

The Politics of Food Anti-Politics

Abstract: This article explores the dynamics of a discursive contest between a “Real Food” frame in which, for concerned consumers and activists, processed food is an unhealthy product of a troubled food system, and a “Real Facts” frame in which, for food science and food industry advocates, processed food is a solution to the need to provide abundant, safe, and nutritious food. The analysis focuses on two school curricula that are vying to teach children “where food comes from.” I argue that the “food” in these two curricula is not the same thing. Within the *Food, Inc.* Discussion Guide, food is

connection, responsibility, and politics. The Alliance to Feed the Future curricula respond with a strategic anti-politics of food, asserting that food can only be “what it obviously is” and framing Real Food’s challenge as scientific and technical ignorance.

Keywords: food discourse, food industry, critical nutrition, *Food, Inc.*, Alliance to Feed the Future, public understanding of science

“WATCHING MOLD GROW” IS A science experiment for first graders that requires two pieces of bread, one with and one without preservatives, two paper plates labeled “plate 1” and “plate 2,” and a spray bottle with water. The teacher puts each slice of bread into a plastic bag and onto a labeled plate, spritzes each slice with an equal amount of water, and seals the bags. The plates are moved to an out-of-the-way place in the classroom, covered with a towel, and then uncovered every several days so the students can see how the bread has changed. What do the students discover when they revisit the two slices of bread? The slice without preservatives is moldy while the other remains edible. While this could be a lesson about the dangers of processing techniques that defy nature by creating food that does not rot, it is meant instead to instill in first graders an appreciation for preservatives, in particular, and food processing in general.¹ The lesson is not, however, likely to settle the question it was designed to address: whether “processed food” is something consumers should love or loathe. This is because the debate about processed food is fractured not so much by disagreements over facts, such as whether or not preservatives retard molding in bread, but rather by disagreements about the kind of questions about food, and food processing, that matter.²

This celebration of a slice of bread that remains edible after spending days inside a moist plastic bag is a striking example of the “processed food problem” and of the contemporary politics—and anti-politics—of food. My aim is not to debate the facts or merits of food processing, any more than it is to

answer the question of whether bread that does not get moldy after three or four days in a moist plastic bag is something that should be celebrated because it reduces waste and makes food more convenient or derided as unnatural and potentially dangerous. Instead, I illuminate the dynamics of a framing contest between a “Real Food” frame in which, for concerned consumers and activists, processed food is an unhealthy product of a troubled food system, and a “Real Facts” frame in which, for food science and food industry advocates, processed food is a solution to the need to provide abundant, safe, and nutritious food.

Recent work has shown that contemporary debates about food are often shaped by striking differences in worldview (Saguy and Riley 2005; Schurman and Munro 2010; Lang and Heasman 2015). Recognizing these debates as framing contests in which incommensurate interpretations of reality compete for credibility and authority highlights the political nature of points of view about “good food” and offers useful warnings about the potential for unproductive polarization. As Abigail Saguy points out, in cases where competing claims are plausible because of empirical ambiguity or complexity, framing contests hinge on rhetorical persuasion and both sides tend to exaggerate their concerns in competition for the public’s attention, leading to the escalation of alarmist claims on both sides. Competing frames delimit the range of what becomes both reasonable and imperative for their adherents, and can make other points of view difficult or even impossible to comprehend (Saguy and Riley 2005; Saguy 2012).

While these insights and warnings certainly apply to the credibility struggle between Real Food and Real Facts, they do not adequately capture the nature of this debate, which is structured not merely by conflicting interpretations of the same reality but by differing versions of reality itself (Mol 2012; Woolgar and Lezaun 2013). Food projects are inevitably developed around assumptions—generally unexamined—about what food is (Korthals 2012). As Michiel Korthals argues, it is within and between these often hidden assumptions that politics takes place. This is not simply the result of different perceptions, but rather because ontological assumptions, or “the answer to the question of what counts as food,” lead to particular actions in the world rather than others and therefore have “wide reaching institutional and cultural implications” (ibid.: 289–90).

That what makes food “good” is cultural and contestable—and thus political—is a central tenet of Critical Nutrition Studies, a growing subfield within Food Studies that understands truths about food and health as produced at the interface of science, culture, and politics, and is particularly sensitive to the normative function of scientific discourses of “good food” (Biltekoff 2012). While informed by these insights, in the present analysis the emphasis is on what makes food “food.” My case study—an analysis of school curricula representing competing processed food frames—suggests that the question of what makes food good has to do not only with different forms of knowledge, but also with different versions of reality itself. Following Annemarie Mol’s (1999) analysis of Dutch dieting techniques, I explore the ontological politics of “good food,” shifting the focus from how different truths about food are constructed to how different versions of food are enacted.

This analysis is also meant to inquire into what Critical Nutrition Studies has to do with the food industry. I take seriously the warning that framing contests can contribute to polarization and to the disappearance of a productive middle ground within which solutions might otherwise emerge (Saguy and Riley 2005; Saguy 2012). This is a critical analysis of the way in which organizations representing food industry interests are meeting the challenge posed by activists and concerned consumers that, I hope, can contribute to more productive dialogue. As Philip Lowe and coauthors have argued, new modes of analysis—addressing both social and biological processes, and integrating social and natural science research—are clearly needed in the current context of increasing consumer opposition to “technology-driven models of food production” (Lowe, Phillipson, and Lee 2008: 226). They challenge both industry and academics to jettison the traditional approach to engaging social science in order to facilitate acceptance of products and processes, an approach which stems directly from

the discredited deficit model of the public understanding of science discussed below. Instead, they propose that innovations along the food chain be guided by an up-front understanding of the social contexts in which new technologies are “developed, taken up or contested.” The authors specifically call out problem framing—understanding how potential solutions depend on the ways in which problems are characterized—as a key justification for interdisciplinarity. I hope to have usefully extended that provocation here (ibid.: 231).

The food that is at the center of the Real Food frame both is and emerges from connections between individual eaters and their social and natural environments, as well as connections between various parts of an overall matrix that includes both social and natural worlds. Because food is understood as matter that connects, its impacts across connected systems are central to what it is; food mandates responsibility. For proponents of the Real Facts frame, on the other hand, food is a commodity that both is and can be known by its utility in meeting consumer needs for pleasure, nutrition, and convenience and—connected to this—producers’ need to remain profitable.³ Whether processing is to be celebrated or reviled has everything to do with the version of food that is at play. For Real Food proponents processing makes food less “food-like” because it distances food from the natural world and prioritizes pleasure and convenience over responsibility. For proponents of the Real Facts frame processing makes food more “food-like” because it enhances its utility as a commodity by adding nutrients, making food tastier, increasing convenience, and making food cheaper to move through the food system.

Through a discursive analysis of school curricula that represent the Real Food and Real Facts frames I show that, as its name suggests, the “Real Food” frame challenges the food industry’s authority to define what food is and brings into being a version of “food” that is distinct from the one anchoring and enacted by the “Real Facts” frame: food as politics. In response, and as *its* name suggests, the “Real Facts” frame deploys the factual authority of science to defend both the ontological singularity of “food” (that there can only be one “food”) and the version of food that animates and emerges from the industrial food system. The two frames are oriented not only around distinct versions of “food” but also “health,” and the information about both that matters. While the Real Facts frame has emerged to counter the critique levied by Real Food advocates, this case study shows the limits of its strategy, which neither accounts for nor responds to the politics of the matter. While clearly not apolitical, Real Facts is an active negation of food politics.

Framing “Food”

This contest between Real Food and Real Facts frames emerges from a confluence of social movements along with cultural and technological changes. The critical perspective on the industrial food system at the heart of Real Food is informed by environmental and food movements that have roots in 1960s counterculture (Belasco 1989; Guthman 2004; Billekoff 2013). It also has been shaped by a well-documented increase in attention to issues of risk across society since the 1990s, coupled with growing attention to food-related issues in the internet age (Beck 1992; Blue 2009). As Gwendolyn Blue points out, alongside the proliferation of food discourse on the internet, traditional media outlets have also increased their attention to food, leading to a dramatic rise in the “range of claims and counterclaims about food” and the emergence of a contemporary politics of food that “can be read as a *politics of discourse* as more and more groups have the power to set agendas, frame debates and grant voices to different concerns” (Blue 2009: 148). The Real Facts frame responds to the complex, multifaceted, and evolving challenge that the Real Food frame, and food politics in general, pose to the conventional industrial food system.

I define the Real Food and Real Facts frames around the solutions they propose, but different conceptualizations of the problem are central to the construction of these competing solution frames. The Real Food solution frame encompasses three distinct but overlapping problem frames, or ways of defining the processed food problem: “Ingredients,” “Public Health,” and “Food System.” Some Real Food proponents are primarily concerned with specific ingredients and processes, working toward changes in the food system with a focus on improving the health and safety of particular products and individual diets.⁴ Others are motivated by concerns about public health effects related to the widespread consumption of processed foods and seek to change the food system, individual behaviors, or both in order to mitigate problems such as obesity, cardiovascular disease, and diabetes (Nestle 2006, 2015; Monteiro 2009). The “Food System” problem frame encompasses the concerns that define the Ingredients and Public Health frames, but it connects those concerns to a broader critique of the values and politics of the food system. The curriculum representing the Real Food frame in this analysis, the *Food, Inc.* Discussion Guide, aligns with this “Food System” problem frame and accompanies the film *Food, Inc.* that features interviews with Michael Pollan, one of the frame’s most well-known champions (Center for Ecoliteracy 2009).

Food and agriculture industries have responded to the onslaught of criticism from Real Food proponents in at least

two distinct—and to a certain extent contradictory—ways. On the one hand, producers have responded by seeking to meet changing consumer demands, revamping formulations, product lines, and marketing to appeal to the array of concerns related to processing (Kowitz 2015; Noguchi 2015; Shemkus 2015). On the other, and in tension with these trends, the industry is waging an information and education campaign aimed at changing minds. The Real Facts solution frame seeks to stem the tide of consumer criticism of processed foods, and the very real threat of “deselection” it engenders, through education and information (Schmidt 2014). Organizations representing food industry interests such as the Grocery Manufacturers Association (GMA), the International Food Information Council (IFIC), and the Institute for Food Technologists (IFT) have all launched campaigns that respond to consumer concerns by seeking to allay and discredit them while shifting the focus to the benefits that processing provides.⁵

As part of their efforts, proponents of both frames have produced and circulated school curricula that teach students “where food comes from.” The *Food, Inc.* Discussion Guide was created to accompany the film *Food, Inc.*, which focuses on the negative environmental, health, and social impacts associated with large-scale corporate agribusiness. The film opened nationwide in June 2009 and was broadcast on PBS and released on DVD in 2010. In 2011 Participant Media, an entertainment company focused on social action content, teamed up with the Center for Ecoliteracy, known for its work integrating sustainability into school curricula, to create the *Food, Inc.* Discussion Guide for students high school-aged and older (Center for Ecoliteracy 2009; “Participant Media Teams” 2011). They distributed the 108-page, 9-chapter Discussion Guide along with free copies of the *Food, Inc.* DVD to three thousand schools nationwide. This caught the attention of the IFIC, which responded swiftly and directly by creating the Alliance to Feed the Future in order to “tell the real story of modern food production” through its own school curricula (Schmidt 2014).

The Alliance to Feed the Future is an umbrella network coordinated by IFIC to connect and strengthen efforts already underway among its members to “balance” the debate about food by bringing attention to the benefits of the industrial food system. At the time its curricula were launched, the Alliance represented roughly two hundred member groups.⁶ As Sarah Heiss points out, trade associations like IFIC and the Alliance to Feed the Future act as “discursive landscape architects,” affording the organizations they represent more “discursive resources” and thus a greater likelihood of being heard than they would have on their own (Heiss 2013: 223–24).

Representing the shared interests of its members, the Alliance set out to create educational materials that would counter the disturbing narrative being promoted by Real Food in general and by the *Food, Inc.* Discussion Guide in particular.⁷ Working with the Education Center of Greensboro, North Carolina, a producer of ready-to-use classroom materials, and with funding provided by Farm Credit, the largest agricultural lender in the United States, the Alliance launched “Lunch Box Lessons: Professor G.U. Eatwell and the Journey from Farm to Fork,” in summer 2012. The downloadable K–8 curricula included fifteen lesson plans, classroom posters, and parent take-home pages (including Spanish translation) that met Common Core standards (Alliance to Feed the Future 2012a). In November 2013 they issued another set of materials under the title “The Science of Feeding the World,” geared to both specific Common Core standards and Next Generation Science Standards (Alliance to Feed the Future 2013b).⁸ In February 2014, the CEO of IFIC noted that the first round of their educational efforts had reached 750,000 teachers and 4.5 million students (Schmidt 2014).

Only What It Obviously Is?

The *Food, Inc.* Discussion Guide and the Alliance to Feed the Future curricula are vying not only to teach U.S. schoolchildren where their food comes from but also, in so doing, to enact and stabilize distinct versions of the reality of food. In their analysis of competing versions of “bin bags” (black plastic trash bags), Steve Woolgar and Javier Lezaun point out that most recent discussions of ontological politics have located politics in “the differential enactment of distinct entities,” or ontological multiplicity, but that politics can also be found in the defense of ontological singularity (Woolgar and Lezaun 2013: 334). Following this logic, I locate politics in the Real Facts frame’s refusal to engage with the possibility that there can be more than one “food.” Instead, Real Facts asserts that food “can only be what it obviously is,” a gesture that, as Woolgar and Lezaun argue, “makes possible and goes hand and hand with, the denigration of other ‘versions’ . . . as motivated, influenced, socially informed and, in short, political” (ibid.). While Real Food produces a version of “where food comes from” that consists of connections, costs, and responsibility, Real Facts responds with a technical accounting of a production process that leads back to exactly the version of food that Real Food contests.

In the *Food, Inc.* Discussion Guide, teaching students “where food comes from” involves revealing complex social and natural relations that together constitute “food.” Chapters trace particular threads within an overall connected matrix, framing the question of where food comes from as an ethical

rather than a technical one. For example, the first chapter, “Fast Food to All,” explores the impact of consumer demand for fast food on farming practices and “the entire global food system,” using the example of poultry to trace the transition to factory farming and its effects in terms of animal welfare and corporate power (Center for Ecoliteracy 2009: 23–24). “In the Grass” focuses on the impact the demand for cheap meat has had on workers in the meatpacking industry, including lowered wages, increasing production speeds, reliance on immigrant labor, and consolidation into relatively few huge operations. The lesson focuses on a question that reflects the Real Food approach to thinking about “where our food comes from” in terms of connections and values: “When deciding what to eat, how much should we consider the workers who pick, process and transport it?” (ibid.: 58).

In this version of food, knowing where it comes from involves revealing the costs and consequences of mistaking a matrix of social and natural connections for a commodity. For example, a chapter called “Hidden Costs” explores “trade-offs” that result from prioritizing cheapness and abundance and asks students to rethink the dominant version of food by discussing questions such as “Should price be the most important force behind our food industry? Why or why not? How might our food system change if it was driven by other values, like health or environmental sustainability?” (ibid.: 66). The lesson also includes an activity that guides students to think about their own food choices in terms of connections, rather than simply nourishment, convenience, or pleasure. Using a worksheet called “The Company You Keep,” students locate themselves on a continuum between “I’ll buy what I like to eat no matter who makes it” and “I’ll only buy food from companies whose values I agree with” and then write about their position and how the film may have affected their perspective (ibid.: 68).

Where food is a matrix of connections, knowing “where food comes from” is an accessory to making choices that minimize negative impacts within the connected system, so the Discussion Guide encourages students to change the food system through both “voting with their forks” and taking political action. The Guide ends with a “Things You Can Do” handout subtitled, “You can vote to change this system. Three times a day.” The “vote with your forks” logic—which here includes actions related to what is on the fork as well as those that transcend individual choice—reflects the status of food as connection and responsibility (ibid.: 88). The fork in this “farm to fork” continuum is not just a literal tool for eating with, but also a symbolic tool for enacting food as politics.

In response, the Alliance curricula refuses to engage with the version of food that the *Food, Inc.* Discussion Guide enacts, or the possibility that there may be more than one version of

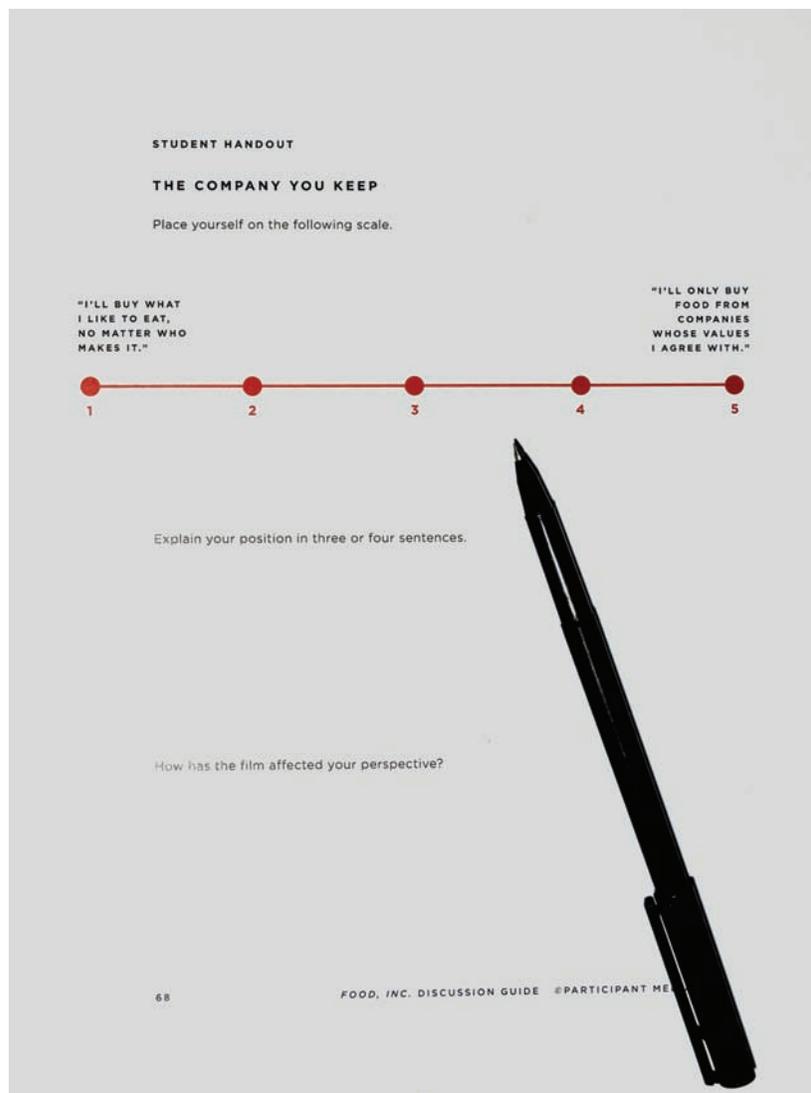


FIGURE 1: "The Company You Keep" Student Handout.

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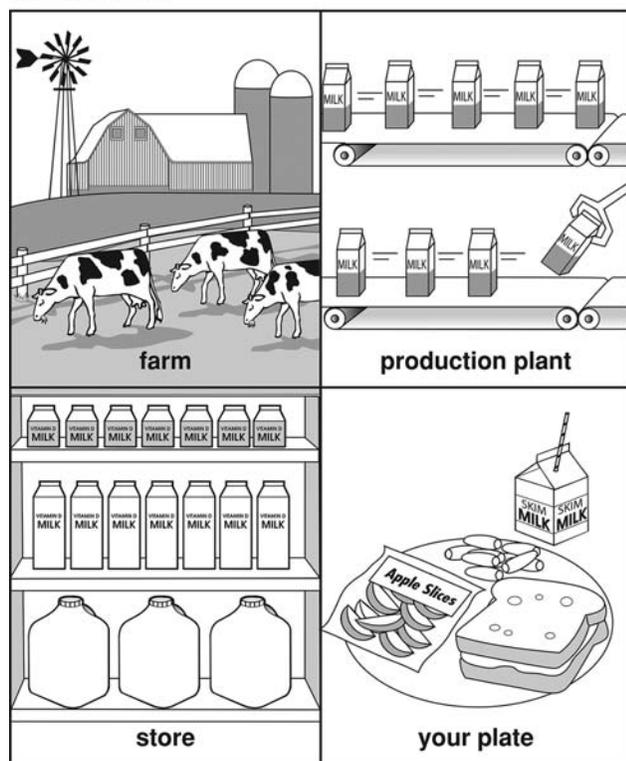
food. Instead it treats the fork as entirely literal and “the journey from farm to fork” as a technical process that can be traced, sequentially, from a farm to a fork. Sequencing exercises at every grade level reiterate that food comes from a linear process that can be broken down into simple steps that lead from agriculture, through production, to consumption. For grades K–2, for example, the teacher writes the labels “Farm,” “Production Plant,” “Store,” and “Fork” on the board, has each student choose a favorite food from a list, and then talks about what occurs at each step for the chosen foods, “driving” a sticky note with the food written on it from one step to the next.⁹ In grades 3–5 students cut out “farm to fork cards” (“farm,” “production plant,” “store,” and “your plate”), place them in order, and use their favorite foods to explain each step.¹⁰ Things get logistically

more complex in grades 6–8—students build four-sided models to represent the four phases of food production—but the basic premise that “where food comes from” can be represented as a linear production process remains.¹¹ Connections to policy, public health, animal welfare, the environment, workers, etc., disappear in this version of reality, in which food can be “only what it obviously is”: a commodity that comes from a technical, industrial process (Lee 2011; Woolgar and Lezaun 2013).

Defending Deficits

In enacting food as politics, the Real Food frame redefines the kind of knowledge that matters. While scientific knowledge about food and agriculture may govern food as a

Farm to Fork Cards



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The development of this curriculum is made possible, in part, by a grant from Farm Credit.

FIGURE 2: Grades 3–5 “All in Order” Farm to Fork Cards.

IMAGE FROM FARM TO FORK: WHERE FOOD COMES FROM BY ALLIANCE TO FEED THE FUTURE © 2012.

commodity, food as a matrix of interrelationships requires and produces different forms of expertise. This challenge to conventional modes of defining what is to be known about food is evident in the approach to teaching and learning taken by the *Food, Inc.* Discussion Guide as well as in its lessons specifically addressing information about food. The curriculum focuses on the politics of knowledge and information, encourages questions rather than answers, and challenges the primacy of scientific knowledge that pervades the Real Facts frame. In response, the Alliance curricula’s approach to both pedagogy and lessons about “information” evades and even erases politics by reframing the challenge posed by Real Food as scientific and technical ignorance.

Because in the Real Food context food is matter that connects a complex matrix of social and natural systems, the kind of knowledge that matters is contextual, having to do with the social, political, and economic dynamics of both production and consumption. The *Food, Inc.* Discussion Guide, therefore, teaches toward a wide range of humanities and social science educational standards, including English, Geography, Social Studies, and Science Studies. For example, the Guide meets

“National Geographic Standard 16: Environment and Society,” which includes ensuring that students understand “How resource development and use changes over time” and “The geographic results of policies and programs for resource use and management” (Center for Ecoliteracy 2009). It can also be used to meet standards in several areas of Social Studies, including “Individuals, Groups, and Institutions,” “Power, Authority, and Governance” and “Production, Distribution, and Consumption.” Specific Social Studies skills the lessons address include evaluating “the role of institutions in furthering both continuity and change,” and examining “persistent issues involving the rights, roles and status of the individual in relation to the general welfare” (ibid.: 13–14).

The Discussion Guide also meets standards related to science, but these too have to do with understanding science in context rather than using science as a means of understanding food. For example, it meets a National Research Council Science and Technology Standard requiring students to develop an “understanding about science and technology” and it also meets several National Council for the Social Studies standards for “Science, Technology, and Society.” These include enabling the learner to “analyze how science and technology influence the core values, beliefs and attitudes of society” and vice versa, as well as ensuring that learners can “evaluate policies that have been proposed as ways of dealing with social change resulting from new technologies, such as genetically engineered plants and animals” (ibid.: 14–15).

The *Food, Inc.* Discussion Guide also challenges the presumption that what should be known about food can be simply transferred from teachers to students. Because the kind of knowledge about food that matters has to do with understanding relationships among various social and natural systems, and because the role of this type of knowledge is to engender and inform responsibility, the curriculum approaches learning as a process of thinking through connections and considering where a student’s own actions might fit into them. Rather than acquiring knowledge that is fixed and stable, students are meant to participate in the production of knowledge that is fluid and evolving. The Guide uses the Socratic Method, which it describes as inspired by Socrates’s belief that “helping students to think was more important than filling their minds with facts, and that questions—not answers—are the driving force behind learning.” Teachers are encouraged to make it clear to students that they are not looking for particular answers, and that there are no right or wrong answers (ibid.: 16). Each chapter responds to a piece of the film with a Focus Question that introduces central issues, Deepening Questions that probe the issue more critically, and Ideas for Action that suggest activities beyond the classroom (ibid.: 10).

In addition to implicitly addressing questions about the kind of knowledge about food that matters through pedagogy, the Discussion Guide also directly takes on issues of knowledge, power, and expertise within its lessons. For example, the Guide challenges dominant frameworks for knowing and assessing food that focus on individual nutrients and their relationship to particular bodily states. The Real Food frame explicitly takes up a critique of “nutritionism,” or the dominance of nutritional means of assessing food over other possible criteria, such as production and processing quality, cultural knowledge, and the senses. As Gyorgy Scrinis argues, nutritionism’s reduction of health to a narrow relationship between specific nutrients and biomarkers benefits the food industry by lending itself toward the use of health claims for marketing processed foods (Scrinis 2013). Drawing directly on this work, Pollan popularized the critique of nutritionism in his 2008 best seller *In Defense of Food*, and coined the term “nutrition industrial complex” to capture Scrinis’s indictment of the food industry’s interest in maintaining nutritionism (Pollan 2008).

The *Food, Inc.* Discussion Guide advances this perspective by privileging contextual rather than scientific/nutritional knowledge about food, as is clear from the educational standards it teaches toward, and by downplaying the role of nutritional information in relation to health, as is evident in the approach to health discussed below.¹² The Guide also resists nutritionism through lessons geared explicitly toward pointing out the limits of available information about food, showing the ways in which nutritional information fails to adequately inform consumers about food as a connected matrix. For example, a chapter called “A Cornucopia of Choices” organized around the question “Do people have a right to know what is in their food?” emphasizes the prevalence of corn in the food system and points out that mandated food labels obscure this prevalence, rather than revealing it, because consumers do not recognize the names of many corn-based ingredients (Center for Ecoliteracy 2009: 30–37). While from a nutritional perspective the terms that corn-based ingredients go by is irrelevant (the nutrition facts remain the same regardless of what an ingredient is called), the “mislabeling” of corn-based ingredients matters for the Real Food frame because food is not simply a collection of nutrients but rather a matrix of relationships. Standard nutrition labels convey the ingredients of a nutritional commodity, but fail to provide the information that matters for food within the Real Food frame, such as the connection between corn-based ingredients and farm subsidies, monocropping, and power dynamics that privilege industry interests.

Within the *Food, Inc.* Discussion Guide ignorance about food is understood as a result of deceit and collusion within

and between industry and government regulators, and lessons encourage students to think about information as politics. Discussion questions for “A Cornucopia of Choices,” for example, include “Do you think the government and food producers have kept [the prevalence of corn in our food] a secret?” “How do you feel about ingredients being included in your diet without your knowledge?” and “Whose responsibility do you think it is to inform us about what is in our food? Is it our responsibility to find out, the producers responsibility to make it more clear, or both?” (ibid.: 34–35). A chapter called “The Veil” focuses on the question “Should a company have the power to decide what information to give consumers about the food it produces?” and screens part of the film that, as the Guide states, “portrays the industry as intentionally drawing a ‘veil’ to keep people in the dark about their food and how it is produced” (ibid.: 81).

In response to the challenge that the *Food, Inc.* Discussion Guide poses to both what food is and what is to be known about it, the Alliance to Feed the Future curricula remain firmly oriented around food as a commodity that can be known through food and agricultural sciences. The lessons are motivated by a “deficit model” of the public’s understanding of science in which the public is believed to lack the knowledge necessary to negotiate risks related to science and technology and, therefore, to be in need of expert guidance (Beck 1992; Wynne 1992; Gross 1994; Heiss 2013). Lessons presume that the public’s concerns about processed food and the food system arise not from politics—ontological or otherwise—but from ignorance that can and should be corrected through education.

The president of IFIC describes the curricula as a response to the problem that many Americans are not only separated from food production, but also “exposed to misinformation and myths about modern food and agricultural production.” The goal of the Alliance to Feed the Future, he explains, is to make “accurate and straightforward information” available to teachers, students, and parents in order to “demystify” food production (Alliance to Feed the Future 2012a). In contrast to the Discussion Guide’s pedagogy and aims, Alliance lessons are designed to transfer expert knowledge to students who are assumed to lack the information they need to behave as rational consumers in the marketplace. Lessons address Common Core Standards of Learning for Language Arts and Math as well as Next Generation Science Standards, but they all prepare students to understand, appreciate, and use processed food. A lesson oriented toward a science standard might teach students about the benefits of fortification, preservatives, concentrates, or pasteurization.¹³ Lessons geared toward language arts standards might involve writing about new ways to reach

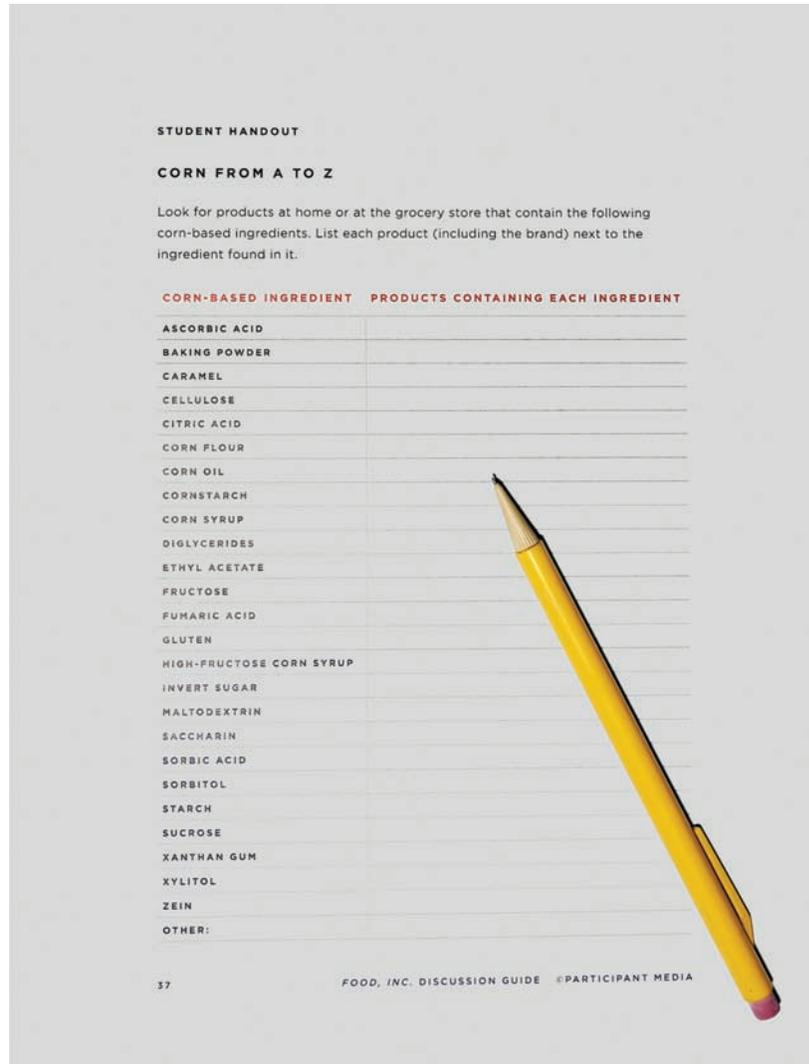


FIGURE 3: “Corn From A to Z” Student Handout.

PHOTO BY ANDREW G. BAKER © 2016.

health goals using processed foods (such as “frozen broccoli vs. fresh”), or writing step-by-step directions comparing the number of steps involved in preparing food from scratch to the number involved in using processed foods (which “offer healthful choices and are big timesavers for busy families!”).¹⁴

Mistaking disagreement for ignorance, the Alliance curricula meets the Real Food critique of nutritionism with information about nutrition (Wynne 1992). Lessons of many kinds and across every grade level emphasize the importance of learning to read, understand, and use the information on food labels to make healthy choices, privileging the kinds of information food labels provide, the kinds of products (packaged, processed) that can carry them, and an understanding of health that hinges on individual behavior. For example, in a lesson called “Read That

Label” students in grades 3–5 practice using labels from orange pineapple juice, frozen spinach, and chicken noodle soup to determine whether a food is low in fat, cholesterol, and sodium, and whether it is a good or excellent source of fiber, vitamins, calcium, and iron.¹⁵ In another lesson, students in grades 6–8 learn how to use labels to understand serving sizes through an exercise in which each member of a team pours cereal into bowls as if getting ready to eat breakfast, measures the amount in each bowl, and compares the mean, median, and mode across the bowls to the serving size suggested on the label.¹⁶

Alliance lessons also actively engage in “boundary work,” demarcating and defending the boundary between legitimate scientific knowledge about food and “misinformation” (Gieryn 1983; Heiss 2013). A unit for 6–8 graders called “Buzzwords,” for

Food Ingredient Cards		
<p>Emulsifiers—create smoothness in foods and keep ingredients from separating or crystallizing</p> <ul style="list-style-type: none"> Sorbitan monostearate, which is found in whipped topping 	<p>Stabilizers and thickeners, binders, texturizers—provide a uniform texture in food</p> <ul style="list-style-type: none"> Gelatin, which is used to thicken foods like yogurt and ice cream 	<p>Stabilizers and thickeners, binders, texturizers—provide a uniform texture in food</p> <ul style="list-style-type: none"> Pectin, which is naturally found in apples and citrus fruits. Pectin is added to some jams and jellies.
<p>Stabilizers and thickeners, binders, texturizers—provide a uniform texture in food</p> <ul style="list-style-type: none"> Guar gum, which comes from a shrub in the bean family. Guar gum can also be used as a fat replacer in reduced-fat foods. 	<p>Stabilizers and thickeners, binders, texturizers—provide a uniform texture in food</p> <ul style="list-style-type: none"> Xanthan gum, which is made by fermenting corn sugar. Xanthan gum can also be used as a fat replacer in reduced-fat foods. 	<p>Leavening agents—help baked goods rise</p> <ul style="list-style-type: none"> Sodium bicarbonate, also called baking soda
<p>Leavening agents—help baked goods rise</p> <ul style="list-style-type: none"> Calcium carbonate, which occurs naturally in rocks. Calcium carbonate also is used as an anticid. 	<p>Firming agents—keep processed fruits and vegetables crisp</p> <ul style="list-style-type: none"> Calcium chloride, which is chemically similar to table salt except it contains calcium instead of sodium 	<p>Firming agents—keep processed fruits and vegetables crisp</p> <ul style="list-style-type: none"> Calcium lactate. Calcium lactate is also used as a supplement in pill form to prevent calcium deficiency.

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The development of this curriculum is made possible, in part, by a grant from Farm Credit.

FIGURE 4: Grades 6–8 “It all Adds Up” Food Ingredient Cards.

IMAGE FROM BUZZWORDS BY ALLIANCE TO FEED THE FUTURE © 2012.

example, includes lessons that both delegitimize terms that are used to mobilize critique within Real Food and use “legitimate” information to “correct” mistrust. For example, lessons frame consumer concerns about ingredients and processes as stemming from irrational fears caused by a lack of understanding of technical terms, and seek to mitigate such concern with correct information about what the terms mean. In one lesson students learn that “every food we eat . . . is made of chemical compounds” and that the long names of ingredients on labels “that may feel unfamiliar” serve important functions. In order to better understand these ingredients and their beneficial role students play a game using twenty-seven “ingredient cards” that describe the function of ingredients such as soy lecithin, guar gum, and calcium chloride. They form groups based on the purpose of their ingredients cards, such as “create smoothness in foods and keep ingredients from separating or crystallizing” (emulsifiers), “provide texture in reduced fat foods” (fat replacers), and “keep processed fruits and vegetables crisp” (firming agents) and then make up mottos expressing the benefit of each category such as “We’re so smooth!” for the emulsifiers group.¹⁷

Another lesson in the “Buzzwords” unit called “What Does That Mean” engages in boundary work by asking students to write down what they think a list of words mean before providing the “true meaning” of each word. In some cases, terms that evoke risk (and distrust) within Real Food such as “irradiated,” “enriched,” and “fortified” are reframed in terms of their benefits. In other cases, the lesson delimits and delegitimizes terms that are used to mobilize and express critique within Real Food, such as “local,” “all natural,” and “organic.” Students learn that “local” and “all natural” are unregulated and that “organic”—a regulated production standard—probably does not mean what they think it does.¹⁸ But the contrast between the meaning given to the organic label by producers and verifiers and the one that operates among consumers (often having to do with purity and “naturalness”) is not simply the result of ignorance that can be corrected with education. As Sally Eden argues, food labels such as “organic” have the potential to act as “boundary objects,” translating or mediating between the social worlds of producers and consumers. Contrary to the deficit model, labels do not merely transfer fixed knowledge from experts to laypeople, but rather are actively made sense of by producers, regulators, retailers, and consumers in a process that “puts information to work, enabling different social worlds . . . to enact changes to food through sharing information” (Eden 2009: 192).¹⁹ Despite this, the lesson assumes a knowledge deficit, reduces labels to transferable information, and defends the legitimacy of regulated, scientific terms in contrast to those terms that, while meaningful in the context of food politics, are considered “misinformation” within Real Facts’ anti-politics.

Depoliticizing Health

The understanding of health that operates within Real Food is a politicized rebuff to the dominant medical model, in which both the problem and solutions to disease are located within individual bodies, and to the prevailing ethos of neoliberalism, in which responsibility for health is shifted to individuals, as well as to the emphasis on education that results from both (Crawford 1980). Many scholars have shown that Real Food politics often coincide with the neoliberal emphasis on personal responsibility, foregrounding lifestyle solutions to systemic problems (such as “voting with your fork”) and mobilizing the pursuit of health as a morally loaded personal responsibility (Guthman 2008; Hayes-Conroy 2010; Biltehoff 2013). However, the *Food, Inc.* Discussion Guide works against some of these tendencies by explicitly decentering the individual when it comes to health, focusing almost

Name _____ *Food production and processing, vocabulary*

What Does That Mean?

Fold the right side of your paper over to the dotted line. Consider each term listed on the left and write what you think it means. Then unfold your paper to learn the true meaning.

<p>"Local" _____ _____ _____</p> <p>"All Natural" _____ _____</p> <p>"Enriched" _____ _____</p> <p>"Organic" _____ _____</p> <p>"Irradiated" _____ _____</p> <p>"Vacuum-packed" _____ _____</p> <p>"Fortified" _____ _____</p> <p>"Pasteurized" _____ _____</p>	<p>Local This term is not defined by government regulatory agencies. Generally it describes foods grown or produced within close proximity to where they're purchased, though the actual distances vary.</p> <hr/> <p>All Natural This term is not defined by government regulatory agencies. Generally it refers to foods that contain only ingredients found in nature, though actual ingredients vary.</p> <hr/> <p>Enriched The process of restoring nutrients in foods lost during handling, processing, or storage. You'll see this term with foods like pasta and flour.</p> <hr/> <p>Organic The US Department of Agriculture defines this term as foods produced without man-made pesticides and fertilizers, antibiotics, or growth hormones. Products labeled "100% organic" or "organic" may display a USDA organic seal. Products labeled "Made with Organic Ingredients" contain at least 70 percent organic ingredients.</p> <hr/> <p>Irradiated The process of killing harmful bacteria and other organisms by exposing food to safe levels of radiation. Irradiating foods also extends shelf life and improves safety. Fruits, vegetables, meat, poultry, fish and seafood, cereals, and legumes are some of the items that can be irradiated.</p> <hr/> <p>Vacuum-packed The process of storing foods in an airless environment, such as an airtight package or bottle, to prevent the growth of microorganisms.</p> <hr/> <p>Fortified The process of adding nutrients at levels beyond those that occur naturally in a food to meet public health goals.</p> <hr/> <p>Pasteurized The process of eliminating harmful organisms by heating a food or beverage for a specified amount of time to ensure food safety.</p>
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(RI.6-8.4)

Bonus: Which of these words have you seen on food labels? Did you have a good, bad, or neutral impression of what these terms meant? Does their actual definition change your perception? How or why?

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FIGURE 5: Grades 6–8 “What Does That Mean?” Worksheet.
 PHOTO BY ANDREW G. BAKER © 2016.

exclusively on issues of access and policy. Since within the Real Food frame food is understood as emerging from and composed of connections across natural and social systems, health is understood to result from those connections rather than simply from the behavior of individuals. In response to this provocation, however, Real Facts refuses to engage with the politics of food and health, insisting instead that like food, health can only be what it obviously is: a biomedical result of how individuals choose to consume the commodity that is food.

Within the Discussion Guide health is politics; students think about where health comes from and consider the role that individuals, governments, and corporations should play in healthy eating. For example, the chapter called “The

Dollar Menu” focuses on the question, “Should access to food be a right for everyone?” It responds to a part of the film in which a family faces difficult choices in the grocery store between the expensive fresh produce they would like to buy and the less healthy foods that they can afford while still paying for the medication the father needs to treat diabetes. The lesson challenges the notion that food choices should be viewed solely as a matter of individual responsibility by tracing connections between the farm subsidy system, the cheapness of processed foods, and higher incidences of obesity and diabetes among people with lower incomes. Students discuss questions such as “How might our government be restructured to allow more access to healthier foods?” and are asked to “write a personal response to the question of whether

healthy eating should be a right, a responsibility or a privilege” (Center for Ecoliteracy 2009: 47, 50–51).

Like healthy eating, food safety also emerges from the complex dynamics of the food system rather than individual behaviors. The chapter called “Unintended Consequences” responds to a section of the film that includes an interview with the mother of a toddler who died from an *E. coli* infection after eating a contaminated hamburger. It traces links between cheap corn and rising incidences of *E. coli*, which is described as a result of high corn diets, “systemic lack of prevention strategies,” and “the fragmentation of our food safety system” (ibid.: 39–40). The lesson focuses on the question, “Who’s responsible for keeping our food safe?” Students are asked to consider how responsible for the child’s death various actors might be: the person at the restaurant who sold the hamburger, a distributor who sold the meat to the restaurant, a worker at the meatpacking plant that cut the carcass, a federal court judge who determined that the government did not have authority to shut the plant down after it failed contamination tests, or “the people who started feeding corn to cows in the first place.” Afterwards, students discuss the complex relationship between responsibility and unintended consequences by considering whether they would still be responsible if they accidentally killed someone while driving their car and were very sorry about it, and they explore the way systemic change takes place by developing an action plan for changing a rule at their school (ibid.: 42).

While clearly not apolitical, lessons in the Alliance curricula respond to this with an anti-politics of health that frames and enables health as the result of individual biology, personal responsibility, and information. In the face of Real Food’s systemic version of health and a growing consensus about the role of environmental factors in obesity, lessons teach students that they are responsible for understanding the relationship between eating and exercise in order to maintain “energy balance” (Saguy 2012). For example, students in grades 6–8 learn about the importance of balancing calories with exercise by drawing circles labeled “calories in” and “energy out,” writing the number of calories contained in favorite foods in one and the calories burned by their favorite activities in the other, and then checking to see if they have achieved “balance.”²⁰

Lessons about “balanced meals” and “sometimes foods” also evade the politics of food and health provoked by the *Food, Inc.*, Discussion Guide by teaching students that health hinges on restrained, educated choices. The role of the food industry in shaping choice, the sociopolitical contexts within which choices are made, and economic and other constraints on choice present in the Discussion Guide all disappear in

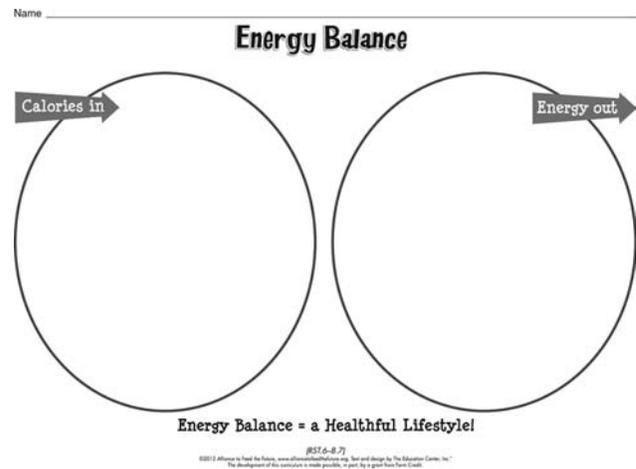


FIGURE 6: Grades 6–8 “Energy Balance” Worksheet.

IMAGE FROM ENERGY BALANCE BY ALLIANCE TO FEED THE FUTURE © 2012.

the Alliance curricula as lessons focus on teaching students to use expert advice, such as USDA’s My Plate, to choose “healthful diets.” In “Food for a Day,” for example, students learn about My Plate, use a daily food log to track their choices for a week, “chart their food choices to determine whether their diets became more healthful,” and finally “graph the number of balanced meals they ate to reflect their changed eating habits.”²¹

Lessons about “sometimes food” also conceive of health as the result of informed self-discipline rather than systemic or environmental factors. For example, K–2 students sort a variety of food cards into piles for breakfast, lunch, and dinner and learn that the ones that are left over—cookies, chips, and cake—are “sometimes” foods which are “okay to eat occasionally, after a nutritious meal.” An “Extend the Learning” option involves a discussion about “the fact that sometimes people eat snacks even if they’re not hungry” in which teachers encourage students to become “smart snackers” who “ask themselves if they are truly hungry before they reach for a ‘sometimes’ food.”²² This version of health emerges directly from the Real Facts version of food and coincides with industry interests, negating the need for regulation and evading issues such as inequality and corporate responsibility that arise from assumptions about what “food” and “health” are within Real Food (Heiss 2013).

Within the Alliance curricula, food safety is also presented as a matter of educated choice rather than politics. Food safety refers exclusively to pathogenic threats, not the economic and regulatory conditions that contribute to their proliferation and spread. In contrast to *Food, Inc.*’s investigation into the layered complexity of assigning responsibility when it comes to food safety dangers such as *E. coli*, for example, the Alliance curricula assures students that producers are doing their part and focuses on teaching them to do theirs.

Lessons teach students how to avoid food safety dangers through educated behaviors such as using a food thermometer, proper refrigeration, hand washing, cleaning surfaces, and never eating “food that doesn’t look or smell right.”²³ Addressing ignorance and irresponsibility as the cause of, and solution to, food safety problems, lessons that teach “safe handling” also seek to stabilize a distinctly anti-political version of “food,” “health,” and the information about both that matters.

After Anti-Politics?

The curricula examined here compete for the authority and credibility to shape today’s discursive politics of food, with lessons not only vying to create different kinds of consumers but also seeking to stabilize different versions of what food is. Unexamined assumptions about what food is shape every aspect of the educational experience created for students, from the kind of knowledge they are intended to gain to how they are expected to learn as well as what they are meant to think, and do, about “processed food” and the industrial food system. While the Alliance to Feed the Future curricula may fulfill the aim of “delivering information” about modern food and agricultural production, it fails—crucially—to recognize the politics that shape the kind of information about food that matters.

In revealing the ontological politics at play in this discourse—that is, both the existence of more than one version of food and the insistence on the part of Real Facts that there can be only one version—this analysis paints a somewhat grim picture of food’s discursive politics. The Alliance aims to “balance the public dialogue about food,” but the competing versions of reality I have described here hardly add up to anything that might be reasonably mistaken for “dialogue” (Alliance to Feed the Future 2011). Instead the Alliance curricula seems to seek to foreclose the possibility of dialogue. It asserts the normalcy of food as a commodity and the appropriateness of behaviors that engage with this version of food over and against the irrational behaviors of those who might engage with another, less legitimate, version (Woolgar and Lezaun 2013).

But this analysis also points toward the potential for a more productive scenario in which real dialogue might emerge from direct engagement with the kind of unexamined assumptions that are at play. What might happen if the discursive field described here allowed for the possibility that both sides were referring to different foods (ibid.)? Rather than contending with a plurality of worldviews, politics in this case would become a question of what kind of world is better, or worse, to live in (Korthals 2012; Mol

2012). Rather than a competition to define what is true about food, food discourse would address the importance of how we answer the question of what counts as food.

Food studies scholars can play a role in making this and other seemingly intractable conflicts over food more legible and thus more productive. The ethical, ecological, and safety concerns of today’s food consumers both stem from and are shaped by complex sociocultural conditions that cannot be dismissed as ignorance about the science of food and agricultural production. Rather than engaging social scientists to facilitate the acceptance of new technologies or deliver information (marketing, education) to a presumably misinformed public, food science and the food industry should look to us for agenda-shaping insights about the social and cultural worlds within which food technologies exist, from development to consumption (or rejection) (Lowe, Phillipson, and Lee 2008).

As Lowe and coauthors argue, integration between social and technical perspectives is necessary in order to align research and innovation with the “consumption-centered and socially constructed character of contemporary food chains,” avoid the partial framing of problems that are both social and technical, and establish a model of food production that, rather than being technology driven, emphasizes the social shaping of technology (ibid.: 230–31). My experiences at the intersection of food studies and the food industry—including formulating this analysis in conversation with food science and industry colleagues—suggests that there is a place for productive critique, for integrating food studies insights with food industry imperatives, and for building collaborative networks that can advance new modes of problem solving.²⁴ 

Acknowledgments

I am grateful to Sally Aaron for early conversations about this material and an inspiring collaboration across the academic/industry divide. Stephanie Maroney provided research assistance during the project’s inception. Many thanks to Julie Guthman for comments on an early draft that significantly influenced the direction of the argument. Finally, I am grateful to Lissa Caldwell and two anonymous reviewers for their generous and extremely helpful feedback. Remaining errors and omissions are my own.

NOTES

1. Alliance to Feed the Future (2013a), “Watching Mold Grow,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/Watching%20Mold%20Grow%20G1.pdf.
2. Joan Dye Gussow (1980) addressed similar issues over thirty-five years ago in her 1980 Presidential Address to the Society for Nutrition Education.

3. Commodity fetishism has been richly theorized and debated in agri-food studies; see for example Goodman 2001; Goodman and DuPuis 2002; Guthman 2002; Hartwick 2000.

4. Vani Hari, a.k.a. The Food Babe, is perhaps the quintessential example of this kind of Real Food proponent. Vani Hari, “Food Babe,” <http://foodbabe.com/>; Yvette D’entremont, “The ‘Food Babe’ Blogger Is Full of Shit,” 2015, <http://gawker.com/the-food-babe-blogger-is-full-of-shit-1694902226>; Yvette D’entremont, “Vani Hari: An Unhealthy Addition,” *SciBabe.com*, March 16, 2015, www.scibabe.com/addiction/.

5. See, for example, GMA’s campaigns “The Facts about GMOs” (<http://factsaboutgmofacts.org/>), IFT’s Future Food 2050 (<http://futurefood2050.com/about/>) and its World Without Food Science Campaign (www.ift.org/knowledge-center/learn-about-food-science/world-without-food-science.aspx), and IFIC’s FACTS (Food Advocates Communicating Through Science) campaign (www.foodinsight.org/facts/about). I focus here on the informational campaign, but there is also a very important policy advocacy/lobbying aspect to these organizations. GMA, for example, has long been involved in lobbying around food and agriculture policy, trade, health care, and labor issues. Recent efforts have focused on preventing mandatory GMO labeling and influencing the Dietary Guidelines for Americans (Hauter 2012: 212; “GMA: Issues and Policy,” www.gmaonline.org/issues-policy/).

6. Members include commodity and trade groups (such as the American Frozen Food Institute), advocacy groups (such as the Council for Biotechnology Information), professional organizations (such as American Agri-Women), and academic organizations (such as departments of Food Science and Colleges of Agriculture). I serve on the Executive Committee of one of its members, the Robert Mondavi Institute of Wine and Food Science, but only became aware of the membership through conducting this research. Alliance to Feed the Future, “About the Alliance,” www.alliancetofeedthefuture.org/about.

7. In his February 2014 address to the annual Food Processing Expo, David Schmidt, CEO of IFIC, explained that the decision to form the Alliance to Feed the Future and produce educational curricula was a response to *Food, Inc.* putting together a curriculum to further communicate the “very misleading perceptions of food and agriculture” in the film (Schmidt 2014).

8. The press release describes Next Generation Science Standards as “a state-led process managed by Achieve in partnership with the National Science Teachers Association (NSTA).”

9. Alliance to Feed the Future (2012b), “Grades K–2: Farm to Fork: Where Food Comes From,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/1K-2%20Farm%20to%20Fork-a.pdf.

10. Ibid., “Grades 3–5: Farm to Fork: Where Food Comes From,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/1G3-5%20Farm%20to%20Fork-a.pdf.

11. Ibid., “Grades 6–8: Farm to Fork,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/Farm%20to%20fork%20model%206-8.pdf.

12. That’s not to say that the Real Food frame does not, at times, explicitly take up nutritional knowledge as a means of knowing “good food.”

13. Alliance to Feed the Future (2013a): “Watching Mold Grow,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/Watching%20Mold%20Grow%20G1.pdf; “Fortified for Health,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/Fortified%20for%20Health%20G3.pdf; and “Mapping Meals,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/Mapping%20Meals-Grade%205.pdf.

14. Alliance to Feed the Future (2012b): “Grades 3–5: Making a Family Commitment to Healthful Living,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/

[5G3-5%20Healthy%20Living-e.pdf](http://www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/3G3-5%20Processed%20Foods-a.pdf); and “Grades 3–5: What Are Processed Foods?” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/3G3-5%20Processed%20Foods-a.pdf.

15. Ibid., “Read That Label!” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/5G3-5%20Healthy%20Living-b.pdf.

16. Ibid., “Grades 6–8: Reading Food Labels,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/Food%20Labels-Same%20or%20not%206-8.pdf.

17. Ibid., “Grades 6–8: Buzzwords,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/3G6-8%20Buzzwords-c.pdf.

18. Ibid., “What Does That Mean?” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/3G6-8%20Buzzwords-b.pdf.

19. For a different take on the meaning and political economy of “organic,” see Julie Guthman’s work, such as Guthman 2003.

20. Alliance to Feed the Future (2012b), “Grades 6–8: Energy Balance,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/4G6-8%20Energy%20Balance-a.pdf.

21. Ibid., “Grades 3–5: Making a Family Commitment to Healthful Living,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/5G3-5%20Healthy%20Living-d.pdf.

22. Ibid., “Grades K–2: Healthful Living,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/Healthful%20Living-Which%20meal%20K2.pdf.

23. Ibid., “Grades 6–8: Food Safety,” www.alliancetofeedthefuture.org/sites/alliancetofeedthefuture.org/files/5G6-8%20Food%20Safety-b.pdf.

24. The questions and arguments that drive this essay and the larger project of which it is a part have been shaped by ongoing dialogue with food and agricultural scientists and people working across the fraught landscape of today’s food industry. Versions of this paper have been presented at several industry conferences, including two collaborative presentations with a colleague who was struggling with exactly these issues in her day-to-day work at a company seeking to straddle the polarized positions I describe here. I arrive at this experience through a unique institutional arrangement, as a food studies scholar with a 50 percent faculty appointment in a Department of Food Science and Technology. This project—and my broader interest in the potential for an industry-facing food studies—emerges directly from the challenges and opportunities that this arrangement presents.

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