Community Literacy Journal

Volume 10
Issue 1 *Autumn*

Article 3

Spring 2016

Nutritional Noise: Community Literacies and the Movement Against Foods Labeled as "Natural"

Erin Trauth
University of South Florida

Recommended Citation
Trauth, Erin. "Nutritional Noise: Community Literacies and the Movement Against Foods Labeled as 'Natural.'" Community Literacy Journal, vol. 10, no. 1, 2015, pp. 4–20, doi:10.25148/clj.10.1.009272.

Nutritional Noise: Community Literacies and the Movement Against Foods Labeled as "Natural"

Erin Trauth

In the face of the $44 billion market—and rising—for foods labeled as "natural" (despite any formal regulatory oversight on the use of this term), this article examines multiple complex layers of community literacies and movements involving foods labeled as "natural," including an increasing availability of "natural" foods and simultaneous rise in U.S. obesity rates, as well as grassroots movements that have challenged the use of "natural." Then, using an online survey of 707 respondents in a localized community setting, I provide my own examination of literacies of "natural" foods by assessing specific consumer interpretations and regulatory knowledge of the word "natural" as it is found on food labels. Ultimately, I discuss what role these varying levels of literacies play in the rising U.S. movement to push back against the use of this claim in the face of an otherwise flourishing "natural" food market.

Background: Food Labels and the "Natural" Food Movement

Americans are increasingly growing more concerned about their food. According to a 2014 report from the U.S. Department of Agriculture's Economic Research Service, American adults are making marked attempts to "eat better, make better use of available nutrition information, consume fewer calories coming from fat and saturated fat, and consume less cholesterol and eat more fiber" than they were 10 years ago (par. 1). In addition, American concern with the origins and ingredients of food has grown; this increased interest in "healthier" foods, often centered on consuming fewer chemical/processed ingredients and higher levels of "natural" ingredients, can be noted through the increased availability of supermarkets and restaurants boasting an array of "natural" selections. While the "natural" foods offered to consumers are often labeled with many different terms, from "smart choice" to "free range" to "good for you," no other label claim, in recent years, has faced the simultaneous levels of attention and scrutiny as "natural."

The word "natural," and its variations—i.e. "all natural" and "made with natural ingredients"—as they are used on United States food labels, have been major marketing assets to the food industry over the past several years. At the same time, they have also been key points of contention for consumers, as U.S. obesity rates continue to

rise and grassroots campaigns expose the claim that the word is merely marketing language, prompting numerous community efforts to eradicate its use. From 2012 to 2013, consumers spent more than $44 billion on food products labeled specifically as "natural." A recent study also claims that 51 percent of Americans seek out products labeled as "natural" when they are grocery shopping (Esterl par. 4). The claim is so popular that foods labeled "natural" made up approximately 10 percent of the grocery sales in 2013 (Cummins par. 1). A 2009 study by The Shelton Group found that "natural" is the sole most popular claim with consumers, and the "Clean Label Study" of 2012 found that 74 percent of consumers think "natural" foods are healthier (Food Navigator par. 2).

However, despite this rise in demand for "natural" foods as part of the healthy-eating movement, we have also seen a steady rise in obesity rates (Tierney 1). Many call this part of the "American obesity paradox," which shows a coincident rise in the U.S. obesity rate and demand for "healthier" foods (Tierney 1). One essence of this phenomenon is that consumers are reaching for "healthier" foods by way of eating foods with a "natural" label, and this may cause a "halo" effect surrounding the food (Tierney 2), meaning consumers will often overestimate the healthfulness of a food if a label claim is given, i.e. "low fat" or "natural." Researchers have found that people will then eat more of this product because they think it is healthier. In the case of foods labeled as "natural," this paradox is particularly important to examine, since the term faces no formal regulation and may entice people to eat more of a product they think is healthier—but in fact may be no better than the more obviously unhealthy selections not labeled as "natural."

Further complicating the complex issues already at hand, in the background of the concurrent boom of "natural" products and obesity rates, another countermovement reflecting a dissatisfaction with the regulation of "natural" products has also emerged in local communities. A 2006 poll by Harris Interactive found that "when asked whether the government should provide food manufacturers with regulations to follow when making a 'natural' claim, 83% answered 'yes' that the government should provide such regulations" (The Sugar Association 9). In addition to these sentiments being expressed, community movements to push back against the use of this term on food labels—from online petitions to lawsuits against food companies—have sprung up across the country.

On the surface, many different movements are at play in the "natural" food arena, demonstrating numerous diverse community literacies about these foods. On the one hand, a movement exists in the United States to purchase seemingly healthier foods, and, from the aforementioned statistics about the rise of natural food purchases, the "natural" phrase seems to entice consumers, which many equate to "healthier" eating. This demonstrates, at the very least, a baseline literacy about the benefits of eating healthier and marked attempts to do so. At the same time, the fact that the former group focuses on purchasing "natural" products when they are virtually unregulated may indicate a deficient literacy exists about the true nature of many marketing health claims made on food products, especially "natural." On the other hand, a coincidental

growing community movement has pushed back against the food industry and the Food and Drug Administration (FDA) about the term "natural," demonstrating an opposing community literacy about the true meaning behind unregulated food label language.

All of these issues present a need for further examination of this topic: how far apart are these community groups in their literacies about "natural" foods? What role does consumer literacy about "natural" foods play in local community efforts to push back against this food label claim? To what degree does literacy about the unregulated nature of these foods exist? What, if anything, has been impacted by grassroots community efforts to increase other consumers' knowledge about the true nature of "natural" foods and to influence the Food and Drug Administration's (FDA) decision-making? In a sample community, just how literate are consumers about the "natural" term? For those consumers who are buying food labeled as "natural," do they feel "natural" products will provide them with specific positive nutritional benefits, such as improved health and/or a reduced risk of disease? What, exactly, do they think this means about the food product in terms of ingredients and nutritional value? Do they think this claim is regulated by the FDA or not? How do members of a sample community make their own meaning amidst the "nutritional noise," or, all the complex layers of understanding surrounding "natural" foods?

In this article, I further investigate these important questions and subsequently examine the complex movements surrounding "natural" food and varying community literacies. I first provide an overview of the FDA's current definition—as of May 2015—of "natural." Then, I describe grassroots community movements that have challenged the use of this word on food labels and demonstrated a movement to make these issues more publically known, including online petitions and lawsuits against food companies using this phrase on its labels, and how the FDA has responded to some of these community movements. Then, using a survey of 707 respondents in a localized community setting, I provide my own examination of literacy of "natural" foods by assessing consumer interpretations and regulatory knowledge of the word "natural" as it is found on food labels. Using this sample, I discuss the interpretations of and literacy about "natural" as it is currently used on the front of food packaging and what potential role this knowledge (or lack thereof) plays in the movement to further regulate this term in the context of a rising global movement to better understand what is in our food.

Defining "Natural" on U.S. Food Labels: The FDA and Baseline Consumer Perceptions

The FDA's Stance. Despite its widespread use on food labels, the term "natural" as it applies in the United States is an arguable declaration. Unlike the term "organic," "natural" currently faces no true directive by the FDA, the main source of governance for U.S. food corporations and their use of food labels. Thus far, the FDA "has not developed a definition for use of the term natural or its derivatives" and only states

that it "has not objected to the use of the term if the food does not contain added color, artificial flavors, or synthetic substances" (FDA par. 5). William Sears, M.D., an Associate Clinical Professor of Pediatrics at the University of California-Irvine School of Medicine, makes a case that the word is deceptive:

> 'Natural' is probably the least trustworthy of all the label terms. While the term 'natural' sounds appealing, it really says little about the nutritional quality of the food, or even its safety. In reality, 'natural' is empty of nutritional meaning. Consumers believe that 'natural' means the food is pretty much as Mother Nature grew it, but this is seldom the case (par. 3).

Because the FDA has not taken any formal regulatory stance on the word, the use of it is often found on food labels with little (if any) meaning about the product itself, unless accompanied by a regulated "organic" symbol (Sears par. 4).

What Consumers Think 'Natural' Means. Although the word is not formally defined, the larger U.S. community does have some baseline ideas about what the word *should* mean. In a 2014 survey conducted by the Consumer Reports National Research Center, U.S. consumers believe the "natural" label should mean, "no pesticides were used (86%), no artificial ingredients were used (86%), no artificial materials were used during processing (87%), and no genetically-modified organisms (GMOs) were used (85%)" (8). A 2006 Harris Interactive poll of 1000 respondents found that "eighty-five percent of 1000 people surveyed said that they would not consider any food containing; anything artificial or synthetic to be natural. Consumers also agreed that the amount of processing (52%) and/or altering of raw materials (60%) should disqualify a product from making a 'natural' claim" (The Sugar Association 9). Later in this article, I will provide the results of my own inquiry into a localized community's assessments through open-ended consumer definitions of the word "natural," evaluations as to whether such a term would mean that a food could improve health or reduce risk of disease, and understanding of the term's regulation or lack thereof. First, I will describe several widespread public community movements to extend individual literacy into social action via attempts to influence the FDA's decision-making.

Community Movements to Regulate "Natural"

A growing movement claims that the FDA should create formal definitions of "natural" which are supported by scientific backing, as opposed to allowing for the use of what many in this movement deep as ambiguous and/or misleading (TakePart 1). Others in this movement assert that if the FDA cannot settle on a definition and regulatory mandate for "natural," then companies should be barred from using the term altogether (TakePart 1). While the arguments take on different degrees of proposed action, community movements demonstrating a counter literacy about the unregulated nature of "natural" have gained traction, even in the face of the soaring $44 billion "natural" food market.

Petitions. Despite the lack of regulation surrounding the word "natural" as it is used

on food labels, there is a movement counter to that of the otherwise positive response to "natural" foods (as evidenced by the $44 billion-and-rising market) taking its own steps to convince the FDA to further define or even outright ban the use of the word on food labels. In 2015, a TakePart petition titled "Stop Confusing Consumers: Ban the 'Natural' Label" received over 33,000 signatures. In it, respondents urged both the FDA and the USDA to ban and/or restrict its use on food products. In a similar move, consumers attempted to start a movement on Change.org in 2014. In this petition's language, the petition organizer writes: "Please FDA and USDA: create a definition in line with what the general public thinks of the word natural. Create a definition for the use of the word natural on food labels. I no longer want to be misled about what I am putting in my body" (Change.org par. 5). A Care2 petition sponsored by Consumersunion.org, titled "Tell the FDA to Be Honest with Food Labeling" currently has more than 130,000 signatures (as of May 2015). The petition urges respondents to "Tell the FDA to strike a blow for truth in labeling and drop the misleading 'natural' label from food once and for all!" As of May 2015, the campaign was shared on Facebook nearly 5000 times with thousands of in-support comments following.

Action in the Courts. In the face of the current lack of definition and regulation of "natural" and consumers' specific notions about the meanings and use of "natural" on food labels, some litigators have claimed that the FDA and USDA are "sleeping on the job": Nicole E. Negowetti, Assistant Professor of Law at Valparaiso University Law School, argues: "although both the FDA and USDA are statutorily mandated to protect consumer interests by prohibiting false and misleading labeling, both agencies have refused to formally define the term" (582). She explains, that due to "consumers' inherent lack of knowledge about food ingredients, food technology, food ingredient terminology" they are bound to face difficulty when trying to discern if a product is actually "natural" (20). Therefore, she asserts, "consumers should be able to rely on the oversight of regulatory agencies to provide food manufacturers with clear and concise regulations" (20).

Beyond grassroots attempts to petition companies, consumers have also taken action against the use of "natural" in the courts. Since 2007, class action lawsuits have been launched against companies such as Bear Naked, Pepperidge Farm, Frito-Lay, Pepsico, Kashi, Kellogg's, Snapple, ConAgra, Arizona, and General Mills by consumers related to the use of "natural" claims made on each company's products in some form. From 2011 to 2013, at least 100 lawsuits involving the "natural" claim were seen by the court system (Esterl par. 8). In most cases, according to Negowetti, the suits claim that "natural" marketing claims "violate state consumer protection statutes that proscribe false and misleading advertising" (21).

In these lawsuits, consumers are publically exhibiting an attempt to make the food industry take notice of their literacy about "natural" foods in a tangible way and exerting effort to help alter the "natural" foods landscape. However, the results of these attempts in the courtroom thus far have been mixed. Jennifer L. Pomeranz, Assistant Professor of Public Health at Temple University, explains that several courts have "dismissed natural claims based on the doctrine of primary jurisdiction or stayed the case to seek

clarification from the FDA, even though the Agency repeatedly declines to intervene or further define the term" (439). There has been some success with settlements: Barbara's Bakery, maker of Puffins cereal, and PepsiCo, which owns Naked Juice, each settled respective claims for $4 million and $9 million (Pomeranz 440). In 2008, the Ninth Circuit found that Gerber's fruit snacks marketed as natural would "likely deceive a reasonable consumer" because "the packaging pictures a number of different fruits, potentially suggesting (falsely) that those fruits or their juices are contained in the product" (Williams vs. Gerber 2008). The court found that "reasonable consumers should [not] be expected to look beyond misleading representations on the front of the box to discover the truth from the ingredient list … on the side of the box." (Williams vs. Gerber 2008).

Perhaps the most interesting impact of the suits, however, is that many food makers have "reportedly started to pull the natural claim, especially when they use GMOs, due to the influx of litigation and the uncertainty of the FDA's position" (Pomeranz 440). This movement by the food industry indicates, at the very least, some companies may be taking notice of the rising literacy about "natural" foods consumers are exhibiting.

The FDA Responds. In January 2014, the FDA responded to a case in which "three separate US.S. District Court cases—Cox v. Gruma Corp. (N.D. Cal.), Barnes v. Campbell Soup Co. (N.D. Cal.), and In Re General Mills, Inc. Kix Cereal Litigation (D.N.J.)"—called upon the organization to determine whether or not food products containing genetically modified ingredients (GMO) could be labeled "natural" (Fogel par. 2). Many claim the FDA's response to this call would set a precedent for how the organization would move forward with generally regulating the "natural" food market (not just GMO foods) (TakePart 1).

In response to this call, the FDA "respectfully declined" to determine if GMO foods should be permitted to be labeled as "natural." In a letter response, Leslie Kux, assistant commissioner for Policy for the FDA, wrote:

> If FDA were inclined to revoke, amend, or add to this policy [its definition of 'natural'], we would likely embark on a public process, such as issuing a regulation or formal guidance, in order to determine whether to make such a change; we would not do so in the context of litigation between private properties (2).

Kux also noted "any definition of natural on food labeling has implications well beyond the narrow scope of genetically engineered food ingredients" (2). She wrote that the FDA has been "considering the issue" with the USDA, another stakeholder in the "natural" labeling context, but there is "no assurance that we would revoke, amend, or add to the current policy, or develop any definition at all" (2).

The letter asserts that the FDA is attending to "priority food public health and safety matters" for now. In addition, the FDA claimed that the public would have to be engaged at a deeper level, despite all of the petitioning and lawsuits, to understand consumer "perceptions and beliefs" about the term "natural" and the issue of further

defining and/or regulating it (2).

As a start to this call to more deeply understand consumer perceptions and contribute insights to at least one layer of the complex puzzle surrounding "natural" foods, in the following section, I provide the results of a large-scale survey, in which I sought to understand how a localized community construes the word "natural" on current front-of-package labels. Further, in this sample, I demonstrate the sampled community's literacy about whether or not "natural" products are regulated by the FDA in a given community. Then, I discuss what potential role this knowledge (or lack thereof) can play in the movement to further understand the complex issue of understanding consumers and regulating "natural" label claims.

"Natural" Interpretations and Community Literacy: A Survey of 707 Respondents

In my own exploration of consumer literacy regarding the "natural" food label claim, I sought to understand how a sample of respondents within a local community construes the word "natural" on current front-of-package labels. In this work, I add to the conversation in the greater movement to understand how "natural" is understood, defined, and interpreted at a qualitative level, thus providing a snapshot of one sample community's literacy of this topic. In the following section, before moving on to a discussion of my results, I provide a brief summary of my study's methods for this specific assessment of consumer literacy about "natural" foods.

Methods Summary. For this project, I used a large-scale survey of students currently attending the University of Colorado-Colorado Springs. At the time of this project, which began in November 2013, I was an instructor at this university and was able to distribute the survey anonymously via the student email mailing list. Over the course of a one-month period, 707 students completed my survey. When all 707 responses were compiled, I used Survey Monkey online survey tools to first compile total average results for every question, which includes demographic inquiries, questions about concerns for future health issues, assessments of current food label interpretations, questions regarding concern with purchasing healthy foods, and then open-ended and Likert-scale questions regarding the "natural" claim. The core questions were intended to measure respondents' initial interpretations of what the claims said about the food product's nutritional value and ingredients. Then, I assessed consumer confidence in the product's ability to improve health or prevent disease, followed by a question as to whether or not respondents believed the claims were authorized for use by the FDA or not. The participants' understanding of regulation of the front-of-package label claims was measured by the response to a yes/no question each respondent answered in the survey that they could either get right or wrong whether or not a claim is authorized for use by the FDA. These responses served as the gauge for understanding for regulation, and, thus, literacy about regulation, of the tested "natural" claim.

My sample for the survey is the result of a convenience sampling method. I used my connection as an instructor on the University of Colorado-Colorado Springs campus

to disseminate my electronic survey to the student population. As an instructor, I had access to the university's student e-mail list. The student e-mail list has been designed so that no individual email addresses or names are revealed, and no individual persons were contacted. Full university Institutional Review Board approval was granted for this study. The survey submissions were stored in one Survey Monkey account for the duration of the study and were protected via a secure password-protected connection and account. Compensation for this survey was entrance into a random drawing for one $25 Chipotle gift card. One respondent won this card and was contacted via email only for the purpose of obtaining information to mail the gift card. The explanation of the survey and its purposes along with a link was sent via this e-mail list on November 5, 2013 and was open for exactly one month until December 5, 2013.

The sample yielded 707 responses from a range of students at the University of Colorado—Colorado Springs (UCCS). The UCCS student population provided a wide range of responses, as the campus is a mix of traditional and non-traditional undergraduate and graduate students with varying backgrounds and geographic origins. In fall 2013, UCCS enrolled 10,619 total students, 40% of whom were first-generation students (UCCS Institutional Research, 2013). Twenty-two percent of these students were of minority ethnicities, and 30% received Pell Grant scholarships. The average age of undergraduate students was 23.2 and, for graduate students, 33.5. Table 1 shows the enrollment and class breakdown of UCCS students from 2010 - Fall 2013.

Table 1: UCCS Student Class Level, 2010- Fall 2013 (UCCS Institutional Research)

Source: UCCS Institutional Research, University of Colorado-Colorado Springs. 2013. Web. Nov. 2014.

Academic Level	2010 Census	2010 EOT	2011 Census	2011 EOT	2012 Census	2012 EOT	2013 Census	2013 EOT
Freshman	1899	1826	2171	2111	2336	2291	2493	2472
Sophomore	1468	1472	1481	1484	1651	1682	1794	1793
Junior	1508	1541	1660	1668	1717	1699	1883	1888
Senior	1548	1567	1594	1610	1682	1711	1820	1835
Senior Fifth Year	661	682	678	718	691	700	792	813
Graduate	1546	1556	1478	1492	1480	1502	1580	1589
Unclassified	262	256	259	256	220	213	236	229
Total	8892	8900	9321	9339	9777	9798	10598	10619

After compiling the 707 total responses, I first used my survey platform to determine basic information about the total respondent population, including demographic information, basic health background, reports of prior use of food labels, perceived respondent shopping preferences—i.e., how often they reportedly seek to buy healthy foods. In the following section, I will describe the results of this study of community interpretations of the "natural" claim.

Key Findings. In the following section, I provide the results of the sample population's interpretation and literacy about "natural" as it is used on U.S. front-of-package food labels.

In response to the question **"When you see the word 'natural' on a front-of-package label, what does this mean to you about the overall nutritional value of the product?"** respondents provided a range of responses. Textual analysis yielded the most common responses as follows in table 2:

Table 2: Textual Analysis of Open-Ended Responses to "Natural" Nutritional Value

Number of Respondents (percent of sample)	Textual Response
120 respondents (17 percent)	it means "nothing" about the nutritional value of the product.
69 respondents (8 percent)	the product would have a higher nutritional value.
69 respondents (8 percent)	the product would be less processed.
48 respondents (5 percent)	the product would be healthier.
46 respondents (5 percent)	the product would contain fewer chemicals.
44 respondents (5 percent)	the product may be organic or contain organic ingredients.
32 respondents (3 percent)	the product may contain fewer preservatives.
16 respondents (1 percent)	the product could be more nutritious.

Some open-ended text responses indicate knowledge of the use of marketing terms on food labels, i.e.: "It means absolutely nothing. Natural is a buzz-word. It could be worse or better for me" and "This makes my eyebrows raise. It seems like this is a product that I will want to investigate more. I will likely pick up this product and read the ingredients to check for preservatives and chemical additives. If it has none of these, I may purchase the product."

On the other hand, other responses exhibit the perception that a food with a "natural" label is indeed different than foods not labeled with the word and its variations—i.e. "The nutritional value is higher than products without this label" and "The nutritional value is higher than the non-natural products".

Other common responses indicate the product would be sold at a higher cost than its counterparts: "This product will have similar or less ingredients for an increased cost." Others thought the product would be marketed to certain groups of people or simply meant "good marketing" but did not mean much about the product itself: "Natural products seem to be oriented towards people who are 'green'. I do not believe that there is a huge difference between products that are and are not labeled this way;" "It means the manufacturer seeks to provide an image of health and avoidance of artificial ingredients;" and "That they've got a good marketing and design team and rarely means anything."

Table 3: Textual Analysis of Open-Ended Responses to "Natural" Ingredients	
Number of Respondents (percent of sample)	**Textual Response**
92 respondents (13 percent)	the product would be less processed.
85 respondents (12 percent)	this meant "nothing" about the ingredients of the product.
83 respondents (10 percent)	the product would contain fewer chemicals
63 respondents (7 percent)	the product might contain organic ingredients, or ingredients regulated to the organic standard.
63 respondents (7 percent)	the product would contain fewer preservatives.
31 respondents (3 percent)	the product would contain fewer artificial ingredients.
24 respondents (2 percent)	the product would be "healthy."
21 respondents (2 percent)	the product would contain fewer pesticides.
19 respondents (2 percent)	the product would contain fewer additives.
11 respondents (1 percent)	the product would contain fewer artificial growth hormones.
10 respondents (1 percent)	the product would be unprocessed.
10 respondents (1 percent)	the product would not contain genetically modified ingredients.
9 respondents (1 percent)	the product would be "healthier."

Regarding the question **"When you see the word 'natural' on a front-of-package label, what does this mean to you about the ingredients of the product?"** textual analysis yielded the following results:

Other responses noted a lack of "lab" ingredients, "synthetic" ingredients, "extra" ingredients, and "man-made" ingredients. Others also noted the product would be of "higher quality" and made of "good ingredients." Many respondents noted a tie to nature, i.e. "To me, it means that it contains ingredients that occur in nature. There is nothing man-made in it like artificial sweeteners, colors, fillers, preservatives."

Regarding confidence in the suggestion that a product labeled as "natural" will help improve one's health, over 30% of respondents note that they are very confident or somewhat confident: 4.5% of respondents note that they are very confident and 26.4% are somewhat confident. Over 35% note they were neutral on the matter. The final third, 32.2% of respondents, note they are somewhat unconfident or very unconfident: 20.2 %, or 143 respondents are somewhat unconfident and 12% of respondents are very unconfident in the food product's ability to improve health. A full distribution of these responses is shown in figure 1.

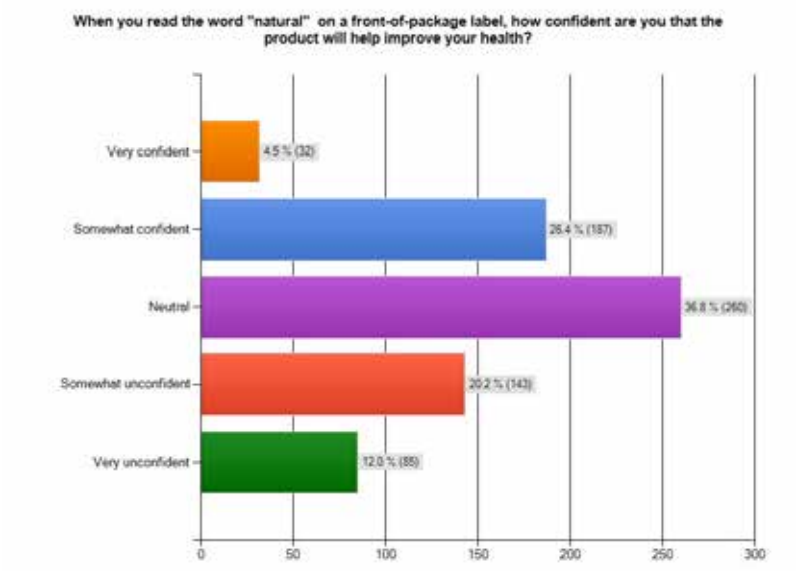

Figure 1: Respondent Confidence in "Natural" Foods' Ability to Improve Health

The mean response to this question was "neutral," and the mode is also "neutral."

Table 4: Respondent Confidence in "Natural" Foods' Ability to Improve Health, Mean Response

Response	Score	Percent Response	Average (Mean)
Very Confident	5	4.5%	0.23
Somewhat Confident	4	26.3%	1.05
Neutral	**3**	**36.8%**	**1.10**
Somewhat Unconfident	2	20.2%	0.40
Very Unconfident	1	12.0%	0.12
		99.8%	**2.91**

Regarding confidence in the suggestion that a product labeled as "natural" will help prevent the risk of potential disease, nearly one quarter of respondents combined note that they are very confident or somewhat confident: 3% are very confident, and 21.4% are somewhat confident. Nearly 40 % note they are neutral on the matter. More than 35 percent note they are somewhat unconfident or very unconfident: 20.7 % are somewhat unconfident, and 15.1% are very unconfident in the food product's ability to improve health.

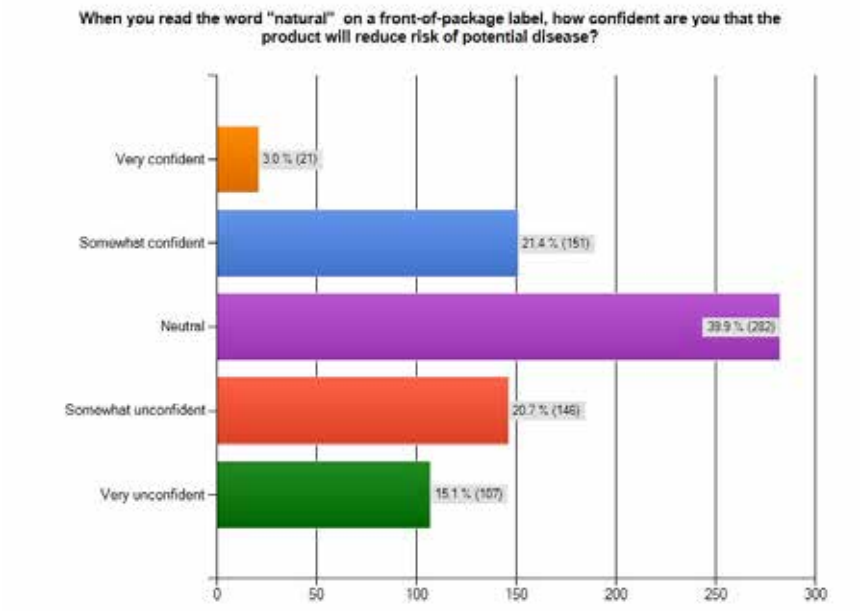

Figure 2: Respondent Confidence in "Natural" Foods' Ability to Reduce Risk of Disease

The mean response to this question is "neutral," and the mode is also "neutral."

Table 5: Respondent Confidence in "Natural" Foods' Ability to Reduce Risk of Disease, Mean Response

Response	Score	Percent Response	Average (Mean)
Very Confident	5	3.0%	0.15
Somewhat Confident	4	21.4%	0.86
Neutral	**3**	**39.9%**	**1.20**
Somewhat Unconfident	2	20.7%	0.41
Very Unconfident	1	15.1%	0.15
		100.1%	**2.77**

Finally, when asked whether or not they believed the word "natural" on a front-of-package label has been authorized for use on the label by the U.S. Food and Drug Administration (FDA), 64.8% note they do not believe so, whereas 35.2% believe the FDA does govern the use of this front-of-package label claim.

Table 6: Is "Natural" Authorized by the FDA?		
No	**64.8%**	**458**
Yes	35.2%	249

As previously discussed in this article, the FDA has no formal definition of the term "natural," nor does it formally govern its use on front-of-package label claims. Thus, all respondents indicating thoughts that this term was officially governed to mean more than marketing and buzz terminologies could be being misled. This means that the sample's literacy about this particular word as it is used on front-of-package labeling is lacking 35% of the time. Although 35% is a minority portion, it is still a substantive segment of the respondent sample. In the following section, after describing the limitation of my findings, I will provide a discussion of the implications of my findings.

Study Limitations. It should be noted that my study is but one examination of a sample population of consumers. For this study, I utilized convenience sampling at the university where I was employed. While my work yielded a large number of responses, university students may, as a whole, have different interpretations and understandings of front-of-package labels than those surveyed in a general population. However, this work indicates the literacy and interpretations of a sample that can help glean important findings related to a sample's notions about foods labeled as "natural."

Making Meaning of "Natural": Limited Sample Literacies and New FDA Movements

Notes on the Sample Community. While grassroots community campaigns are making aforesaid moves to influence regulatory policies surrounding the word "natural," the results of this survey indicate that, while many members of the sampled community appear literate about some of the apparent issues with "natural" products, a good portion of the community also may not have an understanding about the true "non-definition of 'natural' foods," given the respondents that attributed a specific qualitative meaning to the ingredients and nutritional value of foods labeled as "natural," (see tables 2 and 3). More than 30% of respondents note that they are very confident or somewhat confident: 4.5% of respondents note that they are very confident and 26.4% are somewhat confident. (see figure 1). One quarter of respondents note that they are very confident or somewhat confident that foods labeled as "natural" can actually help prevent disease (see figure 4). Further, more than one third of the respondents do not have an apparent literacy that the word is essentially undefined and not truly regulated by the FDA at this time (see table 6). These findings indicate issues with an overall

community literacy of "natural" products and provide a sample of why the "natural" products industry continues to rise, despite lack of regulation in this area.

In a localized look at how "natural" foods may be generally perceived on the UCCS campus itself, and in an attempt to provide context to my findings about the student community's literacy about "natural" foods, a few points are of note: first, UCCS is often regarded as a "green" campus, with its students and the wider campus and area exhibiting a strong knowledge about sustainable and healthy living, which includes, of course, food movements. For example, 2014's Colorado Proposition 105, the failed proposition which would have required stricter mandates on genetically modified foods, including a labeling requirement, was thoroughly covered in an 2014 issue of the *UCCS Scribe*, the university's campus newspaper (Nedd par. 9), with many students chiming in support to the measure. In another 2014 article, a student writer covered the issues of artificial ingredients found in Starbucks lattes. UCCS is home to several informal student clubs, which in the past have indicated a focus on local and natural foods, including the UCCS Local Food Club and the Students for Environmental Awareness and Sustainability. The UCCS Green Action Fund has nearly 300 members on its Facebook group page.

The UCCS community exhibits outward indications of a sustainable campus; the UCCS greenhouse provides organic produce to UCCS's food service locations and offers students a dedicated Office of Sustainability which indicates that providing students with "natural" and "organic" options is a top priority. The campus boasts a very active "Earth Week" campaign annually, with "healthier foods"—whether in the form of local, natural, or organic options—often touted. In 2014, the Princeton Review awarded the UCCS campus distinction as part of the "Green Honor Roll," meaning it earned a place among 24 schools in the nation for sustainable practices, many of which are related to "healthier" and "local, organic foods" (UCCS Office of Sustainability par. 1).

On a larger scale, the local area is seemingly involved in community efforts to fight back against the possible mislabeling of GMO foods as "natural." Colorado Springs is home to one of the annual March Against Monsanto protests. Colorado, as a state, was found to be generally in favor of labeling laws which would alter the state of how many foods labeled as "natural" would be regulated: a *USA Today* poll showed that 51 percent of Coloradans were in favor of the 2014 labeling measure. Colorado's "Right to Know" campaign gained over 170,000 signatures in favor of the effort.

Clearly, the localized environment provides the UCCS student community many opportunities to become informed about issues with foods labeled as "natural," and both UCCS and the city of Colorado Springs, as well as the state of Colorado, maintains an active interest in many of the activist measures described earlier in this article. Yet, the findings of my own survey of the UCCS student community show issues with an overall community literacy of "natural" products; this paradox, in many ways, provides echoes of the idea that there can be a simultaneous community desire to eat "better" or "greener," yet many still choose products that, by many measures, may not actually be so. This echoes the aforementioned bigger picture issue presented by the "American

obesity paradox," in which Americans are showing efforts to eat healthier while obesity rates continue to climb.

While the aforementioned grassroots campaigns and lawsuits show progress in gaining community awareness in this area, the movement may not yet be enough, especially considering the continued rise in a community counter movement expressing an approval of "natural" products via the booming "natural" food market and the increasing rate of purchases of these foods. It has been discussed that the FDA recently declined to make further movement on the regulation of the "natural" label, but the organization has made at least some other moves in a proclaimed effort to diminish consumer confusion.

New Movements by the FDA. In early 2014, in an effort to alter elements of food labels the FDA claims are "often misunderstood by consumers," the organization announced changes to the "Nutrition Facts" portion of food labels– changes which would mark the first alteration of this portion of food labels in more than 20 years (FDA 1). Changes that will occur include a bigger emphasis on calories, sugars, and certain nutrients. The "calories from fat" line will be removed, and the daily values for certain nutrients will be updated. Also, the "serving size" portion of the nutrition facts area will receive a makeover—the FDA asserts that the serving size should more accurately reflect the total number of servings so that consumers do not unknowingly consume several servings when they thought the serving size was perhaps just one (FDA 1). While a direct causal effect cannot be noted, this FDA move does chronologically follow several petitions published in 2013, including a major citizen petition by the Center for Science in the Public Interest backed by individuals requesting the addition of an "added sugars" line on the Nutrition Facts panel (CSPI 2). Interestingly enough, the very first change listed in the 2014 FDA proposal would be to "require information about 'added sugars'" (FDA 1).

The question remains as to whether changes regarding the definition and regulation of health claims, particularly those labeled as "natural," will see movement. Perhaps when larger communities exhibit the dissatisfaction made apparent now by those part of the counter literacy about "natural" foods, as evidenced by petitions to the FDA and lawsuits against food companies, the FDA will make this issue a priority. Until then, local communities and grassroots efforts will likely have to push forward to make the issue even more public in order to gain more traction, and research into local community's interpretations and general literacy about foods labeled as "natural" will need to be replicated in an attempt to provide a better overall snapshot of "consumer perceptions and beliefs" (FDA par. 2). While it is questionable as to whether the burden of prompting the FDA to embark on the public process it insists is needed (Kux 2) to formally regulate foods labeled as "natural" should actually lie with consumers (Pomeranz 440), there is also at least some evidence that public community outcry is being noted (Center for Science in the Public Interest 1).

In the context of a nationwide desire and movement to eat healthier, food labels have the potential to be an incredible guiding tool for consumers. Despite all of the nutritional noise surrounding this complex issue, including differing perceptions and

limited understandings about regulation of the word "natural," counter community literacies and the subsequent public actions that often form as a result have remarkable potential to inform and grow consumer influence on the food industry. These new literacies and actions, which burst through the surrounding nutritional noise, demonstrate how small community movements can grow into national movements and subsequently begin to change the entire landscape of food labeling.

Works Cited

Center for Science in the Public Interest. Petition to Ensure the Safe Use of "Added Sugars." 13 Feb. 2013. Web. 31 May 2015.

Consumer Reports. "Stop Confusing Consumers: Ban the 'Natural' Label." Takeaction.takepart.com, n.d. Web. 31 May 2015.

Cummins, Ronnie, "Organic Retailers and Consumers Demand Truth in Labeling." Organic Consumers Association. 7 March 3013. Web. 31 May 2015.

Esterl, Mike. "The Natural Evolution of Food Labels." *The Wall Street Journal*, B1. 6 Nov. 2013. Web. 31 May 2015.

Fogel, Stefanie Jill. "FDA declines to define 'Natural'" DLA Piper. 8 Jan. 2014. Web. 31 May 2015.

Food Navigator. "Kampffmeyer asks: What does clean label mean to consumers?" 9 Nov. 2012. Web. 31 May 2015.

Kux, Leslie. "Letter to Judges Gonzalez Rogers, White, and McNulty." 6 Jan. 2014. Web. 31 May 2015.

Nedd, Alexander. GMO Labeling Could Change Food in Colorado. *The UCCS Scribe*. 20 Oct. 2014. Web. 1 Aug. 2015.

Negowetti, Nicole E. "Food Labeling Litigation: Exposing Gaps in the FDA's Resources and Regulatory Authority." Governance Studies At Brookings. June 2014. Web. 31 May 2015.

_____. A National "Natural" Standard for Food Labeling, 65 Me. L. Rev. 581 2013. Web. 31 May 2015.

Pomeranz, Jennifer L. "Litigation To Address Misleading Food Label Claims And The Role Of The State Attorneys." Center for Obesity Research and Education, Temple University. Web. 31 May 2015.

Rangan, Urvashi. "Citizen Petition." Petition to the FDA. 26 June 2014. Web. 31 May 2015.

Sears, William. "Label Loopholes." Ask Dr. Sears. 2015. Web. 31 May 2015.

The Sugar Association. "Citizen Petition." Harris Interactive. 2006. Web. 31 May 2015.

Tierney, John. "Health Halo Can Hide the Calories." *N.Y. Times* 8 Dec. 2008. Web. 31 May 2015.

UCCS Office of Sustainability. UCCS Makes Princeton Review Green Honor Roll! 1 Nov. 2014. Web. 1 Aug. 2015.

U.S. Department of Agriculture's Economic Research Service. "American Adults are Choosing Healthier Foods, Consuming Healthier Diets." 16 Jan. 2014. Web. 31 May 2015.
U.S. Food and Drug Administration. "Proposed Changes to the Nutrition Facts Label." 1 Aug. 2014. Web. 31 May 2015.
_____. "What is the meaning of 'natural' on the label of food?" 29 April 2015. Web. 31 May 2015.

Author Bio

Erin Trauth is the Associate Director of Composition and instructor of professional and technical writing at the University of South Florida. She earned her doctorate in Technical Communication and Rhetoric at Texas Tech University. She conducts research on front-of-package food labels and regulatory policies surrounding this communication, public health communication, risk communication, service learning, writing for non-profit organizations, composition pedagogy, and computer-mediated communications.