Loco Labels and Marketing Madness: Improving How Consumers Interpret Information in the American Food Economy

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Don’t you hate that dragging feeling at the end of a long workday – tired, hungry, drained, and wishing for a four-star dinner that won’t make you feel guilty? One night, knowing I would not be eating that dinner, I settled on a quick trip to the grocery for at least a nutritious and eco-friendly meal. I scanned the aisles looking for a decent dinner that could be made quickly at home. In less than 10 minutes I was in line and feeling great because my basket was laden with prudent purchases – not only for me physically, but also for the environment. In my basket: Kashi pesto pasta (it said “all natural” and had healthy whole grain goodness), organic salad greens (even though in a cello bag, the no pesticides claim made me feel good), light dressing (low fat, of course), organic fat free milk (enough said), and some Late July dark chocolate cookies (at least they were organic!). While I thought I could have had a bit less processed food, at least the choices were responsible – claims of whole grains, all natural, and pesticide free abounded.

As I waited in the checkout, I smugly surveyed the basket of the man in front of me. Mr. Conventional, I decided to call him – he was clearly old school. He had canned soup – “steak and potato” variety, (“people really eat that?” I thought), some bagged iceberg salad (isn’t that just water?), Greek salad dressing (did he know how much fat that had?), store brand whole milk (ditto), and Oreos (ok, I love Oreos). What a nutritional nightmare, I thought to myself (feeling even better about my healthy choices).

When I got home, my husband commented that he hoped I had picked up something good for my late dinner. Well, I launched into my healthy choice speech – organics, whole grains, pesticide free, antibiotic free! I even recounted my observations about Mr. Conventional. My husband, who is the pragmatist in the marriage, eyed me (and my receipt for $19.95) skeptically. “How do you know you made out so much better?” he asked (I think he was feeling defensive). I quickly pointed out the labels – whole grains! Antibiotic free! Low fat! He just laughed and said something about me being “a marketing department’s dream.”

As a wife (and a lawyer), I prefer not to be wrong. While microwaving the pasta, I set about proving to my husband that I had not succumbed to mere marketing madness – or crazy labeling schemes. And wouldn’t you know? There wasn’t much difference between Mr. Conventional and me. My purchases cost $19.95. And, if I ate only the serving size, I would consume 605 calories, 1545 mg sodium, 19.5 g fat, and 32 g sugar. Mr. Conventional? He paid $13.17. Assuming he ate only the serving sizes, he would

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1 See Appendix A for a breakdown of the cost and nutritional information for the purchases.
consume 625 calories, 1465 mg sodium, 32.5 g fat, 34 g sugar. Not much difference – except his wallet was in slightly better shape.

These numbers did not stack up in my favor. Sure, I had fewer fat calories and overall calories, but not by much! I spent more – but, for what? Deflated about my feel-good grocery store trip, I started thinking like a lawyer about my purchases. What shaped my perceptions? What food information did I really know? What laws regulated this information? And, how about Mr. Conventional? How did he make his choices? Could we both have made better choices if we had more information?

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I. Introduction – Why Care about Food Labels?

Most Westerners eat primarily processed foods. Since processed food manufacturers prepare much of what America eats, consumers rely on labels to determine what they are eating. These labels’ purpose is three-fold: 1) providing health, safety, and economic information; 2) protecting consumers from deceptive or fraudulent marketing; and 3) promoting fair economic competition and marketing. America’s obesity epidemic, which continues to grow, signals lawmakers, manufacturers, and consumers that America is making poor dietary choices – even though labels provide nutritional information.

To improve the food economy’s efficiency, and with it public and environmental health, lawmakers, with the support of manufacturers and consumers, should make two principal changes to current labeling policies. The Federal government should: 1) adopt front of package, simplified nutrient labeling clearly cuing consumers about a products’ healthfulness or lack thereof and 2) make greater use of marketing logos, such as USDA

Organic, to disclose product production methods, especially when the food has special attributes – such as no genetically engineered ingredients. Taking these steps provides consumers with more information and with more information consumers will make more informed purchases. As a result, manufacturers can make products that consumers demand, rather than developing products and generating demand through marketing. The continuation of poor consumer choices results in an inefficient food economy that promotes consumption, regardless of health consequences.

The Food and Drug Administration (FDA) controls the most meaningful food label and marketing information for average consumers. As in many areas, the government is the initial information broker – meaning it mandates what labels must disclose to consumers and how that disclosure takes place, as well as prohibiting certain disclosures or claims. In this way, the government interferes with what would otherwise be a free market. Of course, there are compelling reasons for this – public health, safety, and moral concerns.

However, the danger is that if the regulated information balance is not properly calibrated, “the information problem can either cause an entire market to collapse or

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5 See e.g. GEORGE J. BENSTON, REGULATING FINANCIAL MARKETS (1999)(critiquing heavily regulated financial services market and making proposals for more consumer friendly, less costly reforms).

6 See Golan supra note 2, at 1 (“In recent years, government intervention in labeling has begun to target a new purpose, namely, influencing individual consumption choices to align them with social objectives.”); Andrew Starbird, Moral Hazard, Inspection Policy, and Food Safety, 87 AM. J. OF AG. ECON. 15, 16 (2005)(noting that imperfect information leads to less food safety).
contract it into an adverse selection of low-quality products. Economists call this phenomenon “asymmetric information.” This article argues that our current food economy’s law and policies have developed significant portions of the food economy where there is “an adverse selection of low-quality products” – at least from public health and consumer choice perspectives.

\[ \text{a. The Label Playing Field} \]

Food consumers navigate a complicated and highly regulated world of food labeling and marketing. Law shapes not only the information on packaging but also how manufacturers formulate the food within the package. Three key agencies play central roles in administering U.S. laws for labels and marketing: the Food and Drug Administration, the United States Department of Agriculture, and the Federal Trade Commission.

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8 “Asymmetric information” is a theory that explains market place behavior. In 2001, three economists won the Nobel Prize for their work in this area: George Akerlof, Michael Spence and Joseph Stiglitz. The three’s prize-winning work: “extended the theory when they augmented the theory with the realistic assumption of asymmetric information: agents on one side of the market have much better information than those on the other side. Borrowers know more than the lender about their repayment prospects; the seller knows more than buyers about the quality of his car; the CEO and the board know more than the shareholders about the profitability of the firm; policyholders know more than the insurance company about their accident risk; and tenants know more than the landowner about their work effort and harvesting conditions. More specifically, Akerlof showed that informational asymmetries can give rise to adverse selection on markets. Due to imperfect information on the part of lenders or prospective car buyers, borrowers with weak repayment prospects or sellers of low-quality cars crowd out everyone else from the market. Spence demonstrated that under certain conditions, well-informed agents can improve their market outcome by signaling their private information to poorly informed agents. The management of a firm can thus incur the additional tax cost of dividends to signal high profitability. Stiglitz showed that an uninformed agent can sometimes capture the information of a better-informed agent through screening, for example by providing choices from a menu of contracts for a particular transaction. Insurance companies are thus able to divide their clients into risk classes by offering different policies, where lower premiums can be exchanged for a higher deductible.” See http://nobelprize.org/nobel_prizes/economics/laureates/2001/public.html (providing additional summaries of Akerlof, Spence, and Stiglitz’s work with citation to their major publications).

9 See NESTLE, supra note 1, at 19-20 (discussing ways in which current food economy encourages purchasing of processed foods).

10 This article focuses on the FDA’s authority under the Food, Drug, and Cosmetics Act, 21 U.S.C. § 301 (2006).
Commission. Once government interferes with a consumer market, no matter how legitimate that interference may be, it has an ongoing obligation to stay attuned to science, public health trends, and consumer preferences as they change over time. When government fails to do this, markets become increasingly inefficient and ultimately, unhealthy (economically and socially).

Since the inception of food labeling, the FDA has set some of the best standards in the world for label disclosure of sodium, sugars, and fats. In America, manufacturers must provide food content information primarily on the “nutrition information” panel of the package. The FDA also allows nutritional claims intended to convince the consumer a particular product is healthful. Examples of these claims include “low fat”, “low sodium”, “reduces cholesterol”, and “lite.”

Why the need to reconsider labels? Despite having some of the best nutritional information on labels in the world, America’s obesity, diabetes, metabolic syndrome, and heart disease rates have skyrocketed. This phenomenon indicates that the American food economy’s regulatory underpinnings are promoting an information imbalance with negative consequences for public health.

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18 There are many other examples that are beyond the scope of this article. One of the most obvious indications that there are serious market problems is the current world food crisis. One can only imagine
The FDA and USDA are easy targets to blame for America’s diet going awry – they have a history of yielding to industry lobbying and regulating in ways perceived to promote the processed food industry. However, it is the consumer who chooses what to buy. Yet, is it fair to blame consumers for poor choices when there is an argument they are acting on imperfect information about our food? The current regulatory scheme creates labels that emphasize the positives where possible, yet are nearly silent about the negatives. This scheme, of course, makes sense given our capitalist emphasis on consumption – and the marketing required to insure goods are consumed.

However, food is not simply a commodity – a good to be manufactured and sold. Science has undeniably linked the quality of human diet to human health. Additionally, while skeptics remain, science has linked our agricultural practices to the quality of our environment. As a result, the balance of information provided on food must strive for

whether the crisis could have been avoided if people better understood the national and global food economy. See generally PATEL, supra note 1.

19 See PATEL, supra note 1, at 108 – 117 (“if we look at the sums donated in the US political system…we see that the top four companies in many sectors of the food system are responsible for more than half the political contributions”); MICHÉLE SIMON, APPETITE FOR PROFIT 143, 154-156 (2006) (“…when it comes to solving the nation’s epidemic of diet-related diseases, Uncle Sam is more aligned with Big Food than with the citizen’s it’s supposed to represent.”)

20 SIMON, Id. at 22 (2006) (when discussing the problem food manufacturers have in acknowledging the rates of diabetes, heart disease, and other diet related health problems Simon notes: “So, many food corporations, trade associations, and industry front groups are adopting an intermediary approach: admitting there’s a problem but laying the blame elsewhere – with the individual. Call it the ‘personal responsibility’ strategy. The line of reasoning goes like this: it’s up to each individual to make ‘better’ choices at supermarkets and restaurants…[c]onsumers who are having difficulty figuring out the ‘right’ options for healthier living are simply in need of ‘better education’ – which food manufacturers and PR mavens are happy to supply, but of course only in the most corporate friendly ways.)

21 That is not to say that capitalism cannot successfully address environmental or health issues. See generally GARY HIRSHBERG, STIRRING IT UP (2008).

22 See supra note 1. The sources cited therein discuss the relationship between human health and diet.

23 See Donald T. Hornstein, The Road Also Taken: Lessons from Organic Agriculture for Market-and Risk-Based Regulation, 56 DUKE L.J. 1541, 1546-47 (2007) (when analyzing the “emergence of a cause-based approach to environmental reform that seeks fundamental changes in production systems or human behavior to prevent environmental harms from arising in the first place” Hornstein draws on Rachel Carson’s SILENT SPRING 278 (40th Anniv. Ed. 2004) which urged farmers and others to forgo the arrogance of controlling nature in favor of agriculture that is “based on understanding of the living organisms [farmers] seek to control, and of the whole fabric of life to which these organisms belong.”)
perfecting the label information that consumers rely upon when purchasing food, especially processed food.

\textit{b. Informing Labels: Science and Marketing}

This article uses two examples of the ongoing struggle to find the proper balance between government regulation, reliable science, and consumers’ demand for information. The examples – the long-drawn out debate over salt’s designation as a “safe” food additive and tension over the National Organic Program – illustrate that the balance of information and regulation is not yet optimal. Science and public health play key roles in policy review and form the foundation of label policy. Government must also consider that other emerging consumer concerns beyond food safety such as environmental impact, animal welfare, and social justice for workers and the poor are playing increasingly important roles in food labeling policy making.\textsuperscript{24}

A label’s front panel is prime real estate – the place to grab the consumer. Government and the market can achieve a better information balance by providing more “perfect” label information – especially on the front panel. To better optimize food label regulations, the FDA could follow the United Kingdom’s lead and implement “negative labels” – flagging foods high in salt, sugar, and/or fat with amber or red light symbols. In a similar vein, the FDA and USDA could be more transparent about the processes underlying special label designations such as “USDA Organic.”

\textsuperscript{24} See Douglas A. Kysar, \textit{Preferences for Processes: The Process/Product Distinction and the Regulation of Consumer Choice}, 118 Harv. L. Rev. 525, 534 (2004) (noting that “process preferences can be expected to capture the displaced moral and political sentiments of individuals who have been encouraged to regard the market as a more sure route to self-expression and efficacious activity than traditional public channels.”); see generally PATEL, supra note 1.
Consumers make their food choices in the grocery store. The store also plays a role in shaping purchasing decisions. By focusing on this, stakeholders should also consider marketplace innovation that operates without regulation to promote more informed food purchases. Innovation includes the grocery industry taking matters into their own hands – as one has already done by providing supplemental food information on the grocery shelves to provide “negative” information to the consumer.25 This approach could expand to redesign of grocery stores around health, rather than food category. For example, grocery stores could design “green light” aisles populated with minimally processed foods, or those low in sugar, salt and fat. However, to innovate, stakeholders also need to understand where our labeling policies can be improved. This article offers two instructive examples and then makes recommendations about learning from those experiences.

Part I examines recent FDA public hearing proceedings on salt. Following petitions for reviewing salt’s designation as “generally regarded as safe” under the Food, Drug, and Cosmetics Act, the FDA held public hearings to review its salt policy. This example illustrates how complicated regulating one food additive can be – and how the FDA’s slow response to issues like it show the need for America to take a fresh look at communicating information about processed food ingredients to consumers.

Part II examines how the National Organic Program (NOP) uses niche marketing to help consumers find foods produced without antibiotics or pesticides. However, NOP also illustrates consumer confusion in the marketplace. For example, many average consumers do not know that organic cookies contain some of the same ingredients as

conventional cookies. While NOP is an innovative program that promotes an agriculture system that many view as sustainable and healthful, critics claim NOP erodes “true” organics. Most importantly, NOP does illustrate an innovative way of providing better information to consumers. However, the USDA must work harder to educate consumers about the true meaning of its organic marketing seal.

Part III makes suggestions for innovative, effective labeling schemes that will promote more efficient food markets. If consumers want to eat “healthy” and “natural” foods, our regulatory system should allow for that. Similarly, if consumers prefer to rely on taste preferences alone, labels should allow for that, but with fuller disclosure of the negative health (personal, public, and environmental) consequences of that decision.

I. Salt

…in all ages salt has been invested with a significance far exceeding that inherent in its natural properties, interesting and important as these are. Homer calls it a divine substance, Plato describes it as especially dear to the Gods, and we shall presently note the importance attached to it in religious ceremonies, covenants and magical charms. That this should have been so in all parts of the world and in all times shows that we are dealing with a general human tendency and not with any local custom, circumstance or notion.  

Given this grand description of salt, what should we make of the fact that Mr. Conventional’s soup contains 41% of the recommended daily allowance of sodium – a whopping 82% if he consumes the entire can? Should consumers be concerned that the FDA recently held a public hearing to revisit its sodium policy? The hearing, called in response to a petition to review salt’s designation as “generally regarded as safe” (GRAS)

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classification under the Food, Drug, and Cosmetics Act, is an important chapter in the American story of food labeling.

Salt serves as a prominent example of how the current regulatory system conditions consumers to look for signals that a product is “healthy” and the consumer should buy it. However, what we really need is a more balanced system that allows consumers to make a decision not to purchase, as easily as to purchase. While this may seem antithetical to the modern American food economy (and it probably is) – only with full disclosure of a product’s attributes can we hope to have a food economy that functions efficiently by prompting informed purchases.

a. Is salt safe?

29 21 U.S.C. § 348, 21 U.S.C. § 321. When a substance is classified as GRAS under the FDCA, it can be added to foods without pre-market review. The law defines "food additive" as "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 (including any substance intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food; and including any source of radiation intended for any such use), 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 the enactment of this paragraph 4 pursuant to this Act [enacted Sept. 6, 1958], the Poultry Products Inspection Act (21 U.S.C. 451 and the following) or the Meat Inspection Act of March 4, 1907 (34 Stat. 1260), as amended and extended (21 U.S.C. 71 and the following);
(5) a new animal drug; or
(6) an ingredient described in paragraph (ff) in, or intended for use in, a dietary supplement.”
21 U.S.C. 321 (s).

30 Certainly, the purpose of the FDCA, supra note 4, provides a touchstone for the FDA to revisit issues such as salt if public health data can support the Secretary’s determination that consumers are not getting “fair” information about a product’s attributes. Individual manufacturers may not be at fault in terms of providing “unfair” information – it may be that consumption patterns (as discussed by journalists such as POLLAN and experts such as NESTLE, supra, note 1) change in a way that makes a GRAS designation unwise.
Many scientists agree that excessive salt consumption has dire health consequences for most humans, yet law classifies salt as “safe.” At odds with the GRAS classification is the FDA’s permission to manufacturers to market foods with health claims such as “low sodium” or “sodium free.” Specifically, while consumers who seek low sodium products may find them, others of us assume that sodium is “safe.”

In modern times, public health experts increasingly blame salt (sodium chloride) for worldwide increased risk for heart disease and stroke. In the United States, the American Medical Association sounded the regulatory alarm in 2006, when it suggested that the FDA remove salt’s GRAS classification. However, this recent spate of attention is only the latest chapter in the effort to regulate salt in processed foods. Health and consumer activists’ demands for closer sodium regulation, while ongoing for 30 years, have largely failed. This failure illustrates that, despite a legal process to review safety of GRAS substances, government has not kept up with the science showing excess dietary sodium is detrimental to human health.

b. Regulatory History 1958-2006


32 An analysis of GRAS classification is beyond the scope of this article. For the reader unfamiliar with GRAS standards, it is essential to understand that it means either: 1) “the scientific data and information about the use of a substance must be widely known and there must be a consensus among qualified experts that those data and information establish that the substance is safe under the conditions of its intended use. GRAS determinations made in this manner are said to be made through scientific procedures” or 2) “For a substance used in food before 1958, a GRAS determination can be made through experience based on common use in food. It should be noted that determinations based on common use in food require a substantial history of consumption in food by a significant number of consumers (21 CFR 170.30(c) and 170.3(f))”

33 FDA Specific Requirements for Nutrient Content Claims, supra note 16.

34 WHO Sodium Report, supra note 31, at 21- 22.

35 72 F.R. 59,973, 76 (Noting that at its July 2006 annual meeting the American Medical Association issued a report seeking to remove salts’ GRAS designation).
Salt’s modern regulatory history commences in 1958, when the Food Additives Amendment of 1958 \(^{36}\) “grandfathered” salt as a substance “generally regarded as safe.” This means that rather than regulation as a “food additive” requiring pre-market clearance procedures, manufacturers are free to add salt to their products. \(^{37}\) In 1969, the FDA began its review of all GRAS substances, including salt. \(^{38}\) The FDA contracted with the Federation of American Societies of Experimental Biology (FASEB) to evaluate salt’s safety. \(^{39}\) A decade later, the FASEB reported to the FDA “it is the prevalent judgment of the scientific community that the consumption of sodium chloride in the aggregate should be lowered in the United States. The Select Committee agrees and favors development of the guidelines for restricting the amount of salt in processed foods, a major contributor of dietary sodium. Adequate labeling of the sodium content of foods would help meet these objectives.” \(^{40}\)

In 1978, the Center for Science in the Public Interest petitioned the FDA in an effort to turn the FASEB’s findings into real regulation, rather than relying on manufacturers’ voluntarily salt reductions. The FDA denied the petition reasoning that it was substantively moot because between 1978 and 1982, the FDA issued its core sodium policy and amendments addressing the FASEB report. \(^{41}\) Dissatisfied that the core sodium policy included any meaningful regulation the CSPI next sued the FDA. \(^{42}\) The

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36 Codified at 21 U.S.C. § 321(s).
37 Id.; Indeed, some FDA regulations require salt as an ingredient in certain branded food, such as cheese. 21 C.F.R. part 133 (2007).
38 21 C.F.R. 170.30 (e)-(f) (1983).
39 47 Fed. Reg. 26, 590, 26, 591 (June 18, 1982).
40 Id. at 26, 592. Oddly the report goes on to note that the scientific evidence at the time was inconclusive as to salt’s effect on a “significant proportion of the population.”
41 47 Fed.Reg. 26,590 (June 18, 1982).
District Court upheld the FDA’s discretion to deny the CSPI’s original petition.\textsuperscript{43} Specifically, the Court ruled that FDA voluntary labeling measures contained in its 1982 policy were adequate under the law, and that the “the FDA should be given the opportunity to test these methods to determine if food manufacturers will provide sodium content labeling and lower the amount of sodium in processed foods voluntarily.”\textsuperscript{44} This decision paved the way for another two and half decades of half-measures and regulatory leniency that continue the myth that salt, at any level, is “safe.”

Three decades later the salt fight is alive. In October 2007, the FDA announced a public hearing to “share” its current sodium policy, likely prompted by a CSPI citizen petition.\textsuperscript{45} Again, there is little chance that the FDA will classify salt as a “food additive.” However, this question remains: has the FDA done enough between 1978’s FASEB report and 2008 to provide accurate, helpful sodium content information to American consumers?

The answer is no, though progress has been made. In 1984, the FDA adopted seven various “health claim” regulations for sodium.\textsuperscript{46} These rules allow manufacturers to place the words: “sodium free,”\textsuperscript{47} “very low sodium,”\textsuperscript{48} “low sodium,”\textsuperscript{49} “reduced sodium,”\textsuperscript{50} or “no added salt”\textsuperscript{51} to food packaging. The terms “light” and “lite” are also restricted to products that contain no more than fifty percent of sodium in the “reference

\begin{footnotes}
\item[43] Id.
\item[44] Id.
\item[47] 101.61(b)(1) defines sodium free as less than 5 milligrams (mg) of sodium per serving.
\item[48] 101.61(b)(2) defines sodium free as generally less than 30 – 35 mg per serving (depending on type of food labeled – per serving, reconstituted etc).
\item[49] 101.61(b)(4) defines low sodium as 140 mg per serving.
\item[50] 101.61(b)(6) requires contents at least 25\% less than the reference food.
\item[51] 101.61(c) prohibits the use of unsalted or no salt added unless no salt is added during processing, where the food would usually have salt added, and carry the words “not a sodium free food” if the product does not meet the definition of “sodium free.”
\end{footnotes}
In 1993, the FDA adopted further labeling requirements for sodium. The most important requirement established a reference value, commonly known to Americans who read labels as the “Daily Value”, which is the upper threshold for daily sodium consumption. This value is 2,400 milligrams of sodium per day for average people.

Among countries with reference values, the American daily value recommendation is one of the lowest. However, the daily value threshold is also one of the major reasons that CSPI filed its citizens’ petition in November 2005 – seeking a further reduction to 1,400 milligrams -- a position that the American Medical Association (AMA) supports.

The AMA’s call for revocation of salt’s GRAS designation is striking because it signals that a major organization in the medical-scientific community believes that there is adequate evidence for the FDA to limit salt’s use in processed foods. The AMA also recommends that food manufacturers reduce the amount of sodium in processed foods by fifty percent. Opposing the AMA and its supporters are (no surprise) food manufacturers and industry groups.

For example, in its March 28, 2008, written testimony General Mills argued GRAS was appropriate because “Revocation (of GRAS) is not supported by science” and “the multi-functional properties of salt (including product safety) make it particularly

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52 21 C.F.R. 101.56(c)(1). The “reference food” is the regular version of a food. For example a “light” tomato soup must have no more than 50% of the sodium in the original.
54 Id.
56 Id. at 19. Though the FDA’s November 2007 public hearing specifically excluded daily value from its scope because daily values are the subject of other rulemaking. 72 Fed.Reg. at 59979, Ref. 18.
58 Id.
difficult to determine appropriate ceilings across all product categories.”

The National Restaurant Association offered, “GRAS status is a scientific evaluation that must take place within a well-defined legal framework. There is no basis for revoking the present status of salt.”

Morton Salt suggested that “FDA policies should emphasize dietary patterns rather than singular nutrients” and that “there is no magic bullet for sodium reduction.”

c. Salt in the 21st Century

What can we learn from the last fifty years of attempts to regulate salt in the American food supply? First, the American food supply has fallen victim to government’s preference for industry and consumption. This preference for industry leaves the American consumer largely unaware of health dangers. For example, when salt first received its GRAS status, manufacturers had just begun to package potato chips salted (before that the chips were plain with a salt packet in the bag).

In 2008, while a consumer may be able to find “low sodium” health claims on packaging, what about the healthy teenager who buys a bag of Dill Pickle Flavor Lay’s Potato Chips. Does it bear any “negative” information? No. The teenager has to be

60 FDA Docket No. 2005P-0450, Comments of the National Restaurant Association (March 25, 2008).
62 See generally POLLAN, supra note 1, at 55 (quoting farmer George Naylor “Agriculture’s always going to be organized by the government; the question is, organized for whose benefit? Now it’s for Cargill and Coca-Cola. It’s certainly not for the farmer.” And I would add, not for consumer health.); DEVRA DAVIS THE SECRET HISTORY OF THE WAR ON CANCER 419-426 (2007) (when recounting the political history of the artificial sweetener aspartame Davis comments “In January 1977, FDA Chief Counsel Richard Merrill made agency history. He formally asked the U.S. Attorney’s office to convene a grand jury to decide whether to indict the major producer of aspartame, G.D. Searle, for knowingly misrepresenting ‘findings, concealing material facts and making false statements’ in aspartame safety tests. That this investigation never happened speaks volumes about the difficulty of acquiring independent information in commercially valuable products.)
63 http://www.thenibble.com/reviews/main/snacks/chip-history.asp (last visited Aug. 15, 2008)(not until the 1950s did chips come salted – prior to this salted chips came with a separate salt packet in the bag).
perceptive enough to know that a 1 oz. serving (which is one sixth of the bag) contains 15% of the daily recommended sodium intake. If she consumes the whole bag, she will also consume 90% of her daily sodium intake. This dramatic example illustrates that while salt, the substance, has not changed, the use of the substance in the food supply has – and this alone should be sufficient for the FDA to reconsider GRAS.

While revocation of GRAS for salt may not be necessary, the FDA must require more balanced, prominent health information on processed food labels. FDA must consider the evolution of our food supply and the effects that this evolution has had on human health. Salt provides just one example of myriad ways in which our current regulatory scheme subtly promotes over consumption and misinformation. Manufacturers’ “health claims” help consumers find and buy “healthy” products without the suggestion that perhaps the consumer would be better off in the produce section. Why not “health claims” that help consumers understand how to make better food choices – not just “positive” purchases of “healthy” foods?

The reason is that our food economy does not support this approach, nor does the FDCA and other food labeling laws and regulations. As a capitalist society, our system’s success depends on consumption. Buy more. Eat more. Buy it from a corporation. Eat it in your car on the way to the mall. While this approach has been good for corporate America, it has been a disaster for the American diet. The FDA would make real progress if it required “balanced” label information -- instead of voluntary “low sodium”,

mandatory “high sodium” instead of voluntary “light”, mandatory “heavy.” This idea is not so far-fetched, though it may seem so to Americans familiar with the FDA’s history.66

In the United Kingdom, the Food Standards Agency (FSA) adopted a “traffic light signpost” system in 2007.67 The system, currently voluntary, includes core information about calories, fat, sugar and salt on the front of packaging. Each category has three levels of “healthfulness” each assigned a color – green, amber and red. Other nutritional information, such as calcium, must remain separate and comply with other regulations.68 The result is that consumers easily identify green light foods as more healthful than red light foods.

Consumer research forms the basis of the FSA program, not public hearings or pure politics. The agency found that consumers wanted an easier way to determine the content of processed foods which consumer reported “difficulty determining the nutritional content of.”69 Therefore, the FSA specifically recommends seven product types for stop light labels: ready-made sandwiches; prepared meals (hot or cold); burgers and sausages; pies, pastries and quiches; breaded formed meat, such as chicken nuggets; pizzas; and breakfast cereals.70 Manufacturers can use the labels more widely than these categories, and probably will, depending on their success in marketing products to consumers.

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66 See MARION NESTLE, FOOD POLITICS CHPT. 2, POLITICS VERSUS SCIENCE (2003); MICHELE SIMON, APPETITE FOR PROFIT CHPT. 7, EXPOSING GOVERNMENT COMPLICITY (2006).
68 Id. at 3.
69 Id. at 4.
70 Id.
The UK based the stop light label criteria on two sources: European Union Regulation No. 1924/2006\textsuperscript{71} and the UK’s own Committee on Medical Aspects of Food and Nutrition Policy (COMA) and Scientific Advisory Committee on Nutrition (SACN)\textsuperscript{72} recommendations. The EU regulation recognizes that health and nutrition claims must be regulated “in order to ensure a high level of protection for consumers and to facilitate their choice…”\textsuperscript{73} of safe, healthy foods.

The nutritional criteria for each color are similar to American guidelines. The sodium levels permitted in a green light food are .30 grams per 100 gram serving, similar to the American salt free standard.\textsuperscript{74} Manufacturers label products containing .3 to 1.5 grams of salt per serving amber, and products containing more than 1.5 grams per serving red.\textsuperscript{75} For fats, food labeled with a green light can have no more than three grams of fat per 100 gram serving. A yellow light food can have a fat range of three to 20 grams, while the program uses a red light for foods that have greater than 20 grams of fat per 100 grams or 21 grams of fat per portion.\textsuperscript{76} The FDA permits a “low fat” label on foods that

\begin{footnotesize}
\begin{enumerate}
\item The Scientific Advisory Committee on Nutrition “is an advisory Committee of independent experts that provides advice to the Food Standards Agency and Department of Health as well as other Government Agencies and Departments. Its remit includes matters concerning nutrient content of individual foods, advice on diet and the nutritional status of people. Members are appointed as independent scientific experts on the basis of their specific skills and knowledge. There are also two members to represent consumers. Members are required to conduct themselves in accordance with the Code of Conduct for Scientific Advisory Committees. Individuals are required to declare conflicts of interest and during discussions they may be disqualified at the Chairman's discretion from contributing to the conclusions and recommendations of the Committee.” The SCAN replaces the Committee on Medical Aspects of Food and Nutrition Policy (COMA) but that COMA’s prior work is still referenced in the FSA’s stop light guidelines. See http://www.sacn.gov.uk/about_us/index.html
\item EU Reg. No. 1924/2006 (1).
\item FDA Sodium Free Regulation, \textit{supra} note 46; FSA Guidelines, \textit{supra} note 66, at 6.
\item The amber light is similar to the “low salt” American label.
\item FSA Guidelines, \textit{supra} note 66, at 6.
\end{enumerate}
\end{footnotesize}
contain no more than three grams of fat. However, the FDA stops there – a food with 20 grams of fat carries no special label alerting consumers that the product is high fat.

While the FSA program does not “determine the design of individual approaches”, it does provide stop light design advice based on the consumer research used to develop the program. The overarching message of the design guidance is that consumers should be able to read the symbols easily and quickly. Information for consumers advises them to eat mainly green and amber foods with red foods “fine to eat...occasionally or as a treat, but think about how often you choose it and how much of it you eat.” The overall government message to consumers about the program is “Healthy eating is all about getting the right overall balance.”

While the European Commission rejected adopting the FSA’s approach for all of Europe, there is one proposal to require at least prominent (front of package) labels for six key pieces of nutritional information. The measures are energy (calories), total fat, saturated fat, carbohydrates, sugars and salts. The proposed regulation’s major purpose is making “nutrition labeling mandatory in the principal field of vision of a food label. It allows for the development of best practice in the presentation of nutrition information, including alternative forms of expression of the nutrition information in relation to

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78 See e.g. 21 U.S.C. §343(r)(3)(C) (allowing manufacturers to petition to make positive health claims based on scientific evidence, but remaining silent on labeling the negative attributes of foods.)
79 FSA Guidelines, supra note 66, at 9.
81 Id.
82 Stephen Castle and Elisabeth Rosenthal. EU Introduces food labeling plan to cut obesity rates. International Herald Tribune (Jan. 30, 2008) (“Almost one in three children is overweight in Europe as a whole....And Finland, Germany, Greece, Cyprus, the Czech Republic, Slovakia, and Malta all have higher proportion of overweight adults than the United States, according to a report by the International Obesity Task Force in 2005.”)
83 European Union, COD/2008/0028.
overall daily nutrient requirements or graphical forms of presentation.\textsuperscript{84} Even though some were disappointed that the EU declined the traffic light system, the fact that the EU is contemplating label redesign– and that the UK has successfully launched traffic light labels – should alert American regulators and manufacturers that change is afoot.

One American company has already launched a program aimed at providing consumers more information with the intent to help them make healthier food choices. Hannaford Company’s “Guiding Stars” is a program for “nutritious shopping made simple.”\textsuperscript{85} An “expert panel of scientists”\textsuperscript{86} who evaluate foods based on the most current scientific information, including the 2005 Federal Dietary Guidelines for Americans, advises the company’s program. The panel then assigns one (good), two (better), or three (best) stars to products – a product can also earn no stars, indicating it is not a good choice.\textsuperscript{87} These stars allow consumers to pick foods with more vitamins, minerals, fiber and whole grains and less saturated fat, trans fat, cholesterol, added sugars, and added salts.\textsuperscript{88}

Hannaford stores display the star system on the shelf for consumers to easily view while shopping. The program’s web guide, also details how products are evaluated, who evaluates, and how consumers benefit from the program. The program is marketed as having six core attributes, it is: easy, fun, fast, good for you, grounded in science, and fair.\textsuperscript{89} This program is one that other food retailers will likely adopt – and it is a powerful example of the private market providing additional information to the consumer.

\textsuperscript{84} Id.
\textsuperscript{85} http://www.hannaford.com/Contents/Healthy_Living/Guiding_Stars/index.shtml.
\textsuperscript{86} http://www.hannaford.com/Contents/Healthy_Living/Guiding_Stars/scientific_advisory.shtml
\textsuperscript{87} http://www.hannaford.com/Contents/Healthy_Living/Guiding_Stars/how_guiding_stars_work.shtml
\textsuperscript{88} Id.
\textsuperscript{89} http://www.hannaford.com/Contents/Healthy_Living/Guiding_Stars/benefits.shtml
However, the program also raises excellent questions about the future of information in the food economy. Had the federal government been more responsive to issues like salt well before national organizations like the AMA had to call for rescinding GRAS, perhaps Guiding Stars would not be necessary. Alternatively, perhaps, a private labeling system will be more trusted by consumers than the politicized federal regulations. In any event, the federal government should take note of the Guiding Stars program, and encourage more innovation in information exchange between manufacturers and consumers. They already have a start: The National Organic Program

II. More from Marketing Programs? The National Organic Program

The primary reason that I paid more than Mr. Conventional at the grocery store was that I bought organic products. Should I have? The National Organic Program (NOP) is a marketing tool. Period. As NOP ages, it faces criticism that it misleads consumers, who purchase organics for health or social concerns. The USDA Organic symbol is not an icon of health and purity, or even safety – yet if consumers believe that it is, is the label misleading?

No. The program represents a positive innovation in promoting consumer education. It marks a substantial step towards informing consumers about the process by which their foods are made. The objective standards, while not perfect as discussed

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92 Hornstein, supra note 23, at 1551; see M.L. Louriero et al., Assessing Consumer Preferences for Organic, Ecolabeled, and Regular Apples, 26 J. of Agric. and Resource Econ. 404, 413-4 (2002)(analyzing niche market for eco-labeled apples when compared to organic or conventional apples and concluding that the organic label may be preferable to an eco-label if production costs are the same).
below, at least give consumers information that they can use to not only make purchasing decisions, but to hold manufacturers accountable for meeting certain standards. This feature of NOP is extremely important to consumers, especially given the FDA’s position that genetically modified (GM) foods are presumed safe under the FDCA.\footnote{Notice, Statement of Policy: Foods Derived from New Plant Varieties 57 Fed.Reg. 22984, 22991 (May 29, 1992) (…consumers may be informed, by appropriate labeling, if a food derived from a new plant variety differs from its traditional counterpart such that the common or usual name no longer applies to the new food, or if a safety or usage issue exists to which consumers must be alerted.); see 21 U.S.C. 321(s) (any substance that becomes a compound of food is a food additive).} It also promotes economic efficiency, because consumers can find the products they want. In turn, their purchases signal manufacturers that there is demand for organic products.

\textit{a. Marketing Logo helps consumers avoid genetically engineered foods}

The FDA’s decision (the Notice) in 1992 to presume that genetically engineered foods were presumed “generally regarded as safe” was controversial because many consumers believed then, and still do today, that genetically engineered foods are unsafe.\footnote{Id. at 172 (citing Chrysler Corp. v. Brown, 441 U.S. 381, 302 n. 99 (1979)) (“A substantive rule, which must undergo a formal notice-and-comment process is a rule that ‘implement[s]’ a statute and has ‘the force and effect of law…[p]olicy statements, on the other hand are ‘statements issued by an agency to advise the public prospectively of the manner in which the agency proposed to exercise a discretionary power.’")} \textit{Alliance for Bio-Integrity v. Shalala} challenged FDA’s issuance of the Notice claiming that the agency’s position on genetically engineered foods required Administrative Procedure Act rulemaking.\footnote{Id. at 171.} The court rejected this argument, specifically finding that the FDA properly classified the Notice as a “policy statement” rather than a substantive rule.\footnote{Id. at 171.} This was the proper outcome, because the FDA’s Notice created no new binding rules for genetically engineered foods and only served to clarify...
that the FDCA’s standard requirements for food additives apply equally to genetically engineered foods.\textsuperscript{97}

The FDA’s presumption rested on its determination that “the only substances added to rDNA engineered foods are nucleic acid proteins, generally recognized as not only safe by also necessary for survival.”\textsuperscript{98} While the petitioners claimed that this position was contrary to statute, and that the FDA’s Notice was “arbitrary and capricious”, the Court disagreed because the petitioners failed to dispute the FSA’s position that nucleic acid proteins are GRAS.\textsuperscript{99} Rather, the petitioner argued that the safety of such proteins in genetically engineered foods was unknown. Reviewing the GRAS standard, the Court ultimately concluded that there was no scientific evidence that the presumption of safety was unwarranted.\textsuperscript{100} However, in 2001 the FDA did replace the GRAS presumption with a rigorous pre-market notice procedure.\textsuperscript{101} And, while that process is probably reassuring to consumers who are aware of it, the fact that manufacturers do not have to label genetically engineered foods is not.\textsuperscript{102}

Understanding that the FDA views genetically engineered foods as materially the same as their conventional counterparts is key to understanding how consumers have no legal leverage to demand labels disclosing the presence of genetically engineered

\textsuperscript{97} See id. at 172 (“…the statement does not declare that transferred genetic material will be considered GRAS; rather, it announces that such material is presumed to be GRAS. This presumption of safety is rebuttable because the FDA will require food additive petitions in cases where safety questions exist sufficient to warrant formal premarket review by FDA to ensure public health protection.”) (emphasis in original, internal citations and quotations omitted).

\textsuperscript{98} Id. at 176 (citing 57 Fed. Reg. at 22, 990).

\textsuperscript{99} Id. at 177. The petitioner did not challenge the safety of nucleic acid proteins, but rather attempted to argue that nucleic acid proteins may not be GRAS when in GM foods.

\textsuperscript{100} Id. (“To be generally recognized as safe, a substance must meet two criteria: 1) it must have technical evidence of safety, usually in published scientific studies; and 2) this technical evidence must be generally known and accepted in the scientific community.” See 21 C.F.R. 170.30 (a-b)).


\textsuperscript{102} Edna Einsiedel, Consumers and GM Food Labels: Providing Information or Sowing Confusion, 3 Ag. Bio Forum 231, 232 (2000).
foods. Since the FDA allows genetically engineered ingredients into the food supply if they pass the pre-market procedure, there can be no argument under the FDCA 321(n) that genetically engineered foods are materially different. Simply put, unless the FDA classifies genetically engineered foods as “materially” different from other foods, the FDA has no authority to require labeling. There is no indication that the FDA will change its approach to genetically engineered foods. Additionally, there is little scientific reason to do so. Therefore, consumers must rely on voluntary labeling of no “genetically engineered ingredients” on foods or purchase 100% USDA Organic foods. This information is provided, though not perfectly, by NOP labeling and standards.

Consumers can rely on the USDA Organic icon to indicate a food has been produced without genetically engineered ingredients. However, consumers cannot rely on the icon to indicate that food is free of genetically engineered ingredients. The NOP regulations do not set a zero tolerance level for genetically engineered substances or pesticides and they do tolerate unintentional exposure to excluded methods of production. If products do not meet the NOP standards, then there is a process to decertify the producer though there is no requirement that foods labeled organic be tested for compliance with the regulations.

b. The USDA Organic model allows consumers to demand compliance

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103 Id. at 179 (“Plaintiffs fail to understand the limitation on the FDA’s power to consider consumer demand when making labeling decisions because they fail to recognize that the determination that a product differs materially from the type of product it purports to be is a factual predicate to the requirement of labeling.”)
104 7 C.F.R. 205.105(e) (2003) (no use of “Excluded Methods” which under 205.2 includes “a variety of methods used to genetically modified organisms or influence their growth and development by means that are not possible under natural conditions…including…recombinant DNA technology.”)
105 Friedland, supra note 91, at 397.
106 Id.
107 Id. at 391 – 397.
Given the criticism of NOP and consumers concerns over genetically engineered foods and pesticide residue, it is somewhat surprising that the first widely reported decertification process involves milk production, rather than produce. Even more interesting is that core issues of the case are primarily economic – non-compliant dairies profiting from high organic milk prices but providing non-compliant organic milk to consumers, rather than public health complaints. For several years, the Cornucopia Institute, a grassroots organization “Promoting Economic Justice for Family-Scale Farming”, has been monitoring the organic dairy industry. The organization’s mission is to protect smaller farms, so it was particularly interested in whether larger scale organic dairies were indeed following NOP regulations. Cornucopia’s research showed that large-scale operators were not.

As a result, in November 2005, the Cornucopia Institute complained to the USDA that Aurora Organic Dairy did not have enough pasture to meet the NOP standards based on the dairy’s herd size and eyewitness accounts. The USDA investigation revealed that the Cornucopia Institute was correct – Aurora Organic Dairy was out of NOP compliance. In April, 2007 the USDA notified Aurora that it would revoke its organic standard for its Platteville, Colorado facility. By August, the USDA and Aurora

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108 Since many consumers claim to buy organic for health reasons, it would seem that “purity” of organic products might have been the first well-known case of non-compliance. Instead, Cornucopia’s work focuses on the economic impact that large scale farming has on small, family operations.
109 Id.
110 Id.
112 Id.
entered a consent agreement requiring complete NOP compliance with a one-year probationary period.\textsuperscript{114}

The agreement sets eight specific requirements. Aurora must allow lactating and dry\textsuperscript{115} cows on pasture daily during the growing season.\textsuperscript{116} This requirement clarifies for Aurora that lactation is not a stage of production that would exempt cows from accessing pasturage. Aurora must also reduce its herd size in relation to the pasture size. The herd must be sized for four lactating cows per acre and five dry cows per acre.\textsuperscript{117} Calves must be allowed to remain at Platteville, until they are weaned and ready for pasture, which is usually around four to six months.\textsuperscript{118} Aurora must also remove certain cows that it improperly transitioned into the organic herd.\textsuperscript{119}

The agreement also contains a one-year probationary period, in which any non-compliance with its terms may trigger resumption of the decertification process.\textsuperscript{120} Additional provisions include that Aurora shall bear the costs of inspection, should the USDA chose to conduct one, at its Platteville facility and certification by October 15, 2008, that Aurora has fully complied with its obligations.\textsuperscript{121} However, these administrative requirements are not the only challenge that Aurora must face.

In December 2007, Aurora became the defendant in a class action suit for allegedly selling “milk and milk products which it purports to be organic – and for which it charges the higher organic price – but which it produces without adherence to federal

\begin{flushleft}
\textsuperscript{114} \textit{Id.} ¶ 11-14. \\
\textsuperscript{115} “Dry” means non-lactating cows. \\
\textsuperscript{116} Generally considered May 1 – Sept. 30 in Platteville, Co.. see supra note 111. \\
\textsuperscript{117} \textit{Id.} \\
\textsuperscript{118} \textit{Id.} \\
\textsuperscript{119} Consent Agreement, supra note 113, at ¶ 7. \\
\textsuperscript{120} \textit{Id.} at ¶13. \\
\textsuperscript{121} \textit{Id.} at ¶. 13c. and 14. 
\end{flushleft}
law.”

While in its very early stages, the multidistrict litigation now names Wal-Mart, Safeway, Wild Oats, Target, and Costco as co-defendants. The basic complaint is that non-compliance with NOP, yet labeling organic, deceived consumers who paid the premium price.

The Aurora complaint illustrates how improved exchange of information empowers the consumer. The NOP standards are quite clear about pasturage and compliance timeframes for organic dairies. Cornucopia Institute did not need to engage in complex testing or scientific analysis of Aurora’s milk, rather it could simply rely on eyewitnesses reports of herd size and photographs to find NOP violations.

With the successful action against Aurora initiated, Cornucopia has since filed additional NOP non-compliance complaints with USDA. On May 10, 2008, it wrote to the NOP compliance office that a certified organic dairy in California denied pasture access for its 3000 head herd. Again, Cornucopia relied on information from workers, but also from having other dairy professional simply driving by the facility on nice days and observing no cows in the pasture. Whether this will result in action against the farm remains to be seen, but the impact of “watchdog” organizations will play an important role in the future of NOP.

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123 In re Aurora Dairy Corp., Conditional Transfer Order, MDL No. 1907 (Mar. 13, 2008); Schedule CTO-1, Tag-Along Actions.
125 NOP’s dairy provisions have been controversial from their inception. Due to the high costs of converting conventional to organic dairies, the regulations have certain provisions that attempt to cushion the financial impacts of organic milk production at the cost, some believe, of the “organic ideal.” See Harvey v. Veneman, 396 F. 3d 28 (1st Cir. 2005) and Harvey v. Johanns, 494 F. 3d 237 (1st Cir. 2007).
128 Id.
Cornucopia Institute has not limited its complaints to specific farming operations. On May 10, 2008, it made a larger complaint against the influence of large corporations on NOP, and specifically Dean Foods.\textsuperscript{129} This phenomenon – of large corporate players in the organic market – is a hot button issue for many, including consumers.\textsuperscript{130} However, Cornucopia’s complaint goes beyond the standard philosophical ideal that organics are off limits to large corporations. The complaint demands an investigation into why, unlike the investigation of Aurora and other organic dairies with compliance problems, complaints against Dean’s Horizon facility in Idaho were ignored. The Cornucopia Institute next called “upon [the Inspector General]…to review this matter and determine why an investigation never took place at Dean/Horizon’s Idaho factory farm. We are asking you to determine why the apparent double standard, in terms of enforcement exists. The integrity of the organic label and the integrity and reputation of the USDA are at stake.”\textsuperscript{131}

Lawmakers should note Cornucopia’s complaints, as well as the class action related to the information revealed in those complaints. These activities reveal that consumers, when provided with enough information, can and will proactively demand that food meets its labeled standard.

\textbf{IV. Conclusion}

NOP serves as an excellent illustration of how transparent information influences the marketplace. While NOP still has a long way to go to educate consumers about what “USDA Organic” means, it is on the right path. The FDA should take notice of how a

\textsuperscript{131} Supra n. 144, p. 3.
marketing program can provide information consumers want, while also balancing the needs of producers. If the FDA did take notice, they might be inclined to follow the UK’s traffic light label examples noted above.

Optimizing information in the food economy is no simple task. As labeling analysts have noted, “as with any policy, the costs and benefits of government intervention in labeling must be weighed, and the sometimes conflicting demands of economic efficiency, consumer and producer concerns, public opinion, political expediency, and current events must be sorted and evaluated.”132 The UK, Hannaford, and NOP all illustrate how information exchange can change consumer’s view and power in the marketplace. Conversely, the American milk controversy illustrates how limiting information leads to misinformed consumers and market inefficiencies.

Better information exchange in the food economy also leads to better data for manufacturers and policy makers. For example, the traffic light label links scientific evidence of healthy eating habits with a simple way to signal consumers how to eat healthily. The real test of this program, and Hannaford’s Guiding Stars, is whether purchasing patterns will be altered. If consumers purchase and demand more “green light” or “three star” options, manufacturers can produce more products to meet that demand. Should consumer patterns not be altered or should they prove that “red light” or no star options remain popular, there is then a clear signal to government that its health message is not clear, or that people do not care to manage their health. If it is the former, then government has information that can help it better allocate its educational resources. If it is the latter, then lawmakers and policy analysts must grapple with how to allocate the costs of irresponsible citizens.

132 Golan, supra note 1, at 1.
The food economy is a complex mix of law and economics, among other things. In the current food economy, law trumps economics in the sense that the constraints of the FDCA, FTC, USDA, and even commercial speech, govern what information most consumers receive. Given the decline of public health as a result of obesity and environmental troubles related to agriculture, one can only imagine that the information exchange between food manufacturers and consumers is accelerating the “race to the bottom” that Akerlof predicts whenever there is asymmetric information. While economic modeling is valuable to proving the phenomenon, rebalancing the flow of information in the food economy will require lawmakers to revisit our currently regulatory scheme. The sooner, the better.
### Appendix A: The Shopping List

<table>
<thead>
<tr>
<th>My Purchases/Per Serving</th>
<th>Total Cost/Package Size/Serving</th>
<th>Front Pack Label Information/Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kashi Pesto Pasta</td>
<td>$3.99/10 ounces /One Serving</td>
<td>All Natural</td>
</tr>
<tr>
<td>Calories 290</td>
<td>Sodium 750 mg</td>
<td>Fat 11 grams</td>
</tr>
<tr>
<td>Sodium 750 mg</td>
<td>Fat 11 grams</td>
<td>Sugars 4 grams</td>
</tr>
<tr>
<td>Olivia’s Organic Salad</td>
<td>$3.99/ 5 ounces/ 2 cups (85 g)</td>
<td>USDA Organic</td>
</tr>
<tr>
<td>Calories 15</td>
<td>Sodium 60 g</td>
<td>Fat 0 g</td>
</tr>
<tr>
<td>Sodium 60 g</td>
<td>Fat 0 g</td>
<td>Sugars 0g</td>
</tr>
<tr>
<td>Zinfandel Low Fat Vinaigrette</td>
<td>$3.99/8 ounces/2 tablespoons (29 grams)</td>
<td>Low Fat</td>
</tr>
<tr>
<td>Calories 60</td>
<td>Sodium 480 mg</td>
<td>Fat 2.5 g</td>
</tr>
<tr>
<td>Sodium 480 mg</td>
<td>Fat 2.5 g</td>
<td>Sugars 7 g</td>
</tr>
<tr>
<td>Store Brand Organic Milk</td>
<td>$3.99/ half gallon/8 ounce glass</td>
<td>USDA Organic</td>
</tr>
<tr>
<td>Calories 90</td>
<td>Sodium 130 mg</td>
<td>Fat 0 g</td>
</tr>
<tr>
<td>Sodium 130 mg</td>
<td>Fat 0 g</td>
<td>Sugars 12 g</td>
</tr>
<tr>
<td>Late July Dark Chocolate Sandwich Cookies</td>
<td>$3.99/ 8.2 ounces/ 3 cookies (33 grams)</td>
<td>USDA Organic</td>
</tr>
<tr>
<td>Calories 150</td>
<td>Sodium 125 mg</td>
<td>Fat 6 g</td>
</tr>
<tr>
<td>Sodium 125 mg</td>
<td>Fat 6 g</td>
<td>Sugars 9 g</td>
</tr>
<tr>
<td>Late July Dark Chocolate Sandwich Cookies</td>
<td>$3.99/ 8.2 ounces/ 3 cookies (33 grams)</td>
<td>USDA Organic</td>
</tr>
<tr>
<td>Calories 150</td>
<td>Sodium 125 mg</td>
<td>Fat 6 g</td>
</tr>
<tr>
<td>Sodium 125 mg</td>
<td>Fat 6 g</td>
<td>Sugars 9 g</td>
</tr>
<tr>
<td>TOTALS</td>
<td>Total Cost $19.95</td>
<td></td>
</tr>
<tr>
<td>Calories 605</td>
<td>Sodium 1545 mg</td>
<td>Fat 19.5 g</td>
</tr>
<tr>
<td>Sodium 1545 mg</td>
<td>Fat 19.5 g</td>
<td>Sugars 32 g</td>
</tr>
</tbody>
</table>

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133 All prices surveyed on July 10, 2008 at Shaw’s Supermarket and Concord Co-op Market in Concord, New Hampshire, USA.
<table>
<thead>
<tr>
<th>Mr. Conventional's Purchases/Nutritional Information</th>
<th>Total Cost/Package Size/Serving</th>
<th>Front Pack Label Information/Claims</th>
</tr>
</thead>
</table>
| *Progresso Soup Rich n’ Hearty Steak and Russett Potato*  
Calories 140 (280) (whole can)  
Sodium 990 (1980) mg  
Fat 1.5 (3.0) g  
Sugars 3 (6) g | $1.89/ 18.5 ounces/ ½ Can (246 g) | None |
| *Iceberg Salad Mix*  
Calories 15  
Sodium 0 g  
Fat 0 g  
Sugars 2 g | $2.29/ 16 ounces/ 1 ½ cups (85 g) | None |
| *Creamy Greek Dressing*  
Calories 160  
Sodium 160 mg  
Fat 16 g  
Sugars 3 g | $3.99/8 ounces/2 tablespoons (29 grams) | None |
| *Store Brand Whole Milk*  
Calories 150  
Sodium 125 mg  
Fat 8 g  
Sugars 12 g | $2.50/ half gallon/ 1 cup | None |
| *Oreo*s  
Calories 160  
Sodium 190 mg  
Fat 7g  
Sugars 14g | $2.50/18 ounces/ 34 grams – no cookie number listed | None |
| **TOTALS**  
Calories 625  
Sodium 1465 mg  
Fat 32.5 g  
Sugars 34 g | Total Cost $13.17 | |