Administering Real Food: How the Eat-Food Movement Should— and Should Not—Approach Government Regulation

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Led by Michael Pollan, the fast-growing food movement has changed the way many Americans think about what they eat. Increasingly, the movement is focusing on issues of national policy, which makes sense in such a highly regulated field. Yet, to date, legal scholarship has done little to explore how the goals of this nascent movement relate to the current system of food regulation in the United States. This Article begins to fill that void. The Article focuses on one aspect of the greater food movement: the "eat-food movement," which encourages the consumption of "real," unprocessed food. Upon juxtaposing the philosophy of the eat-food movement with the structure and mission of FDA and USDA, the Article concludes that certain types of command-and-control regulation pose unique threats to the movement's integrity. On the other hand, disclosure-based regulation, used in combination with twenty-first century information and communication technologies, holds particular promise for this movement. The idea that the relative merits of different types of regulation should be assessed in light of a given movement's specific goals and a given agency's specific structure has implications for administrative law more broadly.

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INTRODUCTION

In recent years, popular authors—most notably Michael Pollan—have been tremendously successful in getting Americans to think differently about food. But although food is heavily regulated in the United States, the question of how these new ways of thinking could or should result in new approaches to regulation has received surprisingly little attention. At times, Pollan and other

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In its earliest stages, this project benefited greatly from the advice of my father, Steven Goldberg, who passed away in 2010. This Article is better for having known him, and worse for having not known him longer.

1. Pollan's popularity and influence are perhaps best demonstrated by a summary of his career trajectory. A journalist and author, Pollan focused on the natural world in two of his early books, SECOND NATURE: A GARDENER'S EDUCATION (1991) and THE BOTANY OF DESIRE: A PLANT'S-EYE VIEW OF THE WORLD (2001). THE BOTANY OF DESIRE won Borders Books and Music's Original Voices Award. See Borders Announces 2002 Original Voices Award Winners, WRITE NEWS (Mar. 2, 2002), http://www.writenews.com/2002/050202_borders_original_voices.htm. But it was THE OMNIVORE'S DILEMMA: A NATURAL HISTORY OF FOUR MEALS (2006) [hereinafter POLLAN, THE OMNIVORE'S DILEMMA] that marked the beginning of both Pollan's foray into food policy and his widespread fame. The Omnivore's Dilemma won numerous awards, see About Michael Pollan, MICHAEL POLLAN, http://michaelpollan.com/press-kit/ (last visited July 21, 2012), and eventually led to the publication of a young reader's edition, THE OMNIVORE'S DILEMMA FOR KIDS: THE SECRETS BEHIND WHAT YOU EAT (2009). In the interim, Pollan's 2007 New York Times Magazine article, Unhappy Meals, N.Y. TIMES MAG., Jan. 28, 2007, available at http://www.nytimes.com/2007/01/28/magazine/28nutritionism. t.html?pagewanted=all [hereinafter Pollan, Unhappy Meals], grew into a book, IN DEFENSE OF FOOD: AN EATER'S MANIFESTO (2008) [hereinafter POLLAN, IN DEFENSE OF FOOD], the final section of which Pollan later expanded into its own book, FOOD RULES: AN EATER'S MANUAL (2009), later revised and illustrated for 2011. Many not-for-profit organizations working on food-related matters cite Pollan as an influence. See examples cited infra note 220.

Other authors have also influenced the current dialogue around food, including Eric Schlosser, author of FAST FOOD NATION: THE DARK SIDE OF THE ALL-AMERICAN MEAL (2002) and its young readers' version, CHEW ON THIS: EVERYTHING YOU DON'T WANT TO KNOW ABOUT FAST FOOD (2006), and Marion Nestle, author of numerous books on food, including FOOD POLITICS: HOW THE FOOD INDUSTRY INFLUENCES NUTRITION AND HEALTH (rev. ed. 2007) [hereinafter NESTLE, FOOD POLITICS]; SAFE FOOD: THE POLITICS OF FOOD SAFETY (rev. ed. 2010); WHAT TO EAT: AN AISLE-BY-AISLE GUIDE TO SAVVY FOOD CHOICES AND GOOD EATING (2006) [hereinafter NESTLE, WHAT TO EAT]; and MARION NESTLE & MALDEN NESHEIM, WHY CALORIES COUNT: FROM SCIENCE TO POLITICS (2012).

2. See, e.g., discussion infra Parts II, III, and IV.

leaders of the food movement have indicated a desire for regulatory agencies, such as the U.S. Food and Drug Administration (FDA) and the U.S. Department of Agriculture (USDA), to change their approach with respect to a discrete issue,³ or to embrace the movement's priorities and values more generally.⁴ However, by and large, the movement has focused its tremendous energy on grassroots efforts to reach individual eaters, rather than attempts to influence law and policy. Perhaps for this reason, very few legal scholars have directly confronted the question of what, if anything, the food movement means for the current system of food regulation.⁵ However, the food movement appears to be rapidly increasing its policy-level advocacy efforts,⁶ and the time has come for the legal community to more fully contemplate the future of food regulation in light of this nascent movement.

This Article represents an attempt to take one step toward bridging the gap between the large and complex regulatory structure that governs the production and sale of food in the United States,⁷ on the one hand, and the fast-growing and highly influential food movement, which has already had a significant impact on the popular perception of food,⁸ on the other. The Article focuses on one specific element of the food movement: the deceptively simple call to "eat food"—"real," unprocessed food—that is central to many of the food movement's undertakings.⁹ I refer to this sub-movement as the "eat-food movement."

This Article argues that, while many social movements and public health movements choose to seek significant regulatory involvement as a means of achieving their goals, features unique to the eat-food movement make some forms of regulation less desirable, even if one accepts the usual arguments in

^{3.} See, e.g., NESTLE & NESHEIM, supra note 1, at 225–26 (listing ways to "get political").

^{4.} See, e.g., POLLAN, IN DEFENSE OF FOOD, supra note 1, at 36 (bemoaning FDA's embrace of "nutritionism," defined *infra*, Part IA).

^{5.} Recent legal scholarship has begun to explore this topic. See, e.g., Margaret Sova McCabe, Foodshed Foundations: Law's Role in Shaping Our Food System's Future, 22 FORDHAM ENVIL. L. REV. 563 (2011); Susan A. Schneider, A Reconsideration of Agricultural Law: A Call for the Law of Food, Farming, and Sustainability, 34 WM. & MARY ENVIL. L. & POL'Y REV. 935 (2010); Susan A. Schneider, Reconnecting Consumers and Producers: On the Path Toward a Sustainable Food and Agriculture Policy, 14 DRAKE J. AGRIC. L. 75 (2009) [hereinafter Schneider, Reconnecting Consumers and Producers]; Marne Coit, Jumping on the Next Bandwagon: An Overview of the Policy and Legal Aspects of the Local Food Movement, 4 J. FOOD L. & POL'Y 45 (2008).

^{6.} See, e.g., Michael Pollan, How Change Is Going to Come in the Food System, THE NATION, Oct. 3, 2011, http://www.thenation.com/article/163399/how-change-going-come-food-system (summarizing recent political accomplishments of the food movement and predicting that grassroots efforts will eventually lead to more substantial political gains).

^{7.} While this Article's focus is on the role of the U.S. federal government, the role of state and local governments is a promising area to explore, as is the international arena.

^{8.} See, e.g., Don Carr, Americans' Views of Industrial Agriculture by the Numbers, ENVTL. WORKING GROUP (Sept. 28, 2011), http://www.ewg.org/agmag/2011/09/americans-views-of-industrial-agriculture-by-the-numbers/ (describing the results of two polls measuring American's "concerns about the quality of food and how it's produced" and noting that "[t]he popularity of Oscar-nominated 'Food, Inc.' and writers Michael Pollan and Mark Bittman make it clear that consumer interest in food and farming issues is now deeply embedded in the cultural mainstream").

^{9.} See discussion infra Part I.A.

favor of public health regulation. Specifically, I argue that the eat-food movement should not be overly eager to have federal agencies ban the sale of substances the movement opposes, or even to perform an information filtering role, for example by creating a government-run labeling system for "real" food. On the contrary, there are reasons why the movement may want to focus on developing more sophisticated ways for consumers to filter information and evaluate food products themselves, despite efficiency and access concerns. Under this model, the movement would focus its lobbying efforts on seeking mandates related to information gathering and dissemination, such as requirements that additional information about the provenance of a food be included on the label or embedded in a bar code, so that interested consumers could use a cell phone application or other approach to synthesize the data on their own terms, or on terms dictated by those within the eat-food movement whom they trust.

Similar to the "reflexive law" model, ¹⁰ this approach constitutes a middle ground between command-and-control regulation and reliance on the free market. The difference, however, is two-fold. First, the middle ground described here focuses not on fostering the ability of companies to align their practices with their values, but rather on fostering the ability of consumers and social movements to develop more effective and nuanced systems for obtaining and evaluating the information in which they are most interested. Second, I do not argue that this middle ground is inherently preferable to a command-and-control approach. Instead, I contend that specific features of the eat-food movement, coupled with specific features of U.S. food regulation, result in a situation where this middle-ground approach will often best advance this particular movement's goals.

This Article arrives at these conclusions after examining the ways in which the eat-food movement's philosophy is fundamentally in tension with certain aspects of federal food regulation. This examination has implications for the study of administrative regulation more broadly. All government agencies have guiding principles that permeate their structures and methods of analysis, preventing them from being entirely neutral. For this reason, a given agency may or may not be well suited to the approach of a given social movement. This Article presents an example of this phenomenon by demonstrating that some of the regulatory pathways within FDA and USDA are not well suited to the pursuit of the eat-food movement's goals. Seeking to change the fundamental nature of these regulatory pathways would be an epic

^{10.} See Eric W. Orts, Reflexive Environmental Law, 89 Nw. U. L. REV. 1227, 1232 (1995) (The reflexive law model "emphasizes the limits of the law in the face of complexity . . . [and] proposes an alternative approach to law reform. It focuses on enhancing self-referential capacities of social systems and institutions outside the legal system, rather than direct intervention of the legal system itself through agencies, highly detailed statutes, or delegation of great power to courts."); see also Jeffrey J. Minneti, Relational Integrity Regulation: Nudging Consumers Toward Products Bearing Valid Environmental Marketing Claims, 40 ENVIL. L. 1327, 1336–38 (2010).

task. Moreover, insofar as the current structure of these agencies is beneficial in other contexts, such a fundamental change might not be to the public's benefit.

Under these circumstances, a social movement may be best served by steering clear of approaches that go against the grain of the relevant agency, and by instead identifying the existing regulatory pathways most suited to the movement's specific goals and pursuing change through those pathways. This Article demonstrates this phenomenon in the context of the eat-food movement, which I argue is positioned to benefit particularly readily from regulatory pathways associated with information disclosure, used in conjunction with consumer-based filtering systems.

Part I examines the ways in which the eat-food movement is different from other movements and how its unique worldview sometimes upends traditional notions of the institutional competencies of agencies. Most notably, the traditional view that agencies are well suited to filter complex scientific information is deeply in tension with the eat-food movement's fundamental beliefs about the limited ability of the scientific process to explicate matters of nutrition. Parts II, III, and IV look at three types of regulatory involvement that the eat-food movement might pursue, examining each option in light of the movement's unique features. Part II analyzes regulatory bans and limits on the sale of certain substances as food and argues that the eat-food movement is well served by the pursuit of such bans only in a limited set of circumstances. Part III focuses on government-filtered labeling, such as the "traffic light" labeling advocated by many activists, in which government develops a formula to determine good and bad food choices, identifying them with green light and red light icons. This Part argues that the potential benefits of such labeling are counterbalanced (and perhaps undercut) by the unique features of the eat-food movement. Part IV looks at consumer filtering of labeling based on—among other things-government-mandated information disclosure and argues that this approach meshes well with the eat-food movement's goals and beliefs, and is made more practicable by recent advances in technology.

I. DEFINING AND POSITIONING THE EAT-FOOD MOVEMENT

While the eat-food movement, and the food movement more broadly, bear an important resemblance to other movements—most notably, the environmental movement 11—the eat-food movement has many unique features.

^{11.} Edward Rubin describes the birth of the environmental movement as having "contradicted all existing theories on the causes of mass movements," going on to state that "the movement was remarkable for the diffuse and remote character of the concerns that animated its participants, for the lack of any particularized economic interests in its basic goals, and for the sophisticated organizational efforts that sustained it." Edward L. Rubin, *Passing Through the Door: Social Movement Literature and Legal Scholarship*, 150 U. PA. L. REV. 1, 6–7 (2001). While it remains to be seen if the food movement will be sustained by sophisticated organizational efforts, Rubin's other two observations about the "remarkable" nature of the environmental movement apply with equal force to the food movement. Moreover, there is significant substantive overlap between the two movements. Frances Moore Lappé's seminal book, DIET FOR A SMALL PLANET (1971), introduced early environmentalists to the impact that

This Part begins with a discussion of the philosophy of the eat-food movement and then turns to an examination of how that philosophy calls into question traditional views on the appropriate role of government regulation.

A. The Eat-Food Movement's Philosophy

The eat-food movement is premised on three basic, cumulative assertions:

- 1. Historically, long-standing food cultures answered the question of what to eat. You ate what your parents and grandparents ate, and what your ancestors had eaten before that. The advent of the modern Western diet—defined by the widespread distribution of processed, shelf-stable foodstuffs that did not form a part of any traditional cuisine—changed this. Amid initial concerns about the deficiencies of these new foods, the question of what to eat was delegated to "experts," such as food technologists and nutritional scientists. 4
- 2. Wherever the Western diet goes, a cluster of serious diseases, that are rare or non-existent in societies eating traditional diets, follows. The efforts of nutritional scientists and food technologists to fortify processed foods or otherwise manufacture healthful food have not been able to change this basic fact. This demonstrates not only that the Western diet is unhealthy but also that nutritional science is, at best, a discipline still in its infancy, far from being able to understand the complex relationships between our bodies and our food. The serious diseases, that are rare or non-existent in societies eating traditional diets, follows. The serious diseases, and food technologists to fortify processed foods or otherwise manufacture healthful food have not been able to change this basic fact. This demonstrates not only that the Western diet is unhealthy but also that nutritional science is, at
- 3. Therefore, one should not rely on nutritional science or eat the modern Western diet. 18 While it would be ideal to immerse oneself in a

food production has on the earth, and the counterculture of the late 1960s and early 1970s included a "countercuisine" element that was closely entwined with environmentalism. See generally WARREN J. BELASCO, APPETITE FOR CHANGE: HOW THE COUNTERCULTURE TOOK ON THE FOOD INDUSTRY (2d ed. 2007). Similarly, today's food movement focuses not only on issues of individual health, as discussed infra Part I.A, but also on issues of environmentalism (as well as many other topics, including animal welfare and social justice). Most notably, Michael Pollan's book, THE OMNIVORE'S DILEMMA, supra note 1, drew attention to the environmental consequences of industrial meat production and to the issue of "food miles." For a legal perspective on the environmental impact of food production, see Jason J. Czarnezki, The Future of Food Eco-Labeling: Organic, Carbon Footprint, and Environmental Life-Cycle Analysis, 30 STAN. ENVIL. L.J. 3 (2011).

- 12. See Pollan, Unhappy Meals, supra note 1.
- 13. See id.; see also Geoffrey Cannon, The Royal Society, London, Caroline Walker Lecture at The Fate of Nations: Food and Nutrition Policy in the New World 11 (2003), available at http://www.cwt.org.uk/pdfs/2003%20lecture.pdf. The narrative traced in this paragraph has been popularized almost exclusively by Michael Pollan, but Pollan's work builds on the work of others, including Cannon. See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 53.
 - 14. See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 8, 28, 108–09.
 - 15. See id. at 90–101; see also Cannon, supra note 13, at 11–13.
- 16. See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 101; see also Cannon, supra note 13, at 13–14.
 - 17. See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 61–78.
 - 18. See id. at 11-12.

traditional food culture, this is often not practicable.¹⁹ However, because the Western diet is largely defined by processed food, while traditional diets across the globe have little in common beyond their reliance on "real" food, it follows that one can escape the ills of a Western diet by eschewing processed food and instead eating "real" food.²⁰

This Article does not purport to determine whether or not this basic argument is correct. It is useful, however, to note the widespread, mainstream acceptance of the premise that processed food is unhealthy, and a diet based on what is often called "whole food" is preferable. If the eat-food movement were promoting a type of eating that many viewed as dangerous or bizarre, it would likely not make sense for policymakers and scholars to take the movement seriously. However, this is far from the case.

In order to inform the discussion that follows, it is worthwhile to take a more in-depth look at the basic narrative outlined above. Michael Pollan has written the most detailed account of this narrative, which he frames in terms of "nutritionism." Pollan defines nutritionism as "the widely shared but unexamined assumption . . . that the key to understanding food is . . . the nutrient," such that "[f]oods are essentially the sum of their nutrient parts." Food therefore becomes a mystery that scientists must unpack for us. It is important that the mystery be unpacked, because nutritionism views promoting bodily health as the central goal of eating. Pollan views nutritionism as a

^{19.} Although it is often not possible to change the culture in which one lives, there are those who try to adopt the traditional diet of a specific culture, even though they are not part of that culture. *See, e.g.*, Daphne Miller, The Jungle Effect: Healthiest Diets from Around the World—Why They Work and How to Make Them Work for You (2008).

^{20.} See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 11–12. As many readers may be aware, Pollan has concluded from this basic narrative not only that people should eat "real" food—what he simply calls "food"—but also that people should eat "[n]ot too much" and "[m]ostly plants." Pollan, Unhappy Meals, supra note 1 (asserting that this, "more or less, is the short answer to the supposedly incredibly complicated and confusing question of what we humans should eat"); see also POLLAN, IN DEFENSE OF FOOD, supra note 1, at 1. This Article focuses on the "eat food" part of the equation, which is fundamental to much of the food movement's work.

^{21.} See, e.g., U.S. DEP'T OF AGRIC. & U.S. DEP'T OF HEALTH AND HUMAN SERVS., DIETARY GUIDELINES FOR AMERICANS 2010 ix (2010), available at http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/PolicyDoc.pdf [hereinafter DIETARY GUIDELINES FOR AMERICANS 2010] (stating that a "healthy eating pattern" limits refined grains and added sugars and emphasizes whole foods such as vegetables, fruits, and whole grains). See also id. at 21, 23, 27, 50, 67 (identifying various risks associated with processed foods). Government recognition of the benefits of whole foods over processed foods dates at least to the development of the 1980 Dietary Guidelines for Americans. See BELASCO, supra note 11, at 148–53.

^{22.} The term "nutritionism" was coined by Gyorgy Scrinis, an Australian sociologist of science. POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 27; *see* Gyorgy Scrinis, *Sorry Marge*, 61 MEANJIN 108, 108–16 (2002); *see also* Gyorgy Scrinis, *On the Ideology of Nutritionism*, GASTRONOMICA: J. OF FOOD & CULTURE, Winter 2008, at 39 [hereinafter Scrinis, *On the Ideology of Nutritionism*].

^{23.} POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 28.

^{24.} See id. at 28-29.

^{25.} See id. at 8–9, 29. Pollan argues that it is a relatively new idea to think about eating as being primarily for the promotion of health, id. at 9, and that it is not shared by all cultures, id. at 29.

pervasive ideology in which we are so deeply immersed that we barely recognize it, but from which we need to escape.²⁶

Pollan describes nutritionism as arriving on the heels of the Western diet, which came to Europe and North America in the mid-to-late nineteenth century. The Western diet is characterized by refined flour, refined sugar, added fats, and—particularly as one moves through the twentieth century and into the twenty-first century—highly processed food, or what Pollan refers to as "edible foodlike substances." Nutritionism originally arose to combat the most obvious deficiencies of the Western diet. For example, when refined grains came into widespread use, the populations that relied upon them experienced epidemics of pellagra and beriberi. The scientists who discovered that these diseases stemmed from vitamin deficiencies and could be prevented by fortifying white flour and other refined grains with B vitamins, were early proponents of nutritionism.

Food processing can refer both to chemical processing and to physical processing. Cf. J.R. Lupton, Codex Definition of Dietary Fibre and Issues Requiring Resolution, in DIETARY FIBRE: NEW FRONTIERS FOR FOOD AND HEALTH 23 (Jan Willem van der Kamp, et al. eds., 2010). Processing can be as simple as squeezing an orange to make orange juice or as complex as deriving high-fructose corn syrup from corn. In general, some of the elements of the original food, such as fiber, are lost during processing, though some forms of processing, such as freezing, can preserve foods in almost their original state. See, e.g., RODALE FOOD CTR., PRESERVING SUMMER'S BOUNTY 31-33 (Susan McClure ed., 1998). "Processed food" often refers to multi-ingredient foods that have undergone multiple stages of processing to create both the constituent ingredients and the finished product. See, e.g., MARK BITTMAN, THE FOOD MATTERS COOKBOOK: 500 REVOLUTIONARY RECIPES FOR BETTER LIVING 6 (2010) (describing processed foods as "often a brew of ultrarefined carbohydrates (white flour, sugar, high-fructose corn syrup, and so on) and fats (oils, hydrogenated vegetable shortening or 'trans fat,' and super-refined animal products) based almost entirely on corn and soybean products (remember, animals are mostly fed corn and soy)."). For an in-depth discussion of modern food processing, see DAVID A. KESSLER, THE END OF OVEREATING: TAKING CONTROL OF THE INSATIABLE AMERICAN APPETITE 120-24 (2009).

- 29. POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 1.
- 30. See id. at 133.

^{26.} See id. at 28. Prominent nutritionist and food movement leader Marion Nestle offers a similar critique, though it is not central to her work. Her critique takes aim not just at the focus on nutrients, but also at the focus on individual foods as opposed to overall dietary patterns. See, e.g., NESTLE, WHAT TO EAT, supra note 1, at 7–8.

^{27.} See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 105.

^{28.} See *id.* at 10, 91,107. While there was initially a fair amount of unease with the increased industrialization of the food supply, industrialization was embraced whole-heartedly in the aftermath of World War II. See *id.* at 100–101. In the late 1960's, the first backlash against processed and industrial food began, and a "countercuisine" movement arose. See generally BELASCO, supra note 11.

^{31.} See id. at 109; see also AARON BOBROW-STRAIN, WHITE BREAD: A SOCIAL HISTORY OF THE STORE-BOUGHT LOAF 111, 115 (2012). Bobrow-Strain states that pellagra was widely but incorrectly believed to be associated with white bread consumption, see id. at 111, but that beriberi was in fact caused by a thiamin deficiency in populations that removed the thiamin-rich husks from their rice, see id. at 115.

^{32.} See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 109.

^{33.} See id. at 21–22. For an extensive history of bread fortification, including the role played by the scientist Robert R. Williams, who both discovered the role of thiamin in whole foods and devised an inexpensive way to create it in a lab, see BOBROW-STRAIN, *supra* note 31, ch. 4, at 105 ("Vitamin Bread Boot Camp").

If nutritionism originated as a tool for pointing out the deficiencies of the Western diet, Pollan argues that it quickly developed a symbiotic relationship with that diet. Techniques for refining grains and otherwise processing food allowed food products to be transported over long distances and stored for long periods of time, which in turn allowed the Western diet to flourish and spread.³⁴ Nutritionism seemed to offer the promise that these shelf-stable foods—which are easier to transport and store than their unrefined counterparts, not to mention finicky things like fresh fruits and vegetables—could be manufactured to contain any nutritionally-essential components that had been removed during processing.³⁵ As time went on, a more pernicious relationship developed, as processed food producers discovered that they could add market value to their products by incorporating specific nutrients that had never been present in the food, but that were deemed healthful.³⁶

The rise and influence of nutritionism is, therefore, closely linked to the rise of a Western diet focused on processed food, which in turn is linked to the development of a lengthy, attenuated food chain, in which the sense of connection between food producers and food consumers is weakened or lost.³⁷ As it became physically feasible and economically desirable for people in the urbanized West (and, quickly, other parts of the world) to get the bulk of their food from distant sources, shelf-stability became an increasingly valuable attribute, and food processing took on greater and greater importance.³⁸ Nutritionism offered the promise that science could guide food choices in this new era.

Pollan's argument that nutritionism is a flawed theory hinges, in part, on the many things that nutritionism has gotten wrong over the years: its initial focus on macronutrients, ³⁹ its enthusiastic embrace of margarine, ⁴⁰ its many failed attempts to create an infant formula that would mimic breast milk, ⁴¹ and, most recently, its emphasis on low-fat foods. ⁴²

More broadly, Pollan makes a persuasive argument for how difficult it is to study nutrients using the scientific method.⁴³ A single food is an incredibly

^{34.} See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 91, 106–08.

^{35.} *See id.* at 106–09.

^{36.} See MICHELE SIMON, APPETITE FOR PROFIT: HOW THE FOOD INDUSTRY UNDERMINES OUR HEALTH AND HOW TO FIGHT BACK 91–115 (2006); see also Scrinis, On the Ideology of Nutritionism, supra note 22, at 39.

^{37.} See W.P. HEDDEN, HOW GREAT CITIES ARE FED xv (1929), quoted in McCabe, supra note 5, at 565.

^{38.} See, e.g., BOBROW-STRAIN, supra note 31, ch. 5, at 133 ("White Bread Imperialism").

^{39.} See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 20–21.

^{40.} See id. at 32-33.

^{41.} See id. at 20-21, 31-32.

^{42.} See id. ch. I-5, at 40 ("The Melting of the Lipid Hypothesis."). While many people still believe that a low-fat diet is a key to good health, Pollan argues that the hypothesis has been disproven. See id. It has certainly been called into question, most notably by author and science journalist Gary Taubes. See, e.g., GARY TAUBES, GOOD CALORIES, BAD CALORIES: CHALLENGING THE CONVENTIONAL WISDOM ON DIET, WEIGHT CONTROL, AND DISEASE (2007).

^{43.} See POLLAN, IN DEFENSE OF FOOD, supra note 1, ch. I-9, at 61 ("Bad Science").

complicated thing; a leaf of garden-variety thyme, for example, contains at least thirty-five antioxidants alone. Here while nutritionism has made bold claims about the importance of individual nutrients, from Vitamin C to omega-3 fatty acids, scientists have struggled to identify the role that individual nutrients play in human health. This is unsurprising in light of the many confounding factors that must be controlled for, such as the potential interactions between different nutrients in a single food, different foods in a single person's diet, and the variation in biological mechanisms in different people's bodies. Furthermore, nutritional science is plagued by such fundamental problems as an inability to know what people are actually eating. While many studies rely on questionnaires to determine diet composition, such questionnaires are widely considered to be unreliable.

For the eat-food movement, the saving grace is that eaters of "real" food need not concern themselves with this confusion. As Pollan puts it, "[y]ou don't need to fathom a carrot's complexity in order to reap its benefits." While the eat-food movement is highly skeptical of nutritional science, it places great faith in observational studies that have concluded that the "diseases of civilization" accompanying the Western diet are almost never found in societies that eat only "real" food. The solution to what ails us, the movement concludes, is to free ourselves from nutritionism and simply eat such food.

To Pollan and other movement leaders, upending the prevailing ideology of nutritionism means more than simply reaching for the whole wheat bread; it means shortening the food chain and viewing food as a web of relationships. ⁵⁰ If flour is nothing more than a powder that can be injected with the various nutrients necessary to promote health, it does not matter where your flour comes from. ⁵¹ But if wheat itself is the staff of life, then you want to make sure you are eating high-quality wheat, grown in healthy soil by farmers who know their craft. ⁵² Thus, the call to "eat food" comes to encompass much more than a call to favor apples over Apple Jacks. It is a call to reject the attenuated food chain in which farmers are little more than producers of a medium that food

^{44.} See id. at 65.

^{45.} See id. ch. I-9, at 61 ("Bad Science").

^{46.} See id. at 66-67.

^{47.} See id. at 74–77; see also NESTLE & NESHEIM, supra note 1, at 86.

^{48.} POLLAN, IN DEFENSE OF FOOD, supra note 1, at 66.

^{49.} See supra note 15 and accompanying text. Cf. BOBROW-STRAIN, supra note 31, at 101 ("[W]hile the more 'natural' focus on health may not always have logic or legitimate double-blind studies on its side, it is very good at identifying blind spots in the vision of mainstream science. In their idiosyncratic way, fringe health movements help expose the unspoken cultural assumptions, political interests, and subjective decisions woven into science.").

^{50.} See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 102.

^{51.} Cf. BELASCO, supra note 11, at 47.

^{52.} Cf. WENDELL BERRY, BRINGING IT TO THE TABLE: ON FARMING AND FOOD 7 (2009) ("The appropriate measure of farming . . . [is] the world's health and our health . . . [which] is inescapably one measure."); id. at 228 ("The industrial eater [is] . . . one who does not know that eating is an agricultural act, who no longer knows or imagines the connections between eating and the land, and who is therefore necessarily passive and uncritical—in short, a victim.").

scientists can engineer into tens of thousands of new products a year, and instead to see the production and consumption of food as part of an intricate web in which the interests of farmers, cooks, and eaters are all tightly interwoven.⁵³

If valuing "real" food was important in the nineteenth century, when the Western diet first emerged,⁵⁴ it is even more important today, when many people believe that super-processed food is leading to an epidemic of obesity and a generation destined to live shorter, less healthy lives than their parents.⁵⁵ Whereas it might once have been the case that an industrially-produced loaf of white bread was designed by well-meaning scientists and food technologists who were struggling, albeit without complete success, to create a healthful food product with a long shelf life, today we live in a world where a tremendous amount of scientific innovation is being used to create what former FDA commissioner David Kessler describes as "hyperpalatable" food, designed to be as irresistible as possible, without any thought paid to healthfulness.⁵⁶ It goes without saying that the eat-food movement would have us avoid all such highly processed "foodlike" substances.

But the eat-food movement's distrust of profit-driven corporations is not what makes it unique. Instead, the central thing that sets the movement apart from other public health movements is its view that even the most disinterested science is of extremely limited utility for informing the task at hand: deciding what to eat.

Yet the eat-food movement is not anti-science.⁵⁷ Indeed, the mainstream leaders of the movement do not wholly reject the discipline of nutritional

^{53.} This way of thinking has an environmental bent to it, as food production is seen as a cycle of nourishing the land to nourish our crops to nourish ourselves. The organic food movement is premised in part on the belief that healthy soil yields healthier food—a belief shared by the eat-food movement. See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 170 (describing the work of organic pioneers Sir Albert Howard and J. I. Rodale). Similarly, Pollan and others have promoted the idea that it is preferable to eat animal products from pasture-raised animals rather than from industrially-raised animals, not only for the ethical reasons long stressed by animal rights activists, but also because "you are what what you eat eats." Id. at 167; see generally POLLAN, THE OMNIVORE'S DILEMMA, supra note 1.

^{54.} For a history of those who opposed processed food (particularly white bread) at various points in history, see BOBROW-STRAIN, *supra* note 31.

^{55.} See, e.g., Robert H. Lustig et al., Public Health: The Toxic Truth About Sugar, 482 NATURE 5, 27 (2012) ("Every country that has adopted the Western diet—one dominated by low-cost, highly processed food—has witnessed rising rates of obesity and related diseases.").

^{56.} KESSLER, supra note 28, at 14; see also id. at 118.

^{57.} There are fringe elements within the eat-food movement that can properly be labeled antiscience. One issue where the rubber hits the road is raw milk—a whole food, to be sure, but one that has been repeatedly shown through sound science to pose a health hazard. See Adam J. Langer et al., Nonpasteurized Dairy Products, Disease Outbreaks, and State Laws—United States, 1993-2006, 18 EMERGING INFECTIOUS DISEASES 385 (Mar. 2012), available at http://www.cdc.gov/foodsafety/rawmilk/nonpasteurized-outbreaks.html. While mainstream movement leaders like Marion Nestle acknowledge the weight of this scientific evidence, see NESTLE, WHAT TO EAT, supra note 1, at 94–95, there exist many raw milk proponents who refuse to do so; for example, Joel Salatin, whose Polyface Farm was made famous by Michael Pollan's book The Omnivore's Dilemma wrote the introduction to a pro-raw milk book, DAVID E. GUMPERT & JOEL F. SALATIN, THE RAW MILK REVOLUTION: BEHIND AMERICA'S EMERGING BATTLE OVER FOOD RIGHTS (2009).

science, which Pollan describes as "the sharpest experimental and explanatory tool we have." However, "it's one thing to entertain such explanations and quite another to mistake them for the whole truth or to let any one of them dictate the way you eat." The eat-food movement is fundamentally defined by a belief that we should not place our trust in nutritional science, which does not hold the answers we seek, but should instead simply *eat real food*.

B. Government Regulation and the Eat-Food Movement

As set forth above, the eat-food movement is defined largely by a deep skepticism regarding the entire endeavor of nutritional science. This defining feature—the fact that the eat-food movement sees the scientific process as contributing little to its goals—sets it apart from movements with which it otherwise has much in common.

By way of comparison, the environmental movement has long been embroiled in a debate about whether to adopt the precautionary principle—under which, for example, a pesticide would not be permitted to come on the market if it met a threshold possibility of harming humans or the environment, even if the lack of safety had not been definitively established and the benefits of the pesticide were clear—or to rely on cost-benefit analysis, where the possibility that the pesticide might cause harm would be weighed (if it could even be measured) against the benefits the pesticide offered. Cost-benefit analysis appears to be of no interest to the eat-food movement, but what is more striking is that even the precautionary principle is antithetical to the movement's philosophy. This is because the precautionary principle assumes that scientific studies should form the basis of safety evaluations—an assumption the eat-food movement, by and large, rejects.

It would be easy for the broader food movement to argue that the precautionary principle should be applied to decisions about, for example, which artificial food additives can come on the market. However, by making "eat food" a central plank in its philosophy, the food movement instead emphasizes the idea that one simply should not eat artificial food additives. 62 If

Fragmented, uncoordinated, and spontaneous as this movement appears, it has all the hallmarks of democracy at its best The food movement embraces a great range of issues that have in common demands for more healthful alternatives to the current food system, as well as for more meaningful—moral, ethical, and sustainable—alternatives.

^{58.} POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 139.

^{59.} Id.

^{60.} Many mainstream scientists share this skepticism. For overview, see, for example, POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 69–78.

^{61.} Compare Douglas A. Kysar, Regulating from Nowhere: Environmental Law and the Search for Objectivity (2010) with Cass R. Sunstein, Laws of Fear: Beyond the Precautionary Principle (2005).

^{62.} Although the broader food movement is very diffuse in its goals, I think it is sufficiently cohesive to be viewed as one movement that contains "eat food" as one plank in its platform. Movement leaders Michael Pollan and Marion Nestle both recognize the fragmented nature of the movement but, nonetheless, consistently use the phrase "food movement." Nestle writes:

the precautionary principle can be summed up as "look before you leap," the eat-food movement's philosophy is, simply, "don't leap"—at least, not into the world of processed or artificial food.⁶³

This fundamental aspect of the eat-food movement's philosophy has important implications as the movement becomes increasingly involved in policy-level advocacy efforts.⁶⁴ Public health movements often seek agency-based regulation as a means of achieving their ends, and agencies are particularly valued for their perceived ability to use scientific expertise to resolve complex questions.⁶⁵ It would therefore seem reasonable that the eat-food movement would seek agency-based regulation to promote its goal of encouraging healthful eating. But as this Article will discuss, many (though not all) of the regulatory pathways that could be used to pursue that end are premised on the agency's role as evaluator of scientific information. If the eat-food movement wants to remain true to its philosophical roots, in most situations it will not seek policies that rely on agencies using nutritional science to make decisions about the healthfulness of food.

Another aspect of the eat-food movement worth noting is that, though it is a public health movement concerned with the health of the public at large, the movement is very much focused on the actions of individuals. Of course, the choices of individual eaters are influenced by government policies, and the movement's work on issues from crop subsidies to school lunches clearly acknowledges that individual choice is not the sole, or even the dominant, force at play. ⁶⁶ But unless the government could be convinced to ban all processed food—a result I have never heard the eat-food movement advocate ⁶⁷—the eat-

NESTLE, FOOD POLITICS, supra note 1, at ix-x. Similarly, Pollan writes:

One of the most interesting social movements to emerge in the last few years is the "food movement," or perhaps I should say "movements," since it is unified as yet by little more than the recognition that industrial food production is in need of reform because its social/environmental/public health/animal welfare/gastronomic costs are too high It's a big, lumpy tent . . . [b]ut there are indications that these various voices may be coming together in something that looks more and more like a coherent movement.

Michael Pollan, *The Food Movement, Rising*, N.Y. REV. BOOKS, June 10, 2010, http://www.nybooks.com/articles/archives/2010/jun/10/food-movement-rising/. It is this "big, lumpy tent" to which I refer when I reference the "broader food movement"; while Pollan himself does not mention it, it is his influence, perhaps more than anything, around which the movement coheres.

- 63. In this way, the eat-food movement bears a resemblance to fringe environmentalist movements that advocate for living "off the grid." Warren Belasco describes how some early environmentalists "envisioned a return to primitive tribal societies," free from technology. BELASCO, *supra* note 11, at 25–26. While a return to primitive society is certainly a far more radical goal than a diet without processed food, both approaches share the "don't leap" philosophy.
 - 64. See supra note 6 and accompanying text.
- 65. See, e.g., David J. Barron, Forward: From Takeover to Merger: Reforming Administrative Law in an Age of Agency Politicization, 76 GEO. WASH. L. REV. 1095, 1098 (2008); see also M. Gregg Bloche, The Invention of Health Law, 91 CALIF. L. REV. 247, 314 (2003).
- 66. For more on how government policy can influence consumer choice, see generally RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS (2009).
- 67. Banning all processed food seems politically impossible, at least in the near term. *But see infra* note 287. Such an effort would not only need to contend with the political and economic clout of the

food movement will always be ultimately concerned with the choices of individual eaters. ⁶⁸

There is perhaps only a subtle difference between a movement, such as the environmental movement, that seeks to end a harm—environmental degradation—that is perpetuated on a greater scale by corporations and governments than by individuals, and the eat-food movement, which seeks to end a harm—eating "edible foodlike substances"—that is in many ways encouraged by corporations and governments, but ultimately perpetuated by individuals. ⁶⁹ But this difference does have an impact on the types of government regulation that make sense in the context of the eat-food movement. While the impulse of many activists might be to focus primarily on regulations that will bring about a nationwide change in the type of food available and the conditions under which it is available, if the eat-food movement believes that most of its battles will ultimately be fought on the plates of individual eaters, that is a reason to focus much of its energy on policies that will affect and inform the choices made by those individual eaters.

These two points are related. By adopting a "don't leap" philosophy and emphasizing the eating of "real" food, rather than more cautious regulation of processed food, the eat-food movement implicitly concedes that government cannot get it all the way, or perhaps even most of the way, to its goals. The result is a need to focus on individual eaters.

As the broader food movement's lobbying and other policy-oriented efforts continue to increase, it would be easy for the eat-food wing of the movement to be left behind, seen as an ideal that individuals might strive for

processed food industry, it would also need to allay the very real fears that an entire nation—let alone the world—cannot feed itself without the help of processed food, which is often both shelf-stable and low-cost. *Cf.* Jim Prevor, *Feeding the World in 2050*, AM. FOOD & AGRIC. EXPORTER, Fall 2009 at 10, *available at* http://www.americanfoodandag.com/Articles/feedingtheworld-2050.pdf. However, Aaron Bobrow-Strain critiques this narrative, arguing that:

every time a grain industry spokesperson warns that only industrial agriculture can keep famine and food riots at bay . . . [she is] deploying a dream forged in the crucible of Cold War anxiety The story of bread and the Cold War reminds us that, even when couched in a language of humanitarianism and world peace, the present-day eliding of industrial food production and global security establishes a state of emergency in which the enormous social, economic, environmental, and health costs of industrial food production must be accepted without question or critique.

BOBROW-STRAIN, supra note 31, at 135–36.

68. In this way the eat-food movement most resembles the anti-smoking movement, insofar as the latter has accepted the premise that the United States is unlikely to ever ban tobacco products. While both the eat-food movement and the anti-smoking movement have many policy-level options open to them short of a total ban, the fact that the substances they oppose remain on the market means that the choices of individual consumers will always be the final battleground.

69. This is not to minimize the extent to which the actions of individuals affect the environment; indeed, one striking similarity between the eat-food movement and the environmental movement is that they both grapple directly with the daily actions of individuals. Moreover, the actions of corporate and government entities can and do impact the goals of the eat-food movement. *See supra* note 66 and accompanying text. But there is still a difference to be found in the fact that the ultimate consumers of (human) food are always people, acting in their individual capacity.

but that has no place in the practical world of policy negotiations. This Article will demonstrate, however, that such a fate is not necessary. There are ways in which regulation can promote eating "real" food, and there are ways in which the eat-food movement can fight for that goal without losing sight of its fundamental beliefs about the appropriate role of science. To do so, however, the movement would be well advised to consider which of the available regulatory pathways are best suited to its goals.

This inquiry begins with understanding the main agencies that regulate food in the United States, FDA and USDA. As Gerald Torres has noted, agencies are organized around congressionally imposed missions that shape agency culture. Unless Congress changes an agency's fundamental mandate, that agency's approach to its work will remain substantially the same. It is therefore important to understand the mission and culture of FDA and USDA.

FDA prides itself on being a science-based agency.⁷² The implicit message is that a principled adherence to science will insulate the agency from overly political decision making, including agency capture.⁷³ FDA's identity as a science-based agency permeates almost every aspect of its structure. The scientific method's primacy is enshrined not only in the statutes the agency implements and the regulations it has promulgated, but also in its programs, offices and laboratories.⁷⁴ Part II describes the specific ways in which FDA's food-related programs are fundamentally premised on a scientific approach; for

^{70.} See Gerald Torres, Environmental Justice: The Legal Meaning of a Social Movement, 15 J.L. & Com. 597, 614–15 (1996).

^{71.} See id.

^{72.} See, e.g., What We Do, U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/aboutfda/whatwedo/default.htm (last visited July 21, 2012) (stating FDA responsibility "for protecting the public health by assuring the safety, efficacy and security of . . . our nation's food supply," "for advancing the public health by helping . . . the public get the accurate, science-based information they need to use . . . foods to maintain and improve their health," and for "ensuring the security of the food supply . . ."). For more on FDA's emphasis on science-based regulation, see for example, Press Announcement, U.S. Food and Drug Admin., Regulatory Science Plan Positions Agency to Foster Innovation through Better Science (Aug. 17, 2011), available at http://www.fda.gov/NewsEvents/Newsroom/Press Announcements/ucm268293.htm.

^{73.} For recent articles offering an overview of capture theory, see Nicholas Bagley & Richard L. Revesz, Centralized Oversight of the Regulatory State, 106 COLUM. L. REV. 1260, 1284-92 (2006) and Rachel E. Barkow, Insulating Agencies: Avoiding Capture Through Institutional Design, 89 TEX. L. REV. 15 (2010). For articles specifically discussing the issue of capture at FDA, see Margaret Gilhooley, Drug User Fee Reform: The Problem of Capture and a Sunset, and the Relevance of Priorities and the Deficit, 41 N.M. L. REV. 327 (2011); Sidney A. Shapiro & Rena Steinzor, Capture, Accountability, and Regulatory Metrics, 86 TEX. L. REV. 1741 (2008); and Neal D. Fortin, The Hang-Up with HACCP: The Resistance to Translating Science into Food Safety Law, 58 FOOD & DRUG L.J. 565 (2003). Certainly FDA and the Department of Health and Human Services (HHS) have faced serious allegations of letting politics trump science, most recently with respect to HHS's reversal of FDA's decision to make the drug Plan B, the so-called "morning after pill," available to individuals under the age of seventeen without a prescription. See Andrew Rosenthal, Politics Beats Science, Again, N.Y. TIMES (Dec. 13, 2011), http://loyalopposition.blogs.nytimes.com/2011/12/13/politics-beats-science-again/?scp=2&sq=plan+b+ fda&st=nyt. But the response to the Plan B decision only serves to emphasize the widespread belief that science is the best tool the agency has to protect the public health, even—and perhaps especially—in the face of political pressures.

^{74.} See infra note 119 and accompanying text.

now, it suffices to note that the agency is deeply imbued with a scientific culture.

As an executive department encompassing numerous agencies,⁷⁵ USDA is less easily classified. As Part III describes, USDA's Agricultural Marketing Service (AMS), which administers the National Organic Program, has a mission of "facilitat[ing] the competitive and efficient marketing of agricultural products." Because of AMS's emphasis on marketing, USDA's regulation of food is sometimes viewed as less public-health focused than FDA's, although AMS's sister agency, the Food Safety and Inspection Service (FSIS), has an explicit public health mandate. While USDA does not emphasize a scientific approach in the ways that FDA does, the discussion in Part III will show that the department is often tasked with making scientific determinations. Moreover, AMS's emphasis on marketing runs counter to other philosophical beliefs of the eat-food movement, namely the movement's deep skepticism of modern food marketing in general.

To return to the environmental movement comparison, that movement arguably benefits from a lead federal environmental agency that shares its general worldview. The Environmental Protection Agency is tasked with protecting human health and the environment, including by ensuring that "national efforts to reduce environmental risk are based on the best available scientific information." This emphasis meshes well with the environmental movement's embrace of science as the key to identifying and preventing environmental harm. 80

Unlike the environmental movement, the eat-food movement does not have the benefit of an agency so closely aligned with its own worldview. One possible solution would be to pursue a radical change in the structure of the relevant agencies or the creation of a new agency altogether. But as the remainder of this Article sets forth, the eat-food movement can work within the existing regulatory regime to promote its goals, particularly if it is attentive to the ways in which different regulatory programs are or are not suited to particular aspects of the movement's agenda.

^{75.} See Federal Executive Branch, USA.GOV, http://www.usa.gov/Agencies/Federal/Executive/Agriculture.shtml (last visited May 15, 2012).

^{76.} See Agricultural Marketing Service Mission Statement, U.S. DEP'T AGRIC., http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateN&navID=AMSMissionStatement&rightNav1=AMSMissionStatement&topNav=AboutAMS&leftNav=&page=AboutAM SMissionStatement&resultType=&acct=AMSPW (last visited Apr. 23, 2012).

^{77.} See About FSIS, U.S. DEP'T AGRIC., http://www.fsis.usda.gov/about/index.asp (last visited July 21, 2012) (listing FSIS's mission as "ensuring that the nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and correctly labeled and packaged").

^{78.} See generally SIMON, supra note 36; see also infra notes 167-69 and accompanying text.

^{79.} Our Mission and What We Do, U.S. ENVTL. PROT. AGENCY, http://www.epa.gov/aboutepa/whatwedo.html (last visited July 21, 2012).

^{80.} See, e.g., Mary Jane Angelo, Harnessing the Power of Science in Environmental Law: Why We Should, Why We Don't, and How We Can, 86 Tex. L. Rev. 1527, 1527 (2008); see also Wendy E. Wagner, The "Bad Science" Fiction: Reclaiming the Debate Over the Role of Science in Public Health and Environmental Regulation, 66 LAW & CONTEMP. PROBS. 63, 64 (2003).

The next three Parts explore three types of federal regulation for which the eat-food movement might advocate (and in many cases, already is advocating) to further its goals. These certainly do not represent all possible means the movement might pursue. Indeed, two important potential avenues already receiving considerable attention—restructuring the current crop subsidy system⁸¹ and levying a "sin" tax on items such as soda⁸²—are not addressed here at all. The three areas discussed here have received little attention in legal scholarship;⁸³ however, they highlight the tension between the desire for aggressive regulatory involvement and the particular aspects of the eat-food movement that, given the organizing principles of the United States' primary food-regulating agencies, may render such involvement suboptimal.

II. BANNING OR LIMITING FOOD THAT IS NOT FOOD

The U.S. government regulates what may and may not be sold as food. The mere existence of a robust regulatory system for controlling the use of substances in food makes it a tempting pathway for activists to pursue. Indeed, urging the government to ban or limit "edible foodlike substances" would seem to be the most straightforward way to advance the "eat food" agenda.

As is discussed in Part I, a ban on *all* such substances would be so radical that few, if any, eat-food movement activists advocate that approach.⁸⁴ On the other hand, there has been a recent surge of interest in pursuing bans or limits on specific substances the eat-food movement particularly abhors. For example, advocates are actively working in pursuit of both a federal ban on processed *trans* fats⁸⁵ and federal limits on the use of salt (an instrumental ingredient in many processed foods),⁸⁶ and the eat-food movement has been abuzz over a recent comment in the journal *Nature* arguing that FDA should impose limits on the use of processed sugar in food.⁸⁷ Pursuit of regulatory bans and limits on

^{81.} See, e.g., DANIEL IMHOFF, FOOD FIGHT: THE CITIZEN'S GUIDE TO THE NEXT FOOD AND FARM BILL 116–18 (2012); see also POLLAN, THE OMNIVORE'S DILEMMA, supra note 1, at 200–01.

^{82.} See, e.g., Duff Wilson & Janet Roberts, How Washington Lost the War on Childhood Obesity, REUTERS, Apr. 27, 2012, http://www.reuters.com/assets/print?aid=USBRE83Q0ED20120427 (stating that twenty-four states and five cities have considered a tax on soda during the preceding two years, but that every such effort has been either "dropped or defeated").

^{83.} The National Organic Program, discussed *infra* Part III, has received considerable attention in legal scholarship, but considerably less attention has been paid to the broader classification of government-filtered food labeling discussed in that Part.

^{84.} See supra note 67 and accompanying text.

^{85.} For an account of recent efforts to get FDA to reduce or eliminate added *trans* fats from the food supply, as well as the agency's response, see U.S. GOV'T ACCOUNTABILITY OFFICE, REPORT TO CONGRESSIONAL REQUESTERS, GAO-10-246, FOOD SAFETY: FDA SHOULD STRENGTHEN ITS OVERSIGHT OF FOOD INGREDIENTS DETERMINED TO BE GENERALLY RECOGNIZED AS SAFE (GRAS) 22, 46–49 (2010).

^{86.} See id. at 21, 23-24, 41-45.

^{87.} See Lustig et al., supra note 55, at 29; see also Marion Nestle, Are Sugars Toxic?, FOOD POLITICS (Feb. 2, 2012), http://www.foodpolitics.com/2012/02/are-sugars-toxic-should-they-be-regulated/. Before Nature published the comment, Gary Taubes published an article in the New York Times Magazine about Lustig's work on sugar. See Gary Taubes, Is Sugar Toxic?, N.Y. TIMES MAG., Apr. 13, 2011, at MM47.

specific processed food ingredients, then, is quickly gaining traction as a way for the eat-food movement to pursue its goals at a national level. This approach certainly holds promise for the movement; however, it also carries significant risks that should not be overlooked.

This Part explores both the promise and the risks to the eat-food movement of this specific type of advocacy. Part II.A describes the statutory and regulatory mechanisms by which FDA can prohibit or limit the sale of a substance for use as food, as well as the history of those mechanisms. Reference and the relative merits of "real" food as opposed to novel food substances. Part II.B turns to the question of whether and to what extent it makes sense for the eat-food movement to pursue bans or limits on certain substances, in light of the regulatory framework described in Part II.A and the movement's philosophy, described in Part II.

A FDA's Power to Ban or Limit Food Ingredients

Title 21, § 321(f) of the U.S. Code defines "food" as "(1) articles used for food or drink for man or other animals, (2) chewing gum, and (3) articles used for components of any such article." Though this circular definition is not entirely helpful, 90 it is significant that its crux is "use." To the extent that the eat-food movement wants to argue that Cheetos, for example, are not "food," and therefore legally cannot be sold as such, this definition does not provide an obvious path to that conclusion, since it is difficult to argue that Cheetos are not used for food. Indeed, the very problem the eat-food movement is trying to combat is the fact that "edible foodlike substances" *are* being used as food, and are therefore displacing "real" food.

Therefore, arguing that a "foodlike substance" does not meet the definition of food under 21 U.S.C. § 321(f) is not a promising way to seek a ban of such a substance. 91 FDA's power to ban or limit substances that people 92 want to use

^{88.} For more on this history, see Schneider, *Reconnecting Consumers and Producers*, *supra* note 5, at 80–83.

^{89. 21} U.S.C. § 321(f) (2006) is section 201(f) of the Federal Food, Drug, and Cosmetic Act. For ease of reference, this Article uses the U.S. Code citations.

^{90.} See, e.g., Nutrilab, Inc. v. Schweiker, 713 F.2d 335, 337 (7th Cir. 1983) ("Congress defined 'food' in Section 321(f) as 'articles used as food.' This definition is not too helpful"). It is worth noting that the court in *Nutrilab* read the word "food" in the phrase "used for food" in § 321(f)(1) as having a different meaning than the word "food" that § 321(f) seeks to define. In that court's view, the term the statute defines at § 321(f) is:

a term of art and is clearly intended to be broader than the common-sense definition of food. .

[.] Yet the statutory definition of "food" also includes in section 321(f)(1) the common-sense definition of food. When the statute defines "food" as "articles used for food," it means that the statutory definition of "food" includes articles used by people in the ordinary way most people use food—primarily for taste, aroma, or nutritive value.

Id. at 337–38.

^{91.} Where interpreting § 321(f) becomes important is in distinguishing food from other FDA-regulated products, such as drugs. For example, if Cheetos had the intended use of curing asthma, as expressed, perhaps, on the product label, they would be drugs under § 321(g)(1)(B), because they would

as food is generally carried out with reference to the definition of "food additive":

[A]ny substance the intended use of which results or may reasonably be expected to result, directly or indirectly, in its becoming a component or otherwise affecting the characteristics of any food . . . if such substance is not generally recognized, among experts qualified by scientific training and experience to evaluate its safety, as having been adequately shown through scientific procedures (or, in the case of a substance used in food prior to January 1, 1958, through either scientific procedures or experience based on common use in food) to be safe under the conditions of its intended use; except that such term does not include—(1) a pesticide chemical residue in or on a raw agricultural commodity or processed food; or (2) a pesticide chemical; or (3) a color additive; or (4) any substance used in accordance with a sanction or approval granted prior to September 6, 1958 . . . ; (5) a new animal drug; or (6) an ingredient described in paragraph (ff) in, or intended for use in, a dietary supplement. 93

For our purposes here, the most important thing to note about this definition is that a substance can avoid classification as a food additive altogether if it is "generally recognized" by qualified experts "as having been adequately shown . . . to be safe." This status is known as "generally recognized as safe," or "GRAS." 95

The line separating a food additive and a GRAS substance is a crucial one. Under 21 U.S.C. § 348(a), "[a] food additive shall, with respect to any particular use or intended use . . . be deemed to be unsafe" unless FDA has promulgated a regulation prescribing the conditions under which it may be safely used. A food that contains an unsafe food additive is adulterated within the meaning of § 342(a)(2)(C)(i) and can, therefore, be seized under § 334(a)(1). This means that food additives must undergo a lengthy preapproval process by FDA before they can legally be used in food. Additionally, once a regulation is in place, an additive may only be used under the conditions the regulation specifies, which may be quite limiting. GRAS substances, 96 on the other hand, may be legally marketed without preapproval.

be "articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals." Similarly, if Cheetos had the intended use of turning your fingers orange, they would be cosmetics under § 321(i)(1), because they would be "articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness, or altering the appearance."

^{92.} While the word "food" is defined in § 321(f) as including "articles used for food or drink for" non-human animals, this Article focuses exclusively on human food.

^{93. 21} U.S.C. § 321(s).

^{94.} *Id*.

^{95.} See Substances Generally Recognized as Safe, 62 Fed. Reg. 18,938, 18,938 (Apr. 17, 1997) [hereinafter SGRS].

^{96.} The phrase "GRAS substance," while sufficient for our purposes here, fails to capture the fact that the GRAS definition relates to specific conditions of use. See § 321(s). For example, FDA lists caffeine as GRAS "when used in cola-type beverages" for a tolerance of up to 0.02 percent. 21 C.F.R. § 182.1180 (2012). It might also be GRAS for other uses. See infra note 97. But in 2010, FDA issued warning letters to four companies stating that the agency was "not aware of any information to establish

Broadly speaking, therefore, there are two main ways that a food substance may be deemed safe and, thus, legal to market as food. If the substance is generally recognized as safe by qualified experts under the conditions of its intended use, the inquiry is over. ⁹⁷ If, however, such general recognition does not exist, the proponent of the substance must petition FDA and attempt to demonstrate that the substance is safe; if the agency agrees that safety has been established, at least for specific uses and within specific limits, it will promulgate a regulation allowing the substance to be used in the specified manner. ⁹⁸

that caffeine added directly to alcoholic beverages . . . is GRAS under these conditions of use." See, e.g., Warning Letter from Joann Givens, Acting Dir., Office of Compliance, Ctr. for Food Safety, U.S. Food and Drug Admin., to Phusion Projects, LLC (Nov. 17, 2010), available at http://www.fda.gov/ICECI/EnforcementActions/WarningLetters/2010/ucm234023.htm; see also News Release, U.S. Food & Drug Admin., FDA Warning Letters Issued to Four Makers of Caffeinated Alcoholic Beverages (Nov. 17, 2010), available at http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ ucm234109.htm.

97. To ensure it is on the right side of the law, a food manufacturer might want assurance that a particular food substance is GRAS. Such assurance can be gained by petitioning FDA to have the substance listed as GRAS in its regulations, pursuant to 21 C.F.R. § 170.35. Such listings sometimes provide specific conditions for use of the substance. See, e.g., 21 C.F.R. § 182.1180. A less formal "notification" procedure has been in effect since 1997 under a proposed rule that was issued at that time. See SGRS, 62 Fed. Reg. at 18,938. FDA fairly recently reopened the comment period on this proposed rule. See Substances Generally Recognized as Safe, Reopening of the Comment Period, 75 Fed. Reg. 81,536 (Dec. 28, 2010). Furthermore, FDA can on its own initiative list a substance as GRAS in its regulations, pursuant to 21 C.F.R. § 170.35(b). However, if a food substance meets the definition of GRAS, the substance can be legally marketed even if none of these procedures has been followed.

98. See 21 U.S.C. § 348(b)–(c). A substance might avoid this entire inquiry if it is intended to be eaten on its own, rather than ever becoming a component of food. The Seventh Circuit concluded as much in *United States v. Two Plastic Drums [of Black Currant Oil]*, 984 F.2d 814 (7th Cir. 1993), where the issue was whether black currant oil was a component of food (and therefore in danger of being deemed a food additive if it was not found to be GRAS) when combined with gelatin and glycerin so as to be marketed in capsule form. In that case, the "FDA concede[d] that if the [black currant oil] alone was marketed in bottles for teaspoon consumption, it would not be a food additive, and FDA would bear the burden of proving that BCO is injurious to health." *Id.* at 816; *see also* United States v. An Article of Food, 678 F.2d 735, 739 (7th Cir. 1982) [hereinafter *FoodScience Labs.*].

It is curious that a different standard should apply to the same food substance, based on whether or not the substance is intended to be eaten on its own or to be made a component of a finished food product. Perhaps Congress did not intend this result; but if it did, one could hypothesize that the distinction was based on the same distinction that the food movement seeks to advance today—the distinction between "real" food and "foodlike" substances. The theory might have been that only real food is eaten straight, and that real food does not carry the same safety risks as other substances. But if that was the case, it is odd that the statute seems to allow for a real food item, such as a carrot, to become a potential food additive as soon as it is added to a finished food product, such as soup. Moreover, Congress evidently failed to anticipate that people might try to eat all kinds of things straight, such as black currant oil. For a discussion of the legislative history of the food additive/GRAS distinction, see *infra* notes 106–114 and accompanying text.

In any event, the distinction between single-ingredient foods and multi-ingredient foods is rarely salient. *FoodScience Labs.* and *Two Plastic Drums* [of Black Currant Oil] both dealt with products that today would likely be classified as dietary supplements under § 321(ff), and would therefore undergo a different regulatory review. See §§ 342(f), 350b. Outside the realm of dietary supplements, few foods are intended exclusively for use as single-ingredient foods. And we are spared the battles over whether a banana is meant to be eaten alone or in banana bread because in any event it is surely GRAS. The substances that attract the most attention are almost always intended to become components of food, not to be eaten alone.

Food movement veterans will notice two interesting things about the above regime. The first is that Congress has set up a system whereby FDA evaluates ingredients, as opposed to finished food products. Congress and FDA have not ignored the possibility that some substances might only be appropriate for use in certain contexts—GRAS status is specific to the conditions of a substance's intended use, and food additive regulations often specify particular conditions of use. However, the statutory and regulatory systems are not set up in a way that would lead FDA to evaluate the safety or GRAS status of, for example, Cheetos as a complete product. Therefore, if a public health advocate wanted to petition FDA to remove Cheetos from the market, it would be nonsensical to argue that Cheetos are not GRAS; the GRAS inquiry only applies when a substance is otherwise in danger of being classified as a food additive. For a multiple-ingredient food product like Cheetos, an advocate would need to argue that individual ingredients were being used in an impermissible way. For an ingredient that is an approved food additive, one could argue that the use of the ingredient in Cheetos is inconsistent with the relevant regulation; 99 for an ingredient that is being used on the theory that it is GRAS, one could argue that the ingredient is not in fact GRAS, either generally or specifically as used in Cheetos. Even if the advocate prevailed on one of these arguments, the manufacturer of Cheetos would have the option of replacing the now-impermissible ingredient with something else. This approach might make sense when there is serious concern about one specific ingredient that is used in many foods, such as trans fats or salt, 100 but in general it represents a somewhat limited and inefficient way to challenge highly processed foods.

A second interesting thing about this regime is its focus on safety. Food additives must be established as safe in order to be marketed, ¹⁰¹ and substances can avoid the food additive designation if they are generally recognized as safe. The word "safe" in this context is broad—it does not apply only to avoiding acute risks such as poisoning ¹⁰²—nonetheless, "safety," broadly defined, forms the relevant inquiry. Thus, a substance that provides nothing but "empty calories" is treated identically to a nutrient-dense food. ¹⁰³

^{99.} Another option, which would take much longer but would have broader implications, would be to argue that the regulation is flawed and should be changed.

^{100.} See supra notes 85–86 and accompanying text.

^{101.} See 21 U.S.C. § 348.

^{102.} For example, it is clear that a substance will not be found safe at a level that, over time, has been shown to increase the risk of a deadly disease such as cancer. *See infra* note 112.

^{103.} Interestingly, the GRAS concept is also used in FDA's regulation of drugs, but there it includes an additional prong regarding efficacy. See 21 U.S.C. § 321(s) (stating that a drug is not a "new drug" if it is "generally recognized, among experts qualified by scientific training and experience to evaluate the safety and effectiveness of drugs, as safe and effective") (emphasis added). One could imagine a regime in which a food substance would have to establish its efficacy at achieving some purpose—nutrition, taste, extending shelf-life, etc.—in order to be permissibly used in food. Under such a regime, safety might even be balanced against efficacy or utility, as is done in the context of drugs.

The history of FDA's food additive program sheds additional light on the government's stance regarding what factors are relevant to a consideration of whether and how a substance may be used in food. FDA has described the Food Additives Amendment of 1958, 104 which established the current food additive program, as having been passed "in response to public concern about the increased use of chemicals in foods and food processing," 105 and, indeed, the contemporaneous Senate Report conceptualized the bill as being "chemical additive legislation." 106 While chemicals are not specifically mentioned in the statute, both the text and the legislative history of the 1958 Amendment suggest that Congress had in mind a distinction between a "substance" (perhaps a synthetic chemical substance) and a "food." 107 But regardless of what Congress may have intended, it seems that FDA has always interpreted the 1958 Amendment as at least potentially applying not only to synthetic chemical additives but also to food ingredients (such as pepper) that are botanically derived. 108

In this sense, it seems that Congress shared the view of "food" that was advanced by the court in *Nutrilab, Inc. v. Schweiker*, 713 F.2d 335, 337–38 (7th Cir. 1983); in other words, Congress meant for the Food Additive Amendment to apply to substances that are regulated as food under § 321(f)(3), "articles used for components of [articles used for food]," but which themselves do not fit the commonsense definition of food. *See supra* note 90 and accompanying text.

108. See Statement of Policy: Foods Derived From New Plant Varieties, 57 Fed. Reg. 22,984, 22,989 (May 29, 1992) [hereinafter Plant Policy Statement] (describing the GRAS exemption as having been applied to "many ingredients derived from natural sources" as well as to "a host of chemical additives").

When it was originally drafted in 1959, the regulation that is now 21 C.F.R. § 582.1(a) (2012) (then 21 C.F.R. § 121.101(a)) began by stating that "[i]t is impracticable to list all substances that are generally recognized as safe for their intended use. However, by way of illustration, the Commissioner regards such common food ingredients as salt, pepper, sugar, vinegar, baking powder, and monosodium glutamate as safe for their intended use." *See also* Substances Generally Recognized as Safe, 24 Fed. Reg. 9368, 9368 (Nov. 20, 1959). It is interesting to note that sugar has since been removed from this provision. *See* 21 C.F.R. § 182.1(a).

The courts have at times taken things further, arguing that even a food that can be consumed on its own becomes a potential food additive when used as an ingredient in another food product, such as chocolate being used as an ingredient in chocolate ice cream. *See FoodScience Labs.*, 678 F.2d 735, 738 n.3 (7th Cir. 1982). FDA seems to take the position that this reading is permissible, but that regulation of "whole foods" as food additives is generally not necessary. *See* Plant Policy Statement, *supra* note 108, at 22,990.

^{104.} Pub. L. No. 85-929, 72 Stat. 1784 (1958).

^{105.} SGRS, 62 Fed. Reg. 18,938, 18,938 (Apr. 17, 1997).

^{106.} See S. REP. No. 85-2422 (1958), reprinted in 1958 U.S.C.C.A.N. 5300, 5303 (outlining how several sessions of Congress had held hearings regarding the need for "chemical additive legislation," eventually leading to the bill under consideration).

^{107.} Recall that the food additive definition begins as follows: "[t]he term 'food additive' means any *substance* the intended use of which results or may reasonably be expected to result, directly or indirectly, in its becoming a component or otherwise affecting the characteristics of any *food* "21 U.S.C. § 321(s) (emphasis added). The same use of "substance" and "food" occurs in the legislative history of the amendment. *See, e.g.*, S. REP. No. 85-2422, *reprinted in* 1958 U.S.C.C.A.N. 5300, 5301–02 (explaining that the bill "would put upon the processor rather than our government the burden of proving that a newly discovered substance which a processor of foodstuffs proposes to add to the food we eat is safe").

The question of whether the 1958 Amendment was meant to apply to botanically derived ingredients is largely academic, because by and large such substances are widely considered to be GRAS.¹⁰⁹ While it is interesting to contemplate whether Congress saw an important distinction between synthetic chemical additives and substances such as pepper, the bigger picture is that the existence of the food additive/GRAS distinction shows that Congress's safety concerns in 1958 were directed at novel substances, rather than long-standing food additives like baking powder, or items that are food in and of themselves, like bananas. Therefore, the 1958 Amendment knowingly created an expensive and time-consuming preapproval process for novel substances.¹¹⁰ To the extent that Congress did not deem a similar process necessary for more traditional food, this indicates an attitude toward innovation that is, in some ways, strikingly in line with the current thinking of the eat-food movement.

The similarities do not stop there. In keeping with the eat-food movement's narrative, described in Part I.A, the 1958 Congress identified the issue of shelf-stability as the crux of the shift toward novel food ingredients, which led to increased safety concerns. However, Congress viewed the goal of shelf-stability more favorably than Michael Pollan does, as reflected in the Senate Report that accompanied the amendment. The report stated that the bill:

would make possible the use of additives discovered by our scientists which, having been adjudged safe for humans and animals when used in or within certain quantitative limits, could materially advance our ability to make more wholesome foods available to more people at all seasons and, perhaps, we hope, to assure to ourselves and others the ability to stockpile supplies of healthful and appetizing foods over such long periods of time as emergencies might make either desirable or essential.¹¹¹

While the 1958 Congress seemed confident that the twin goals of safety¹¹² and progress could be advanced simultaneously, that confidence was tempered with a degree of humility regarding the role of science that provides yet another parallel with today's eat-food movement. The Senate Report warned that:

^{109.} A crucial exception is salt, *see supra* note 86 and accompanying text, and, in light of the recent *Nature* comment, perhaps sugar, *see supra* note 87 and accompanying text.

^{110.} See S. REP. No. 85-2422, reprinted in 1958 U.S.C.C.A.N. 5300, 5300–01 (discussing the expense that responsible food processors were already incurring to establish the safety of food additives, and noting that "[t]his bill, if enacted, will require the processor who wants to add a new and unproven additive to accept the responsibility now voluntarily borne by all responsible food processors of first proving it to be safe for ingestion by human beings").

^{111.} *Id.* at 5302. The language about "stockpiling" food for "emergencies" is perhaps best read as a Cold War-era reference to nuclear war, though that connection is not made explicit in the legislative history I have examined.

^{112.} Another area in which the 1958 Congress seems to have anticipated the concerns of today is with respect to questions of long-term health, as opposed to short-term safety. On this topic, the Senate Report stated that "[i]n determining the 'safety' of an additive, scientists must take into consideration the cumulative effect of such additive in the diet of man or animals over their respective life spans together with any chemically or pharmacologically related substances in such diet." *Id.* at 5305; *see also id.* at 5310 ("[T]he bill is aimed at preventing the addition to the food our people eat of any substances the ingestion of which reasonable people would expect to produce not just cancer but any disease or disability.").

[s]afety requires proof of a reasonable certainty that no harm will result from the proposed use of an additive. It does not—and cannot—require proof beyond any possible doubt that no harm will result under any conceivable circumstances.

This was emphasized particularly by the scientific panel which testified before the subcommittee. The scientists pointed out that it is impossible in the present state of scientific knowledge to establish with complete certainty the absolute harmlessness of any chemical substance. ¹¹³

This "reasonable certainty" standard remains in effect today. FDA's food additive regulations define "safe or safety" as meaning "there is a reasonable certainty in the minds of competent scientists that the substance is not harmful under the intended conditions of use."¹¹⁴

But while FDA's food additive program and the eat-food movement are both grounded in a surprisingly similar set of assumptions, their views of the role science should play in determining what we eat are fundamentally different. Although Congress and FDA have explicitly recognized that science can never definitively establish the safety of a substance, they never seem to have doubted that science should lie at the heart of decisions regarding food safety. The "reasonable certainty" that is the center of the "safety" definition exists "in the minds of competent scientists." 115 Scientific experiments are to be used to demonstrate the safety of a proposed food additive. 116 And while GRAS status can be shown either through "scientific procedures" or, for substances used in food prior to 1958, through "experience based on common use in food," in either situation the general recognition of safety is not meant to be among the general population, but rather "among experts qualified by scientific training and experience to evaluate [the substance's] safety."117 Therefore, the program that Congress created in 1958, and that FDA administers to this day, draws an important distinction between traditional and novel food; but in both realms the system places scientific determinations of safety at the heart of government decisions regarding what may be marketed as food.

The ramifications of this history are far from abstract. When Congress expresses its views in statutes, those statutes necessarily go on to influence and shape the agencies tasked with administering them. 118 FDA's Office of Food Additive Safety, which administers the food additive and GRAS programs created by the 1958 Amendment, employs numerous scientists and, as of this

^{113.} Id. at 5305.

^{114. 21} C.F.R. § 170.3(i) (2012).

^{115.} Id.

^{116.} See 21 C.F.R. § 170.20(b).

^{117. 21} U.S.C. § 321(s) (2006).

^{118.} See Torres, supra note 70, at 614-15. When, as here, Congress's views are further explained in legislative history, that legislative history might also influence the agency that administers the relevant statute. See, e.g., Richard J. Pierce, Jr., How Agencies Should Give Meaning to the Statutes They Administer: A Response to Mashaw and Strauss, 59 ADMIN. L. REV. AM. U. 197 (2007).

writing, is headed by a Ph.D. scientist. ¹¹⁹ Whether the agency's culture of science arose as a result of laws such as the Food Additives Amendment of 1958 or derives from other sources is beyond the scope of this Article. But, at least with respect to the food additive and GRAS programs, that scientific culture is deeply embedded in the agency.

That said, the description of the food additive/GRAS program in this Part is only a snapshot in time—the eat-food movement could attempt to change the rules of the game by lobbying for a fundamental statutory change to the ways in which FDA decides if a substance can be used in food. However, because Congress is unlikely to dismantle the basic tenets of the system—most notably, reliance on science to evaluate food safety—this Article does not focus on that possibility. Instead, we turn next to the question of whether, and to what extent, it makes sense for the eat-food movement to attempt to use the current system to ban or limit the use of certain substances in food.

B. The Eat-Food Movement's Pursuit of Bans and Limits

There are numerous ways for an interest group such as the eat-food movement to make its views known to FDA, and to seek specific actions from the agency. In the context of a rulemaking—for example, if an industry group has submitted a petition under 21 U.S.C. § 348 seeking a regulation permitting a new food additive—the Administrative Procedure Act requires agencies to give the public an opportunity to submit comments, which the agency must consider. 120 Moreover, agencies must give interested persons the right to petition at any point in time for the issuance, amendment, or repeal of a rule. 121 Under FDA's regulations, citizen petitions may be submitted to the agency at any time, 122 and the agency must rule on all such petitions. 123 Therefore, if the eat-food movement has concerns about a substance that is already on the market, it can petition for a change to the existing regulations (if a regulation is in place) or for consideration of the substance's GRAS status. Similarly, if the movement has concerns about a new substance whose status is under consideration by FDA, it can submit comments expressing those concerns. The important question, however, is whether and when it makes sense for the eatfood movement to use its resources in this way, in light of the movement's broader philosophy.

^{119.} See CFSAN-Office of Food Additive Safety-Organization, U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/AboutFDA/CentersOffices/OrganizationCharts/ucm183726.htm (last visited July 21, 2012) (listing Dennis M. Keefe, Ph.D., as Director of the Office); see also Presentation Abstract, INST. OF FOOD TECHNOLOGISTS, http://www.abstractsonline.com/plan/ViewAbstract.aspx?mID= 2525&sKey=00c23c33-4ae0-4f64-849d-3dffbf92d017&cKey=fd60a42b-1af5-4b23-b6bf-19ed195f301 a&mKey=%7B64C55C22-D314-40A2-98B8-3CE298279EC7%7D (last visited July 21, 2012).

^{120.} See 5 U.S.C. § 553(c) (2006).

^{121.} See id. § 553(e).

^{122.} See 21 C.F.R. § 10.30 (2012).

^{123.} See id. § 10.30(e).

As Part II.A discussed, in creating FDA's food additive program, Congress acknowledged that safety can never be definitively established but explicitly decided not to let this fact stand in the way of allowing new food ingredients to enter the market. Therefore, in situations where well-designed scientific studies have revealed no evidence of a safety risk from a specific substance, it would not be productive for members of the eat-food movement to encourage FDA to reject or limit use of the substance simply based on the "don't leap" philosophy to which the movement adheres.

Other types of participation, however, might be more likely to bear fruit. Public interest groups commonly submit detailed comments regarding scientific evidence of safety (or lack thereof) for specific substances, either in the context of GRAS determinations¹²⁴ or food additive petitions.¹²⁵ These comments typically call into question the science used to establish a substance's safety in any of a number of ways, such as by arguing that the relevant studies were not done over a long enough period of time, did not use a large enough sample size, or were otherwise poorly designed or led to inconclusive results. Similarly, if some studies suggest a possible safety hazard, comments might argue that the proponent of the substance has given these studies too little weight or has improperly disregarded them.¹²⁶

I submit that, prior to engaging in this type of advocacy, the eat-food movement must consider whether such advocacy undercuts the movement's broader goals and message. One of the central tenets of the eat-food movement is that the scientific process is currently incapable of understanding the extremely complex relationship between food and health. To petition FDA using a science-based paradigm—by asserting, for example, that a study establishing safety should have encompassed 500 people rather than 100 people, or that the agency should also consider a small study based on food questionnaires that seems to suggest a link between a chemical additive and cataracts—would be an implicit rejection of this tenet.

Since precious few people read the scientific analysis in these types of administrative comments, the problem is not that this type of action would lead to widespread accusations of hypocrisy. Instead, the primary issues are resource allocation and emphasis. To the extent that the eat-food movement expends its money, time, and energy fighting these types of battles, it will presumably have fewer resources available to pursue other endeavors. Moreover, if one imagines a hypothetical eat-food lobbying organization, it is hard to believe that engaging in battles about study design and control of variables would not cause

^{124.} *See, e.g.*, Revoke the GRAS Standing of the Food Additive Monosodium Glutamate, Docket No. FDA-2007-P-0178 (Food and Drug Admin. 2007) (citizen petition), *available at* http://www.regulations.gov/#!docketDetail;rpp=10;po=0;D=FDA-2007-P-0178.

^{125.} See, e.g., Food Additives Permitted for Direct Addition to Food for Human Consumption; Bacteriophage Preparation, 76 Fed. Reg. 16285 (Mar. 23, 2011).

^{126.} A more robust form of participation might consist of funding additional studies to examine the matter at hand.

^{127.} See discussion supra Part I.

the organization to lose at least some of its focus on the big-picture belief that science has little to tell us about food. 128

However, the eat-food movement does not appear to take the position that science has *nothing* to tell us about food. The movement's philosophy would not require it to look the other way if rigorous science established a serious risk from consuming a particular substance. After all, neither the fact that safety can never be definitely established nor the idea that individual studies that seem to show a correlation between particular ingredients and particular outcomes should be viewed with skepticism changes the fact that science is at times very good at demonstrating harm. For example, it is not difficult (absent ethical hurdles) to conceptualize a study that would demonstrate that we should not introduce large quantities of cyanide into the food supply. While Pollan, in particular, has focused on the limitations of the scientific process, the eat-food movement seems to have a general consensus that scientific studies are sometimes capable of demonstrating a lack of safety. 130

Therefore, we can draw an important line between battles that the eat-food movement can fight on FDA's terms without abandoning its own principles and battles that cannot be thus fought. Situations in which the traditional scientific process adequately illuminates a safety risk fall into the former category; situations in which the movement's safety concerns arise from its general distrust of novel substances and of studies purporting to show such substances' safety fall into the latter category.

Because the eat-food movement aims to discourage the eating of all "edible foodlike substances," it is tempting to argue that the movement should work against every such substance in every possible way. But in the latter category of situations, it would be not only hypocritical but also distracting to the movement itself to engage in battles over food additive petitions and GRAS determinations, for example, by urging FDA to consider a study showing a correlation between a contested substance and a poor health outcome, even when the study utilizes overly simplistic nutritional science of the sort the movement abhors. There is enough overlap between the philosophy of the food additive program and the philosophy of the eat-food movement that the movement can fight the most important battles—those relating to substances that present the highest risk—on its own terms, using only science that the

^{128.} Another argument against engaging in this sort of advocacy is that the food additive program is a classic example of where one might expect to see agency capture by corporate interests, which might render such advocacy efforts futile. *See supra* note 73 and accompanying text. But it is important to note that the eat-food movement's reservations about the use of nutritional science apply even when the science is performed and evaluated with complete impartiality.

^{129.} More subtle dangers are, of course, more difficult to detect. The long battle to establish scientific proof of the dangers of tobacco is a good example of both the promise and the difficulty of isolating the effects of one dangerous substance in the complicated arena of public health. *See, e.g.*, DEVRA DAVIS, THE SECRET HISTORY OF THE WAR ON CANCER 169–98 (2007).

^{130.} This lack of safety, of course, can come from "real" food as well as "edible foodlike substances." *See supra* note 57 and accompanying text.

movement itself finds compelling.¹³¹ Even if the movement experienced some high-profile success in getting FDA to ban or limit verifiably unsafe substances, it would not follow that the movement should make FDA's food additive and GRAS programs a central focus of its advocacy efforts. Specifically, taking on battles that would have to be fought on FDA's terms and against the movement's own principles would not necessarily be in the eat-food movement's best interests

III. GOVERNMENT-FILTERED FOOD LABELING

Regardless of the extent to which the eat-food movement pursues bans of "edible foodlike substances," some such substances will likely remain on the market. Therefore, to assist consumers in distinguishing between these substances and "real" food, the eat-food movement could seek changes in the way food is labeled. While there are numerous ways to use labeling to promote the eating of "real" food, this Part focuses on a form of labeling I call "government-filtered labeling."

Government-filtered labeling refers to labeling (for our purposes here, food labeling) that expresses a value-laden conclusion the government has reached about the specific product in question. For example, while federally mandated ingredient labeling reflects a number of government-made conclusions—that ingredients are important, that they should be listed in a certain order, that they can be categorized in certain ways—which are, at least arguably, value-laden, the ingredient list on a specific product does not express any governmental conclusions about that product, relative to others. On the other hand, the organic label does express such a conclusion—based on the methods by which the food or its ingredients were grown and processed, the government has concluded that it qualifies as organic, a category with positive

^{131.} Of course, the movement might choose not to fight even these battles, whether out of a desire to focus its efforts on the decisions of individual eaters or to eschew entirely a government program that is based so firmly on nutritional science. However, in situations where the risk is grave and the movement would not be acting contrary to its beliefs, I see nothing inherent in the eat-food movement's philosophy that would dictate against seeking a ban of a dangerous substance.

^{132.} Note that FDA, USDA's Food Safety and Inspection Service, USDA's Agricultural Marketing Service, and several other agencies currently share jurisdiction for regulating food labeling. See RONALD H. SCHMIDT, DOUGLAS L. ARCHER & M.T. OLEXA, FEDERAL REGULATION OF THE FOOD INDUSTRY: PART 2, FEDERAL REGULATORY AGENCIES, FSHN05-11 (June 2005), available at http://edis.ifas. ufl.edu/pdffiles/FS/FS12100.pdf. Moreover, there is considerable complexity even within a single agency's approach. FDA, for example, regulates some types of labeling only under the broad prohibition on false and misleading labeling, see 21 U.S.C. §§ 343(a)(1), 321(n) (2006), while other types are regulated under much more detailed provisions, see, e.g., § 343(r)(1)(B) (health claims); § 343(r)(1)(A) (nutrient content claims); § 321(g)(1)(C) (structure / function claims); § 343(q) (nutrition facts panels); § 343(i) (ingredient labeling).

^{133.} Government-filtered labeling exists outside the food context as well. The most prominent example is the "Energy Star" labeling program, which creates a federal standard for energy efficiency and provides an Energy Star seal for products that sufficiently exceed that standard. See ENERGY STAR, http://www.energystar.gov/ (last visited July 21, 2012); see also Minneti, supra note 10, at 1346–51. For an historical account of government-filtered labeling efforts in the environmental context, both in the United States and abroad, see Orts, supra note 10, at 1246–51.

implications that the government has defined based on value-laden judgments. 134

The organic label represents one type of existing government-filtered labeling; but not all government-filtered labeling would need to take the form of the National Organic Program (NOP), which involves an expensive and resource-intensive certification process¹³⁵ and results in a specific claim, with positive associations, being permitted on the label of the food in question. The traffic-light system the United Kingdom has recently explored represents another, very different type of government-filtered labeling, whereby information about fat, saturated fat, salt, and sugar is presented on the label of food products, with each element color-coded to indicate a low amount (green), a medium amount (amber), or a high amount (red).¹³⁶ A variety of commentators have expressed interest in enacting a similar system in the United States.¹³⁷

Neither the United States' NOP nor the United Kingdom's traffic light program are meant to inform consumers whether what they are eating is "real" food or not. This Part examines each of these two models and explores the question of whether a similar model could serve the eat-food movement's goals. Part III.A looks at traffic light labeling and other related proposals. Part III.B looks at organic labeling. Drawing on those analyses, Part III.C concludes that, while government-filtered labeling is a good way to achieve certain types

^{134.} USDA defines "organic production" as "[a] production system that is managed in accordance with the Act and regulations in this part to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity." 7 C.F.R. § 205.2 (2012). With some exceptions, organic food must be grown without synthetic pesticides, herbicides, or fertilizers. It cannot be grown from genetically modified seeds, and neither the seeds nor the food can have been treated with irradiation. See NESTLE, WHAT TO EAT, supra note 1, at 42.

^{135.} See A. Bryan Endres, An Awkward Adolescence in the Organics Industry: Coming to Terms with Big Organics and Other Legal Challenges for the Industry's Next Ten Years, 12 DRAKE J. AGRIC. L. 17, 58 (2007). Congress recognized the high cost of organic certification in the Farm Security and Rural Investment Act of 2002 § 10606, Pub. L. No. 107-171, 116 Stat. 134, 514 (codified as amended at 7 U.S.C. § 6523(a) (2006)), which established a national organic certification cost-share program.

^{136.} Under the United Kingdom's system, traffic light labels also provide the per-portion percentage of Guideline Daily Amounts, and the guidelines suggest that the traffic light color be further explicated with the word "High," "Medium," or "Low." See FOOD STANDARDS AGENCY, FRONT OF PACK (FOP) NUTRITION LABELLING 6 (2010), available at http://www.food.gov.uk/multimedia/pdfs/board/fsa100307.pdf [hereinafter FSA BOARD REPORT]. This system is premised on the theory that fat, saturated fat, sugar, and salt are all things that consumers should avoid eating too much of. With respect to fat and saturated fat in particular, this premise is hotly contested. See, e.g., TAUBES, supra note 42.

^{137.} See infra notes 144-48 and accompanying text.

^{138.} While there is presumably some overlap between "real" food and organic food, it is not complete. For example, many members of the eat-food movement might consider that food is not "real" if it (or its ingredients) were grown using pesticides; however, as is discussed *infra* Part III.B, the organic label does not always guarantee that pesticides were not used, nor does the lack of an organic label necessarily mean that pesticides were used. Furthermore, highly processed foods can, in some circumstances, bear the organic label.

of goals, it is not necessarily well suited to the specific goals of the eat-food movement.

A. Traffic Light Labeling

The United Kingdom's voluntary traffic light labeling system has been evolving and continues to evolve; ¹³⁹ however, the basic principle has remained the same. Labeling on the front of a product's package conveys information about four nutritional components: fat, saturated fat, sugar, and salt. For each component, red, amber, or green color-coding communicates a conclusion that the component is present in amounts that are advisable (green), inadvisable (red), or something in between (amber). ¹⁴⁰ The color-coded categories are based on recommended intake levels. For example, under the current system, if a serving of a product contains more than 30 percent of the government's recommended intake level for fat, saturated fat, or sugar, it will be coded red with respect to that nutrient; for salt, the red designation is only given if a portion exceeds 40 percent of the recommended intake level. ¹⁴¹

Although the system has never been mandatory, it has been highly controversial, and in 2010 the European Parliament voted to block the European Union from adopting, and making mandatory, the United Kingdom's traffic light system. Many saw this vote as a bow to industry pressure, 43 as the traffic light system has been met with considerable enthusiasm from the public health community.

^{139.} See FOOD STANDARDS AGENCY, FRONT-OF-PACK TRAFFIC LIGHT SIGNPOST LABELLING TECHNICAL GUIDANCE, (2007), available at http://www.food.gov.uk/multimedia/pdfs/frontofpack guidance2.pdf [hereinafter TECHNICAL GUIDANCE] (remaining in effect as of this writing). In March 2010, the U.K.'s Food Standards Agency (FSA) Board issued a report recommending a modified approach and stating that FSA would "update its existing FOP nutrition labelling technical guidance to reflect the principles outlined" in the report and would then engage in further public consultation before formally submitting its recommendations to the Health Ministers. See FSA BOARD REPORT, supra note 136, at 7. However, the agency has not yet updated its technical guidance. As of this writing, the FSA website states that the Agency is currently reviewing its FOP policy, and that the technical guidance "will be updated at the end of the policy review process." See Front-of-pack Nutrition Labelling: Technical Guidance, FOOD STANDARDS AGENCY, http://www.food.gov.uk/scotland/scotnut/signposting/ technicalguide/ (last visited Dec. 21, 2011). The FSA only has the authority to recommend voluntary labeling systems; mandatory legislation is carried out by the European Union. See Felicity Lawrence, Tesco Rejects Traffic Light Food Labelling, THE GUARDIAN, Mar. 9, 2006, http://www.guardian. co.uk/society/2006/mar/10/health.food1?INTCMP =SRCH.

^{140.} See TECHNICAL GUIDANCE, supra note 139, at 2; FSA BOARD REPORT, supra note 136, at 6.

^{141.} See TECHNICAL GUIDANCE, supra note 139, at 5.

^{142.} See Rebecca Smithers, MEPs Reject 'Traffic Light' Food Labelling System, THE GUARDIAN, June 16, 2010, http://www.guardian.co.uk/lifeandstyle/2010/jun/16/meps-reject-traffic-light-food-labelling?INTCMP=SRCH.

^{143.} See id.

^{144.} See id.; see also Margaret Sova McCabe, Loco Labels and Marketing Madness: Improving How Consumers Interpret Information in the American Food Economy, 17 J.L. & POL'Y 493, 512–16 (2009); Marion Nestle, Update on Marketing to Kids, FOOD POLITICS (Dec. 14, 2011), http://www.foodpolitics.com/2011/12/update-on-marketing-to-kids.

More generally, the concept of "front-of-pack" nutrition labeling has generated considerable attention in recent years. 145 A proliferation of industry-created labeling claims has led to concerns that consumers are being confused and misled; 146 the antidote, many believe, is a standardized, government-imposed front-of-pack labeling system, such as the one considered (and rejected) by the European Union. 147 While the term "front-of-pack labeling" could be applied to any labeling that appears on the front of a package, the current front-of-pack debate generally uses the term to refer to systems whereby readily available information about a product is synthesized via a generic formula capable of assessing every product in the marketplace, and an easily understood indicator (such as a color code, a grade, or an appropriate number of stars) is used to communicate that assessment.

Interest in the topic is such that Congress directed the Centers for Disease Control and Prevention to undertake a study with the Institute of Medicine (IOM) on front-of-pack labeling. As a result, the IOM issued a report calling on FDA and USDA to require and to standardize such labeling. The report recommended a "simple, standard symbol," to appear on all grocery products, which would translate information regarding "saturated and *trans* fats, sodium, and added sugars" to yield "a quickly and easily grasped health meaning." FDA subsequently issued a Federal Register notice establishing a docket and requesting comments and information regarding front-of-pack labeling systems, ¹⁴⁹ and FDA Commissioner Margaret Hamburg issued an open letter to industry encouraging a collaborative approach to developing a standardized system of front-of-pack labeling, ¹⁵⁰ while the agency simultaneously issued a set of Warning Letters to companies that were engaging in voluntary front-of-pack labeling in a manner FDA deemed impermissible. ¹⁵¹ More recently, in what many have interpreted as an attempt to subvert FDA's efforts to create a

^{145.} See, e.g., Glenn G. Lammi, Front-of-Package Rating System Government's Next Tool in "Guiding" Consumers' Food Choices?, FORBES (Dec. 13, 2011), available at http://www.forbes.com/sites/wlf/2011/12/13/front-of-package-rating-system-governments-next-tool-in-guiding-consumers-food-choices.

^{146.} See NESTLE & NESHEIM, supra note 1, at 211.

^{147.} See Marion Nestle, Guess What: Traffic Light Labels Work, FOOD POLITICS (Jan. 27, 2012), available at http://www.foodpolitics.com/2012/01/guess-what-traffic-light-labels-work; see also infra note 148 and accompanying text.

^{148.} Inst. of Med. of the Nat'l Acads., Front-of-Package Nutrition Rating Systems and Symbols: Promoting Healthier Choices 107 (2011), available at http://books.nap.edu/openbook.php?record_id=13221 [hereinafter IOM Final Report]. See also Institute of Medicine of the National Academies, Front-of-Package Nutrition Rating Systems and Symbols: Phase I Report (2010), available at http://books.nap.edu/openbook.php?record_id=12957.

^{149.} See Front-of-Pack and Shelf Tag Nutrition Symbols; Establishment of Docket; Request for Comments and Information, 75 Fed. Reg. 22,602 (Apr. 29, 2010).

^{150.} See Margaret A. Hamburg, Open Letter to Industry from Dr. Hamburg, U.S. FOOD & DRUG ADMIN. (Mar. 3, 2010), http://www.fda.gov/Food/LabelingNutrition/ucm202733.htm.

^{151.} See id. For more on FDA's stance regarding industry-implemented front-of-pack labeling, see Guidance for Industry: Letter Regarding Point of Purchase Food Labeling, U.S. FOOD & DRUG ADMIN. (Oct. 2009), http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodLabelingNutrition/ucm187208.htm.

standardized system, a coalition of industry groups unveiled a voluntary system called "Facts Up Front," in which basic nutritional information is put on the front of the package but not assessed (for example, via stars or traffic light coloring). ¹⁵² Public health advocates have opposed this approach. ¹⁵³

One thing this ongoing saga reveals is that nutritionism is, indeed, the prevailing ideology that Pollan portrays it to be. 154 The entire debate over front-of-pack labeling is suffused with the assumption that the healthfulness of a food product can be assessed based on a handful of individual nutrients.

Yet it does seem possible that the basic concept—labeling all foods in a standardized, visible, easily-understandable way that communicates whether or not the food is a good choice—could translate to the "real" food vs. "edible foodlike substance" context. For example, compare two loaves of packaged bread: one whose entire ingredient list consists of "freshly stone-ground whole wheat flour, water, honey, yeast, sea salt," and one that contains 100 percent whole wheat flour but features a longer list of ingredients, including soy lecithin and cultured wheat starch. The first loaf seems to fit unambiguously into Pollan's definition of a "real" food, but the second loaf is borderline—while the whole wheat is "real," and perhaps there are not any synthetic ingredients, most people do not keep soy lecithin 155 or cultured wheat starch in their pantries. From the eat-food movement's point of view, it might be desirable for the label of the first loaf of bread to have a green light on it, for

^{152.} See News Release, GMA and FMI Announce "Facts Up Front" as Theme for Front-of-Pack Labeling Program Consumer Education Campaign, GMAONLINE (Sept. 22, 2011), at http://www.gmaonline.org/news-events/newsroom/gma-and-fmi-announce-facts-up-front-as-theme-for-labeling-program-consumer-; see also Lammi, supra note 145. "Facts Up Front" creates a standardized way of conveying the amount of calories, saturated fat, sodium, and sugar in one serving of a given food; for saturated fat and sodium, the percentage of the daily value is also listed. See FACTS UP FRONT, http://factsupfront.com (last visited June 13, 2012). Manufacturers have the option of including up to two "nutrients to encourage," such as fiber and vitamin C, if the product contains a sufficient quantity of the nutrient. See id. The processed food industry in the European Union has favored a nearly identical "Guideline Daily Amounts" program. See Guideline Daily Amounts, CIAA, http://gda.ciaa.eu (last visited June 13, 2012); see also Smithers, supra note 142.

^{153.} See, e.g., Marion Nestle, Food Industry Thinks Name Change Will Disguise Bad Labeling Scheme, FOOD POLITICS (Sept. 27, 2011), at http://www.foodpolitics.com/2011/09/food-industry-thinks-name-change-will-disguise-bad-labeling-scheme; Ezekiel J. Emanuel, Healthy Labels, Not Stealthy Labels, N.Y. TIMES OPINIONATOR (Mar. 5, 2012), at http://opinionator.blogs.nytimes.com/2012/03/05/healthy-labels-not-stealthy-labels. One major item of contention is the inclusion of "nutrients to encourage," which is seen as feeding into a broader trend of the processed food industry attempting to portray unhealthy foods as healthy. Public health lawyer Michele Simon refers to these efforts as "nutriwashing." SIMON, supra note 36, at 68. Ezekiel Emanuel has also pointed out that "Facts Up Front" is not thus far in widespread use. See Emanuel, supra. Legal scholars have also weighed in on the front-of-pack debate. See generally Timothy D. Lytton, Signs of Change or Clash of Symbols? FDA Regulation of Nutrient Profile Labeling, 20 HEALTH MATRIX 93 (2010); McCabe, supra note 144, at 512-16.

^{154.} See supra note 26 and accompanying text.

^{155.} Expellers can be used to extract soy lecithin mechanically from soybeans, but it is usually extracted using the organic solvent hexane. *See* G.R. List, *Commercial Manufacture of Lecithin, in* LECITHINS: SOURCES, MANUFACTURE & USES 145, 146 (Bernard F. Szuhaj ed., 1989), *available at* http://books.google.com/books?id=_2Vgsk7o9LsC.

^{156.} Cf. POLLAN, IN DEFENSE OF FOOD, supra note 1, at 150–54.

the second loaf of bread's label to have a yellow light on it, and for a loaf of highly processed white bread to display a red light. In this way, the basic concept of front-of-pack labeling could be divorced from the tenets of nutritionism and used to further the eat-food movement's goals.

Even if one assumes that such a system is—or could one day be—politically possible, it is not clear whether it is advisable from the standpoint of the eat-food movement. Part III.C addresses that question, but first we turn to another type of government-filtered labeling: organic labeling.

B. The National Organic Program

The NOP stands in stark contrast to the labeling initiatives described in Part III.A. Before a product can be represented as "organic," each production or handling operation for the crops or livestock from which the product is derived must be certified as meeting the NOP's standards, 157 which prohibit most synthetic fertilizers 158 and address numerous other topics. 159 Certification is an on-site activity; 160 unlike the front-of-pack labeling described above, the information necessary to determine whether or not a product meets the NOP's standards is not available on other parts of the product's label. Therefore, "organic" is not a filter through which every product in the marketplace may be easily assessed—indeed, a product that is not labeled organic might in fact have been produced in a manner that is consistent with the NOP. 161 The only way to know for sure would be to visit the production operation.

The on-site certification aspect of the NOP allows for a more in-depth approach than the front-of-pack systems described in Part III.A. This is important to a consideration of how a similar approach might work in the eatfood arena. Whereas my imagined "real food" front-of-pack labeling system would have classified the different loaves of bread described above based only on their ingredient lists (which, unlike the nutritional information on which most other front-of-pack labeling relies, are not grounded in nutritionism), ¹⁶² an on-site certification system would allow for consideration of a much wider array of factors. Issues such as the degree and manner of processing, how animals were raised, and what they were fed, could be taken into account

^{157.} See National Organic Program, 65 Fed. Reg. 80,548, 80,551 (Dec. 21, 2000) [hereinafter NOP Final Rule].

^{158.} See 7 C.F.R. § 205.203(e)(1) (2012).

^{159.} See generally 7 C.F.R. $\S\S$ 205.2–205.299, subpt. C; see also NOP Final Rule, 65 Fed. Reg. at 80,551.

^{160.} See NESTLE, WHAT TO EAT, supra note 1, at 43. Nestle describes an interview with an organic certifying agent who "visits farms and suppliers; reviews records of purchases, crop rotations, and sales; and inspects the facilities, soils, supplies, and crops." *Id.*

^{161.} For reasons of cost, principle, or both, some producers choose not to pursue organic certification. *See* Endres, *supra* note 135, at 58–59 (describing the "beyond-organic" movement).

^{162.} See supra text accompanying note 156.

alongside ingredient lists. ¹⁶³ In this way, it might be possible to assess whether a given product meets the eat-food movement's definition of "real" food.

One can imagine, therefore, a certification program modeled on the NOP that would create a set of requirements for food products seeking a "real food" label. Part III.C considers the pros and cons of such a system in the context of the broader goals of the eat-food movement. But, first, it is instructive to take note of some of the challenges the NOP has faced and continues to face.

Other authors have detailed the history of the NOP, ¹⁶⁴ but a few elements of the story are worth highlighting here. Congress tasked USDA with establishing the NOP in the Organic Foods Production Act of 1990 (OFPA), 165 but it was USDA that decided to establish that program within the Agricultural Marketing Service (AMS). 166 Some commentators have criticized this decision on the grounds that AMS's mission of facilitating the agricultural market as a whole 167 conflicts with the organic movement's disapproval of conventional agriculture and, more generally, that NOP placement within AMS reflects a view of the organic label as a marketing tool, rather than part of a social/environmental movement with non-economic aims. 168 I think these criticisms overstate the extent to which AMS has portrayed the organic label as somehow facilitating marketing without being an indicator of superiority, ¹⁶⁹ but the debate highlights broader points about the importance of framing a program's mission and goals. Agency management of a program necessitates a constant stream of regulatory decision making, and these decisions are often guided by the program's (and the agency's) fundamental mission. Therefore, a

^{163.} The requirements of the NOP, or perhaps an even stricter set of related requirements, would presumably play a role in making a "real food" determination.

^{164.} See, e.g., Endres, supra note 135, at 17; see also NESTLE, WHAT TO EAT, supra note 1, at 42–44

^{165.} OFPA was Title XXI of the 1990 Farm Bill, Pub. L. No. 101-624, § 2101, 104 Stat. 3359, 3935 (1990). *See* Endres, *supra* note 135, at 20 & n.8. For the specific provisions tasking USDA with administering the NOP, see 7 U.S.C. §§ 6503(a), 6502(19) (2006).

^{66.} See Endres, supra note 135, at 20 & n.8.

^{167.} See supra notes 76-78 and accompanying text.

^{168.} See, e.g., Endres, supra note 135, at 20–21; William J. Friedman, The Framework for Global Organic Food Trade Circa 2005: Accomplishments and Challenges, 60 FOOD & DRUG L.J. 361, 366 (2005).

^{169.} For example, Endres critiques the following statement from the *NOP Final Rule*, 65 Fed. Reg. 80,548, 80,586 (Dec. 21, 2000): "The USDA seal indicates only that the product has been certified to a certain production and/or handling 'process' or 'system.' The seal does not convey a message of food safety or more nutritional value." *See* Endres, *supra* note 135, at 20. But this statement was made in the context of rejecting a proposal by opponents of the organic label, under which organic products would have been required to carry disclaimers stating that organic food is less safe than conventional food. *See* NOP Final Rule, 65 Fed. Reg. at 80,586. More generally, while it is true that the NOP is not premised on claims of safety or nutrition, it is explicitly premised on the values of ecological balance and biodiversity. *See* 7 C.F.R. § 205.2 (2012) ("[O]rganic production" is defined as "[a] production system that is managed in accordance with the Act and regulations in this part to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity"). AMS adopted this definition in response to comments that disputed the proposed definition. *See* NOP Final Rule, 65 Fed. Reg. at 80,550.

program's initial framing and placement within a specific agency has a lasting impact.

The National List of Allowed and Prohibited Substances (National List) is a vivid example of the types of ongoing regulatory decisions AMS must make. The Many people assume that organic products are produced without the use of synthetic chemicals; but this is not always the case. In fact, synthetic chemicals may be used in the production of organic products, provided the chemicals are on the National List. Congress created a number of requirements for placing chemicals on the National List, and AMS has promulgated regulations addressing the matter further. Needless to say, the addition and subtraction of chemicals from the National List is carefully watched and hotly disputed. The National List is carefully watched and hotly disputed.

More generally, the history of the NOP demonstrates the constant vigilance a social movement must practice if it is to consolidate and maintain the legislative victories it achieves. For example, the first proposed rule to implement the OFPA would have allowed the use of genetically modified seeds, irradiation, and "sewage sludge" in the production of organic foods. 174 More than 275,000 people sent comments opposing those provisions—"the largest public response to a proposed rule in USDA history". 175—after which AMS revised the proposed rule. 176 The revised proposal was finalized (thus promulgating regulations to implement the OFPA) without any additional significant changes to those provisions;¹⁷⁷ but there were other ways in which pro-organic activists thought AMS's regulations deviated from what Congress had mandated.¹⁷⁸ One activist immediately brought a legal challenge, and the First Circuit ultimately sided with him on several key points, striking down aspects of the regulations that were favored by large organic processors but opposed by many within the organic movement. The large organic processors then successfully lobbied Congress to amend the OFPA, which Congress did without debate and without a hearing. 180 Thus, the battle to

^{170.} See 7 C.F.R. §§ 205.600-205.607.

^{171.} See 7 U.S.C. §§ 6504(1), 6517 (2006); 7 C.F.R. § 205.601 (listing "[s]ynthetic substances allowed for use in organic crop production"); 7 C.F.R. § 205.603 (listing "[s]ynthetic substances allowed for use in organic livestock production"); 7 C.F.R. § 206.605 (listing "[n]onagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as 'organic'").

^{172.} See 7 U.S.C. § 6517; 7 C.F.R. § 205.600.

^{173.} See Endres, supra note 135, at 37–40.

^{174.} See National Organic Program, 62 Fed. Reg. 65850 (Dec. 16, 1997); see also NESTLE, WHAT TO EAT, supra note 1, at 43–44.

^{175.} National Organic Program, 65 Fed. Reg. 13512 (Mar. 13, 2000).

^{176.} See id. "Your comments do matter," the revised proposal noted. Id. Dan Glickman, who was Secretary of Agriculture at that time, has been quoted as saying that the public outcry was "so full-throated that I think it was choking me on occasion." KEN ROSEBORO, THE ORGANIC FOOD HANDBOOK: A CONSUMER'S GUIDE TO BUYING AND EATING ORGANIC FOOD 41 (2009).

^{177.} See NOP Final Rule, 65 Fed. Reg. 80,548 (Dec. 21, 2000).

^{178.} *See* Endres, *supra* note 135, at 21–22.

^{179.} See Harvey v. Veneman, 396 F.3d 28 (1st Cir. 2005).

^{180.} See Endres, supra note 135, at 23-24.

maintain the standards initially embraced by Congress has been fought in all three branches of government—a clear demonstration that even a landmark statute like the OFPA is not grounds for a movement to declare victory. ¹⁸¹

A final lesson from the history of the NOP is that success is not without costs. The market for organic produce has exploded in recent years, ¹⁸² in what must, at some level, be construed as a victory for the organic movement. But much of the growth has been brought about by "Big Organic," ¹⁸³ or what Marion Nestle calls the "organic-industrial complex." ¹⁸⁴ To the extent that large-scale production of organic food by corporate giants such as General Mills conflicts with the values of those in the organic movement, the tremendous growth of the organic sector is not—at least in the eyes of those activists—an unmitigated success. ¹⁸⁵

C. The Eat-Food Movement's Pursuit of Government-Filtered Labeling

It is worth taking a step back and recognizing the similarities between front-of-pack labeling systems such as the British traffic light system and certification systems like the NOP. Both of these programs fit my definition of government-filtered labeling because they are ways the government expresses, via product labeling, ¹⁸⁶ a value-laden conclusion it has reached about the product in question. ¹⁸⁷ Needless to say, this type of labeling forces government to take a stance on certain issues. For instance, the United Kingdom's traffic light system is predicated on a number of government conclusions—for example, that people should avoid consuming high levels of saturated fat and that more than a certain amount of saturated fat in a product is too much. Similarly, the NOP is predicated on government adoption of the idea that biodiversity is worth promoting, ¹⁸⁸ while individual decisions about which chemicals to place on the National List are based on government evaluations of

^{181.} Since the passage of the OFPA, there have been numerous other struggles "between the organic industry and the organic movement." POLLAN, THE OMNIVORE'S DILEMMA, *supra* note 1, at 155. These have included debates about access to pasture for organic dairy cows and the applicability of the organic designation to processed foods. *See id.* at 154–58.

^{182.} A summary of the Organic Trade Association's 2011 Organic Industry Survey is available at *U.S. Organic Industry Overview*, ORGANIC TRADE ASS'N, http://www.ota.com/pics/documents/2011OrganicIndustrySurvey.pdf (last visited July 21, 2012). *See also* NESTLE, WHAT TO EAT, *supra* note 1, at 37–38; Endres, *supra* note 135, at 18.

^{183.} See generally Endres, supra note 135.

^{184.} NESTLE, WHAT TO EAT, supra note 1, at 38.

^{185.} See Kimberly Ong, A New Standard: Finding a Way to Go Beyond Organic, 17 N.Y.U. ENVTL. L.J. 883 (2008).

^{186.} For foods that are not packaged, such as many produce items, "product labeling" can take the form of shelf tags or stickers. *See* IOM Final Report, *supra* note 148.

^{187.} By way of contrast, the "Facts Up Front" system and the British GDA system, described *supra* notes 136, 152–153 and accompanying text, even if mandated by government, would not express a value-laden conclusion about specific products. These programs simply convey data. While the initial choice of what data to convey is certainly value-laden, these systems do not include the final step of synthesizing data in a way that places products in a "good" or "bad" category.

^{188.} See supra note 134 and accompanying text.

scientific data in the context of government-dictated requirements for the National List that, themselves, reflect a series of judgments.

The histories of both the NOP and front-of-pack labeling reveal the political landmines that are unavoidable when government puts itself in the position of making these sorts of value-laden judgments. The economic stakes are high, so it is no surprise that these initiatives are the subjects of intense lobbying.

But the existence of the NOP—a program that does a great deal to protect the environment, even though it is not as rigorous as many advocates would want¹⁸⁹—is proof that advocates can muster the political will to spur the government to play this type of a role. It is conceivable that government could get involved in the labeling of "real" food in a similar way. Indeed, from 1938 until 1973, FDA required that any product that resembled a traditional food but did not comply with the standard for that food be labeled "imitation." Today, however, the "imitation" moniker is only required if the product is "nutritionally inferior" to the food it imitates¹⁹¹—an obvious embrace of nutritionism if ever there was one. Therefore, one possible form of government-filtered labeling the eat-food movement could pursue is a return to the original definition of "imitation." Yet another option would be a robust regulatory definition of the term "natural," which so far both FDA and USDA have explicitly declined to provide. 193

^{189.} See, e.g., NESTLE, WHAT TO EAT, supra note 1, at 42–45. Nestle states, "I cannot count the number of times that I have been asked whether the Certified Organic seal really means anything. It most definitely does." Id. at 42.

^{190.} See POLLAN, IN DEFENSE OF FOOD, supra note 1, at 34. The relevant statutory provision is still in place. See 21 U.S.C. § 343(c) (2006). However, the regulation has been revised. See 21 C.F.R. § 101.3(e) (2012).

^{191. 21} C.F.R. § 101.3(e)(1). However, it remains the case that the name of a food with a defined standard of identity may not be used for a product that does not conform to the standard. See 21 U.S.C. §§ 341, 343(g); see also 21 C.F.R. § 130 ("Food Standards: General"); id. § 131 ("Milk and Cream"); id. § 133 ("Cheeses and Related Cheese Products"); id. § 135 ("Frozen Desserts"); id. § 136 ("Bakery Products"); id. § 137 ("Cereal Flours and Related Products"); id. § 139 ("Macaroni and Noodle Products"); id. § 145 ("Canned Fruits"); id. § 146 ("Canned Fruit Juices"); id. § 150 ("Fruit Butters, Jellies, Preserves, and Related Products"); id. § 152 ("Fruit Pies"); id. § 155 ("Canned Vegetables"); id. § 156 ("Vegetable Juices"); id. § 158 ("Frozen Vegetables"); id. § 160 ("Eggs and Egg Products"); id. § 161 ("Fish and Shellfish"); id. § 163 ("Cacao Products"); id. § 164 ("Tree Nut and Peanut Products"); id. § 165 ("Beverages"); id. § 166 ("Margarine"); id. § 168 ("Sweeteners and Table Sirups"); id. § 169 ("Food Dressings and Flavorings").

All told, regulations regarding standards of identity consume 272 pages of the Code of Federal Regulations, demonstrating both the commitment that FDA once had to such standards (most of which are decades old) and the complexity of the task of setting such standards. FDA's website offers an account of changes in the agency's approach to setting food standards. See Food Standard Innovations: Peanut Butter's Sticky Standard, U.S. FOOD & DRUG ADMIN. (Apr. 14, 2009), http://www.fda.gov/AboutFDA/WhatWeDo/History/ProductRegulation/ucm132911.htm.

^{192.} This fact is not lost on Michael Pollan. *See* POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 34–36 (summarizing FDA's change in approach to the "imitation" label and concluding, "[n]utritionism had become the official ideology of the Food and Drug Administration; for all practical purposes the government had redefined foods as nothing more than the sum of their recognized nutrients").

^{193.} See Food Labeling: Nutrient Content Claims, General Principles, Petitions, Definition of Terms; Definitions of Nutrient Content Claims for the Fat, Fatty Acid, and Cholesterol Content of Food,

If the eat-food movement decides to seek these, or any other, government-filtered labeling schemes, it must be prepared to fight a very long fight. ¹⁹⁴ Prior to embarking on such a mobilization, movement members should think about not only the political obstacles that proponents of other types of government-filtered food labeling have faced but also the specific goals of their own movement, and whether or not a government-filtered labeling scheme, if attained, would actually serve those goals.

As I have already discussed at length, the eat-food movement is fundamentally grounded in the principle that the scientific method is not capable of illuminating the complex relationship between food and health, and that it is therefore better to avoid novel food substances altogether. ¹⁹⁵ Therefore, the movement would not want to approach processing methods and novel ingredients in the way the NOP approaches synthetic chemicals: by defaulting to prohibition but allowing use if scientists make certain determinations. ¹⁹⁶ Similarly, in a front-of-pack labeling scheme, the eat-food movement would not want a green light given to a food substance that is not "real" food, even if current science deems it to be healthful.

These goals are theoretically attainable, but achieving them would require extracting a clear and explicit mandate from Congress. For example, if the OFPA had been drafted simply to state that an organic product must have been produced and handled without the use of synthetic chemicals, ¹⁹⁷ the NOP would be much more palatable to organic purists.

Furthermore, the legislative battles required to pass (and maintain gains from) bills carry risks. Although a social movement might build the initial momentum for a bill, it does not follow that it will like the final result or that it will be able to maintain the gains it initially won. ¹⁹⁸ Moreover, even language that seems unambiguous when drafted—as the statutory language regarding "imitation" must have seemed in 1938—could be subject to varying interpretations over the years. And it is not always the case that something is

⁵⁸ Fed. Reg. 2302, 2407 (Jan. 6, 1993); Product Labeling: Use of the Voluntary Claim 'Natural' in the Labeling of Meat and Poultry Products, 74 Fed. Reg. 46,951 (Sept. 14, 2009). For more on this history, see Schneider, Reconnecting Consumers and Producers, supra note 5, at 87–91.

^{194.} The discussion of the NOP's history in Part III.B suggests the ongoing effort that is necessary if a movement is to achieve and maintain legislative and regulatory victories. *See also* POLLAN, THE OMNIVORE'S DILEMMA, *supra* note 1, at 151–58. Similarly, Marion Nestle has described at great length the decades-long battle between industry (both for conventional foods and dietary supplements), public health advocates, FDA, Congress, and the courts regarding "health claims"—claims that associate a food with the reduced risk of a disease. *See* NESTLE, FOOD POLITICS, *supra* note 1, at 239–71.

^{195.} See discussion supra Part I.

^{196.} See 7 U.S.C. § 6517(c)(1) (2006); see also supra notes 171-72 and accompanying text.

^{197.} Instead, the relevant language reads: "[t]o be sold or labeled as an organically produced agricultural product under this chapter, an agricultural product shall... have been produced and handled without the use of synthetic chemicals, *except as otherwise provided in this chapter*." 7 U.S.C. § 6504 (emphasis added). For our purposes, the relevant part of the chapter which so "otherwise provide[s]" is § 6517 (mandating creation of the National List).

^{198.} As discussed *supra* Part III.B, winning the initial legislative battle is only the beginning; laws can be changed, as indeed the governing statute for the NOP has been.

better than nothing. Watered-down labeling schemes might do more harm than good if they give consumers a misplaced sense of trust, contributing to complacency. Indeed, some argue it was a mistake for the organic movement to seek any government involvement in organic food labeling.¹⁹⁹

There are therefore many reasons the eat-food movement should be wary of government-filtered labeling, despite the considerable interest it has recently generated, including from the IOM and FDA. For the same reasons, if the eat-food movement does decide to pursue a government-filtered labeling scheme, it should give careful consideration to not only the specific legislative language it advocates but also the question of what regulatory agency should house the new labeling program. The Energy Star program, which provides government-filtered labeling for energy-efficient consumer products, administered jointly by the Federal Trade Commission (FTC), the Environmental Protection Agency, and the Department of Energy. It would be worth examining FTC's role in administering the Energy Star program and contemplating whether a similar role might be fruitful in the context of government-filtered food labeling, which FTC might administer jointly with FDA, AMS, or both. On the context of government-filtered food labeling, which FTC might administer jointly with FDA, AMS, or both.

However, while FTC's mission includes protecting consumers from deception, it also focuses on promoting business competition without unduly burdening businesses.²⁰⁴ Commentators have viewed this as a relatively probusiness mission,²⁰⁵ which is at odds with the eat-food movement's agenda. Similarly, AMS's focus on facilitating all agricultural product marketing has

the organic community made a deal they will find difficult to live with in asking the government—any agency of the government—to manage this effort. Obviously, organic advocates could have gone out and registered a trademark and could have kept organic standards pure and enforcement rigorous. The minute the government is involved, though, politics is involved.

Id.

^{199.} See, e.g., Jim Prevor, Marion Nestle on Organics, Crop Yields and Food Politics, JIM PREVOR'S PERISHABLE PUNDIT (Feb. 20, 2012), http://www.perishablepundit.com/index.php? article=2726. Prevor argues that:

^{200.} See supra notes 144–48 and accompanying text. While IOM and FDA seem interested in a nutrient-based form of government-filtered labeling that would be antithetical to the eat-food movement's goals, the fact that government-filtered FOP labeling is attracting so much attention, coupled with the continued success of the NOP, could provide a strong launching point for efforts to bring about a government-filtered labeling regime that would promote eating "real" food.

^{201.} See supra note 133 and accompanying text.

^{202.} See Minneti, supra note 10, at 1347 ("EPA and DOE are charged with developing product categories and standard criteria; FTC is charged with generating rules regarding the eco-labels.").

^{203.} FDA and FTC already share jurisdiction over certain kinds of food promotion. *See* Enforcement Policy Statement On Food Advertising, 59 Fed. Reg. 28,388 (June 1, 1994).

^{204.} See About the Federal Trade Commission, FED. TRADE COMM'N, http://www.ftc.gov/ftc/about.shtm (last visited June 13, 2012) (The agency's mission is "[t]o prevent business practices that are anticompetitive or deceptive or unfair to consumers; to enhance informed consumer choice and public understanding of the competitive process; and to accomplish this without unduly burdening legitimate business activity.").

^{205.} See, e.g., NESTLE, FOOD POLITICS, supra note 1, at 227.

often been viewed as in tension with the NOP,²⁰⁶ and the same critique would apply in this context. Indeed, even the success that the NOP has enjoyed while housed at AMS could be cause for concern—to the extent that the "organic-industrial complex"²⁰⁷ has undermined the goals of the original organic movement, one might fear a similar fate for the eat-food movement. But the tension between the eat-food movement's distrust of nutritional science and FDA's embrace of science²⁰⁸ also makes FDA a problematic potential home to a "real food" labeling program. The fact that no agency presents a good fit for such a program is itself another reason why the eat-food movement should proceed cautiously.

There are still other reasons why the eat-food movement might choose not to pursue a government-filtered labeling scheme. While this Article has focused so far mainly on the eat-food movement's philosophy as it pertains to the role of science, other elements of the movement's philosophy are in tension with the general concept of government-filtered labeling. The eat-food movement seeks to connect consumers more directly to the food they consume, ²⁰⁹ and to remove the perception that "experts" are needed to help consumers make food choices.²¹⁰ Michael Pollan urges consumers to "[s]hake the hand that feeds you"211—to leave the supermarket behind in favor of farmers' markets, community-supported agriculture programs, and eating from your own garden.²¹² He notes that food in a package is more likely to be processed than food without a package.²¹³ Government-filtered labeling assumes a package (though shelf tags or stickers for produce could also be part of the system), and it suggests the need for an expert opinion. More generally, it bears little relationship to the utopian vision of people eating from their gardens and supplementing that diet with whole foods bought from farmers with whom they are on a first-name basis.²¹⁴ While Pollan himself seems to recognize that this vision is unattainable for most—he injects a note of reality by urging consumers to escape the supermarket "whenever possible" it is worth contemplating whether the eat-food movement should focus its efforts on government-filtered labeling schemes that reinforce the distance between the consumer and her food, even if the result would be "better" food choices.

That said, the movement should not overlook the potential benefits of government-filtered labeling. Easily-understood government-filtered labeling

^{206.} See supra notes 167–169 and accompanying text.

^{207.} See supra note 184 and accompanying text.

^{208.} See supra Part I.

^{209.} See supra notes 51-53 and accompanying text.

^{210.} See supra note 48 and accompanying text.

^{211.} POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 160.

^{212.} See id. at 157-61.

^{213.} See id. at 154.

^{214.} To learn how one family lived that particular utopian vision for a year, see Barbara Kingsolver, Camille Kingsolver & Steven L. Hopp, Animal, Vegetable, Miracle: A Year of Food Life (2007).

^{215.} POLLAN, IN DEFENSE OF FOOD, supra note 1, at 157.

can cut through the confusion created by industry-generated claims 216 and promote specific eating patterns in consumers who might otherwise not have the knowledge, time, or drive to evaluate their food options carefully. 217

But in light of today's technology, government regulation may not be the only way, or even the best way, for the eat-food message to reach such consumers. The following Part explores how the eat-food movement might choose to reserve as much of the filtering role as possible to consumers and to itself in lieu of encouraging government-filtered labeling.

IV. CONSUMER FILTERING OF FOOD LABELING

There will always be vocal opposition to government imposition of values from groups that dislike the "nanny state." At the risk of gross oversimplification, I posit that the general tendency of public health movements is to work against this opposition and in favor of government action. However, even those who find across-the-board arguments for small government unpersuasive must consider whether or not government involvement will be productive in a specific situation, and, if so, what type of government involvement to seek.

This Part explores ways in which the eat-food movement could consciously limit the amount of involvement it seeks from government in promoting its agenda by pursuing a limited, disclosure-based form of government involvement that would foster what I call "consumer filtering of labeling." Of course, all consumers filter labeling information when shopping, whether consciously or unconsciously; but this Part focuses on the ways in which the eat-food movement could facilitate a much more complex and goal-specific form of filtering at the consumer level.²¹⁹

^{216.} Industry-generated claims might also be forbidden by a statute creating a government-filtered labeling scheme, though such a provision might be vulnerable to a First Amendment challenge. *See infra* note 239. But regardless of whether government-filtered labeling took place alongside industry claims or in place of industry claims, it would offer a standardized terminology for consumers to rely on. *Cf.* Rebecca Tushnet, *It Depends on What the Meaning of "False" is: Falsity and Misleadingness in Commercial Speech Doctrine*, 41 LOY. L.A. L. REV. 227, 243 (2007) (discussing the benefits of a government-standardized meaning of "organic").

^{217.} *Cf.* IOM Final Report, *supra* note 148, at 34 (finding that "actual label use is much less than what is reported," and identifying the following reasons why this might be: "lack of time . . ., difficulty with the presentation of information, and lack of understanding of food label information").

^{218.} This opposition is highly visible in the FOP labeling debate. *See, e.g.*, Lammi, *supra* note 145 ("IOM's proposal is quite a step away from current food labeling mandates, which require producers to provide factual information. The label, which is, after all privately owned property, would become a federal forum on which government can pass judgment on the product's worth.").

^{219.} There are ways in which the eat-food movement is already aiding with information filtering earlier in the process, such as third-party certification efforts like the Whole Grain Stamp, see Whole Grain Stamp, WHOLE GRAINS COUNCIL, http://wholegrainscouncil.org/whole-grain-stamp/ (last visited July 21, 2011), and the Non-GMO Project, see Non-GMO PROJECT, http://www.nongmoproject.org/ (last visited July 21, 2011). Similar efforts have proliferated within the environmental movement. See, e.g., Orts, supra note 10, at 1248–50. Such efforts are worth exploring further, though this Part focuses on filtering that occurs at the consumer level.

For example, rather than relying on government to set up a traffic light system that would differentiate between "real" food and "edible foodlike substances" in a manner that is consistent with the movement's beliefs, organizations associated with the eat-food movement²²⁰ could design a smartphone application that could scan a product's barcode and generate a green light symbol if the product meets their definition of "real" food. Consumer filtering systems of this sort are rapidly on the rise, as twenty-first-century technology allows for not only collecting tremendous amounts of information but also sorting and manipulating that data with increased ease. Indeed, consumers can already use smartphones to scan a barcode and learn about a third party's assessment of the environmental impact of a given product.²²¹ Much of the relevant infrastructure is already in place to create a similar system for food choices.²²²

But as I alluded to in Part III.B, ²²³ the mandatory elements of today's food labels do not provide all of the information one might want to make a determination of whether or not something is "real" food. It might, therefore, be fruitful for the eat-food movement to pursue additional mandatory informational labeling of a type that would aid in such determinations. It also might make sense to pursue additional means of expressing data on a food label. The limited size of a food label is presumably always a consideration when a new labeling mandate is created;²²⁴ however, data that does not fit on the label could be required to be embedded in a barcode or made available via another mechanism.

^{220.} Organizations already abound that explicitly associate their mission with Michael Pollan's call to "eat food." *See, e.g.*, WINDOWFARMS, http://www.windowfarms.org/abouttheproject (last visited July 21, 2012) (explaining that "[t]he first window farm was built in a low-light Brooklyn window after Britta Riley read Michael Pollan's New York Times Magazine article 'Why Bother?'"); MAD RIVER VALLEY LOCALVORE PROJECT, http://www.vermontlocalvore.org (last visited July 21, 2012) (quoting Michael Pollan as saying, "[d]on't eat food that won't rot"); KITCHEN GARDENERS, http://kitchengardeners.org (last visited July 21, 2012) (searching the organization's website for "Pollan" yields several results, including the organization's annual report); OCEANIC PRESERVATION SOCIETY, http://opsociety.org (last visited July 21, 2012) (quoting Pollan on its "What You Can Do As A Consumer" page, which instructs consumers to "[e]at food, not too much, mostly plants").

^{221.} The GoodGuide system provides environmental ratings for over 100,000 products; the company's mobile app allows consumers to scan barcodes with a smart phone to view GoodGuide's assessment of the product, if such an assessment exists. See GOODGUIDE, http://www.goodguide.com/about/mobile (last visited July 21, 2012); see also Robert H. Cutting et al., Spill the Beans: GoodGuide, Walmart and EPA Use Information as Efficient, Market-Based Environmental Regulation, 24 TUL. ENVTL. L.J. 291 (2011).

^{222.} A company called FoodEssentials has developed a database of food labels and has used it to create an iPhone application that can scan barcodes and create a customized output showing allergen information or other ingredient or nutrient information of interest to the consumer. See New iPhone App Allows Consumers to Scan Food Labels In-Store Avoid Allergens and Additives, PRUNDERGROUND (Apr. 12, 2010), http://www.prunderground.com/new-iphone-app-allows-consumers-to-scan-food-labels-in-store-avoid-allergens-and-additives/002635.

^{223.} See supra notes 157-163 and accompanying text.

^{224.} See, e.g., 21 C.F.R. § 101.2(f) (2012); see also NOP Final Rule, 65 Fed. Reg. 80,548, 80,587 (Dec. 21, 2000).

Part IV.A examines the information that federal law already requires on food labels, and explores types of additional information the law might require. Part IV.B then examines the pros and cons of consumer filtering of information from the point of view of the eat-food movement's goals.

A Mandatory Information and the Food Label

A considerable amount of information is currently required on the labels of packaged foods. ²²⁵ The Food, Drug, and Cosmetic Act and its implementing regulations govern most of these requirements, from stating the identity of the product ²²⁶ to declaring the net quantity of its contents. ²²⁷ An extensive regulatory scheme governs the Nutrition Facts label, ²²⁸ a feature of food labeling that, perhaps more than anything, represents the government's embrace of nutritionism, ²²⁹ and which is therefore not likely to be a source of useful information from the point of view of the eat-food movement.

However, there are other elements of the current food label that support the goals of the eat-food movement, and that could be enhanced to do so even more. Most notably, mandatory ingredient labeling provides fundamental information regarding the composition of any multi-ingredient food. ²³⁰ In most cases, the list of ingredients must include the specific name of each ingredient ²³¹ and must appear in descending order of predominance by weight. ²³² While ingredient labeling may appear straightforward, the regulations governing it suggest a long series of controversies, as demonstrated by the fact that some regulations require a high degree of specificity ²³³ while others explicitly allow for ambiguity. ²³⁴

^{225.} The labeling of unpackaged food, such as much produce and food sold in bulk, is discussed briefly *supra* note 186.

^{226.} See 21 U.S.C. §§ 343(g), 343(i)(1) (2006); 21 C.F.R. § 101.3.

^{227.} See 21 U.S.C. § 343(e)(2); 21 C.F.R. § 101.105. Other mandatory labeling is discussed *infra* this Part. Note that some food labeling requirements are triggered only in specific circumstances, such as allergen labeling, see 21 U.S.C. § 343(w), and warnings and safe handling instructions, see 21 C.F.R. § 101.17.

^{228.} See 21 U.S.C. § 343(q) and 21 C.F.R. § 101.9. FDA has also issued regulations governing voluntary nutrition labeling of raw produce and fish; the regulations specifically state that such labeling could become mandatory. See 21 C.F.R. §§ 101.42–101.45.

^{229.} Geoffrey Cannon engages in a lengthy discussion of nutrition labeling, which he critiques with regard to both the specific scientific conclusions it conveys and the broader message it sends that food is simply the sum of its chemical components. *See* Cannon, *supra* note 13, ch. 2, at 18; *see also* POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 53.

^{230.} See 21 U.S.C. § 343(i)(2); 21 C.F.R. § 101.4.

^{231.} See 21 C.F.R. § 101.4(b). One exception is that spices, natural flavors, and artificial flavors can be labeled by those collective terms, rather than with specific names. See 21 C.F.R. § 101.4(b)(1); 21 C.F.R. § 101.22(h)(1).

^{232.} See 21 C.F.R. § 101.4(a)(1). This requirement does not apply to ingredients present in amounts of 2 percent or less by weight. 21 C.F.R. § 101.4(a)(2).

^{233.} See, e.g., 21 C.F.R. § 101.4(d) (requiring that "[w]hen foods characterized on the label as 'nondairy' contain a caseinate ingredient, the caseinate ingredient shall be followed by a parenthetical statement identifying its source").

^{234.} See, e.g., 21 C.F.R. § 101.22(f) (stating that "[a] fruit or vegetable shall be exempt from compliance with the requirements of [21 U.S.C. § 343(k)] with respect to a chemical preservative

The degree to which companies may voluntarily declare additional details about their ingredients, whether on the ingredient list or elsewhere on the product label, is also an issue of much contention. For example, with respect to bioengineered food (often referred to as genetically modified food), FDA has warned against voluntary labeling statements that imply that a product is superior to other products because it does not contain bioengineered ingredients.²³⁵ Proponents of food that is not bioengineered (often called "GMO-free," meaning free from genetically modified organisms) have simultaneously sought greater leeway with respect to these types of claims and fought for mandatory labeling of bioengineered ingredients. 236 FDA's stated rationale for not mandating such labeling is that bioengineering is not, to the agency's knowledge, a "material fact." 237 The agency has characterized prolabeling comments it has received as "mainly expressions of concern about the unknown," finding them unpersuasive. 238 This history demonstrates the sorts of obstacles the eat-food movement faces in seeking more nuanced ingredient labeling requirements. It is especially critical for the movement to understand the First Amendment concerns presented by government-mandated labeling, ²³⁹ so it can frame its arguments accordingly.²⁴⁰

applied to the fruit or vegetable as a pesticide chemical prior to harvest"). See also 21 C.F.R. § 101.4(b)(4) (stating that "[m]ilk, concentrated milk, reconstituted milk, and dry whole milk may be declared as 'milk'"); similar regulations govern many other foods, see generally 21 C.F.R. § 101.4(b). See also Truth in Labeling Campaign v. Shalala, 999 F. Supp. 1289 (E.D. Mo. 1998) (upholding regulations that require monosodium glutamate to be identified on food labels only if it is added as a single ingredient).

Sometimes the issue is not general terms versus specific terms, but instead a conflict between the connotations of two different terms, such as "corn sugar" and "high fructose corn syrup." *See, e.g.*, *Sugar Farmers Amend High Fructose Corn Syrup Complaint*, Sw. Farm Press (Dec. 1, 2011), http://southwestfarmpress.com/government/sugar-farmers-amend-high-fructose-corn-syrup-complaint.

- 235. See U.S. FOOD AND DRUG ADMIN., GUIDANCE FOR INDUSTRY: VOLUNTARY LABELING INDICATING WHETHER FOODS HAVE OR HAVE NOT BEEN DEVELOPED USING BIOENGINEERING; DRAFT GUIDANCE (2001), available at http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodLabelingNutrition/ucm059098.htm [hereinafter BIOENGINEERING DRAFT GUIDANCE]. For more information on the significant controversy surrounding the labeling of such foods, see P. Byrne, Labeling of Genetically Engineered Foods, CSU EXT., http://www.ext.colostate.edu/pubs/foodnut/09371.html (last updated May 17, 2012).
- 236. See Douglas A. Kysar, Preferences For Processes: The Process/Product Distinction and the Regulation of Consumer Choice, 118 HARV. L. REV. 525, 561–62 (2004).
- 237. See BIOENGINEERING DRAFT GUIDANCE, *supra* note 235. More specifically, the agency has advanced the theory that it only has the authority to require disclosure of this sort if the label would otherwise be false or misleading under 21 U.S.C. § 343(a) or § 321(n), the latter of which states that a determination of whether or not a label is misleading must take into account "the extent to which the labeling or advertising fails to reveal facts material in the light of such representations." For a comparison between the U.S. government's approach to this issue and the approach taken in Europe and elsewhere, see Kysar, *supra* note 236, at 556–57.
 - 238. BIOENGINEERING DRAFT GUIDANCE, *supra* note 235.
- 239. At the state level, this has played out recently with respect to the labeling of milk that comes from cows not treated with rbST. See Int'l Dairy Foods Assoc. v. Boggs, 622 F.3d 628 (6th Cir. 2010); see also Tony Au, In Brief, Got (rbST-Free) Milk? The Sixth Circuit Overturns Ohio's Milk Labeling Restrictions, 38 ECOLOGY L.Q. 571 (2011).

The flip side of the First Amendment issue is that government has a limited ability to prohibit the many voluntary descriptions of ingredients or nutrients that the eat-food movement would very much

Determining what types of additional ingredient labeling requirements the eat-food movement might realistically seek would require a case-by-case assessment. In addition to raising First Amendment concerns, mandatory ingredient labeling also raises concerns about the disclosure of trade secrets—a barrier that would presumably make it impossible to require manufacturers to disclose exact recipes absent an explicit congressional directive.²⁴¹ However, this does not mean that greater specificity is not an achievable goal. Professor Kara Swanson has explored how the Pure Food and Drugs Act of 1906 and the Federal Food, Drug, and Cosmetic Act of 1938—the two landmark acts in food and drug law-significantly limited the ways in which trade secrets could be used to protect recipes and drug formulae.²⁴² Advocates for the 1906 Act in particular were motivated by concerns about "artificial foods" being foisted on an unsuspecting public (at prices that undercut the manufacturers of traditional foods).²⁴³ While Swanson emphasizes this history's relevance to today's debates about seed patenting, ²⁴⁴ it is even more directly relevant to the question of what information should be required on ingredient lists, as today's concerns about "edible foodlike substances" echo the concerns of a century ago about "artificial foods." ²⁴⁵

Even without a shift in trade secret law, there are numerous ways that today's ingredient listing requirements could be modified to advance the goals

like to see *removed* from product labeling. Michael Pollan, Marion Nestle, Michael Simon, and others have railed against labeling claims that tout the supposed health benefits of nutrients found in specific products, *see*, *e.g.*, POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 52–53, MARION NESTLE, FOOD POLITICS, *supra* note 1, at 247–71, SIMON, *supra* note 36 at 98–100, but FDA's efforts to remove some such claims from product labeling have met with a number of adverse decisions on First Amendment grounds, as Nestle has recognized, *see* MARION NESTLE, FOOD POLITICS, *supra* note 1, at 265–67. *See*, *e.g.*, Pearson v. Shalala, 164 F.3d 650, 656 (D.C. Cir. 1999); Alliance for Natural Health U.S. v. Sebelius, 714 F. Supp. 2d 48 (D.D.C. 2010). *But see* Alliance for Natural Health U.S. v. Sebelius, 786 F. Supp. 2d 1 (D.D.C. 2011). For more on the landmark case of *Pearson*, see David C. Vladeck, *Devaluing Truth: Unverified Health Claims in the Aftermath of* Pearson v. Shalala, 54 FOOD & DRUG L.J. 535 (1999).

- 240. Detailing the relevant First Amendment doctrine is beyond the scope of this Article, but there is a robust literature on this topic. For a discussion of this doctrine that specifically focuses on the FDA's labeling of food, see, for example, Kysar, *supra* note 236, at 560-62; Jamie E. Jorg Spence, *Right To Know: A Diet Of The Future Presently Upon Us*, 39 VAL. U. L. REV. 1009 (2005); Neil D. Hamilton, *Forced Feeding: New Legal Issues in the Biotechnology Policy Debate*, 17 WASH. U. J.L. & POL'Y 37, 43–45 (2005).
- 241. Currently, trade secrets are strongly protected by federal law. Exemption four of the Freedom of Information Act protects trade secrets from disclosure under that Act. See 5 U.S.C. § 552(b)(4) (2006). Government employees face personal liability if they make known trade secrets that they learned in the course of their official duties. See 18 U.S.C. § 1905. Most famously, the formula for Coca-Cola has been maintained as a trade secret for more than a century. See David S. Levine, The People's Trade Secrets?, 18 MICH. TELECOMM. & TECH. L. REV. 61, 69–70 (2011).
- 242. See Kara W. Swanson, Food and Drug Law as Intellectual Property Law: Historical Reflections, 2011 Wis. L. Rev. 331, 365 (2011).
 - 243. See id. at 358–62.
 - 244. See id. at 396.
- 245. The 1906 Act required ingredient labeling, though standardized foods were exempt. *See id.* at 365. Food labeling requirements have been updated several times since 1906, most notably with the passage of the Nutrition Labeling and Education Act of 1990, Pub. L. 101-535, 104 Stat. 2353.

of the eat-food movement. For example, given the emphasis the government itself has placed on eating whole grains, ²⁴⁶ the movement could seek a requirement that products containing a mix of whole grains and refined grains declare the percentage of each. In addition, the movement could seek mandates with respect to specific ingredients, such as a mandate that the ingredient "milk" never be listed by that general term, but instead always be listed as derived from either grain-fed cows or grass-fed cows.²⁴⁷

Other types of existing labeling requirements have received far less scrutiny than ingredient labeling but may, nonetheless, provide useful data points for the eat-food movement. Currently, packaged-food labels must state the name and place of business of the manufacturer, packer, or distributor.²⁴⁸ By itself, such information is unlikely to be very helpful to the eat-food movement, especially in light of the fact that the consumer cannot control which one of these three options will be disclosed on a particular label. This is an example in which additional details might require too much space to be mandated; but as product labels move into the digital age,²⁴⁹ additional requirements—such as disclosing the manufacturer, packer, and distributor of a food and, perhaps, providing additional details about each—might no longer seem overly burdensome. The eat-food movement might well have reason to associate certain manufacturers or distributors with the creation of "real" food (or specifically with "edible foodlike substances"), for example, based on corporate policies or information that companies choose to make publicly available about their ingredients and processing methods.²⁵⁰ It might therefore be fruitful to seek additional labeling of this sort.

Another form of product labeling many consumers are already aware of is country-of-origin labeling. USDA and U.S. Customs and Border Protection regulate country-of-origin labeling,²⁵¹ which differs from the other forms of labeling discussed in this Part in that it is, in many cases, the responsibility of

^{246.} See, e.g., DIETARY GUIDELINES FOR AMERICANS 2010, supra note 21, at 36–37.

^{247.} However, as the battle over bioengineered ingredients has shown, see supra notes 235–38 and accompanying text, this type of labeling is unlikely to be mandated unless a material difference can be shown between milk from grass-fed cows and milk from grain-fed cows. In attempting to prove this sort of "materiality," the eat-food movement could get bogged down in scientific disputes that are antithetical to the movement's philosophy. See supra Parts I and II. In deciding whether to advocate for this sort of ingredient labeling, the movement should weigh the benefits of potentially winning access to this type of information against the negative consequences of engaging in these sorts of disputes.

^{248.} See 21 U.S.C. § 343(e)(1) (2006); 21 C.F.R. § 101.5 (2012).

^{249.} The FDA Food Safety Modernization Act, signed into law on January 4, 2011, suggests a move toward increased use of digital data at the FDA, at least in specific situations. *See, e.g.*, Pub. L. No. 111-353, § 204(b)(1)(A)–(C), 124 Stat. 3885, 3930 (2011) (directing the FDA to assess product tracing technologies); *see also* § 201(b)(1)(C), 124 Stat. at 3887–88 (codified at 21 U.S.C.A. § 350d(b)(5)(B) (West 2011)) (authorizing "[t]he Secretary [to] require that registration under this section be submitted in an electronic format").

^{250.} For example, American meat producers might follow the lead of Denmark, where a second barcode has sometimes been added to packages of meat. When scanned at a kiosk, the barcode shows pictures of the farm where the meat originated, along with numerous details about how the individual animal was raised. See POLLAN, THE OMNIVORE'S DILEMMA, supra note 1, at 244.

^{251.} See 19 U.S.C. § 1304 (2006); 7 U.S.C. §§ 1638–1638d (2006).

the retailer. Thus, while the Tariff Act of 1930 has long required importers to mark their items to indicate to the "ultimate purchaser" the country of origin, ²⁵² for many years this information only reached consumers in situations where the item was sold in the form in which it arrived at the border, as with an imported bottle of olive oil. ²⁵³ Now, however, retailers such as grocery stores must provide country-of-origin information to their customers for fresh and frozen fruits and vegetables, as well as many types of meat, fish, shellfish, and nuts. ²⁵⁴ These new requirements are the result of legislation in 2002 and 2008 and implementing regulations promulgated in 2009. ²⁵⁵

Consumers are interested in country-of-origin information for a number of reasons, most of which are not related to the question of whether or not the item in question constitutes "real" food. However, to the extent that different countries have different standards that bear on issues of importance to the eatfood movement—such as New Zealand's requirement that animals be given the "opportunity to display normal patterns of behavior" or the European Union's ban on using antibiotics for growth promotion in food animals this information could be useful to promoting the movement's goals. Moreover, the eat-food movement might consider seeking additional labeling of this sort, such as labeling domestic products to indicate their state of origin, 259 embedding the

^{252.} See 19 U.S.C. § 1304; see also 19 C.F.R. § 134 (2012). This is the element of country-of-origin labeling that is regulated by Customs.

^{253.} See Geoffrey S. Becker, Cong. Research Serv., CRS Report for Congress 97-508: Country-of-Origin Labeling for Foods 1 (2008), available at http://fpc.state.gov/documents/organization/106148.pdf.

^{254.} See 7 U.S.C. §§ 1638–1638d; see also 7 C.F.R. §§ 60, 65 (2012). This is the element of country-of-origin labeling that is regulated by USDA, specifically AMS. See Country of Origin Labeling, USDA AGRIC. MKTG. SERV. http://www.ams.usda.gov/AMSv1.0/COOL (last modified Apr. 9, 2012).

^{255.} *See* Mandatory Country of Origin Labeling of Beef, Pork, Lamb, Chicken, Goat Meat, Wild and Farm-Raised Fish and Shellfish, Perishable Agricultural Commodities, Peanuts, Pecans, Ginseng, and Macadamia Nuts, 74 Fed. Reg. 2658 (Jan. 15, 2009).

^{256.} For example, country-of-origin labeling is helpful to consumers who, for environmental or other reasons, do not want to purchase food that has traveled a long distance, a concept emphasized by Michael Pollan. See POLLAN, THE OMNIVORE'S DILEMMA, *supra* note 1, at 253–60.

^{257.} Animal Welfare Act 1999 § 4(c) (N.Z.), available at http://www.legislation.govt.nz. New Zealand is a leader in pasture-based animal production; virtually all of the beef produced in New Zealand is grass-fed. See Derrick Moot, et al., Food and Agriculture Organization of the United Nations, Country Pasture/Forage Resource Profiles, New Zealand 28 (2009), available at http://www.fao.org/ag/AGP/AGPC/doc/Counprof/PDF%20files/NewZealand.pdf. The eatfood movement considers animal products from grass-fed animals to be "real" in a way that products from grain-fed animals are not, insofar as the natural diet of the animal in question is grass.

^{258.} See European Union Bans Antibiotics for Growth Promotion, UNION OF CONCERNED SCIENTISTS, http://www.ucsusa.org/food_and_agriculture/solutions/wise_antibiotics/european-union-bans.html (last modified Feb. 14, 2006).

^{259.} Information of this sort would help the consumer determine how far the food had traveled, which is relevant not only for environmental reasons, but also because many in the eat-food movement are concerned about the loss of nutrients that may occur over time. *Cf.* Pollan, *Unhappy Meals*, *supra* note 1 (describing farmer's market produce as being "picked at the peak of nutritional quality"). State-of-origin labeling could also be relevant to the eat-food movement because of the different requirements that different states have regarding how food animals are raised. This area of state law is evolving quickly. *See* Elizabeth Rumley, Staff Attorney, Nat'l Agric. Law Ctr., Legal Issues in Animal

country-of-origin information displayed by the retailer in a bar code on the product itself, or embedding such data in the labels of multi-ingredient foods to indicate the state or country of origin for each ingredient in the food.

The above types of labeling all have possible uses for the eat-food movement. To be sure, there are many situations when "real" food is easy to distinguish from "edible foodlike substances," even without any labeling. If you skip the fast-food drive-through and instead cook a meal of brown rice and vegetables at home, you can probably rest assured that you have made the right choice from the point of view of the eat-food movement.

But there are also situations when labels are very helpful in making a "real" food determination. Sometimes existing label content suffices. For example, many consumers seeking to eat "real" food know to reject the jar of peanut butter with the long ingredient list that includes partially hydrogenated oils in favor of the jar that simply lists "peanuts." ²⁶⁰

Unfortunately, many consumers with the goal of eating "real" food might lack the knowledge or time to make full use of the information that is already available on food labels. Furthermore, as suggested above, many times existing labels fail to provide all the information necessary to make an informed decision. We turn now to a brief examination of how various types of information, including information that already exists on food labels and that which might someday exist, could be filtered at the point of purchase to guide consumers who wish to purchase "real" food.

Imagine a frozen meal consisting of noodles, chicken, and vegetables. The noodles are billed as being whole wheat, and it takes a careful study of the long ingredient list to see that they in fact contain both refined wheat flour and whole-wheat flour. The order of the ingredients tells the informed and careful consumer that the whole-wheat flour predominates, but not that it does so by only a slim margin of 51 to 49 percent. The product's packaging describes it as "Made with Organic Ingredients," which many consumers will incorrectly assume means all of the ingredients are organic. ²⁶¹ In fact, only 80 percent of the ingredients are organic, and, while the chicken itself is one of them, it was raised on a diet of grain. Of the vegetables, the organic onions provide relatively little reason to celebrate, since only 1 percent of conventional onions test positive for pesticides; meanwhile, the non-organic celery would be a true cause of concern for many consumers if they were aware that researchers have

Agriculture: Medication, Identification and Accommodations, CLE Presentation at the Nat'l Agric. Law Ctr. (Nov. 11, 2010), available at http://www.nationalaglawcenter.org/assets/articles/erumley_animalag-ppt.pdf. State-of-origin labeling could create an incentive for individual states to mandate practices that more closely mimic conditions occurring in nature.

^{260.} In addition, many consumers rely on the organic label as an indicator—albeit an imperfect one—that food has been raised without the use of pesticides, which for many is a requirement for "real" food. *See* POLLAN, IN DEFENSE OF FOOD, *supra* note 1, at 169–70.

^{261.} The claim "made with organic ingredients" may be made on processed products that contain at least 70 percent organic ingredients. *See* U.S. DEPT. AGRIC., AGRICULTURAL MARKETING SERVICE ORGANIC LABELING AND MARKETING INFORMATION 1 (2008), *available at* http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELDEV3004446.

detected fifty-seven different pesticides in conventional celery.²⁶² Meanwhile, the non-organic garlic has been shipped a great distance from a country that frequently employs growing practices that the eat-food movement particularly opposes.

A second frozen meal composed of noodles, chicken, and vegetables sits beside the first. This product is labeled organic, and the only non-organic ingredient²⁶³ is onions (which, as noted above, are likely free from pesticides). The chicken was raised on an Amish farm that practices traditional farming practices, including allowing chickens to graze on grass. As above, the ingredient list describes the noodles as containing both whole-wheat flour and refined wheat flour, but here the whole wheat flour predominates by a margin of 98 percent to 2 percent; moreover, because this frozen meal was made by a company that has voluntarily disclosed all of its suppliers, it could be possible to learn that the noodles were made using traditional methods and equipment. All of the ingredients in this frozen meal come from the same region of the country, indicating that the produce did not travel far before it was frozen.²⁶⁴

A sophisticated filtering system could take all of this information into account and render a judgment as simple as a green light for the second meal and a yellow light for the first, or as complicated as a detailed chart describing every known detail about each ingredient in each product. Such a filtering system could synthesize all of the information included in the label (which might be available in digital form through an online database or because it has been embedded in a bar code), as well as publicly available information from other sources. The operation could be performed by a smartphone application²⁶⁵ or by another "reading" device. For example, the sorts of "guns" that some stores use to price-check items or to allow customers to scan their items as they shop or register for gifts could be connected to one or more eatfood filtering applications. Supermarkets might make it a selling point to have such guns available to enhance the shopping experience. Not-for-profit organizations might provide the guns for free to stores in low-income neighborhoods. Page 19 or 19

^{262.} See EWG's 2012 Shopper's Guide to Pesticides in Produce, ENVTL. WORKING GROUP, http://www.ewg.org/foodnews (last updated June 19, 2012).

^{263.} Products must contain at least 95 percent organically produced ingredients in order to bear the claim "organic." *See* U.S. DEPT. AGRIC., *supra* note 261, at 1.

^{264.} See supra note 259 and accompanying text.

^{265.} See supra notes 221–22 and accompanying text.

^{266.} Eric Goldman's "Coasean filters" would take things several steps further than any of these options by monitoring a consumer, figuring out her preferences, filtering unwanted marketing content, and soliciting wanted content. See Eric Goldman, A Coasean Analysis of Marketing, 2006 WIS. L. REV. 1151 (2006).

^{267.} Unfortunately, full-scale grocery stores are often not present in low-income neighborhoods, where convenience stores selling mainly processed food are sometimes the only place to shop for food. See SARAH TREUHAFT & ALLISON KARPYN, THE GROCERY GAP: WHO HAS ACCESS TO HEALTHY FOOD AND WHY IT MATTERS 7 (2010), available at http://www.policylink.org/atf/cf/{97C6D565-BB43-406D-A6D5-ECA3BBF35AF0}/FINALGroceryGap.pdf.

It could also make sense to explore less comprehensive filtering systems. Smart phone applications already exist to help guide seafood purchases, among other things. People within the eat-food movement could develop similar applications to address discrete elements of the movement's agenda or to provide detailed information about a fairly short list of products. Consumer filtering can also be low-tech, as with the seafood pocket guides that preceded (and continue to coexist with)²⁶⁹ the smartphone application, or the Weight Watchers slide rule that preceded the current calculator and smartphone application.²⁷⁰

Consumer filtering of labeling is a relatively untapped area; but given recent technological advancements, there is the potential for consumers to manipulate data in an unlimited number of ways, both simple and sophisticated.

B. The Eat-Food Movement's Facilitation of Consumer Filtering of Labeling

Consumer filtering of labeling is certainly not a perfect answer to the question of how best to promote the eating of "real" food. Its most notable drawback is that it requires considerable effort on the part of the consumer. Therefore, it would most likely only benefit consumers who were already sufficiently motivated to eat "real" food that they chose to use some sort of filtering mechanism with that goal in mind. Furthermore, high-tech filtering mechanisms such as those involving smartphones might not be available even to the most motivated consumers, if they lack access to the relevant technology.²⁷¹

^{268.} The long-standing Monterey Bay Aquarium Seafood Watch program now has a smartphone application for this purpose. *See Seafood Watch App for Android and iPhone*, MONTEREY BAY AQUARIUM, http://www.montereybayaquarium.org/cr/SeafoodWatch/web/sfw_iPhone.aspx (last visited June 12, 2012).

^{269.} See Select a Seafood Watch Pocket Guide, MONTEREY BAY AQUARIUM, http://www.montereybayaquarium.org/cr/cr_seafoodwatch/download.aspx (last visited June 16, 2012).

^{270.} Weight Watchers, which has had millions of members in its long history, see Weight Watchers Frequently Asked Questions, CLEVELAND CLINIC, http://www.clevelandclinic.org/healthplan/wellness_ww_faq.htm (last visited June 12, 2012), provides an excellent example of widespread consumer filtering of labels. Members enter specific data points—currently, carbohydrates, fiber, fat, and protein—into a smartphone application, a website, or a special calculator. It is only because of government requirements that consumers can depend on these data points being available. The application, website, or calculator filters the information and yields a quantity of "PointsPlus," which helps the user determine how much of the food he or she should consume. See WEIGHT WATCHERS, http://www.weightwatchers.com/plan/eat/plan.aspx (last visited June 12, 2012). In an interesting weaving of nutritionism with an eat-food sensibility, all fruits and most vegetables are valued as zero PointsPlus (i.e., all-you-can-eat), regardless of whether the relevant data points would, if entered into the calculator, yield a greater number. See Elissa Gootman, Weight Watchers Upends Its Points System, N.Y. TIMES, Dec. 4, 2010, at A1.

^{271.} A recent study by the Pew Internet Project offers insight into the smartphone-using population. The study found that 35 percent of American adults own smartphones and that smartphone adoption is particularly high among the affluent and well educated, the young, the non-white population, and the non-rural population. See AARON SMITH, PEW INTERNET PROJECT, SMARTPHONE ADOPTION AND USAGE (2011), available at http://pewinternet.org/Reports/2011/Smartphones.aspx. For one-quarter of smartphone users—often those with relatively low income levels—the smartphone was their main source of Internet access. See id.

These obstacles are not insurmountable, however. For example, grocery stores and cooperatives could utilize applications designed for consumers²⁷² to take small steps, such as using shelf tags to highlight products receiving a green light from an eat-food filtering application, or more drastic steps, like stocking only green-lighted products. This approach would go part of the way toward solving the problem of access; but, at least initially, stores that would take these steps would likely be responding to demand from a customer base that was already well informed about these issues.

Further muddying the waters is the fact that industry-filtered labeling is already on the rise and would likely further proliferate in an attempt to keep pace with movement-led filtering efforts. The most notable industry effort to date is Walmart's "Great for You" icon, introduced in February 2012, which the store places on foods that meet specific, quite stringent, criteria based on the presence of whole grains, fruits and vegetables, and lean proteins.²⁷³ Notfor-profit organizations, including those from within the eat-food movement, also have their own filtering systems, in which they place their seal on products that meet their criteria.²⁷⁴

If one of these "seal of approval" systems, be it industry-based or movement-based, were to gain widespread use and consumer confidence, consumer filtering of labeling might lose its appeal for at least some consumers. (Of course, this could be a positive result for the eat-food movement, if the popular labeling scheme fit the movement's goals.) But in the current state of affairs in which no one "seal" enjoys widespread popularity, ²⁷⁵ consumer confusion between a myriad of different labeling schemes presents an argument in favor of applications that foster consumer filtering.

One advantage of consumer filtering of labeling is that it allows the consumer to take control by choosing a filtering mechanism that fits her goals. The consumer can then use that mechanism to cut through the proliferation of labeling claims and focus only on the issues of importance to her. Indeed, even if one "seal of approval" were to eventually dominate the marketplace, there would no doubt be those who would seek an even more stringent filtering mechanism. This is another useful feature of consumer filtering of labeling: it can be changed to push the boundaries further and further toward whatever the

^{272.} Alternatively, applications could be designed specifically for use by grocery stores, distributors, or any other party in the chain of distribution, though this would no longer be considered "consumer filtering of information."

^{273.} See Nutrition Icon Criteria, WALMART, http://walmartstores.com/nutrition/greatforyou.aspx (last visited July 21, 2012); see also Stephanie Strom, Walmart to Label Healthy Foods, N.Y. TIMES, Feb. 7, 2012, http://www.nytimes.com/2012/02/08/business/walmart-to-add-great-for-you-label-to-healthy-foods.html.

^{274.} See supra note 219 and accompanying text. Such systems could be another productive way for the eat-food movement to pursue its goals. *Id.*

^{275.} For a history of similar labeling competition within the environmental movement, see Orts, *supra* note 10, at 1246–50.

goal may be, and it can be utilized by small groups of consumers as well as large groups.²⁷⁶

While consumer filtering of labeling offers the promise of product-level determinations that are in line with the philosophy of the eat-food movement, it is not clear that the approach as a whole is in line with that philosophy. As is discussed above, the movement's ideal world would not have food labels in it at all, because food would not be in packages.²⁷⁷ Furthermore, the movement's ideal is for consumers not to feel the need to consult an expert before making food purchases, presumably regardless of whether that expert is a scientist, a bureaucrat, or Michael Pollan.

That said, consumer filtering of labeling seems to offer a possible stepping-stone between the real world and this ideal world in a way that the other efforts to promote "real" food discussed in this Article do not. Properly executed, a consumer filtering application could educate as well as instruct, and could connect consumers with their food sources rather than creating additional distance. For example, a filtering application could provide both a "green light" icon and a discussion of how that icon was obtained, or a link to the website of the farm where the product in question (or some of its ingredients) originated, or a social networking element where consumers and producers could interact. Furthermore, it is an increasingly rare consumer who leaves her cell phone behind when she enters a farmers' market—in the absence of a bar code, a consumer could enter the name of a given farm into a filtering application and gain information about the farm in that way. While some would surely see this as a corruption of the "shake the hand that feeds you" philosophy, 278 others might see it as a useful augmentation.

One clear benefit of consumer filtering of labeling is its potential to enhance the usability of the labeling information that already exists, ²⁷⁹ without the need for new government action. ²⁸⁰ Furthermore, efforts to convince manufacturers to voluntarily disclose additional information, and efforts to consolidate that information, could take place without government action. But even more sophisticated filtering would be possible if, on top of these efforts, the movement successfully advocated for increased governmental requirements regarding information disclosure.

Just as the current requirements reflect a certain amount of government filtering, any new requirements would inevitably do the same. However, by focusing its efforts on facilitating filtering at the consumer level, the eat-food

^{276.} Third-party "seals" can also serve relatively small groups of people, as demonstrated perhaps most clearly by Kosher and Halal labeling.

^{277.} See supra note 213 and accompanying text.

^{278.} See supra note 211 and accompanying text.

^{279.} Existing information would need to be organized in order for such efforts to succeed; however, that organization is already underway. For example, the company FoodEssentials, discussed *supra* note 222, has the mission of making "vast amounts of food label data accessible and easily analyzable." *See* FOODESSENTIALS, http://fe2012.squarespace.com/about (last visited Jun. 12, 2012).

^{280.} The movement would, however, need to stay alert to the possibility that existing labeling requirements could be changed or could go unenforced.

movement would maintain control over the final message.²⁸¹ For example, suppose the movement successfully lobbied for a government requirement that chicken must be described as either "free-range" or "caged," but the chicken industry successfully lobbied for the term "free-range" to cover chickens that graze outdoors during the summer but are housed in cages and fed only grains during the winter. The eat-food movement could have the final word by offering a consumer-level filtering application that would only give the highest ranking to food products containing "free-range" chicken if additional information showed that the chickens had been raised in a manner more in line with the movement's ideals.

Of course, the movement would only have this "final word" in situations where consumers chose to take advantage of the filtering application. For consumers who were interested in eating chickens that were raised under conditions approximating those found in nature, but who lacked knowledge of, or access to, the application, the "free range" or "caged" designation would be the final word. It is clear from existing disputes that there would be those within the movement who would consider the existence of the new mandatory labeling scheme to be better than nothing, while others would worry that it would do more harm than good.²⁸²

Therefore, just as I have argued elsewhere in this Article with respect to other advocacy efforts that the eat-food movement might choose to pursue, the decision to pursue new types of government-mandated information disclosure should only be made after considering the potential pitfalls of government involvement in information filtering. But to the extent that the movement is successful in creating its own robust, accessible, and popular tools to facilitate consumer filtering of labeling, that success would change the equation, putting the movement in a much stronger position to empower consumers and assume control over the ultimate message.²⁸³

^{281.} The movement might nonetheless have to fight the initial fight for additional disclosure on the government's terms. *See supra* note 247 and accompanying text.

^{282.} Even if "free-range" chicken were defined in the exact way that the eat-food movement would choose, some within the broader food movement might fight against the designation on the theory that such labels encourage people to eat more meat than they otherwise would. For example, many vegan activists have expressed dissatisfaction over the voluntary "free-range" and "humanely raised" labels that already exist. See, e.g., JONATHAN SAFRAN FOER, EATING ANIMALS 157 (2009). If the terms were defined in such a way that the term "free-range" encompassed birds that were not raised to the standards of the eat-food movement, this line of argument would be strengthened. Currently, the term "free-range" is defined by USDA's FSIS as meaning "[p]roducers must demonstrate to the Agency that the poultry has been allowed access to the outside." Fact Sheet: Meat and Poultry Labeling Terms, U.S. DEP'T AGRIC., http://www.fsis.usda.gov/Factsheets/Meat_&_Poultry_Labeling_Terms/index.asp (last modified Apr. 12, 2011). As Pollan documented in tracing the path of "Rosie, the organic free-range chicken," "access to the outside" is not as high a standard as many would like to see. See POLLAN, THE OMNIVORE's DILEMMA, supra note 1, at 135, 169–73.

^{283.} Because this Article focuses on the eat-food movement's specific goals, I have not delved into the other ways that consumer filtering of labeling could be used by the broader food movement. But it is worth briefly noting that applications of the sort I describe here could be used to address many of the other topics that interest the movement, beyond the question of whether the food being consumed is "real" food. Data that is relevant to environmental concerns, labor concerns, and animal rights concerns,

CONCLUSION

This Article's conclusions are not necessarily good news for those who tend to favor government action as a tool for promoting the health of the entire public, regardless of education, income, or other factors that might create barriers to access. The first type of regulatory option this Article explored banning or setting legal limits on the use of a substance in food—would protect the entire population from the harms associated with that substance. The second option—government-filtered labeling—would provide content-rich information, presumably in a highly visible and easily understood way, to the entire population. Yet this Article argues that a third option—consumer filtering of labeling-might, in many contexts, be better for the eat-food movement to pursue, even though it presents considerably more access issues than the other two options.

This Article should not be read as arguing that consumer filtering of labeling is always the best option, even for this specific movement. There is room for the eat-food movement to try all three approaches discussed in this Article, as well as countless other approaches, ²⁸⁴ and specific issues within the eat-food movement will lend themselves more to one approach than another. Indeed, one purpose of this Article is to make the broader point that there is never a one-size-fits-all solution, and all social movements must consider how their specific goals align with the structure and philosophy of the agency or agencies from which they are considering seeking regulatory involvement.

What this means for the eat-food movement is that the movement's very specific views on the proper role of science should lead it to think twice before it seeks to put certain types of decisions in the hands of science-based agencies. Furthermore, because the eat-food movement will always have the goal of influencing individual eaters on a mouth-by-mouth basis, it makes sense for the movement to explore bold and innovative ways to interact directly with consumers. These new forms of interaction have the added benefit that, if used correctly, they can help facilitate the connections between producers and consumers that the eat-food movement prizes.

This Article begins with the premise that there exists an "eat-food movement" that is part of a larger food movement. At this moment in time, I think this is an accurate way of viewing things. ²⁸⁵ An important plank in the broader food movement's platform is the uncompromising preference for "real" food over "edible foodlike substances," regardless of what nutritional scientists might have to say. As Part I set forth, this position is grounded in the work of

to name just a few topics, could all be synthesized for the consumer in the same way. Indeed, it is easy to imagine one application attempting to weave all of these factors together, or to imagine competing applications aimed at consumers with different sets of priorities. For a discussion of food labeling that addresses environmental concerns, see Czarnezki, supra note 11, at 3.

^{284.} See supra note 67 and accompanying text. In addition to the many possible vehicles for regulatory reform and for product-specific communications to consumers, the eat-food movement could also increase its broader communication and consumer education efforts.

^{285.} See supra note 62 and accompanying text.

numerous scholars, and it carries implications for a wide range of issues. However, it strikes me that as the broader food movement matures, this plank of its platform could be in peril. The worldview that underlies the eat-food stance is not only a threat to the tremendously large and powerful processed food industry; it is also at odds with the worldview that underlies much of the U.S. government's regulation of food. Furthermore, because it is defined by its uncompromising nature—its insistence on "don't leap," which allows for so much less wiggle room than "look before you leap"—it is hard to imagine how the eat-food agenda could survive the give-and-take compromise inherent in the legislative process. "Eat food" is such an absolute position that it would be easy to let it slide from the mainstream of the broader food movement to become, instead, a fringe belief seen as largely irrelevant to discussions of policy.²⁸⁶

Perhaps these are all reasons why the eat-food movement deserves to fade away. But this fate is not inevitable. To be sure, "eat food" is a position that does not lend itself to compromise, and there are directions in which it cannot bend but can only break. However, if the eat-food movement and the broader food movement accept, and even embrace, the unique nature of the eat-food philosophy, it can remain a vibrant part of the movement.

As this Article sets forth, traditional notions of agency competencies and the benefits of government regulation do not always apply to the effort to promote the eating of "real" food. If the eat-food movement constantly embroils itself in debates over food additive petitions and GRAS status, it will lose focus on the big picture and the unique perspective that the eat-food philosophy can offer. Likewise, if the eat-food movement encourages government to take control of determining what is and is not "real" food through a program of government-filtered labeling, it runs the risk that the movement's own definition of "real" food will be lost. But if the movement focuses on innovative ways to interact directly with consumers and creates tools consumers can use to filter information for themselves, it might be able to maintain its philosophical beliefs without being relegated to the fringes. 287

^{286.} See supra note 63 and accompanying text.

^{287.} Jedediah Purdy's insights into the environmental movement suggest that the eat-food movement can not only remain a vibrant part of the broader food movement but also that it might someday shift public language enough to dislodge the interests that today seem to stand in the way of truly radical change. See Jedediah Purdy, The Politics of Nature: Climate Change, Environmental Law, and Democracy, 119 YALE L.J. 1122 (2010); see also supra note 67 and accompanying text. Purdy disputes the view of environmentalism as "defensive," "temperamentally associated with sacrifice, austerity, and guilt," and "nostalgic and ontologically naïve"—all terms that critics might level at the eat-food movement as well. Purdy, supra at 1127. He counters that "environmental public language" has instead played an active role in "the ongoing self-definition of the political community." Id. at 1129–30. This narrative is something the eat-food movement might contemplate as it shapes its own use of public language.

The eat-food movement should approach decisions about how best to promote the eating of "real" food with its eyes wide open, not only to the promise government regulation holds for advancing a public health agenda, but also to the perils that government regulation could present for its particular agenda. Today's technology can help the movement find novel solutions to this apparent bind.