

# Introduction

## *Food and Power in the Information Age*

A consumer strolling down the grocery store aisle is awash in a sea of product information. Boxes, bags, and cans made of cardboard, plastic, or metal (with paper label wrap) are stained with yellow, red, or a rainbow of colorful ink intended to grab the attention of the passerby. Friendly, stately, or even slick company logos neatly frame bold, two-inch-tall letters spelling out the brand of the food product. Littered across the “Principal Display Panel,” to use the U.S. Food and Drug Administration’s lexicon for the front of a package, are phrases that tout the (implied) health benefits about the food’s appealing qualities: “All Natural,” “ORGANIC,” “100% REAL” or “Clinically PROVEN to Help Reduce Cholesterol.” The claims sit alongside more conventional marketplace puffery, like “ORIGINAL” or “AMERICA’S FAVORITE.” An extended zone of food information occupies the sides or back, with summaries of the company’s romanticized history, instructions on how to prepare the food, additional ways to use it as an ingredient, or strategies to incorporate the product into a daily balanced diet.

It is here, in this text-heavy zone, that the consumer discovers the conspicuously inconspicuous information panel. This is a black box bearing the modest title (in bolded lettering and easy-to-read Helvetica) “Nutrition Facts.” Strikingly austere in its black-on-white math-chart display format and high-school vocabulary, the Nutrition Facts panel, with ingredients listed below, almost leaps out at the consumer by contrast with the more colorful, flamboyant product information displayed elsewhere on the package.

The present-day Nutrition Facts panel, required by the Food and Drug Administration (FDA) for all packaged food products sold in the United States, made its first appearance in the 1990s, though an earlier version had been around since the 1970s.

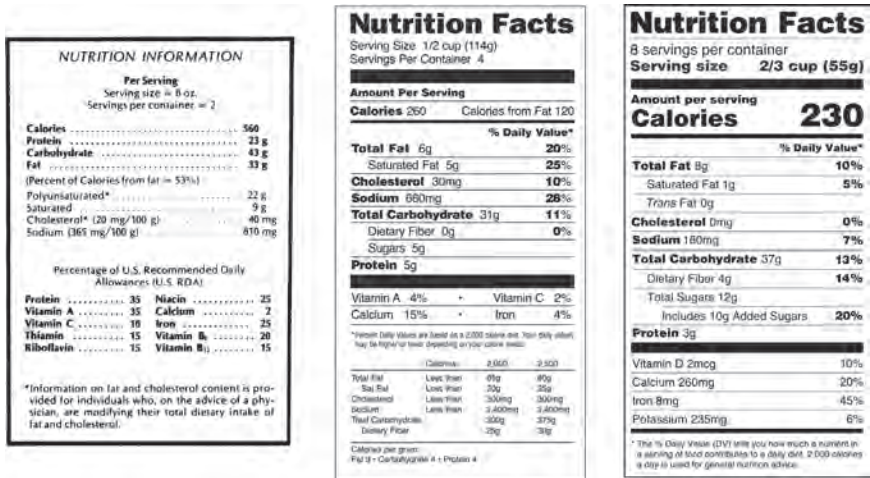


figure 1. Evolution of the FDA's nutrition label: the original 1973 voluntary "Nutrition Information" label, the 1993 Nutrition Facts label with "% Daily Value," and the present-day Nutrition Facts label with "Trans Fat" and "Added Sugars."

Nutrition Facts reflect a particularly American penchant for scientism, a confidence in the power of science to address society's ills. The label represents a remarkable triumph of the appearance of nutrition science in everyday life. Fifty years earlier, only diet scientists used language like "saturated fats" or "carbohydrates." Today, all prepared foods carry labels with these terms; they are commonplace vocabulary for consumers. The Nutrition Facts panel also manifests America's propensity for legalism; that is, using warning labels to solve social problems. In this sense, the FDA label represents a new paradigm for regulating food markets. Nutrition and ingredient disclosures embody a contradictory political sensibility that endorses caveat emptor—buyer beware—but also looks to a paternalistic state for public messaging on the private real estate of packaging. The Nutrition Facts panel, a mundane object that at first appears fairly straightforward, in fact encodes a complicated politics based on backstage expert decision-making. How did this legal and scientific label come to appear on millions of everyday American household products?

The standard narrative is that by giving the public better information, the FDA's Nutrition Facts panel was the government's answer to public concerns in the 1980s about the links between diet and health, and especially the rising incidence of heart disease. But the story is much older and more complicated. Why address public health concerns through food labels, specifically on commercial packaging? The origins of the FDA's Nutrition Facts panel traces back to the first half of the twentieth century, to the early years of America's packaged food economy and the rise of the FDA as a key

institution regulating food markets. The growth in sales of consumer packaged goods (CPGs) and processed foods created opportunities for national and even global marketing. But packaged and processed foods also led to a perennial crisis of trust in industrial foodways: If more and more cooking and food preparation was happening backstage, by strangers, how could consumers know who to trust with making their food? If they couldn't turn to local, familiar food providers for information, how would consumers determine what made their foods good or bad to eat?

One answer was the food label. First branded manufacturers, and then government institutions, looked to the food label to replace local, interpersonal forms of trust with an impersonal, institutional form that would work in urban retailing economies. The shift from buying food from local vendors at marketplaces, where consumers could sample, to buying packaged foods from grocers and supermarkets, produced a dramatic transformation in consumers' "information environment." An information environment is the totality of different sources of information, personal and impersonal, mediated and unmediated, that shape a consumer's decisions about what to buy. As Americans entered new information environments in the 1930s, producers were forced to rely less and less on face-to-face interactions to build trust. Advertising in magazines, radio, and television supplemented and ultimately displaced the direct sales approach of markets and door-to-door salesmen. Branded manufacturers touted food packaging and labels as the "silent salesmen" to which consumers could turn to distinguish quality products from cheap knockoffs.<sup>1</sup>

Local, state, and federal governments were pulled into these informational strategies for building trust in national markets. The FDA would become one of the most important governmental agencies for implementing rules on food labeling, from the earliest standard weight labeling and nomenclature laws to the ingredients and nutrition disclosures that are so commonplace today. Founded in 1906 as the Bureau of Chemistry inside the U.S. Department of Agriculture, initially its powers to regulate food markets were restricted almost entirely to the prevention of *mislabeling* foods. By midcentury, the FDA had grown into a powerful administrative agency overseeing markets for consumer goods, specifically food, drugs, and cosmetics. Today, the FDA oversees more than \$2.7 trillion of food, medical, and tobacco products, such that FDA-regulated products account for about 20 cents of every dollar spent by U.S. consumers.<sup>2</sup> At times, regulators at the FDA worked within the framework of an activist state, policing and countering market abuses. At other times, FDA regulators saw their role as collaborating with market players so that their actions would not clash with specific public interests, a form of what scholars have recently called *coregulation*.<sup>3</sup> Over the course of the twentieth century, food labeling became one of the primary ways that the FDA attempted to control national food markets, even as the industry underwent dramatic transformations.

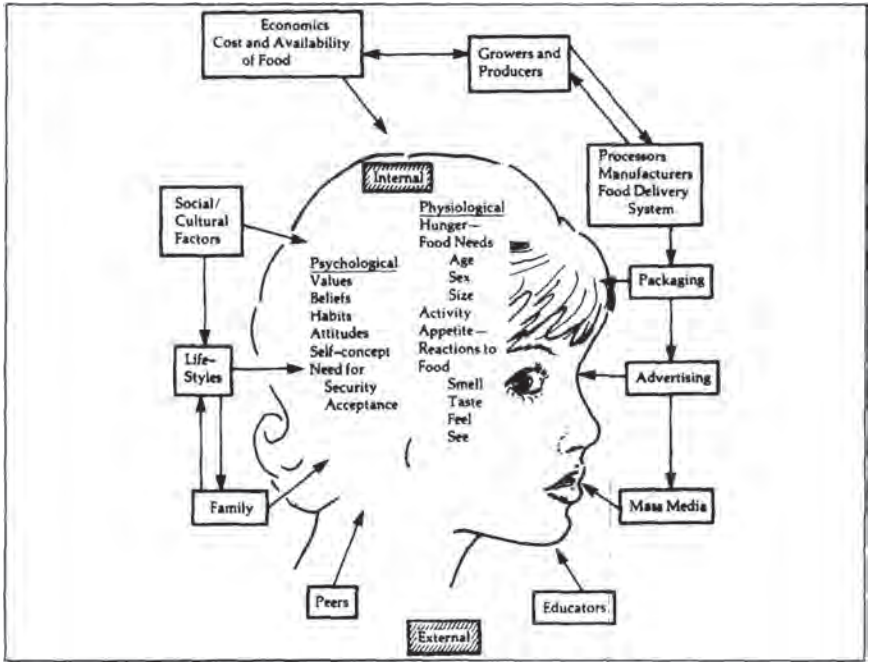


figure 2. “Influences on Our Food Habits—External and Internal” diagram modeling the information environment of a typical female shopper, reprinted in an influential 1988 GAO report on food labeling. Source: U. S. GAO RCED-88-70, *Food Marketing: Frozen Pizza Cheese—Representative of Broader Food Labeling Issues* (1988), p. 12. Original: D. Wenck, B. Baren, and S. Dewan, *Nutrition: The Challenge of Being Well Nourished*, by Reston Publishing Company, Inc., a Prentice Hall Company, Reston, VA (1980), p. 24.

The result of this century of private and public efforts to build trust in packaged and processed foods is a mediated food economy: the food label has become prime real estate for shaping consumer choices. What information goes on a label? What information stays off? And how can the label best capture the equally scarce currency of a consumer’s attention? These were questions experts grappled with as the FDA molded its food labeling policies. To understand why the FDA touted Nutrition Facts in the 1990s, one needs to understand the important role different groups of experts played in shaping and framing modern foodways.

#### HOW EXPERTS BUILT MODERN FOOD INFRASTRUCTURES

Experts shape every aspect of modern life. Yet the role of experts is often overlooked in food studies, perhaps owing to the field’s commitment to foregrounding

the experiences of those who have been marginalized by Big Science, Big Government, or Big Food. Writing about experts means focusing on the worldviews of powerful protagonists from business, government, and science rather than those who have been marginalized on account of their race, class, gender, or place origins.<sup>4</sup> Yet, by privileging experts' voices, it is not my intent to privilege their worldview.

This book describes work done by experts and expert institutions in order to look critically at the techniques and tactics expert institutions use to shape everyday life. It joins a growing literature in "new political history" that combines institutional history with social and cultural history to provide a window into what historian Meg Jacobs calls "state-building from the bottom up." Rather than taking the power of such institutions as the FDA for granted, accounts in the new political history ask how these institutions obtain and legitimate their authority.<sup>5</sup> Seen in this light, public and private campaigns around food labeling are part of a larger story on the contested concept of economic citizenship; that is, the rights and responsibilities of citizens as consumers in a capitalist democracy. Experts, often acting as intermediaries, navigate between top-down institutional prerogatives and the bottom-up social movements shaping America's mass markets for food.

This work required experts to interpret what issues mattered to the FDA's public as well as its institutional needs. It also required experts to "translate" between the interests of the public and the frames and constraints of governing institutions.<sup>6</sup> Experts developed technical rationales for their arguments for what should or should not go on the label. These rationales were grounded in culturally and historically specific "public knowledge-ways" that STS scholar Sheila Jasanoff has called "civic epistemology."<sup>7</sup> Experts working with the FDA on its food labeling policies were in dialogue with this changing civic food epistemology, sometimes responsive to public critiques, other times not. Food labels were part of a broader challenge for expert institutions who were concerned about how to communicate science, and in particular risk, to nonexpert publics. Would better, more informative labeling help fill what experts regularly believed to be a "deficit" in public understanding of nutrition science, or would it instead confuse or mislead the ordinary consumer?<sup>8</sup>

The Nutrition Facts panel is just a recent example of a long history of information devices developed by marketers, regulators, and other experts seeking to shape what consumers know about food. Long before the internet appeared, heralding an "Information Age," these communities of experts were concerned about consumers' information environments, how information about food circulated, and what they could do to shape and direct that information. This book will focus on three kinds of experts—in markets, in law, and in science—whose work helped build the modern information environments consumers depend on for food, and who in doing so sought to channel food from label to table.

## IMAGINING CONSUMERS

What do consumers want? This is one of the big questions market experts mull over as they devise marketing strategies and build the marketplaces where consumers get their food. Marketing, both as an everyday business practice and an increasingly arcane art, has played a growing role in framing how food is bought, sold, cooked, and eaten. Though such “market devices” as labels, trademarks, brand names, logos, mascots, and more,<sup>9</sup> market experts, be they economists, brand marketers, consumer psychologists, business owners, or sales specialists, hope to mold the meanings of the food they sell and thereby motivate shoppers to purchase and value their product.<sup>10</sup>

While officially a history of food labels, this book is also a study of how market experts have imagined consumers. The consumer is a central protagonist in histories of twentieth-century food politics, yet writing about consumers presents a problem. Whether you are a historian or a policymaker, asserting “what consumers want” quickly becomes an exercise in either projection—what *I* want a consumer to want—or metonym—what *I myself* and therefore I presume all consumers want.<sup>11</sup> In most narratives of public regulation, changing consumer preferences appear as a populist *deus ex machina* or a *zeitgeist* cultural backdrop. In the worst cases, consumers appear collectively as a monolithic character. While I have tried to avoid this, it remains a problem in any account that attempts to characterize the wildly diverse preferences of American consumers.

This definitional problem with consumer agency links to a bigger challenge in the history of food and agriculture: the question of “push” versus “pull” narratives. Push or supply-side narratives suggest that consumer demand for a product primarily responds to new advertising campaigns that are, in turn, typically designed to address a farm production glut. A popular example of this is the idea that our markets are saturated with corn products because corn producers successfully “captured” federal farm-subsidy programs to promote increased production and then pushed corn into new consumer markets through engineered innovations such as high fructose corn syrup.<sup>12</sup> Pull or demand-side narratives, by contrast, recount how producers seek to respond to an emerging consumer demand for something new; for instance, diet fads.<sup>13</sup> Accounts of “passive” consumers, duped by advertising and misinformation, versus “active” consumers, agents of reform empowered with information, are manifestations of these frames.<sup>14</sup>

Focusing on market experts as interlocutors between consumers and big market institutions offers a way to move beyond this oversimplified dichotomy. How, for instance, did experts form their impressions of consumer tastes and why consumers’ tastes changed? Companies spend a fortune trying to know what the consumer wants, yet even *they* don’t know. How many of us have bought a product we didn’t need or want, because it was easier to buy something than to achieve the

feeling or aspiration we were actually seeking? This is why companies spend a fortune trying to shape what consumers want. Experts' ideas about the consumer should be understood as a representation of the consumer, and also as an intervention into who they are. Instead of trying to speak for the consumer, or at consumers, this book explores consumers as a social construction: an idea invoked in different forms and for different purposes by different groups of experts, "cultivated" and "mobilized" through a variety of expert techniques.<sup>15</sup>

What power did business have to shape the consumer's sense of self?<sup>16</sup> One way market experts "instantiated" the consumer was as a legal or market "conceptual personae," a rhetorical device experts use to justify the actions they take. Throughout this book I describe a succession of different types of conceptual personae implied in the policies and designs of food labels: the "ordinary consumer" in chapter 2, the "informed consumer" in chapter 4, a "distributed consumer" in chapter 5, and the "rationally irrational consumer" discussed in the conclusion and common in policy circles today.<sup>17</sup>

A second level at which market experts shaped the agency of consumers was through their conceptualizations of "market infrastructures," the organizational and technological tissue that ties together (or separates) producers, distributors, and consumers.<sup>18</sup> Earlier histories of American markets described how large corporate firms, including many familiar household names in food manufacturing, vertically integrated their supply chains in the early twentieth century. The last step in this market integration was integrating the consumer. These firms invested in "mass feedback technologies," including market research and advertising, to "educate" consumers to want the goods and services companies provided.<sup>19</sup> In the case of packaged foods, the interface between producer and consumer was the label, which could function as either "a bridge or a barrier to communication."<sup>20</sup> Two key market infrastructures explored in this book are the FDA "standards of identity," introduced in chapter 1, developed over the course of the 1930s to 1960s, and informative labels, such as the FDA ingredients and nutrition panels in use since the 1970s, discussed in chapters 4 and 5.

A third way experts framed markets for consumers was through market *things*. Markets have depended on a wide variety of devices and physical things to make them work, ranging from market research focus groups and financial algorithms to shopping carts and cash registers.<sup>21</sup> These market things are different from theories or models because they act directly on the consumer. Foods themselves can become a "package" for a particular idea of food. For example, once certain colors or flavors were associated with quality or "freshness," companies selected, designed, and standardized foods to have those colors and flavors to create a standardized selection at the marketplace, thus by extension standardizing taste.<sup>22</sup> After the introduction of nutrition labeling, companies reformulated foods to be "nutritious" in a way that would be visible on the label.



The question of who counts as an expert on the consumer has itself been a moving target. Ever since Josiah Wedgewood marketed his “Queensware” porcelain in eighteenth-century England, “tastemakers”—people who decide or influence what becomes fashionable—have played a prominent role in marketing goods. Early tastemakers were often upper-class elites emulated by an aspiring middle class. This form of “conspicuous consumption” and “keeping up with the Joneses” never went away, but another type of professional tastemaker emerged with the rise of mass media and mass marketing in the late nineteenth century.<sup>23</sup> For much of the first half of the twentieth century, consumers looked to home economists, often women, for guidance on foods, dieting, and domestic products.<sup>24</sup> As new market expert professions emerged in the 1950s, adopting formal research tools from other disciplines, opportunities for women home economists diminished. Marketers’ tools shifted from direct customer engagement to consumer research techniques intended to “mobilize consumers” using new models in psychology to shape consumer behavior.<sup>25</sup>

As food chains became more complex, market experts played a critical role in solving a core challenge at the heart of the food system: how can buyers trust where their food comes from? At the start of the twentieth century, critics of a newly emerging manufactured food economy complained of “fabricated foods,” foods so packaged and processed it was difficult to assess their quality with the naked eye. They worried about a new era of market trickery they called “economic adulteration.” By the 1970s, economists formalized these problems into a theory of “information asymmetry” that attributed poor market decisions to the imbalance of information between buyers and sellers. This problem of “quality uncertainty” was not just a problem for the consumer. Legitimate producers risked losing markets to competition from cheap knockoffs.<sup>26</sup> How could buyers and sellers establish and maintain trust in increasingly complicated food chains?

One answer to this question was to establish new infrastructures for credible sources of information, specifically the food label. The earliest examples of a modern food label can be found in seventeenth-century “patent” medicine markets, where medicines were sold in handblown bottles wrapped in labels made from handmade sheets with handprinted text. These do-it-yourself remedies foreshadowed many important features of food labeling today: branded names, such as Stoughton’s drops or Anderson’s pills, that identified a maker along with their (supposed) credentials as a health authority; discursive wrappers that instructed the consumer on how to use the product but also sold the buyer on the product’s many benefits and trustworthy manufacture; and handheld packaging that came in a variety of shapes, sizes, and colors to distinguish the product from otherwise indistinguishable competitors. These patent medicines’ manufacture and clientele, however, were fairly local by comparison to today’s mass markets.<sup>27</sup>