 100.

prompted the use of imported milk derivatives that debased the product and diminished a lucrative market for dairy producers in the United States.⁴⁷ Additionally, Rose included a news article that alleged that permitting these additives could result in ice cream that “taste like a combination of air and glue.”⁴⁸

By August the FDA responded to the summer ice cream battle. Donald Kennedy, the FDA administrator, stated that new ice cream standards had been drafted at the request of the ice cream industry. Kennedy claimed that the ice cream industry was motivated by a potential 2.7% reduction in manufacturing costs, and that the change wouldn't affect the taste or texture of the product.

By August, the New York Times had dubbed the skirmish “the great ice cream battle of 1977.” The disagreement continued into late summer, when Rep. Rose joined the chair of the Agricultural Subcommittee on Domestic Marketing, Consumer Relations and Nutrition, Representative Frederick W. Richmond, to hold a joint hearing on the FDA's proposed changes to the ice cream standards. In a statement to the House of Representatives in September of 1977 Richmond stated that the hearing found the proposed changes to be unjustifiable.⁴⁹ Richmond closed his statement by appealing to the emotionality of ice

⁴⁷ Casein is primarily produced in New Zealand and Australia. Representative Rose, speaking on ice cream, on July 13, 1977, 95th Cong. 1st sess., *Congressional Record* 123, 22850.

⁴⁸ Representative Rose, speaking on ice cream, on July 13, 1977, 95th Cong. 1st sess., *Congressional Record* 123, 22850.

⁴⁹ Richmond argued that nonfat dry milk solids were “whole milk ingredients” rather than milk by-products. Richmond centers consumer expectations in his critique stating, “We can be sure ice cream manufacturers will use the cheapest ingredients possible by disguising them with more artificial flavorings”. Despite the increased profits the change would offer the ice cream industry, possibly more than \$70 million dollars a year, Richmond argued that consumers would likely cover the tax dollars needed to offer government dairy loans to farmers affected by the shift to imported caseinates. Representative Frederick W. Richmond, speaking on “New Ice Cream Standards Unjustified,” 95th Cong., 1st sess., *Congressional Record* 123 (September 8, 1977): H 28338.

cream for Americans: “Mr. Speaker, consumers are not about to sit while the agency mandated to protect our food tampers with one of their favorites.”⁵⁰

Ultimately, the great ice cream controversy of 1977 cooled off, and the FDA’s proposed modification of the standards was withdrawn.⁵¹ Nevertheless, this moment reveals how the ice cream industry and dry milk interests like the NMPF sought to use food identity standards to advance their own aims.

This moment also presents an example of how emotion can impact standards discourse. Unlike any food previously discussed, here ice cream was invoked not only as a food but a connection to memories like ice cream at birthday parties, first dates at soda fountains, and fourth of July. Syndicated columnists Martha Angle and Robert Walters even proclaimed that ice cream was “sacred to our fast-food society.”⁵² These fears were exacerbated by the limited labeling transparency required by the FDA for standardized foods, thus prompting further fear that consumers may have no way of knowing or detecting any changes to a particularly sentimental food.⁵³ Despite the emotionality of the Great Ice Cream debate, ice cream consumption remained consistent. From 1950 to 1986, U.S. ice cream consumption held steady at approximately 18 pounds per person annually. Over this same period, consumption of other frozen dairy products, including reduced-fat

⁵⁰ Representative Richmond, speaking on “New Ice Cream Standards Unjustified,” 95th Cong., 1st sess., *Congressional Record* 123 (September 8, 1977): H 28338.

⁵¹ Joseph Tobias and G.A. Muck, “Ice Cream and Frozen Desserts,” *Journal of Dairy Science* 64, no. 6 (1981): 1077-1086, [https://www.journalofdairyscience.org/article/S0022-0302\(81\)82686-0/pdf](https://www.journalofdairyscience.org/article/S0022-0302(81)82686-0/pdf).

⁵² Martha Angle and Robert Walters (Newspaper Enterprise Association), “Ice cream is a hot issue,” *Waxahachie Daily Light*, June 8, 1977.

⁵³ Smith-Howard, *Pure and Modern Milk*, 106.

ice cream, sherbet, frozen yogurt, and other items grew from nearly zero in 1950 to approximately 10 pounds annually in 1986.⁵⁴

Yet by 1979 a new problem renewed debates about dairy additives in ice cream. Food manufacturers were struggling with the environmental implications of the whey produced in cheese manufacturing, following the Nixon administration's monitoring of whey dumping in waterways. Nixon's Environmental Protection Agency classified the practice as pollution, which led cheese manufacturers to pursue costly methods of drying whey. In order to make back the costs of whey drying, the International Association of Ice Cream manufacturers, working with the Whey Products Institute, petitioned the FDA to permit a wider range of whey products in frozen desserts.⁵⁵ While the FDA had permitted the expanded use of whey products by granting them Generally Regarded as Safe status (GRAS), manufacturers complained that the FDA was still placing limits on whey that other GRAS foods did not experience.⁵⁶ Of the need to increase whey consumption E. Linwood Tipton, Executive Assistant of the Milk Industry Foundation and the International Association of Ice Cream Manufacturers invoked nursery rhymes: "*We have a large number of people eating their curds in the form of cheese and we need more than "little Miss Muffet" eating whey. This can be done by the expanded use of whey in other foods.*" The NMPF condemned the proposal because casein and whey could be used in place of nonfat dry milk and referred to consumers of casein and whey as "losers".⁵⁷

⁵⁴ Judith Jones Putnam and Jane E. Allshouse, "Trends in U.S. Per Capita Milk and Cheese Consumption, 1909 to 2001," *U.S. Department of Agriculture*, last modified June 1, 2003, <https://www.ers.usda.gov/amber-waves/2003/june/data-feature/>.

⁵⁵ U.S. Congress, House, Subcommittee on Dairy and Poultry of the Committee on Agriculture, *Assessment of the Whey Situation: Hearing before the Subcommittee on Dairy and Poultry of the Committee on Agriculture*, 96th Cong., 1st sess., 1979, 55.

⁵⁶ U.S. Congress, Senate, Committee, *Assessment of Whey Situation*, 9.

⁵⁷ U.S. Congress, Senate, Committee, *Assessment of Whey Situation*, 18.

Despite continued disagreements among the dairy industry over processed milk ingredients in ice cream, dairy interests came to share in the belief that standards of identity were the problem. According to Jerry T. Hutton, Vice President of Governmental Relations and Scientific Affairs for the Foremost-McKesson Food Group, securing FDA approval for the use of new food ingredients in food identity standards placed an undue burden on industry and curtailed innovation. Hutton specifically called out the recipe format stating “The recipe-type standards simply list the various food ingredients which now can be used, or let’s say were traditionally used and this is a barrier every time you come up with a new food ingredient.”⁵⁸ As we will see in the following section, this growing frustration with standards of identity among the food industry escalated, and by the 1980s, growth in branded imitation products signaled a move away from adhering to standards all together.

Brand Identity: Pasteurized Prepared Cheese Product & Frozen Dairy Dessert

You might ask what the difference is between ice cream and a frozen dairy dessert, and I might answer that it is the same as the difference between a slice of American cheese and Kraft Singles American Pasteurized Prepared Cheese Product.

Dan Barry
“Ice Cream’s Identity Crisis”
The New York Times
April 2013

Throughout the 1980s, Kraft ran several commercials touting the milk content of Singles over other cheese slice brands. Each version of the commercial showed two glasses,

⁵⁸ U.S. Congress, Senate, Committee, *Assessment of Whey Situation*, 34.

one filled with five ounces of milk to represent the milk content in Singles, and one glass filled with two ounces of milk to represent their competitors. Product comparisons are a classic advertising tactic, but here Kraft wasn't comparing apples to apples; their five-ounce milk measure referred to the standard of identity for *all* pasteurized process cheese food slices (the standard Singles adhered to at the time), while the two-ounce quantity referred to imitation cheese slices.⁵⁹

These Kraft commercials came at a time when dairy producers were concerned about rising rates of imitation cheese. In 1980, seven to nine percent of the cheese sold in the United States did not meet standards to be known by a common or usual name.⁶⁰ Speaking before the House Subcommittee on Dairy and Poultry at a hearing on General Dairy Issues, Joe Rogers of the Pennsylvania Farmers Union believed that these imitation products might “turn off” consumers, particularly through their use as an ingredient in other products like pizza.⁶¹ J. Roger Barber, Commissioner of the New York State Department of Agriculture and Markets invoked the nation’s pure food legislation:

As imitation products are now labelled, consumers cannot tell that a cheese substitute is not the real product... The pure food law of the U.S. was not intended to permit food manufacturers to substitute cheaper, undefined and nonstandardized ingredients of both animal and vegetable sources...⁶²

⁵⁹ *Borden, Inc., v. Kraft Inc*, 1984 WL 1458, (United States District Court, N.D. Illinois, Eastern Division, 1984).

⁶⁰ Because they were processed with caseinates and contained vegetable fat instead of milk fat. U.S. Congress, House, Subcommittee on Dairy and Poultry of the Committee on Agriculture, *General Dairy Issues: Hearings before the Subcommittee on Dairy and Poultry of the Committee on Agriculture*, 96th Cong., 1st and 2nd sess., 1980, 433.

⁶¹ U.S. Congress, House, Committee, *General Dairy Issues*, 433.

⁶² U.S. Congress, House, Committee, *General Dairy Issues*, 293.

Barber's testimony suggests that pasteurized process cheese food and imitation cheese slices, the names were not common or usual enough to communicate differences in milk content to consumers.

In June of 1984, Borden, producer of a third cheese slice product, substitute cheese slices Cheeztwin filed a suit against Kraft due to the claims in their commercials.⁶³ Borden argued that Kraft did not clearly differentiate enough between pasteurized process cheese food, imitation cheese slices and substitute slices in their nutritional claims. Nevertheless, Kraft continued to compare their Singles to imitation cheese. In 1990 the Federal Trade Commission charged Kraft with misleading consumers on the grounds that Kraft's nutritional claims were an exploitation of consumers' inability determine the nutritional differences between pasteurized processed cheese food (Singles) and imitation slices.⁶⁴ A 1991 appeal from Kraft affirmed that the company had violated sections 5 and 12 of the Federal Trade Commission Act by misrepresenting the calcium content of Kraft Singles American Pasteurized Process Cheese Food when compared to the content of imitation cheese slices.⁶⁵

Kraft's approach was ostensibly differentiating a standardized food from an imitation food, something that the framers of the FDCA imagined would be central to the value of food standards. Yet Kraft's marketing approach of linking the amount of milk in its Singles products distinguished the Singles brand's quality, rather than the quality inherent in all foods that met this standard. This approach was successful because consumers at this time knew little about food identity standards and what they guaranteed. Thus, by the late

⁶³ U.S. Congress, House, Committee, *General Dairy Issues*, 433.

⁶⁴ *Kraft Inc., v. Federal Trade Commission*, Brief for Petitioner, No. 91-1691, 40a (7th Cir. 1991).

⁶⁵ *Kraft Inc., v. Federal Trade Commission*, Brief for Petitioner, No. 91-1691, 1 (7th Cir. 1991)

20th century, product branding could carry more weight than the common or usual name. With these trends in mind, food companies, particularly dairy brands like Kraft singles and Breyer's ice cream began moving away from adhering to food identity standard recipes and focusing on promoting the names of their own products.

By the dawn of the new millennium, Kraft moved away from producing processed cheeses that followed a standard of identity. In 2002, the FDA issued a warning letter to Kraft CEO Betsy D. Holden over the production of Kraft Singles American Pasteurized Process Cheese Food, Kraft Singles Sharp Cheddar Process Cheese Food, Kraft Singles Swiss Pasteurized Process Cheese Food, and Kraft Velveeta Pasteurized Process Cheese Spread. The letter alleged that the products were misbranded because they did not conform to the standard of identity for pasteurized process cheese food or pasteurized process cheese spread because they contained milk protein concentrate, an ingredient not approved for use in these standards.⁶⁶

Instead of requiring that the products be labeled as misbranded, the FDA permitted Kraft to market the products as "pasteurized prepared cheese product".⁶⁷ For years, the dairy industry had fought with the FDA over the names of their products, like the decades long debate over the naming of dried skim milk. Now, for manufacturers like Kraft the standardized name had virtually no value compared to the brand name. By this moment, Kraft was content to swap one confusing name for another because, as their commercials in

⁶⁶ "Kraft Foods North America Inc. 18-Dec-02," U.S. Food and Drug Administration: Inspections, Compliance, Enforcement, and Criminal Investigations, last modified July 8, 2009, <https://web.archive.org/web/20110818233733/https://www.fda.gov/ICECI/EnforcementActions/WarningLetters/2002/ucm145363.htm>.

⁶⁷ Larry Light, "Addressing Product Problems With Cover-Up Marketing Is A Formula For Failure," Forbes, last modified February 27, 2020, <https://www.forbes.com/sites/larrylight/2020/02/27/addressing-product-problems-with-cover-up-marketing-is-a-formula-for-failure/#60859ccf25c9>

the 1980s revealed, many consumers now tied more significance to brand names than to the common or usual name protected by the standards.

Frozen Dairy Dessert

“Moms Who Read Labels Choose Breyers All-Natural Ice Cream”

Breyers Ice Cream Commercial, 1995⁶⁸

In the 1980s and 1990s, Breyers Ice Cream created a variety of commercials marketing their product as pure and wholesome. They made these claims by asking “Do you know what’s in your ice cream?” to which consumers young and old read the label on their product (cream, milk, sugar, vanilla) in tandem with ingredients like mono and diglycerides, polysorbate 80, and xanthan gum contained in other unnamed frozen treats. Breyers’ branding as the “all natural” ice cream created a perception of quality that differentiated it among consumers. In the 2013, New York Times reporter Dan Barry explained the position that Breyers ice cream had once held in American households: “it meant a reprieve from the cheaper fake version of ice cream that usually defiled our freezer, a store-brand ice milk that tasted like nothing so much as frozen sadness.”⁶⁹

Yet in 2013, Breyers owner Unilever changed the formulation of some of their products from ice cream to frozen dairy dessert, thus allowing all of the ingredients

⁶⁸ “1995 Breyers Ice Cream Commercial,” YouTube, last modified April 29, 2015, https://www.youtube.com/watch?v=BzA_sEd8Tls.

⁶⁹ Dan Barry, “Ice Cream's Identity Crisis: A carton of Breyers isn't always what it used to be,” *New York Times*, April 17 2013.

Breyers had famously disparaged in their decades of television advertisements. Breyers claimed the change meant the product was “blended in a whole new way to create a smoother texture,” however many consumers reacted negatively with outrage and soul searching over the debasement of their favorite Breyers flavor.⁷⁰ Many consumers learned about the standards of identity for the first time and pledged to read ice cream labels moving forward.⁷¹

Like Kraft, Breyers navigated the change by focusing on branding over product naming. Where Breyers packaging had once said “Breyers All Natural Ice Cream” the packaging was redesigned to focus on the brand name and the flavor. Breyers made the brand name bigger and more prominent, and made the photo of the product, a perfect scoop, more central. On products like “Breyers Blasts! Oreo Cookies and Cream” and “Breyers Vanilla Fudge Swirl” the company does not explain what is being blasted or swirled (frozen dairy dessert), other than the required standardized name in small print in the bottom right-hand corner of the package. Like Kraft, Breyers created the suggestion of a food without naming it; the common or usual name was omitted because the picture or name of the product was enough to communicate the idea of the product to consumers. On the change Breyers stated that shifting from the ice cream standard to frozen dairy dessert allows them to use less milk fat solids, thus saving money on the costliest ingredient in ice cream.

⁷⁰ Susan Koeppen, “Is Your Favorite Ice Cream Posing As Something Else?” *KDKA Pittsburgh*, last modified May 14, 2013, <https://pittsburgh.cbslocal.com/2013/05/14/is-your-favorite-ice-cream-posing-as-something-else/>.

⁷¹ Laura Northrup, “New Breyers Recipes: When Ice Cream Is 'Frozen Dairy Dessert',” *Consumerist*, last modified September 11, 2012, <https://consumerist.com/2012/09/11/new-breyers-recipes-when-ice-cream-is-frozen-dairy-dessert/>

Conclusion

The shift away from emphasizing the common or usual name of products like Kraft Singles and Breyers reasserts the importance of common or usual names in the function of food identity standards. When the FDA was campaigning for an overhaul of the Pure Food and Drug Act in the 1930s, the agency organized an exhibit known as the Chamber of Horrors. The FDA argued for more stringent regulations by displaying products with deceptive packaging, like See's candy boxes made with a large gap between the edge of the box and the candy inside, and jarred chicken with the white meat visible on the outside and the dark meat hidden in the middle. Another category of deception were products that resembled a recognizable food visually but were compositionally inferior. One example of this was Bred Spred, a product that was packaged like jam, but contained 17 parts fruit to 55 parts sugar and 11.5 parts water, much less than the generally accepted 50-50 ratio of fruit to sugar.⁷² Bred Spred never used a product name to explain what it was; the brand name that referenced what a buyer would do with the product, coupled with the image of strawberries and the designation "strawberry flavor" were meant to suggest jam without explicitly saying so.

In 1931, the FDA filed a suit to regulate Bred Spred for not being jam in the case *United States v. Ten Case, More or Less, of Bred Spred*. Yet under the rules of the Pure Food

⁷² Food and Drug Administration, Rules and Regulations, "Regulation Fixing and Establishing Definitions and Standards of Identity for Preserves, Jams," *Federal Register* 5, no. 173 (September 5, 1940): 3554-3564. Standards were created for jam in 1940. The standards stipulated that jam/preserves be made from at least 45% fruit, while jelly was made from at least 45% fruit juice. Barry M. Levinson, *Habeas Codfish: Reflections on Food and the Law* (Madison: University of Wisconsin Press, 2001), 35.

and Drug Act, regulators had to prove the product was damaged or inferior. Ultimately the FDA lost the case because Bred Spred was made from legitimate ingredients, it just didn't meet popular expectations that jam should be mostly fruit.⁷³

The branding of Kraft Singles and Breyers frozen dairy desserts mirrors the approach of products like Bred Spred. The reemergence of this type of product in the late 20th century begs the question: how could this happen with the standards of identity provision in place to protect consumers from these practices? Both Kraft Singles and Breyers *do* list a product name, it is just very small, and arguably, confusing. Products now also require a comprehensive ingredient list and nutrition facts label, a practice that began in 1991. Thus, consumers have more information about the composition of the product, even if the meaning of common or usual names for standardized foods have been diminished.

The case studies described in this chapter represent some of the dairy industry's primary strategies to navigate and influence the standards of identity. Since the creation of the standards of identity provision in 1938, industry perspectives regarding the standards of identity have varied, from claims that standards of identity stifle innovation, to claims that the standards aren't strict enough and lack enforcement. In each of these examples, dairy interests identified a unique foe, from consumers to industry competitors. In moments when the public tide is turning away from dairy, such as the oleomargarine tax repeal hearings, dairy interests invoked farmers as sympathetic symbols of their industry. Concomitantly, brands like Kraft and Breyers promoted their brand name over the common or usual name to skirt standard requirements all together. Overall, the dairy

⁷³ Levinson, *Habeas Codfish*, 36.

industry has used food identity standards to advance their interests or disregarded the standards all together as consumer knowledge about food identity standards declined from the 1950s to the present.

Chapter 5

The Pure Food Movement in the 20th and 21st Centuries

Every year new chemicals are being added to our food or sprayed on crops. Ninety percent of the prescriptions written today are for drugs that were unknown twenty years ago. Unless the housewife is an expert dietitian, mathematician, chemist, toxicologist and mechanic, she cannot properly and economically run her household and shop for her family.

President John F. Kennedy
Special message to Congress on protecting consumer interest
15 March 1962¹

By the dawn of the 1960s the luster of the post-WWII consumer marketplace had begun to dull as consumers grew concerned over the long-term health effects of the processed food renaissance. In 1962, President John F. Kennedy addressed Congress on the need for greater oversight of consumer goods. During his speech, Kennedy claimed that housewives needed advanced scientific training to care for their families, an image invoked by pure food crusaders 100 years earlier.

After the Progressive and New Deal-era waves of pure food activism and the resulting regulatory oversight, how did the jungle grow back once again? This chapter traces the history of pure food activism in the post-WWII period to understand how consumers impacted and engaged with food identity standards. From the activism of the Federation of Homemakers from the 1950s through the 1980s, to the counterculture foodways of the 1960s and 1970s, and the growth of pure food class action lawsuits of the

¹ John F. Kennedy, "Special Message to Congress on Protecting Consumer Interest, 15 March 1962," John F. Kennedy Presidential Library and Museum, accessed January 11, 2022, <https://www.jfklibrary.org/asset-viewer/archives/JFKPOF/037/JFKPOF-037-028>.

2010s, these examples illustrate that the pure food movement endured and evolved beyond the passage of the FDCA.

The Federation of Homemakers

Fighting for Wholesome Foods Since 1959

A Brief History
The Federation of Homemakers, Inc., 1979

The PFDA and the FDCA were both passed after years of grassroots Progressive organizing. From the mid-19th century to WWII, women's clubs maintained the momentum of the pure food fight through reading groups, policy recommendations, and conferences.² After the legislative win of the FDCA, progressive women continued to follow the enforcement of the law and the creation of standards of identity, however, WWII began pulling their work in other directions.³ In the post-WWII years, women's group membership changed as more affluent and middle-class women moved to the suburbs. Despite these changes, the gender politics of the postwar period continued to make women responsible for providing pure and safe foods for their families. The pure food fight continued intermittently through consumer responses to the bread and fish flour standards

² Report on the Pure Food & Drug Committee, San Francisco Center of the League of Women Voters, Doris Jessee, February 9, 1937, San Francisco Center of the League of Women Voters Collection, California Historical Society.; Report on the Pure Food & Drug Committee, San Francisco Center of the League of Women Voters, Doris Jessee, April 6, 1937, San Francisco Center of the League of Women Voters Collection, California Historical Society.; Board Meeting, May 16, 1939, San Francisco Center of the League of Women Voters Collection, California Historical Society.

³ "Suggested Recommendations for 1946-1948 National League of Women Voters' Program of Work adopted by the San Francisco Center Board of Directors, October 24, 1945"

of identity until the late 1960s, when a group guided by the principles of Harvey W. Wiley revived the pure food movement.

The Federation of Homemakers of Arlington, Virginia first incorporated in 1959 out of a growing concern over the safety of food additives. They described themselves as “Dedicated to furthering the philosophy of Dr. Harvey W. Wiley, Father of our first Pure Food and Drug Act.”⁴ The group was begun by four homemakers who found that they were mutually concerned about the use of chemicals in foods, and believed that America’s pure food laws were too weak.⁵ The Homemakers closely monitored the legislative agenda of the FDA, and circulated a newsletter to share the dates of hearings, critique proposed legislation, and organize letter writing campaigns. While they didn’t often use the word “pure” to describe their vision for the food marketplace; instead, they emphasized concerns about particular additives like DES (diethylstilbestrol) in animal feed, or caffeine in soft drinks. With the dues collected from members, this self-described “grass-roots group” covered the costs of running their organization, including rent, phone, postage, stationary, printing and retention costs for a lawyer.⁶

Though her name on the masthead was listed as Mrs. Gordon B. Desmond, President and Editor Ruth Desmond was the primary force behind the work of the Homemakers. Desmond became engaged in consumer activism in 1955 when her husband Gordon (then in his 40s) was diagnosed with bladder cancer. Gordon’s health scare led Ruth to begin

⁴ Federation of Homemakers, Inc., “A Brief History,” *Wichita State University Libraries, Special Collections and University Archives*, accessed January 11, 2022, <https://cdm15942.contentdm.oclc.org/digital/collection/p15942coll11/id/1180>.

⁵ Federation of Homemakers, Inc., “A Brief History.”

⁶ Federation of Homemakers, Inc., “A Brief History.”

reading about carcinogens in food.⁷ Contemporary studies linked additives and pesticide residue to cancer, which prompted Desmond to call the FDA and voice her concerns. In response, the FDA invited Desmond to a hearing on food additives.⁸ At the hearings Desmond met three like-minded women who joined her in forming the Federation of Homemakers.⁹ She believed that if consumers knew about food policy debates, they would participate, and saw the Homemakers as necessary to offer consumers more information about food and health risks.¹⁰

The group's first major campaign occurred in 1959 when a crop of cranberries was found to be contaminated with weed killer, right before Thanksgiving. The scandal, known as the "Cranberry Crisis" captured national attention, with presidential candidates John F. Kennedy and Richard Nixon shown publicly eating cranberries to ease concerns. The Federation of Homemakers condemned cranberry producers and called for stricter regulations.¹¹

That same year the Homemakers began their longest and most well-known fight over the proposal to create standards of identity for peanut butter. The first proposed peanut butter standard was issued in 1959, but a standard was not enacted until 1970 after 10 years of combative hearings. The framing process began in 1958 after the FDA noticed

⁷ Hereafter "Desmond" refers to Ruth Desmond.

⁸ Krissy Clark, "Meet Ruth Desmond, a concerned citizen who changed the face of food regulation," *Marketplace*, last modified October 27, 2017, <https://www.marketplace.org/2017/10/27/meet-ruth-desmond-concerned-citizen-who-changed-food-regulation/>; Angie M. Boyce, "When does it stop being peanut butter? FDA Food Standards of Identity, Ruth Desmond, and the Shifting politics of Consumer Activism, 1960s-1970s," *Technology and Culture* 57, no. 1 (January 2016), 57.

⁹ Carole Sugarman, "Veteran of the Peanut-Butter War" *Washington Post*, January 13, 1985, <https://www.washingtonpost.com/archive/lifestyle/food/1985/01/13/veteran-of-the-peanut-butter-war/6e72ac14-c62c-4ca3-9d34-8da4200558c1/>.

¹⁰ Boyce, "When does it stop being peanut butter?" 57.

¹¹ Clark, "Meet Ruth Desmond."

that a new product marketed as Jif peanut butter contained artificial flavor and a high percentage of hydrogenated cottonseed and soybean oils. The FDA believed that Jif should not use the name “peanut butter” because it only contained 75% peanuts.¹² The agency’s desire to standardize the minimum peanut content prompted major disagreements about peanut percentages. Peanut butter manufacturers wanted the lowest mandatory percentage of peanuts possible, while the FDA wanted the standard to represent consumer expectations, and consumers expected peanut butter to be mostly peanuts.¹³

The Federation of Homemakers argued that peanut butter should be just peanuts and salt, and anything else should be known as peanut spread. The Homemakers’ position earned the support of State Food and Drug Officials, Directors of State Health Departments, physicians, pediatricians, the American Home Economics Association, women’s clubs, home economists, private individuals, and small manufacturers of peanut butter. Opponents to the Homemakers’ position included the Peanut Butter Manufacturers Association, and the three largest peanut butter manufacturers.¹⁴

Desmond believed that the contentious nature of the hearings was due to their significance:

Federation officers felt this hearing encompassed more than developing a fair and honest Standard for Peanut Butter. It seemed an opportunity to fight for the integrity of this Country’s food- against adulteration. It seems when food processors want to adulterate wholesome foods- they plead it will actually benefit consumers because it keeps prices from rising.¹⁵

¹² Boyce, “When does it stop being peanut butter?” 63.

¹³ Boyce, “When does it stop being peanut butter?” 54.

¹⁴ U.S. Congress, House, Subcommittee on Departments of Labor, and Health, Education, and Welfare, and Related Agencies, Departments of Labor, and Health, Education, and Welfare, *Departments of Labor, and Health, Education, and Welfare appropriations for 1968. Hearings before a subcommittee (Subcommittee on Departments of Labor, and Health, Education, and Welfare, and Related Agencies) of the Committee on Appropriations*, 90th Cong., 1st sess., 1967, 386.

¹⁵ U.S. Congress, House, Committee, *Departments of Labor, and Health, Education, and Welfare appropriations for 1968*, 388.

While Procter & Gamble dismissed Desmond, contemporary reporting suggested that consumers were having an impact: “This incident shows the power of consumers to get government agencies to fix high-quality standards when they speak up”.¹⁶

Desmond attended every single one of the peanut butter hearings over nearly a decade. A 1985 profile of Desmond described her dedication:

She attended them, day after day, making sure she got the message across to the Food and Drug Administration: Peanut butter should contain at least 95 percent peanuts. But Desmond didn’t leave the house without first apologizing to her husband. Dinner would have to be something easy; she’d have to stay from 9 to 5. Because, she told him, “I cannot leave them alone, those lawyers.”¹⁷

In the end the FDA’s peanut butter standard set the required peanut content at 90%. The FDA had begun with a proposed standard of 95% peanut content, and then dropped the peanut content to 90% in 1961. The final standard affirmed by the U.S. Appeals Court set the required peanut content at 90%, despite nine years of debate.¹⁸

Following the fracas over the peanut butter standards, the FDA removed public hearings for food standards, thus ending direct consumer participation in the framing of the standards.¹⁹ Consumers had been calling for greater transparency in food labeling, and the FDA saw this as an opportunity to balance the interests of industry and consumers. Instead of focusing on developing food standards, the FDA began to favor nutrition and

¹⁶ U.S. Congress, House, Committee, *Departments of Labor, and Health, Education, and Welfare appropriations for 1968*, 389.

Sidney Margolius, “Need Is Seen For Higher Food Standards, Better Labeling”, *The Gazette and Daily*, January 3, 1966.

¹⁷ Sugarman, “Veteran of the Peanut-Butter War.”

¹⁸ Boyce, “When Does It Stop Being Peanut Butter?” 54.

¹⁹ Boyce, “When Does It Stop Being Peanut Butter?” 72.

labeling standards.²⁰ FDA historian Suzanne Junod argues that this moment prompted the FDA to create fewer new food identity standards all together.²¹

After the peanut butter hearings, the Federation of Homemakers continued their “crusader” approach to consumer activism. Desmond found that the peanut butter hearings prompted growth in male membership. Of the change, she noted “you’d be surprised how many men like peanut butter on their toast in the morning.”²² The group went on to sue the Department of Agriculture in district court over the designations “all beef” and “all meat” on hotdogs that contained other ingredients. Despite the Homemakers’ win, the USDA appealed the case in the Supreme Court. Desmond believed that the USDA’s efforts to continue fighting suggested that “our own government is against us, the people, the taxpayers, the consumers.”²³

In the later years of the Federation of Homemakers, the group aligned themselves with consumer activist and politician Ralph Nader.²⁴ Despite declining opportunities for direct consumer engagement with the FDA, the Homemakers maintained 4,000-5,000 active members in 1985.²⁵ Desmond continued running the organization until her death in 1988. Like the pure food crusaders before her, Desmond at once portrayed herself as vulnerable to the march of food science, and an authority of the domestic realm.

Science and Technology Studies scholar Angie Boyce argues that Desmond’s food activism was very influential in the peanut butter hearings. Desmond carefully crafted her

²⁰ Boyce, “When Does It Stop Being Peanut Butter?” 56.

²¹ Boyce, “When Does It Stop Being Peanut Butter?” 56.

²² Sugarman, “Veteran of the Peanut-Butter War.”

²³ Sugarman, “Veteran of the Peanut-Butter War.”

²⁴ Boyce, “When Does It Stop Being Peanut Butter?” 56.

²⁵ Sugarman, “Veteran of the Peanut-Butter War.”

image to embody the every-woman underdog housewife that Kennedy described in his speech, and to avoid comparisons to the counterculture and environmental movements.²⁶ Nevertheless, the Federation of Homemakers and the counterculture shared many beliefs about food purity.

The Counterculture & Pure Food:

In these strange 1970s, ominous and dramatic new reasons are compelling people to reexamine their eating habits. More and more foods are “processed,” becoming the products of factories rather than farms. Chemical nonfood “additives” alter the look of foods and prevent visible spoilage, but the nutritive value of treated foods is hugely diminished- and their cost to you increased.

The Vegetarian Epicure, 1972²⁷

Despite her desire to distance herself from the counterculture, Desmond’s advocacy for wholesome food aligned with many of the counterculture’s beliefs about processed food. Just as Desmond was activated by new links between food additives and disease, the counterculture, as seen in *The Vegetarian Epicure*, believed that processed foods were a detriment to health and the environment. In addition to being temporal contemporaries, Desmond and the counterculture shared many beliefs about processed foods.

The American counterculture movement grew out of the bohemian Beat culture of the 1950s, particularly in the San Francisco Bay Area and Greenwich Village in New York City. While there were many strands of the movement, from anti-war campaigns, anarchism, and psychedelic drug cultures, food was central to the ecological and culinary

²⁶ Boyce, “When Does It Stop Being Peanut Butter?” 69.

²⁷ Anna Thomas, *The Vegetarian Epicure* (New York: Vintage Books, 1972), 3.

reform wings of the counterculture.²⁸ Contemporary reporting on the origins of the counterculture placed food at the heart of much of the disillusionment that young people were feeling. The alternative press critiqued food additives as a reflection of “a more artificial life.”²⁹ Together, counterculture cookbooks, periodicals, markets, and restaurants shared the belief that industrialization destroyed the nutritional value of food, and commercialization obscured the purpose of food to nourish and promote community.³⁰

Vegetarian cookbooks like *Laurel's Kitchen*, *The Moosewood Cookbook*, and the Bloodroot Collective books contrasted themselves with the “packaged food cuisine” of the post-WWII era.³¹ According to McGrath, these books popularized the belief that homemade meals could bring personal and social betterment by addressing issues like obesity, divorce, and the ecological crisis. For example, *Laurel's Kitchen* not only advocated for natural foods, but for a lifestyle overhaul similar to Desmond's view of homemaking:

What possible satisfaction can I get from preparing a bag lunch for my little boy if it means slapping together a sandwich from “balloon” bread and pre-ribboned peanut butter and jelly spread, dropping in a miniature can of fruit cocktail and a bag of potato chips, and adding a dime (milk money) which will end up in the soft drink machine?... The world cannot afford this version of homemaking.³²

²⁸ Blake Slonecker, “The Counterculture of the 1960s and 1970s”, Oxford Research Encyclopedia of American History. 28 Jun. 2017; Accessed 10 Jun. 2020.
<https://oxfordre.com/americanhistory/view/10.1093/acrefore/9780199329175.001.0001/acrefore-9780199329175-e-392>.

²⁹ Rene Dupos, “The Roots of Counterculture,” *New York Times*, September 24, 1972.

³⁰ Maria McGrath, *Food for Dissent: Natural Foods and the Consumer Counterculture since the 1960s*, Amherst: University of Massachusetts Press, 2019, 7, 107.; “Getting Low on GRAS,” *Joint Issue* 3, no. 2, January 24, 1972, <https://www.jstor.org/stable/community.28038634>.; *Great Speckled Bird* 8, no. 41, October 9, 1975, <https://www.jstor.org/stable/community.28037935>.

³¹ Laura Shapiro characterizes mainstream processed foods cooking in this way in the book *Something From the Oven*. A prime example of this is *The Can Opener Cookbook* by Poppy Cannon, first published in 1951.

³² Laurel Robertson, Carol Flinders and Bronwen Godfrey, *Laurel's Kitchen: A Handbook for Vegetarian Cookery & Nutrition* (Berkeley: Nilgiri Press, 1976), 57.

The authors of *Laurel's Kitchen* were critical of what they learned in their junior high home economics classes and the Standard American Diet, which they referred to as "S.A.D. indeed".³³ Instead their book called women to care for their families by preparing natural foods like whole wheat bread, soups, and yogurt.³⁴

In sum, purity concerns were central to the food counterculture. Yet rather than focus on market oversight as previous pure food activists had, counterculture pure foodists developed a body of staple foods and ingredients outside of the mainstream marketplace. Because they did not view "balloon bread," jelly, or canned fruit cocktail as food, and distrusted government institutions, counterculture pure foodists created their own marketplace calibrated to their own standards of food purity. The counterculture looked to their own experts like Laurel Robertson and established their own subcultural vocabulary for their purity standards like natural and organic. Nevertheless, much of the rhetoric and goals of the pure food counterculture aligns with the anxieties of 19th century pure foodists. As we will see in the next section, the legacies of the counterculture's beliefs about food integrity prompted renewed engagement with food identity standards in the 21st century.

Purity by Any Other Name...

By the dawn of the new millennium, food purity had recaptured mainstream public attention. However, the phrase "pure food" was nowhere to be found. In 2000, *Slow Food*

³³ Robertson, et al., *Laurel's Kitchen*, 23.

³⁴ Megan J. Elias, *Stir it Up: Home Economics in American Culture* (Philadelphia: University of Pennsylvania Press, 2008) 153-154.

USA was founded to promote sustainable and equitable “quality, flavorsome, and healthy food.”³⁵ In 2001 Whole Foods Market opened their first Manhattan store location. That same year, Eric Schlosser’s *Fast Food Nation* hit bookstores, followed in 2006 by Michael Pollan’s *Omnivore’s Dilemma*. Throughout this period, organic foods grew in availability, food miles became a growing concern, and products labeled “healthy,” “clean,” and “natural” increased.³⁶ Michael Pollan’s critique of industrialized food became so popular among affluent consumers that in 2008 he issued an eating credo: “eat food. not too much. mostly plants.” His advice popularized the idea that industrial processed foods should not be considered food at all.

This moment of renewed interest in food purity prompted a flurry of class action lawsuits from consumers claiming to have been swindled by food manufacturers. Beginning in 2008, dozens of cases were filed by consumers who accused food manufacturers of fraud. For example, in 2008, plaintiff Stacy Holk accused Snapple Beverage Corporation of violating the New Jersey Fraud Act by marketing their products as “all natural” despite containing high fructose corn syrup”³⁷ In 2012, plaintiff Martin Taradejna brought a class action lawsuit against Yoplait alleging that their “Yoplait Greek” product was not Greek yogurt. Taradejna argued that the product was fraudulent under the Minnesota Prevention of Consumer Fraud Act, Minnesota Unlawful Trade Practices Act, and Minnesota Uniform Deceptive Trade Practices Act because it was thickened with milk

³⁵ “Our philosophy,” Slow Food, accessed January 13, 2022, <https://www.slowfood.com/about-us/our-philosophy/>.

³⁶ “Clean eating,” Google Trends search, accessed January 13, 2022, [https://trends.google.com/trends/explore?date=all&geo=US&q=%22clean%20eating%22](https://trends.google.com/trends/explore?date=all&geo=US&q=%22clean%20eating%22;); “healthy food,” Google Trends search, accessed January 13, 2022 <https://trends.google.com/trends/explore?date=all&geo=US&q=healthy%20food>.

³⁷ *Stacy Holk, v. Snapple Beverage Corporation*, 574 F. Supp.2d 447 (United States District Court, New Jersey, 2008).

protein concentrate instead of strained.³⁸ That same year, plaintiff Levi Jones filed a class action suit against Conagra Foods over claims that Hunt’s Tomatoes, PAM Cooking Spray, and Swiss Miss Cocoa were “100% natural,” “free of artificial ingredients,” and a “natural source of antioxidants” were fraudulent under California’s Unfair Competition Law, California’s False Advertising laws, Consumer Legal Remedies Act, Song-Beverly Act, Magnuson-Moss Act.³⁹

In each of these cases, and dozens more like them, the plaintiff’s claims were denied. Each time, judges ruled that the state-level regulations invoked by plaintiffs were preempted by the FDCA. Plaintiffs were told that, even in cases when food identity standards did not exist, the general “common or usual name” clause of the federal Nutrition Labeling and Education Act of 1990 (NLEA) meant that a vague general understanding of the meaning (such as dictionary definitions) superseded any specific state-level designations.

One grievance that appeared in multiple cases was the issue of pollen in honey. Honey was surging in popularity in the pure food movement of the new millennium as an unprocessed sweetener, as an alternative to high fructose corn syrup, and as a remedy for seasonal allergies. Yet there was also growing anxiety among these consumers that mass-produced honey imported from overseas was adulterated with high fructose corn syrup.⁴⁰ Soon, honey fraud class action lawsuits began to appear.

³⁸ *Martin Taradejna v. General Mills, Inc.*, 909 F.Supp.2d 1128 (United States District Court, Minnesota, 2012).

³⁹ *Levi Jones et al., v. Conagra Foods Inc.*, 912 F.Supp.2d 889 (United States District Court, Northern District of California, 2012).

⁴⁰ These beliefs were stoked by a 2011 article published in *Food Safety News* titled “Tests Show Most Store Honey Isn’t Honey.” Author Andrew Schneider hired Dr. Vaughn Bryant, a Professor of Anthropology at Texas A&M University researching pollen to test 60 types of honey purchased in 10 states. The report found that nearly all mass produced honey had no pollen present, a result of ultra filtration and Chinese “honey laundering.”

In 2012, Reyna Guerrero initiated a class action lawsuit against the Target Corporation over their private label “Market Pantry” and “Archer Farms” honeys. Guerrero invoked Florida’s honey standard and argued that Target’s products were not actually honey because all traces of naturally occurring pollen had been removed.⁴¹ In response, Target Corporation argued that the general federal “common or usual name” requirement established by the FDCA and the NLEA preempted Florida’s specific honey law. They claimed that de-pollinated honey still fell within popular understandings of honey as a food, and they would be in violation of federal law if they did not label the product according to the “common or usual name.”⁴² Ultimately, the judge dismissed Guerrero’s case under the dormant commerce clause and stated that the Florida honey law excessively burdens interstate commerce.

In 2013, Meryl Overton sued CVS Caremark Corp. over their “CVS Gold Emblem Pure & Natural Clover Honey” for similar reasons. Overton argued that their removal of pollen along with the label statements “Pure & Natural” and “100% Pure Honey U.S. Grade A” violated the California Agricultural Code.⁴³ Overton claimed that, based on the United Nations Codex Alimentarius food standards, the CVS product should be known as “filtered honey.” In response, CVS invoked the position of the National Honey Board, who argued that the name was not misleading because pollen is not an essential component of honey. Again, the judge invoked NLEA, and the idea that the federal “common or usual name” rule

Andrew Schneider, “Tests Show Most Store Honey Isn’t Honey,” *Food Safety News*, November 7, 2011, https://www.foodsafetynews.com/2011/11/tests-show-most-store-honey-isnt-honey/#.U_UJqxa1GSo.

⁴¹ Florida’s honey standard required honey to contain pollen in order to be labeled honey.

⁴² *Reyna Guerrero v. Target Corporation*, 889 F.Supp.2d 1348 (United States District Court, Southern District of Florida, Sept. 4, 2012).

⁴³ “Division 13- Bee Management and Honey Production, Chapter 2: Honey, Article 1- Definitions,” *2012 California Codes: FAC- Food and Agricultural Codes*, section 29413(e) (2012), <https://law.justia.com/codes/california/2012/fac/division-13/chapter-2/article-1/section-29413/>.

preempts California’s honey standard. Judge David O. Carter further clarified his interpretation of the laws:

The Court considers this hypothetical: say that there is no federally-created standard of identity for rat tails, but the federally-created “common or usual name” for rat tails is simply “rat tails.” Now assume that State A has promulgated a law that says that the “standard of identity” for rat tails is “hot dogs.” If the Court were to accept the proposition that Federal Section 343(i)(1)’s phrase “standard of identity” refers to both federally-created and state-created standards of identity, then Federal Section 343(i)(1)’s requirement that a food be labeled with its “common or usual name” would not apply, and State A could label rat tails as “hot dogs.”⁴⁴

In sum, Judge Carter argues that federal laws supersede state laws in order to create uniformity. Ultimately the case was dismissed because the court agreed that the common or usual name for filtered honey was “honey” on a federal level that preempted the state level and the Codex level.⁴⁵ Class action lawsuits against honey manufacturers selling depollinated honey continued to appear, and they all followed a similar pattern; a consumer argued that de-pollinated honey did not constitute honey under a state-level honey standard, and the Judge dismissed the cases under the common or usual name standard of NLEA.⁴⁶

⁴⁴ *Meryl Overton et al. v. CVS Caremark Corp et al.*, No. SACV 12-0982 DOC (ANx) (United States District Court, Central District of California, 2012).

⁴⁵ *Meryl Overton et al. v. CVS Caremark Corp et al.*, No. SACV 12-0982 DOC (ANx) (United States District Court, Central District of California, 2012).

⁴⁶ This pattern can be seen in at least seven cases including *Brod v. Sioux Honey Association* of 2012 in California, *Cardona v. Target Corporation* of 2013 in California, *Ross v. Sioux Honey Association* of 2013 in California, *Regan v. Sioux Honey Association* of 2013 in Wisconsin, *Perea v. Walgreen Company* of 2013 in California, *Paugh v. Walgreen Company* of 2014 in Florida, *Birmingham v. Walgreen Company* of 2014 in Florida. In 2015, Gregory Brod appealed his 2012 case, yet the Ninth Circuit Court of Appeals found that Brod “does not persuade us that any other issues were raised sufficiently to the district court or briefed on appeal.” Marler Clark, publisher of *Food Safety News* did not represent any parties in any of the aforementioned cases. *Gregory Bond v. Sioux Honey Association Cooperative*, 609 Fed. Appx 415. United States Court of Appeals (9th Cir. 2015).

At the conclusion of a 2013 lawsuit against the Walgreen Company over their honey, Judge David O. Carter offered Perea some advice:

Plaintiff's concerns regarding the importation of contaminated honey from China and the true origins of Defendant's product may be better addressed through the democratic or administrative processes. Concerned consumers and public interest groups could request that their legislators address the importation of unsafe honey or petition the FDA for a national standard for honey that includes the presence of pollen. Additionally, strong consumer demand for honey with pollen, as demonstrated by this lawsuit and similar cases, presents a powerful incentive and opportunity for honey producers who do not remove all of the pollen from their product to label and advertise their product as "honey with pollen." Thus, Plaintiff and similarly situated consumers are not without remedy or without a voice in this ongoing debate about the proper labeling of honey.⁴⁷

Judge Carter's comment suggests that class action lawsuits were not the best avenue for consumer activism. Instead, Carter suggests that interested consumers should directly petition the FDA for a standard of identity, despite the FDA's decision to diminish opportunities for public engagement since the peanut butter hearings of the 1970s.

As honey class action lawsuits continued to be filed, pure food activists reinvigorated a campaign for a federal honey standard of identity. A proposal for a honey standard of identity was introduced in March of 2006 by the American Beekeeping Federation and several other honey-related groups, based on the revised Codex Alimentarius standard enacted by the United Nations in 2001.⁴⁸ The petitioners argued that adopting this standard would promote honesty and fair dealing in the interest of consumers by clarifying the meaning of "honey," ensuring regulatory oversight, and promoting honesty in the food trade, but the proposal was denied.

⁴⁷ *Terri Perea v. Walgreen Company, et al.*, 939 F.Supp.2d 1026 (United States District Court, Central District of California, 2013).

⁴⁸ U.S. Food and Drug Administration, Food Labeling and Standards Staff, Office of Nutrition, Labeling, and Dietary Supplements, Center for Food Safety and Applied Nutrition, *Draft Guidance for Industry: Proper Labeling of Honey and Honey Products* (Maryland, 2014), 3, <https://www.fda.gov/media/87970/download>.

In 2011 the FDA denied a new petition from the American Beekeeping Federation and several other honey-related associations for a honey standard because they did not see any reasonable grounds for adopting the Codex standard.⁴⁹ Instead, the FDA followed the NLEA approach invoked by judges, that common or usual name referred to the popular usage and offered sufficient regulatory oversight. In their response, the FDA defined honey as “a thick, sweet, syrupy substance that bees make as food from the nectar of flowers and store in honeycombs” as defined by Webster’s New World College Dictionary, The Deluxe Food Lover’s Companion, and the Encyclopedia Britannica Online.⁵⁰ The FDA believed that there was broad agreement in this definition, and that a formal standard of identity was not needed. Instead, the FDA issued a report offering honey manufacturers guidance on how to name honeys with sweeteners or flavoring added but did not address the issue of pollen.⁵¹

⁴⁹ U.S. Food and Drug Administration, Food Labeling and Standards Staff, Office of Nutrition, Labeling, and Dietary Supplements, Center for Food Safety and Applied Nutrition, *Draft Guidance for Industry: Proper Labeling of Honey and Honey Products* (Maryland, 2014), 4, <https://www.fda.gov/media/87970/download>.

⁵⁰ U.S. Food and Drug Administration, Food Labeling and Standards Staff, Office of Nutrition, Labeling, and Dietary Supplements, Center for Food Safety and Applied Nutrition, *Draft Guidance for Industry: Proper Labeling of Honey and Honey Products* (Maryland, 2014), 5, <https://www.fda.gov/media/87970/download>.

⁵¹ The report also addressed allegations of overseas adulteration:

We have a long-standing import alert for surveillance of honey for adulteration with cane or corn sugars. In addition, we have import alerts recommending that field personnel detain without physical examination imported honey that appears to contain residues of chloramphenicol and fluoroquinolones. Such a product would not be released into U.S. distribution until we determined that the product was not adulterated or misbranded.

U.S. Food and Drug Administration, Food Labeling and Standards Staff, Office of Nutrition, Labeling, and Dietary Supplements, Center for Food Safety and Applied Nutrition, *Draft Guidance for Industry: Proper Labeling of Honey and Honey Products* (Maryland, 2014), 8, <https://www.fda.gov/media/87970/download>. Despite the FDA’s promises of strict oversight of the honey trade, contemporary reporting from NPR suggests a 2001 Department of Commerce Notice of Preliminary Determination of Sales at Less Than Fair Value: Honey From the People’s Republic of China report was never resolved. In 2000 the American Honey Producers Association and the Sioux Honey Association filed petitions to investigate antidumping allegations from honey originating from China and Argentina. Just over a year after the NPR article was published, U.S. Immigration and Customs Enforcement charged two of the largest American honey suppliers, Honey Holding and Groeb Farms Inc. of evading over \$180 million dollars in anti-dumping duties by falsely declaring imported Chinese honey as other commodities. The investigation, which was known as Project Honeygate, began in 2006 after regulators noticed honey importers evading import duties. Some of the honey in question contained Chloramphenicol, a prohibited antibiotic.

Dan Charles, “Relax, Folks. It Really Is Honey After All,” NPR, last modified November 25, 2011, <https://www.npr.org/sections/thesalt/2011/11/25/142659547/relax-folks-it-really-is-honey-after-all>.

By 2014, efforts to create a honey standard continued. With public hearings discontinued, the FDA began using the internet to solicit public comments on proposed standards. The original docket and the extension for honey collected 85 total comments.⁵² A year later the honey standard won support from Senator Robert Casey Jr. of Pennsylvania. His advocacy of a honey standard was due to Pennsylvania's history of honey production. Like arguments made in the 19th century for a federal pure food law, Casey argued that in the absence of a federal standard of identity states had prompted a patchwork of regulations that overburdened small producers⁵³ Despite Casey's support a honey standard stalled once again.

The case study of the honey class action lawsuits (and the larger trend of consumers filing class action lawsuits over food purity) suggests that the U.S. food marketplace had returned to conditions similar to the first wave of pure food activism in the second half of the nineteenth century. Much like the first piecemeal state pure food laws of the nineteenth century, by 2015, 29 states had their own honey standards. Yet in the 21st century, the grassroots organizing of Progressive activists was replaced by class action lawsuits. With the spread of hyper-specific meanings of food purity in the late 20th and early 21st centuries, opportunities for collective action became more personal. Class action lawsuits

"Notice of Preliminary Determination of Sales at Less Than Fair Value: Honey From the People's Republic of China," *Federal Register* 66, no. 92 (May 11, 2001): 24101, <https://www.govinfo.gov/content/pkg/FR-2001-05-11/pdf/01-11940.pdf>; Daniel Trotta, "U.S. charges five in 'Honeygate' anti-dumping probe," *Reuters*, last modified February 20, 2013, <https://www.reuters.com/article/usa-china-honey/u-s-charges-five-in-honeygate-anti-dumping-probe-idUSL1N0BKCRX20130220>.

⁵² Agricultural Marketing Service, "Nonrulemaking Docket: U.S. Standard of Identity for Honey," Docket ID: AMS-FV-14-0025, <https://beta.regulations.gov/document/AMS-FV-14-0025-0001/comment>. "Standard of Identity Honey Comment S. Rudnicki," Public Submission Comment, Comment ID: AMS-FV-14-0025-0007 in Agricultural Marketing Service, "Nonrulemaking Docket: U.S. Standard of Identity for Honey," Docket ID: AMS-FV-14-0025, <https://www.regulations.gov/document/AMS-FV-14-0025-0007>.

⁵³ Targeted News Service, "Casey Calls on FDA for Honey Standards to Protect PA Producers, Consumers from Chinese 'Honey Launderers,'" NewsBank: Access World News, March 20, 2015, <https://infoweb.newsbank.com/apps/news/document-view?p=AWNB&docref=news/15430391CAD90DC8>.

are at once individualistic, as they describe personal injury for the main plaintiff, yet they also are a collective action. Nevertheless, the pure food class action deluge of the 2010s demonstrate the continued existence of a pure food movement.

Conclusion

... the pursuit of authenticity and The Real Thing would in other ways become democratized in the counterculture strain of the popular culture that begins in the 1960s- in a taste for crafts, house plants, natural foods, earth shoes, fringed leather jackets, camping, flea markets and collectibles, and the other means whereby the factitiousness of the industrial world is at least partially mitigated. That all of these 'naturals' could be reproduced, mimicked, adulterated, and otherwise manufactured for mass consumption, should come as no surprise in a culture forever wedded to a dialectic between authenticity and imitation.

Miles Orvell

*The Real Thing: Imitation and Authenticity in American Culture, 1880-1940*⁵⁴

The counterculture's quest for authenticity, in part through their preference for natural foods, prompted a paradigm shift in the pure foods movement. As the counterculture faded, food marketers began co-opting the counterculture's purity lexicon. Today consumers can purchase products like whole wheat Wonder bread, "natural" Jif peanut butter, and "Simply Lays" potato chips sprinkled with sea salt. Yet as the food culture of the counterculture became the dominant pure food discourse, how did that impact the food identity standards?

With the food identity standards reliant on shared beliefs among consumers, the counterculture created a new food lexicon that splintered the interests of purity-minded

⁵⁴Orvell, *The Real Thing*, 299.

consumers beyond the pure and adulterated binary to encompass organic, natural, fair-trade, humane, healthy, local, non-GMO, and more. As the countercultural pure food movement reached the mainstream in the 21st century, the filing of dozens of class action lawsuits about food authenticity and purity demonstrate that consumers continued to seek food purity from the industrial marketplace, such as private label honeys from big box stores, natural flavoring in orange juice, added sugar in yogurt and more.⁵⁵ With the disunity of 21st century consumer identity in mind, the final section of this study will look to the future of food identity standards

⁵⁵ *In Re: Tropicana Orange Juice Marketing and Sales Practices Litigation*, slip copy, 1018 WL 497071 (United States District Court, Southern District of New Jersey, 2018).; *Frank Morgan et al., v. Wallaby Yogurt Company Inc.*, 2014 WL 1017879 (United States District Court, Northern District of California, 2014).

Conclusion

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

U.S. Food and Drug Administration Commissioner Scott Gottlieb
July 2018

At a policy summit in the summer of 2018, FDA Commissioner Gottlieb declared his support for the enforcement of a strict definition of the word “milk.” According to Gottlieb, only secretions from the mammary glands of animals should be allowed to be called “milk.” His comments came in response to the growing popularity of alternative milks like almond milk, and recent calls from the dairy industry for stricter regulation of what can be called milk. This conversation emerged as a part of the Trump administration’s promise to “modernize” the standards of identity.¹

In September of 2018 the FDA solicited public comments on “Use of the Names of Dairy Foods in the Labeling of Plant-Based Products”. In response, the FDA received 14,017 comments, from form letters circulated by dairy interests and vegan activist groups, and letters written by individuals. Most of the comments centered on the value of consumer choice, frustration over industry claims that consumers aren’t informed enough to differentiate dairy and plant-based foods, and cynicism about the power of the dairy industry to influence the standards. Comments from the dairy industry claimed that there was widespread confusion over dairy and plant-based products, asserted that words like milk and butter inherently refer to dairy, and invoked the vulnerability of dairy farmers,

¹ Jay Sjerven, “FDA announces ‘down payment’ on modernizing food standards of identity,” *Food Business News*, last modified October 30, 2018, <https://www.foodbusinessnews.net/articles/12787-fda-announces-down-payment-on-modernizing-food-standards-of-identity>.

just as they had done during the margarine hearings. The responses struck as an anxious and emotional reflection of the cultural, environmental, and economic issues that simmered beneath the question of calling a product “almond beverage” or “almondmilk”.

Given the growing tribalism of U.S. politics for the past twenty years, it is not surprising that 21st century consumers living in Oregon and Wisconsin have different views about the meaning of purity and the purpose of food identity standards.² Yet this discordance is part of a larger story of the federal implementation of food identity standards that has recently been exacerbated by political polarization. As the FDA has overseen the standards of identity for more than eighty years, brief educational campaigns about the standards, no packaging information to designate standardized foods, and restrictions on public hearings have diminished consumer knowledge and engagement with the standards of identity. Since the FDA and USDA ended the *Housekeeper’s Chat* and *Consumers’ Guide* in the late 1940s, no consistent outreach efforts have been made to engage consumers in food identity standards.

Additionally, from 1938 to the present, standardized foods have never been labeled in any way that acknowledges that they adhere to a standard. The framers believed that the common or usual name of the food would be powerful enough in the minds of consumers to communicate the ingredients. This approach relies on shared mass consumer knowledge and expectations on common foods. In the early 1970s, the years of contentious peanut

² Food and Drug Administration, “Comment from Kym St. Clair, NA” in *Nonrulemaking Docket: Use of Dairy Terms in the Labeling of Plant-Based Products*, FDA-2018-N-3522, Document ID FDA-2018-N-3522-9095, Received 10 January 2019, <https://www.regulations.gov/document?D=FDA-2018-N-3522-9095>, <https://www.regulations.gov/document?D=FDA-2018-N-3522-9095>; Food and Drug Administration, “Comment from Jennifer Spring,” in *Nonrulemaking Docket: Use of Dairy Terms in the Labeling of Plant-Based Products*, FDA-2018-N-3522, Document ID FDA-2018-N-3522-7378, received 28 November, 2018, <https://www.regulations.gov/document?D=FDA-2018-N-3522-7378>.

butter hearings led the FDA to pivot to focusing on labeling transparency, however full ingredient labels were not printed on standardized foods until 1991 with the passage of the Nutrition Labeling and Education Act of 1990 (NLEA).

In addition to limited FDA consumer outreach and engagement, the management of the food identity standards shifted with the political winds in Washington. As discussed in chapter one, the first years of the food identity standards focused on selecting foods that had entered the Anglo-American mainstream. Beyond the stated purpose of promoting honesty and fair dealing in the interest of consumers, regulators also used the standards to fortify the diets of Americans. This attention to nutrition reflects the wartime ethos of ensuring a healthy and vital citizenry.

By the golden age of food procession of the post-WWII period, regulators responded to new processed ingredients by writing them into the standards. Despite consumer anxieties about ingredients like mono and diglycerides, the food industry argued that food additives were necessary to create the foods of the future. The FDA sided with industry preferences and permitted new additives in the hundreds of standards written and amended between 1945 and 1960. Furthermore, greater flexibility in the sale of imitation products like jam diminished the power of the common or usual name tenant of the food identity standards.

During the Cold War era, the food identity standards moved beyond the domestic sphere to take on geopolitical significance. Products like whole fish flour and dried skim milk were touted as solutions to global hunger that could bolster efforts to contain the spread of communism. Yet industry and political proponents believed that standards of identity were needed to sell overseas consumers on the safety and suitability of these

products. Despite years of appeals from fishing and dairy interests to create favorable food identity standards to help each industry win food aid contracts the FDA declined requests to standardize fish flour and rename dried skim milk.

The food industry tried numerous strategies of influencing food identity standards to varying degrees of success. During the oleomargarine tax repeal standards of the late 1940s, industry representatives claimed that oleomargarine disadvantaged dairy farmers. While this line of reasoning did not sway lawmakers to keep the tax, this argument has been a central strategy for the dairy industry ever since. During the Great Ice Cream Battle of 1977, ice cream manufacturers fought with milk manufacturers over additives and both sides failed to secure their preferred amendments. The battle ended with the food industry in agreement that food identity standards limited innovation and burdened manufacturers. By the 1990s, corporations like Kraft and Breyers were eschewing standards all together. With consumer knowledge of food standards declining, and marketing budgets capable of constant brand campaigns, the brand name had won over the common or usual name.

Nevertheless, the history of the food identity standards demonstrate that the pure foods movement has continued. From bread, fish flour and peanut butter, when given the opportunity, consumers have shown that they have strong beliefs about what will promote honesty and fair dealing in the interest of consumers. While the post-1938 pure foods movement does not have the organizational cohesion of earlier waves, the core concerns of food value, safety, and authenticity have been present in the work of the Federation of Homemakers, counterculture pure foodists, and the class-action lawsuits of the 2010s.

The rhetoric of the class-action lawsuits is rooted in the global food movement of the turn of the 21st century. At this time, groups like Slow Food and the Edible Schoolyard

emerged in response to the industrialized, processed, and fast-food system. As an undergraduate living in San Francisco at this time, I was swept up in the Bay Area food scene. I volunteered at the Ferry Plaza Farmers Market, worked at Whole Foods Market, and served in AmeriCorps teaching garden-based curricula and building school community gardens. Despite my involvement in this movement, I have never been sure what to call it. Is it farm-to-table, the Sustainable Food Movement, or something else? While all these names represent a facet of the movement, the big tent of the long Pure Food Movement offers the most fitting way to understand the search for purity and authenticity that characterizes the 21st century movement.

As beliefs about food purity become more and more specialized, the food industry marketing of brand names over product names, and the FDA's inconsistent record, the future utility of food identity standards is tenuous. If "standardized grades contemplate a standardized humanity," as the president of the National Canners Association claimed in the 1930s, perhaps contemplating a heterogeneous humanity can reorient FDA's approach to better promote honesty and fair dealing in the interest of all consumers.³

³ Anna Zeide, *Canned: the Rise and Fall of Consumer Confidence in the American Food Industry*, (Berkeley: University of California Press, 2019), 121.

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