

Developing a Taxonomy of Food Label Claims

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Introduction/Need for Research

Over 65% of Americans' calories are purchased from large grocery stores rather than restaurants and other specialty stores (Economic Research Service, 2016). With more than 20,000 new food products being introduced to the market each year (Economic Research Service, 2017), consumers are exposed to a multitude of claims found on labels, which are intended to provide valuable information (Bond, Thilmany, and Bond, 2008; Kuchler et al., 2017). However, many of these label claims can be confusing for consumers as meanings vary amongst regulatory agencies and unregulated label claims are defined differently by each independent company (Kuchler et al., 2017). Previous research has found consumers are able to distinguish between separate label claims, although their subjective perception of each label claim's meaning plays a large role in their intent to purchase (Bond et al., 2008). By further defining the meaning, purpose, and credibility of each label claim, consumers will be able to make informed decisions at the grocery store. In this study, common food label claims were analyzed and organized into an all-inclusive taxonomy that allows for clear consumer understanding of food label claim categorization, meaning, and regulatory oversight.

Theoretical Framework

The Total Food Quality (TFQ) Model provides an explanation of how consumers form opinions and expectations of food quality before and after purchase. This model creates a visual representation of objective cues (physical characteristics) and subjective cues (perceived by consumers) used when determining food quality (Grunert, 2005). The TFQ Model bridges the gap between technical product specifications and subjective quality perceptions (Grunert, Baadsgaard, Larsen, & Madsen, 1996). This model "can serve as an overall framework for the analysis of consumers' food quality perception and its relation to intention to buy and to the design of food products" (Grunert et al., 1996, p. 81). As consumers are subjected to a plethora of food labeling claims, which can cause confusion, this model provides a guide to understand how consumers make inferences based upon cues found on food label claims.

Methodology

This research study is a qualitative content analysis focused on analyzing and interpreting claims found on food labels. The researchers noted labels on food products at grocery stores and researched the USDA, FDA, and other websites and created an extensive list of claims found on food labels such as, "Heart Healthy," "Certified Organic," and "All Natural." Next, the researchers categorized each claim as "FDA Regulated," "USDA Regulated," or "Unregulated" based upon investigation of what agency, if any, regulates the claim. Finally, the researchers used thematic analysis to further separate each claim into 11 subcategories based on its regulatory agency. The themes include "Organic," "Nutrient Content Claim," "Authorized Health Claim," "Structure Function Claim," "Natural/Clean," and "Marketing." A committee of agricultural communications faculty reviewed and provided suggestions for this taxonomy.

Findings

Figure 1 provides the developed taxonomy to display regulatory responsibility, label claim subcategories, and specific label claims. (This figure will be larger on the final poster design.)

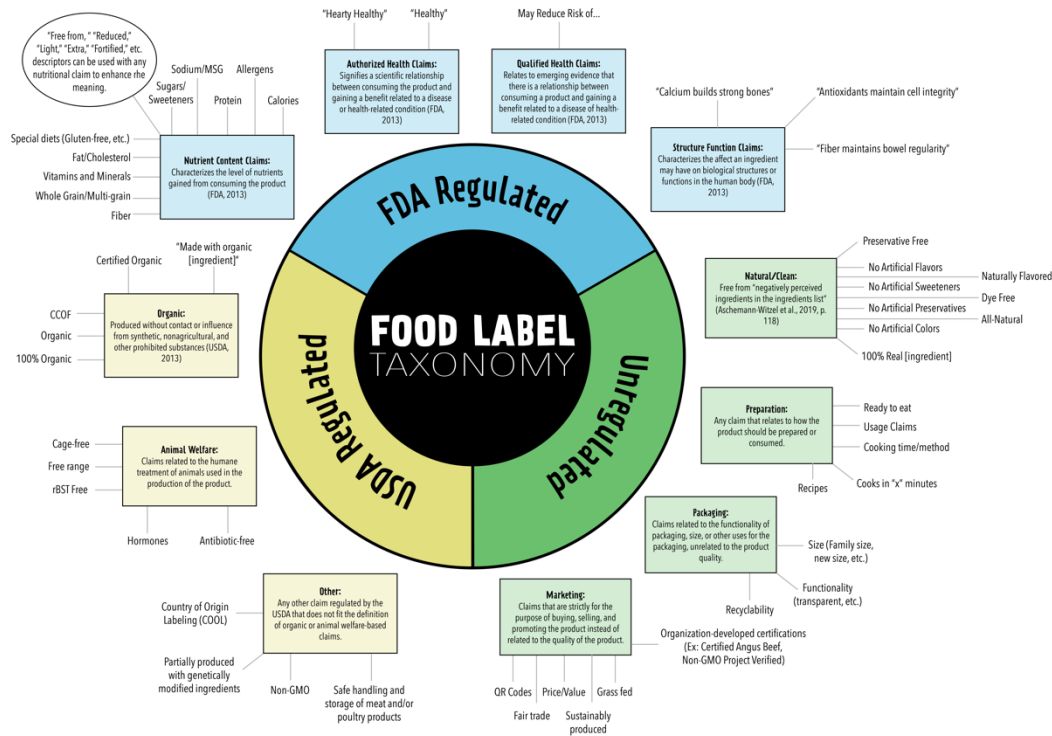


Figure 1. Taxonomy of Food Label Claims.

Conclusions

With every trip to the grocery store, consumers face a multitude of decisions regarding which products to purchase and often rely upon food label claims to aid in decision making (Bond et al., 2008). As the taxonomy demonstrates, some claims are required and others are voluntary, although consumers are unaware of this difference. Claims such as the "Non-GMO Project" and "No Artificial Colors" are unregulated and have varying definitions. Mandatory labeling of controversial topics, like genetically modified foods, may be viewed as a "warning," implying they are unsafe to eat (Hoban, 2000). Consumers can make incorrect inferences regarding claims found on food labels; thus, impacting the approval or rejection of food products and agricultural practices. Conversely, the absence of a claim may imply a negative attribute in consumers' minds (Kuchler et al., 2017). Claims provide great value for product marketing, which ultimately affects supply and demand. This taxonomy provides insight into food label claims and regulation credibility.

Implications/Recommendations

While this taxonomy was developed with the current availability of products on the market, it should be further refined as new categories and claims emerge. Official definitions developed by USDA and FDA should be taken into consideration as they emerge. It is also recommended to test consumer usage of the taxonomy and how it affects their purchasing decisions. According to the USDA, 64% of consumers believe "natural" means no artificial growth hormones, 59% believe "natural" means animals were fed non-genetically modified feed and 57% believe it means no antibiotics or drugs were used (Kuchler et al., 2017). By using this taxonomy to explore consumer perceptions of regulated and unregulated claims, the food industry can understand consumer interpretation of different food label claims.

References

- Aschemann-Witzel, J., Varela, P., & Peschel, A. O. (2019). Consumers' categorization of food ingredients: Do consumers perceive them as 'clean label' producers expect? An exploration with projective mapping. *Food Quality and Preference*, 71, 117–128. <https://doi.org/10.1016/j.foodqual.2018.06.003>
- Bond, C. A., Thilmany, D. D., & Bond, J. K. (2008). What to choose? The value of label claims to fresh produce consumers. *Journal of Agricultural and Resource Economics*, 33(3), 402-407
- Kuchler, F., Greene, C., Bowman, M., Marshall, K. K., Bovay, J., Lynch, L., ... Bovay, J. (2017). *Beyond Nutrition and Organic Labels — 30 Years of Experience With Intervening in Food Labels*.
- Economic Research Service (ERS). (2016). *National Household Food Acquisition and Purchase Survey (FoodAPS)*.
- Economic Research Service (ERS). (2017). New Products. Retrieved from <https://www.ers.usda.gov/topics/food-markets-prices/processing-marketing/new-products>
- Hoban, T. (2000, November 26). Tacogate: There is barely a kernel of truth. Retrieved November 16, 2018, from *The Washington Post* website: https://www.washingtonpost.com/archive/opinions/2000/11/26/tacogate-there-is-barely-a-kernal-of-truth/763fd582-ebec-4648-b555-f8ee98d2c817/?noredirect=on&utm_term=.55918065e167
- Grunert, K. G. (2005). Food quality and safety: Consumer perception and demand. *European Review of Agricultural Economics*, 32(3), 369-391. <https://doi.org/10.1093/eurrag/jbi011>
- Grunert, K. G., Larsen, H. H., Madsen, T. K., & Baadsgaard, A. (1996). Analysing consumers at the individual level. In *Market orientation in food and agriculture* (pp. 75-111). Boston, MA: Kluwer Academic Publishers.
- U.S. Department of Agriculture. (2013). Allowed & Prohibited Substances. Retrieved January 28, 2019, from <https://www.ams.usda.gov/publications/content/allowed-prohibited-substances>
- U.S. Food and Drug Administration. (2013). A Food Labeling Guide: Guidance for Industry. Food and Drug Administration Center for food safety and Applied Nutrition. Retrieved from <https://www.fda.gov/downloads/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/UCM265446.pdf>