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"Natural" Food Claims: Industry Practices, Consumer Expectations, and Class Action Lawsuits

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ABSTRACT

This article examines industry practices, consumer expectations, and class action lawsuits involving natural food claims. Although anecdotal evidence of disputes regarding natural claims is plentiful, there have been few comprehensive, quantitative analyses. This article adds to this debate. It presents data on food manufacturer and retailer use of natural claims, and consumer perceptions of natural claims for food products during the timeframe 2010–2014. It then identifies 22 purported class action lawsuits alleging false or misleading natural claims on food labels and details the causes of action underlying each claim. Insofar as a gap remains between firm use and consumer expectations, regulators and lawmakers should set clear parameters on use of natural claims on food labels.

I. INTRODUCTION

The U.S. Food and Drug Administration (FDA) has underscored the important role that labels play in providing consumers with relevant and accurate product information to make informed decisions on the purchase of food and beverages.[1] At the same time, consumers often make food purchase decisions based on the way they feel about a certain product, whether that manifests as the convenience of a bagged salad or the potential health promotion abilities for yogurt. Evidence suggests that certain heuristics available at the point of product selection (in the store) or consumption (at home or elsewhere) have an especially influential role in shaping

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[1] *See* Use of the Term "Natural" in the Labeling of Human Food Products; Requests for Information and Comments, 80 Fed Reg. 69,906, 69,907 (proposed Nov. 12, 2015); *Meat and Poultry Labeling Terms*, U.S. DEP'T AGRIC., https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/food-labeling/meat-and-poultry-labeling-terms/meat-and-poultry-labeling-terms [https://perma.cc/BME2-KVVF] (last visited Apr. 9, 2018).

consumer behavior.[2] These heuristics include marketing terms such as "natural," "fresh," and "pure." This article provides insight into how consumers and firms understand and use "natural" or "all-natural" claims on food and beverage products.

Natural claims lie within the domain of products that are ostensibly produced using sustainable agricultural practices, such as environmentally conscious farming methods, and food products that do not contain ingredients that are man-made. Studies have consistently found that natural claims impact consumer perceptions of quality. This includes consumer expectations regarding the manner by which food is produced or processed, as well as final attributes of the product.[3] While in some instances, such as raw agricultural products and unprocessed fruits and vegetables, it may be clear to consumers that a particular food is natural,[4] this determination is more challenging for processed or multi-ingredient foods. In this context, natural claims may reinforce, alter, or complement perceptions of product quality. This can create a health halo effect, whereby consumers choose to purchase and eat more of a product because of the perceived healthiness of that product, regardless of whether that product is, in fact, healthy.[5]

In large part, natural claims occur within a regulatory vacuum. Current FDA policy deems the word "natural" on food labels to be a marketing term,[6] and the term is neither clearly defined nor explicitly regulated.[7] As a consequence, food and beverage manufacturers use natural claims ubiquitously, and there is very little formulation or processing differentiation between products that use natural claims and those that do not.[8] In 2015, FDA published a request for information and

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[2] *See generally, e.g.,* Pierre Chandon, *How Package Design and Packaged-based Marketing Claims Lead to Overeating*, APPLIED ECON. PERSP. & POL. 1, 1 (2012); Renaud Lunardo & Camille Saintives, *The Effect of Naturalness Claims on Perceptions of Food Product Naturalness in the Point of Purchase*, 20 J. RETAILING & CONSUMER SERVICES 531, 534 (2013); Amber Walters & Marilee Long, *The Effect of Food Label Cues on Perceptions of Quality and Purchase Intentions among High-Involvement Consumers with Varying Levels of Nutrition Knowledge*, 44 J. NUTRITION, EDUC., & BEHAV. 350 (2012).

[3] *See generally* Sergio Roman et al., *The importance of food naturalness for consumers: Results of a systematic review*, 67 TRENDS IN FOOD SCI. & TECH. 44 (2017).

[4] *See* Iryna Printezis et al., *Importance of Perceived "Naturalness" to the Success of Urban Farming*, 32 CHOICES 1 (2017).

[5] For example, an organic soup may be presumed to be low sodium via a health halo, or a fair trade coffee may be presumed to be organic, even in the absence of a specific or certified claim.

[6] Magnus Bostrom & Mikael Klintman, *Framing, Debating, and Standardizing "Natural Food" in Two Different Political Contexts: Sweden and the U.S.*, SE-106 91 Stockholm School of Economics, http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.459.3008&rep=rep1&type=pdf.

[7] Efthimios Parasidis et al., *Addressing Consumer Confusion Surrounding "Natural" Food Claims*, 41 AM. J. L. MED. 357, 359–63 (2015). Federal regulation over natural claims lies within three agencies: FDA, USDA, and FTC. USDA has jurisdiction over labels for meat, poultry, and processed eggs, while FDA maintains jurisdiction for labels on all other food products (which amount to about 80 percent of all food products). FTC jurisdiction extends to food advertising. *See generally id.*; *see also* Nicole E. Negowetti, *A National "Natural" Standard for Food Labeling*, 65 ME. L. REV. 581, 582–83 (2013); Use of the Term "Natural" in the Labeling of Human Food Products; Requests for Information and Comments, 80 Fed Reg. 69,906, 69,907 (proposed Nov. 12, 2015).

[8] Rebecca Liu et al., *A Natural Experiment: Using Immersive Technologies to Study the Impact of "All-Natural" Labeling on Perceived Food Quality, Nutritional Content, and Liking*, 82 J. FOOD SCI. 825 (2017).

comments on the use of natural food claims;[9] however, the agency has yet to issue regulations or updated guidance.

Given widespread confusion on the definition of the term natural, some consumer advocates have argued that FDA should prohibit use of natural claims; others have called for specific guidelines on when natural claims should be permitted.[10] At the same time, industry lobby groups have urged FDA to allow use of natural claims on food that is produced with bioengineered ingredients, notwithstanding the fact that such ingredients are manmade and not found in nature. For example, the Grocery Manufacturers Association—which describes itself as "the voice of more than 250 leading food, beverage and consumer product companies"[11]—filed a petition with FDA calling for amendments to the regulatory regime that would allow food produced with bioengineered ingredients to be labeled as "natural," "all natural," "100% natural," "from nature," "naturally grown," and "naturally sourced."[12] Meanwhile, companies that create bioengineered ingredients routinely seek and obtain patent protection for their products.[13] Yet, patents cannot be issued for "products of nature," but rather are permitted solely for manmade products.[14] Thus, in the context of patent prosecution, firms argue that their bioengineered ingredients are man-made and not found in nature, while in the context of food labeling firms contend that bioengineered products are equivalent to those occurring in nature.

Several studies have examined the impact of natural claims on consumer perceptions and behaviors. Some studies have found that consumers define natural primarily by the absence of "undesirable" attributes—such as additives, artificial colors, and manmade ingredients—as opposed to the presence of specific positive qualities.[15] This suggests that laws and regulations governing natural claims might be impactful if they speak directly to (1) the types of ingredients that can be used in foods labeled natural and (2) the extent of food processing that is permissible.

In addition to findings that have centered on the presence or absence of certain ingredients, other studies have found that products labeled as natural are considered to be healthier, more appealing, more environmentally friendly, and more humane when compared to products that do not make a natural claim.[16] Indeed, several

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[9] Use of the Term "Natural" in the Labeling of Human Food Products; Requests for Information and Comments, 80 Fed Reg. 69,905 (proposed Nov. 12, 2015).

[10] Use of the Term "Natural" in the Labeling of Human Food Products; Requests for Information and Comments, 80 Fed Reg. 69,907 (proposed Nov. 12, 2015).

[11] Grocery Manufacturers Association *About*, GMA, https://www.gmaonline.org/about/ [https://perma.cc/GN9V-FEXQ].

[12] Use of the Term "Natural" in the Labeling of Human Food Products; Requests for Information and Comments, 80 Fed Reg. 69,905 (proposed Nov. 12, 2015).

[13] Parasidis et al., *supra* note 7, at 368–69.

[14] *See, e.g.*, Efthimios Parasidis, *A Uniform Framework for Patent Eligibility*, 85 TULANE L. REV. 323, 326 (2010).

[15] Paul Rozin et al., *Preference for Natural: Instrumental and Ideational/Moral Motivations, and the Contrast Between Foods and Medicines*, 43 APPETITE 147 (2004); Paul Rozin, Claude Fischler, & Christy Shields-Argeles, *European and American Perspectives on the Meaning of* Natural, 59 APPETITE 448 (2012); *see generally* Paul Rozin, *The Meaning of "Natural,"* 16 PSYCHOL. SCI. 652 (2005); Paul Rozin, *Naturalness Judgments by Lay Americans: Process Dominates Content in Judgments of Food or Water Acceptability and Naturalness*, 1 JUDGMENT & DECISION MAKING 91 (2006).

[16] *See, e.g.*, Parasidis et al., *supra* note 7, at 357–73; Katie M. Abrams et al., *Naturally Confused: Consumers' Perceptions of All-Natural and Organic Pork Products*, 27 AGRIC. & HUM. VALUES 365,

studies have found that healthfulness is often given as a key reason for preferring foods labeled as natural.[17] Moreover, studies have indicated that perceived quality and healthiness are important in consumer decisions related to foods.[18]

Notwithstanding various perspectives on how consumers define the term natural for themselves, natural claims have proven to be a successful marketing tactic. As such, natural claims can be used to exploit consumer uncertainty about perceptions of food quality, just as they may be used as a means of conveying accurate information regarding the processes used to prepare the product, and the presence or absence of certain ingredients or quality attributes.

The gap in the use and understanding of natural claims can be mitigated by a variety of actors, including the government (via sensible regulations), industry (via self-generated marketing principles), and the courts (via adjudication of lawsuits that allege false or misleading food labels). In the absence of government regulation and industry-wide practices, however, consumers have turned to the courts to address false or misleading natural claims.[19] Litigants and the courts can potentially provide meaningful guidance regarding reasonable use of natural claims. To be sure, litigation may not serve as an efficient or optimal means of setting industry parameters on use of natural claims and can lead to a patchwork framework.[20] In addition, the technical nature of these issues arguably requires a more expansive debate and policy-making process than is feasible via litigation.[21]

This article considers three dimensions of the public policy and food marketing environment for natural claims. First, industry practices surrounding use of natural

365–74 (2010). For example, salad dressing labeled all-natural elicited more favorable opinions of food quality and increased purchase intent even when the nutritional label contained an ingredient (high fructose corn syrup) that was potentially inconsistent with this labeling. *See* Walters & Long, *supra* note 2, at 350–54.

[17] *See, e.g.*, Rozin et al. (2004), *supra* note 15.

[18] Jonathon P. Schuldt, Dominique Muller, & Norbert Schwarz, *The "Fair Trade" Effect: Health Halos From Social Ethics Claims*, 3 SOC. PSYCHOLOGICAL & PERSONALITY SCI. 581 (2012); Bernadette Sutterlin & Michael Siegrist, *Simply Adding the Word "Fruit" Makes Sugar Healthier: The Misleading Effect of Symbolic Information on the Perceived Healthiness of Food*, 95 APPETITE 252 (2015).

[19] Ross D. Petty *"Natural" Claims in Food Advertising: Policy Implications of Filling the Regulatory Void with Consumer Class Action Lawsuits,* 34 J. PUB. POL'Y & MARKETING 131, 132 (2015) (finding that the government has attempted regulation with varying results); *see also supra* note 7.

[20] *See* Amanda Berhaupt-Glickstein et al., *The Evolution of Language Complexity in Qualified Health Claims*, 47 FOOD POL'Y 62 (2014) (describing a similar finding for the role of the courts in modifying language contained within qualified health claims). Regarding natural claims, an important historical discussion of the various steps taken by the three key Federal agencies (FTC, FDA and USDA) to regulate the use of natural claims is presented in Petty, *supra* note 19, at 131–41. He documents the growth in related consumer class action lawsuits which is argued to be due to a regulatory void. Petty also argues that the use of class action lawsuits in place of policy making is burdensome and fraught with waste. Suits have stalled within courts in part based on procedural issues such as forming a valid class of impacted consumers or determining if the topic falls within FDA's primary jurisdiction, see Shea Thompson, *Artificially "Natural": Class Action Lawsuits Attack Misleading "Natural" Claims in FDA's Absence*, 47 IND. L. REV. 893 (2014), as opposed to advancing solely on the interpretation of what is "natural." In sum, there is a concern that class actions for such a technical issue may lead to inconsistent results rather than a uniform solution that a (Federal) policy would promote. *See* April L. Farris, *The "Natural" Aversion: The FDA's Reluctance to Define a Leading Food-Industry Marketing Claim, and the Pressing Need for a Workable Rule*, 65 FOOD & DRUG L.J. 403 (2010).

[21] Use of the Term "Natural" in the Labeling of Human Food Products; Requests for Information and Comments, 80 Fed Reg. 69,907 (proposed Nov. 12, 2015).

claims on new food and beverage products are detailed at a category level to characterize the scope and scale of use of natural claims. Second, consumer expectations and behavior are explored using a series of surveys of shoppers of several key products that make natural claims. Third, a sample of early and influential consumer class action cases contesting the use of natural claims is examined, providing a description of the evolving role of litigation to fill the food policy gap. This article synthesizes insights on this contemporary public policy and food marketing topic building from the actions of these linked sets of stakeholders: industry, consumers, and the courts.

II. DATA: INDUSTRY PRACTICES, CONSUMER EXPECTATIONS, AND CLASS ACTION LAWSUITS

This article presents three empirical components: (1) industry labeling practices on natural claims for food and beverage products launched in the United States between 2010–2014; (2) survey data from over 5,000 consumers who purchased food products that were implicated in food labeling lawsuits that were pending between 2010–2014; and (3) a review of 22 class action cases that were pending between 2010–2014. Each empirical element provides a stakeholder perspective on the use, understanding, and response to natural claims on food labels. The timeframe of 2010–2014 was selected to coincide with a peak of activity in class action lawsuits alleging that natural claims on food products resulted in false or misleading food labels.[22]

Food and beverage innovation strategies were tracked using Mintel's Global New Product Database (GNPD) resource for products introduced into commerce in the U.S. market between 2010–2014.[23] GNPD includes product pictures and standardized data elements, including required Nutrition Facts and ingredient lists for new, reformulated, and relaunched food and beverage products. The database includes two relevant product positioning claims, "All Natural" and "GMO Free," which are identified in Table 1 of this article. In addition, text searches of various database fields were run for a set of natural claims (e.g., "All Natural", "100% Natural") and synonyms (e.g., "From Nature"), in part to identify whether Mintel's "All Natural" classifications were precise.

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[22] *See* Thompson, *supra* note 20; Petty *supra* note 19.

[23] For examples of the use of this data in food policy and marketing analyses, see, e.g., Debra Van Camp et al., *The Paradox of Organic Ingredients*, FOOD TECH. 20, 24 (2012); Debra Schaefer et al., *Are Front of Pack Claims Indicators of Nutrition Quality? Evidence from 2 Product Categories,* 81 J. FOOD SCI. 223, 226 (2016).

Table 1: Natural Product Claims (2010-2014)

Claim	2010	2011	2012	2013	2014
Natural	3,083	3,289	3,254	5,294	5,124
All Natural	1,244	1,379	1,208	1,974	1,660
100% Natural	271	309	287	415	349
Nothing Artificial	788	825	896	1,732	1,832
Natural Flavor	209	253	282	508	520
Natural Ingredient	201	208	187	403	410
From Nature	2	1	2	7	4
GMO-Free	154	318	394	1,327	1,992
Natural and Xantham gum	0	0	0	0	0
Natural and Soy Lecithin	367	416	426	736	688
Natural and High Fructose	127	147	165	205	1
Total Number of Food & Beverage Innovations	**11,989**	**11,906**	**11,950**	**18,948**	**19,535**

Source: GNPD (Mintel)

Table 2 presents the distribution of products making a natural claim over 25 categories. The most inclusive term "Natural"—when it was identified in the product description field—was used as the basis for Table 2. In 2014, this included 5,124 food products.

Table 2: Product Categories with Natural Claims

Category	2010	2011	2012	2013	2014
Snacks	389	450	519	716	815
Dairy	212	234	277	485	562
Bakery	304	337	315	474	463
Sauces & Seasonings	398	379	296	534	387
Processed Fish, Meat & Egg Products	202	192	188	322	375
Alcoholic Beverages	125	136	186	260	236
Other Beverages	53	94	107	255	212
Desserts & Ice Cream	127	135	114	230	207
Hot Beverages	107	110	107	190	189
Breakfast Cereals	125	118	112	169	172
Juice Drinks	114	154	126	164	170
Water	58	73	81	80	166
Meals & Meal Centers	97	107	86	184	158
Sugar & Gum Confectionery	140	96	124	184	158
Chocolate Confectionery	73	84	102	149	137
Side Dishes	96	108	75	136	115
Baby Food	31	33	31	80	115
Fruit & Vegetables	84	87	77	186	100
Sweet Spreads	89	80	71	89	73
Carbonated Soft Drinks	73	77	63	79	72
Sports & Energy Drinks	36	46	37	71	68
Ready to Drink Beverages	50	44	51	95	61
Savory Spreads	41	48	33	76	50
Soup	40	42	35	63	43
Sweeteners & Sugar	19	25	41	23	20
Total	**3,083**	**3,289**	**3,254**	**5,294**	**5,124**

Source: GNPD (Mintel)

To assess the extent of consumer understanding and behavior, a series of surveys were conducted using real products from Kashi, Trader Joes, Dreyers, and Bear Naked; these products were implicated in four of the leading class action lawsuits. Table 3 outlines the design of these surveys.

Table 3: Survey Design

Brand	Sample Size	Products	Claim	Contested Ingredient(s)
Trader Joe's	1004	Cookies Bakery - biscuits Apple juice	All Natural	synthetic ascorbic acid, potassium carbonate, sodium acid pyrophosphate, xanthan gum and vegetable mono and diglycerides
		Ricotta cheese	100% Natural	
Bear Naked	1227	Granola Breakfast cereal Cookies Trail mix	100% Natural 100% Pure & Natural	synthetic glycerin, hexane-processed soy ingredients, potassium carbonate and tocopherols
Dreyer's Edy's Haagen-Dazs	851	Ice cream	All Natural All Natural Flavors	synthetic potassium carbonate
Kashi	885	Waffles Oatmeal Breakfast cereal Crackers	Nothing Artificial (front of pack)	synthetic ascorbic acid, calcium pantothenate, calcium phosphates, glycerin, hexane-processed soy ingredients, potassium bicarbonate, potassium carbonate, pyridoxine hydrochloride, sodium acid pyrophosphate, sodium citrate, sodium phosphates, tocopherols, xanthan gum
	792	Breakfast cereal Entrée Snacks	All Natural (front of pack)	
	2763	Snacks Shake Waffles Breakfast cereal	All Natural (side of pack)	
	612	Breakfast cereal	All Natural (back of pack)	

The consumer data were collected through a nationally representative panel of U.S. adults using online surveys and experiments. As a preliminary matter, members of the panel were filtered to assess if they had purchased one of the products under evaluation. Only those who had bought the product in the prior year were included. After screening for qualified participants, the responses of over 5,000 food shoppers were analyzed. Their responses provide robust insight into (1) the frequency of consumption of products labeled natural, (2) how consumers define the term natural, and (3) consumer expectations regarding the cost of natural food products.

Table 4: Consumer Perceptions

	Trader Joe's		**Bear Naked**		**Ice Cream**	**Kashi**	
	All Natural	100% Natural	100% Natural	100% Pure & Natural	All Natural Flavors	All Natural	Nothing Artificial
All of the ingredients in the product are natural	436	311	685	624	311	1961	827
Some of the ingredients in the product are natural	224	38	186	96	262	460	358
None of the ingredients in the product are manmade or artificial	236	138	70	31	95	652	1301
Some of the ingredients in the product are man-made or artificial	36	9	214	395	103	140	124

The questions were administered in a variety of formats, with the same question and question types used for each product. Table 4 provides examples of four survey items. Because prior studies have found that women more commonly report reading, understanding, and using label information to make assertions about product

quality,[24] only the responses of female primary food shoppers are included in our survey results.[25]

We then prepared a list of class action lawsuits filed between 2010–2014, using two reporting databases (*Class Action Reporter* and *Class Action Law Monitor* – LexisNexis) and searches on Westlaw that included keywords "food" and "natural." Further review of retrieved cases excluded a number of lawsuits as not being related to natural food claims, resulting in a final list of 22 cases. After compiling the list of cases, we reviewed electronic docket sheets, collected by Bloomberg Law, for each case. We then created a database that included: (1) the court of jurisdiction; (2) causes of action; (3) contested ingredients; and (4) the legal authority underlying the causes of action. This information is outlined in Table 5. Differences in review across researchers were discussed until agreement was reached.[26] This list of 22 cases is not intended to be exhaustive, but rather serves as illustrative of topics of concern to groups of consumers over the period examined.

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[24] *See, e.g.*, Christine Skubisz, *Naturally Good: Front-of-package Claims as Message Cues*, 108 APPETITE 506 (2017); S.R. Dominick et al., *Consumer Associations with the "All Natural" Food Label,* J. FOOD PRODUCTS MARKETING 1, 10 (2017).

[25] *See, e.g.*, Neal H. Hooker, *Do Female Consumers React to "Natural" Claims on Food Labels?*, 5 (John Glen Coll. of Pub. Affairs, 2015).

[26] Elaine Watson, *Class Action Lawsuit v. General Mills Over All-Natural Claims and GMOs Can Proceed, Says Judge*, FOOD NAVIGATOR-USA.COM https://www.foodnavigator-usa.com/Article/2014/03/31/Lawsuit-v-General-Mills-over-all-natural-claims-GMOs-can-proceed [https://perma.cc/YL5T-F8VN] (reporting 199 natural cases 2010–2013, although it is not clear how this number was derived, in particular if cases that were subsequently consolidated were double counted).

Table 5: Consumer Civil Action Cases (2010–2014)

#	Case/Court/Date	Products	Claim	Contested Ingredient(s)	Basis
1	Von Koenig v. Snapple Beverage Corp., No. 09-0606 (E.D. Cal. Jan. 6, 2011)	beverages	All Natural, 100% Natural	high fructose corn syrup	false and misleading labeling
2	Weiner v. Snapple Beverage Corp., No. 07-8742 (S.D.N.Y. Jan. 21, 2011)	beverages	All Natural	high fructose corn syrup	unfair or deceptive practices
3	Henderson v. Gruma Corp., No. 10-4173 (C.D. Cal. Apr. 11, 2011)	Mission Guacamole and Spicy Bean Dip	All Natural	Trans fat	misleading product labeling
4	Astiana v. Dreyer's Grand Ice Cream, Inc., No. 11-2910 (N.D. Cal. Jun. 14, 2011)	ice cream	All Natural, All Natural Flavors	synthetic potassium carbonate	false and misleading labeling
5	Briseno v. ConAgra Foods, Inc., No. 11-5379 (C.D. Cal. Jun 28, 2011)	Wesson Oil	100% Natural	genetically modified plants and organisms	consumer protection and breach of warranty
6	Astiana v. Kashi Company, No. 11-1967 (S.D. Cal., Feb. 21, 2012)	waffles, oatmeal, breakfast cereal, crackers, entrée, snacks, shake	All Natural, Nothing Artificial	synthetic ascorbic acid, calcium pantothenate, calcium phosphates, glycerin, hexane-processed soy ingredients, potassium bicarbonate, potassium carbonate, pyridoxine hydrochloride, sodium acid pyrophosphate, sodium citrate, sodium phosphates, tocopherols, xanthan gum	false marketing
7	Thurston v. Bear Naked, Inc., No. 11-2890 (S.D. Cal. Mar. 12, 2012	Granola, breakfast cereal, cookies, trail mix	100% Natural, 100% Pure & Natural	synthetic glycerin, hexane-processed soy ingredients, potassium carbonate and tocopherols	false marketing

Table 5 (Continued): Consumer Civil Action Cases (2010–2014)

#	Case/Court/Date	Products	Claim	Contested Ingredient(s)	Basis
8	Larsen v. Trader Joe's Corp., No. 11-5188 (N.D. Cal. Mar. 23, 2012	Cookies, baked products, ricotta cheese, apple juice	All Natural, 100% Natural	synthetic ascorbic acid, potassium carbonate, sodium acid pyrophosphate, xanthan gum and vegetable mono and diglycerides	false marketing
9	Lam v. General Mills Inc., No. 11-5056-SC (N.D. Cal. May 31, 2012)	Fruit Roll-ups and Fruit by the Foot	Natural Flavor	partially hydrogenated oil	false and misleading labeling
10	Robinson v. Hornell Brewing Co., No. 11-2183 (D.N.J. Dec. 13, 2012)	Arizona brand beverages	All Natural	high fructose corn syrup	false marketing
11	Janney v. Gen. Mills, No. 12-3919 (N.D. Cal. May 10, 2013)	Nature Valley products/granola	All Natural	high fructose corn syrup	consumer protection and unjust enrichment
12	Werdebaugh v. Blue Diamond Growers, No. 12-2724 (N.D. Cal. Oct. 2, 2013)	almond milk products and snack foods	All Natural	evaporated cane juice	misbranding
13	Rojas v. General Mills Inc., No. 12-5099 (N.D. Cal. Oct. 9, 2013)	Nature Valley granola bars (at least 30 products)	100% Natural	genetically modified corn and soy	false and misleading labeling
14	Wilson v. Frito-Lay N. Am. Inc., No. 12-1586 (N.D. Cal. Oct. 24, 2013)	Frito-Lay products	All Natural	artificial ingredients	false and misleading labeling
15	Martin v. Cargill Inc., No. 13-2563 (D. Minn. Oct. 29, 2013)	Truvia sweetener	Natural	toxic chemicals	consumer protection

Table 5 (Continued): Consumer Civil Action Cases (2010–2014)

#	Case/Court/Date	Products	Claim	Contested Ingredient(s)	Basis
16	Gitson v. Clover Stornetta Farms, No. 13-1517 (N.D. Cal. Jan. 15, 2014)	yogurt	Natural	organic evaporated cane juice	false and deceptive advertising
17	Sethavanish v. ZonePerfect Nutrition Co., No. 12- 2907 (N.D. Cal. Feb. 13, 2014)	nutrition bars	All Natural	ascorbic acid	false and misleading labeling
18	Randolph v. J.M. Smucker Co., No. 13-80581 (S.D. Fla. Mar. 14, 2014)	Crisco Oils	All Natural	genetically modified plants in oils	breach of express warranty
19	Musgrave v. Marie Callender Pie Shops, No. 14- 2006 (N.D. Cal. May 1, 2014)	baking mixes	All Natural	synthetic sodium acid pyrophosphate (leavening agent)	deceptive advertising
20	Garrison v. Whole Foods Mkt. Group Inc., No. 13- 5222 (N.D. Cal. June 2, 2014)	various Whole Foods products	All Natural	synthetic sodium acid pyro-phosphate (SAPP)	consumer protection and breach of warranty
21	Gustavson v. Mars Inc., No. 13-4537 (N.D. Cal. June 10, 2014)	M&M Chocolate Candy, Twix Cookie Bars, Dove Bars and Snicker Bars	Natural	cocoa flavanols	misbranding
22	Figy v. Frito-Lay N. Am. Inc., No. 13-3988 (N.D. Cal. Aug. 12, 2014)	pretzel products	All Natural	riboflavin, niacin, folic acid	false and misleading labeling

Sources: *Class Action Reporter*; *Class Action Law Monitor* (LexisNexis); Westlaw

A. Firm Use of Natural Claims on Food Labels

We intended to document the scope and scale of the use of various natural claims and close synonyms over the period using U.S. Global New Product Database (Mintel) data for food and beverages launched between 2010–2014 to gain a better understanding of how frequently products containing natural claims were entering the market. First, as Table 1 details, a relatively stable proportion of new food and beverage products launched in the U.S. over the timeframe included a natural claim (25.7–27.9 percent of all new food and beverage products). A smaller number made specific natural content claims (All Natural, 100% Natural, Nothing Artificial) or mentioned particular types of natural ingredients.[27] Three illustrative ingredients were used to describe the potential for consumer confusion within those products claiming to be natural. Specifically, ingredient lists were searched for xanthan gum, soy lecithin, and high fructose corn syrup. The latter appears to be less frequently used in combination with a natural claim in 2014, which coincided with several of the class action cases described below.

Table 2 details products in each category using natural claims. Snacks, dairy, and bakery are the most common products to use these claims. Snacks also lead in other marketing claims, notably health and nutrition.[28] Insofar as snacks include products that are highly branded and convenient these products are particularly prone to health halo effects.[29] While some of the food categories in Table 2 include, or are close to, raw products (such as fruits and vegetables, some sweeteners, sugar, and water) other categories include food products that contain multiple ingredients and are likely to be processed using a variety of techniques and processing aides. Taken together, across all product categories, our data reveal that natural claims (of varying types—see Table 1) are being used with increasing frequency.

B. Consumer Expectations and Natural Claims

To document the potential gap between industry use of natural claims and consumer expectations, the survey data explore (1) if consumers selected products with natural claims and (2) what they believed these claims to mean. Sample sizes, product categories, claims, and contested ingredients are outlined in Table 3. The survey data suggest that consumers actively seek out and select products that make natural claims. For example, using an experimental design of a choice between two

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[27] Over the period, the potentially joint claim of GMO-free dramatically grew (a lesser trend is seen in organic claims over this period, see Xiaojin Wang, Kathryn Boys, Neal H. Hooker, *Organic Innovation: The Growing Importance of Private Label Products*, 24 CASE STUDIES IN FOOD RETAILING AND DISTRIBUTION (forthcoming)).

[28] John L. Stanton et al., *Relationship of Product Quality Claims between Private Label and National Brands: The Influence of Private Label Penetration,* 43 INT'L J. RETAIL & DISTRIBUTION MGMT 815 (May 2015).

[29] Dairy products alternatively are frequently marketed based on both process (e.g., hormone free, Greek-style) and ingredient (e.g., low fat, sugar free) claims and are generally simpler food matrices with a smaller number of ingredients. *See* Wang, *supra* note 27. Note that processed fish, meat, and egg products may be regulated by USDA and thus controlled by the more restrictive standard of "not more than minimally processed" when using a natural claim.

otherwise identical real-world food labels (for example, a Kashi cereal), consumers most often selected the product with the natural claim (68 percent of the time).[30]

Table 4 provides illustrative responses to the simple question: "What do these claims mean to you?" The diversity of responses suggests that consumers react differently when presented with label messages that differ subtly (e.g., All Natural versus 100% Natural). However, the data do not reveal consensus among consumers on this issue. For example, a portion of consumers held contradictory perceptions that a 100% Natural claim both suggests all ingredients are natural and some of the ingredients are manmade or artificial. Consumers also exhibited mixed understanding of the vague, less commonly seen, term of Nothing Artificial.

The mismatch between consumer expectations and firm use sets the foundation for lawsuits alleging false or misleading labeling and advertising. As can be seen in Table 5, several large food firms have been implicated in a set of the natural cases spanning a range of product categories and claims. Snack foods are common, which may be due to the large number of snack foods bearing natural claims, or to the perception that snack foods contain manmade ingredients or use unnatural processing methods. Nevertheless, the lawsuits included other staple foods and beverages, such as breakfast cereals and apple juice. A number of processed ingredients (which are ingredients not found in nature) are recurring in these cases. Examples include potassium carbonate and its role in chocolate processing, various soy derivatives, and xanthan gum.

C. Class Action Lawsuits Alleging False or Misleading Natural Claims

In recent years, a number of firms have been sued for using natural claims on products that contain artificial or synthetically produced ingredients, or products that use certain methods of food processing that are deemed to be not natural. Plaintiffs in these lawsuits argue that such practices contravene federal regulations, violate consumer protections statutes, and/or amount to a fraud on consumers.

Table 5 summarizes key aspects of the 22 consumer class action cases assessed in this study. First, as some commentators have detailed,[31] the federal district court for the Northern District of California is a common, though not exclusive, forum in which to bring consumer class action suits. Indeed, the high volume of food-related cases led to the district being dubbed the "Food Court." California's consumer protection laws, and the state's importance as a commercial nexus for food firms, may explain the high volume of cases in the district,[32] as may the concentration of specialized consumer protection attorneys in the district.[33]

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[30] Statistical significance of these results can be evaluated using a χ^2 test that the number of consumers selecting the item with a "all natural"/"nothing artificial" claim is different from 50 percent, that which would be expected if consumers were randomly selecting a product. Even for the most minor (back of pack claim, 419 selected with claim, 193 selected control) we found statistically significant results for all products meaning consumers more frequently selected the product with a natural claim.

[31] *See, e.g.*, Nicole E. Negowetti, *Food Labeling Litigation: Exposing Gaps in the FDA's Resources and Regulatory Authority*, BROOKINGS INST., https://www.brookings.edu/wp-content/uploads/2016/06/Negowetti_Food-Labeling-Litigation.pdf [https://perma.cc/LD7M-YGUE].

[32] *Id.* at 7–19.

[33] *See generally* U.S. CHAMBER INST. FOR LEGAL REFORM, THE FOOD COURT: TRENDS IN FOOD AND BEVERAGE CLASS ACTION LITIGATION (Feb. 2017). Though outside of the scope of this article, it is

Class action lawsuits related to natural claims may provide a barometer of trends and concerns in food labeling. Of the 22 cases that we examined, 15 included All Natural claims, five included 100% Natural claims, four included Natural claims, and two included Natural Flavor claims. With respect to product categories, nine cases involved snacks, five cases involved beverages, and six cases implicated other products, such as ice cream, oils, granola, and sweeteners. Of the challenged ingredients, high fructose corn syrup, xanthan gum, and/or soy lecithin were commonly raised as contributing to false or misleading natural claims, as each of these ingredients is manmade and does not exist in nature.

In large part, the success of a lawsuit alleging a false or misleading food label may hinge on the type of natural claim. For example, it may be easier to demonstrate a false or misleading food label for a product that includes one of the aforementioned ingredients and has a claim that the product is 100% Natural or All Natural.[34] At the same time, several of the cases we examined failed to advance for a variety of procedural and substantive issues. These hurdles included class certification, causation, and difficulties assessing damages.

III. DISCUSSION AND CONTEMPORARY POLICY EFFORTS

The data suggest there is diverse, inconsistent, and growing use of natural claims, consumer confusion, and an inefficient use of the courts to address this gap in the market. This has led several stakeholders, including food manufacturers and ingredient suppliers, to call for standardization of natural claims on foods and beverages.[35] Whether these standards need to be process- or ingredient-based, applied jointly to FDA and USDA,[36] and extend to GMO/bioengineered ingredients

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interesting to explore the development of the Food Court, and the human capital investment on the part of lawyers, clerks and judges.

[34] Daniel A. Devcich et al., *You eat what you are: Modern Health Worries and the Acceptance of Natural and Synthetic Additives in Functional Foods,* 48 APPETITE 333 (2007) (showing a correlation between health worries and innovation); Patricia Pliner et al., *Development of a scale to measure the trait of food neophobia in humans*, 19 APPETITE 105 (1992) (developing the term neophobia); Rozin, *supra* note 15, at 91 (questioning people's beliefs about products that contain ingredients that are not natural); Rozin *supra* note 15, at 652 (suggesting that processing reduces the perceived naturalness of food and even water); Chandon *supra* note 2, at 6–7 (analyzing whether natural claims are seen as a broader quality heuristic or halo or as a congruent claim); Vanessa Apaolaza et al., *Natural Ingredients Claim's Halo Effect on Hedonic Sensory Experiences of Perfumes,* FOOD QUALITY AND PREFERENCE, at 81–86; Abrams *supra* note 16; Nicholas G. Marconi et al., *What's in a Name? The Impact of Fair Trade Claims on Product Price*, AGRIBUSINESS: AN INTERNATIONAL JOURNAL, 2016 at 1; Liu et al., *supra* note 8 (analyzing whether advertisements or sales promotions about naturalness complement or substitute for label claims); Christine Skubisz, *Naturally Good: Front-of-Package Claims as Message Cues*, 108 APPETITE 506 (2016) (exploring consumer reactions to All Natural claims); Christopher Berry et al., *It's Only Natural: The Mediating Impact of Consumers' Attribute Inferences on the Relationships between Product Claims, Perceived Product Healthfulness, and Purchase Intentions*, J. ACAD. MARKETING SCI. 698, 698 (2017); Dominick, *supra* note 24.

[35] *See* Natural on Food Labeling, FOOD & DRUG ADMIN.,, https://www.fda.gov/Food/Guidance Regulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm456090.htm [https://perma.cc/HD5N-9DVV].

[36] U.S. DEP'T AGRIC., *supra* note 1; *"Natural" on Food Labeling*, FOOD & DRUG ADMIN., https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm456090.htm [https://perma.cc/5SE2-A4H3].

or processing aides are questions worthy of a national debate and lawmaking process.[37]

A comparison can be made to the National Organic Program (NOP), in which the USDA includes a *National List* of ingredients that may or may not be used in foods making organic claims.[38] Such a delineation of permitted ingredients reduces uncertainty for organic food manufacturers, educates consumers about what to expect in organic foods, and serves as the standard for any legal actions regarding appropriate claims and product content. To be sure, an approach of broad exclusion of classes of ingredients in foods making a natural claim may discount the sentiment that natural connotes a process, as opposed to a set of product attributes.[39]

Indeed, a list of approved or restricted ingredients and processing steps as the basis of a natural labeling claim has some appeal. For example, it can be argued that use of the *National List* as a determinate of natural promotes simplicity and efficiency and prevents contradictions with organic claims compared to a standalone (permitted/positive or banned/negative) list. However, the NOP as a validated sustainability framework is built around the notion of process standards rather than content.[40] While the *National List* serves as a permitted or excluded list of ingredients, it also serves as a tool to encourage the development of organic versions of ingredients currently not commercially available in the marketplace.[41] This means the list is intended to be dynamic, responding to innovations provided by ingredient suppliers. As such, one goal of the NOP is an increase in the number of approved organic ingredients.

Alternatively, a list for natural ingredients may need to be static and positive—an exhaustive documentation of ingredients (or even product attributes) that may be used on products with the claim, in a manner similar to qualifying/disqualifying criteria for health claims.[42] Two examples highlight this dilemma: GMOs and high fructose corn syrup (HFCS).[43] GMOs are not permitted in organic foods, whereas HFCS is. Whether HFCS should be permitted in products claiming to be natural arguably depends on the amount of transformation required to generate HFCS if using a process-based standard, as opposed to a product- or content-based standard, as the outcome (fructose) is available in nature.[44] Put another way, science and engineering alone may not be able to determine if this common ingredient is natural. Interestingly, food manufacturing and retail firms appear to have moved away from this issue by 2014, with only one product with HFCS making a natural claim (Table

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[37] *See generally Guidance for Industry: Voluntary Labeling Indicating Whether Foods Have or Have Not Been Derived from Genetically Engineered Plants*, FOOD & DRUG ADMIN. (Nov. 2015) https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/ucm059098.htm [https://perma.cc/27EA-RDB4].

[38] *See* Van Camp et al., *supra* note 23, at 21.

[39] *See, e.g.*, Rozin (2005), *supra* note 15, at 652; Rozin (2006), *supra* note 15, at 91.

[40] Rozin et al. (2004), *supra* note 15; Rozin (2006), *supra* note 15, at 91

[41] *See* Van Camp et al, *supra* note 23, at 21.

[42] *See* Schaefer, *supra* note 23, at 224 (noting that a breakfast cereal only qualifies as "healthy" if it has (per 30g serving) less than 3g of fat, 1g of saturated fat, and 480 mg of sodium, etc. *Id.* at 230.

[43] It should be recognized that the United States is not alone in considering this topic. *See* Heereluurt Heeres et al., *"Natural" Ingredients and Foods: A Practical Approach for Qualification*, EUR. FOOD & FEED L. REV. 297, 297–01, 304–05 (2013) (presenting an international comparison of rules).

[44] *See* Thompson, *supra* note 20, at 916.

1). In large part, this shift was likely due to plaintiffs who were successful in their lawsuits against companies that made natural claims for food that contained HFCS. If both GMOs and HFCS were not permitted in natural products, a list other than the NOP *National List* would be needed, or the *National List* would need to be amended. This may complicate matters for joint claim products marketed as both organic and natural. The lack of an ingredient list for natural products has prompted many of the class action cases described in this study.

An open question remains about the role of the courts in future food labeling issues.[45] Does the series of stalled litigation foretell the declining role of litigation-based food policy formation? While this bodes well for more traditional policy development, are there times when the courts should play an integral role in setting or guiding food policy? If yes, what topics or types of cases might prove more successful and why is this preferable to actions by federal agencies or Congress? As some commentators have noted, for highly technical food science topics, courts may lack the expertise to provide meaningful guidance.[46] At the same time, courts can help fill legislative and regulatory gaps.

In light of our analysis of the GNPD data, consumer data, and cases, it is evident that natural claims have a hold on consumers, causing them to develop false assumptions about the food they are consuming.[47] The data further suggest that a clear definition for the term natural is needed to help consumers make more informed food purchases and consumption choices.

Next steps in this research might include more detailed analyses of the marketing strategies used by food manufacturing and retail firms to support various products with natural claims. For example, how much of a price premium (if any) can be supported by a range of natural claims? Do such premiums vary across brands or product categories? Such hedonic analysis of a range of products with various natural claims—individually and jointly with other sustainability, safety and nutrition messages—may yield results different from those already available for organic or fair trade products.[48]

A greater understanding of the dynamics of consumer purchasing of food products making natural claims—particularly when coupled with price premiums paid for natural products—will also help identify determinants of behavior and potential changes should a labeling (and education) policy be implemented. Firm and consumer responses to the impending GMO labeling policy are likely to influence this environment considerably, and it is not immediately clear how joint GMO-free and natural claims will be used in the future. Moreover, in food categories with a large share of products making some form of a natural claim, a comparison group might be hard to determine for issues such as price premiums.

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45 *See* Negowetti, *supra* note 31, at 1, 3–4.

46 Amanda Berhaupt-Glickstein et al., *The Evolution of Language Complexity in Qualified Health Claims*, FOOD POLICY 62, 63, 68 (2014); Van Camp, *supra* note 23, at 22.

47 *See* Berry, *supra* note 34, at 698–99; Roman, *supra* note 3, at 44–45; Rozin (2006), *supra* note 15 at 91, 92, 96.

48 Nicholas Marconi et al., *What's in a Name? The Impact of Fair Trade Claims on Product Price*, AGRIBUSINESS: AN INT'L J. 160, 160 165–67, 169 (2017).

IV. CONCLUSION

Although the semantics of food labeling claims such as natural, fresh, or pure have been applied variously to agricultural products and food over many years,[49] consumers increasingly are demanding transparency and accountability in food labeling practices. This is especially true as the desire to consume natural products increases. Within the dynamics of the contemporary marketplace, it is essential to understand why, and how much, natural claims matter.

Despite FDA's position that natural is simply a marketing tool, our data indicate that consumers expect products with natural claims to have higher quality and nutritional content.[50] Moreover, our previous work has found that, based on heightened expectations of quality for natural products, consumers will pay a premium for products labeled natural.[51]

To be credible and sustainable, natural claims must be truthful. Because courts have been unable to set clear boundaries on the use of natural claims, it seems prudent that regulators and lawmakers err on the side of caution and protect America's consumers by regulating the meaning and use of the term natural to help ensure that food labels convey accurate and non-misleading information. Establishing clear definitions for natural claims not only can help ameliorate consumer confusion, it can provide industry with assurances that efforts to create truly natural products will not be discounted due to an erosion of consumer perception of natural as a labeling and marketing term. While regulations may not be a panacea, they represent a sensible and appropriate means of tackling an area where firms have routinely engaged in false or misleading business practices.

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[49] *See, e.g.*, Donald B. Thompson, *Natural Food and the Pastoral: A Sentimental Notion?*, J. AGRIC. ENVIRON. ETHICS 165, 186–87 (2011); Alessandro Stanziani, *Defining "Natural Product" Between Public Health and Business, 17th to 21st Centuries*, SCIENCEDIRECT 15, 15 (2008).

[50] Liu et al., *supra* note 8, at 830–32.

[51] *Id.*