

Does "Natural" Food Really Mean Anything?

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Food labeling, if done properly, can help consumers make informed choices. In the U.S., many food products are labeled as “natural”, “all natural”, “100% natural” or something similar. The U.S. Food and Drug Administration (FDA) decided not to define the phrase in the 1990s which allowed companies to use these labels free of any regulation, except on a subset of foods (for example, meat). Consumer groups claim that these phrases are misleading when the associated products contain artificial ingredients, preservatives, and/or genetically modified organisms (GMOs). Popular products such as Wesson cooking oil, Campbell’s soup, Kix cereal, Truvia sweetener, SunChips, Tostitos chips, Goldfish crackers, Ben and Jerry’s ice cream, and Naked juice have been the subject of lawsuits stemming from consumer claims of fraud. Do these labels sway consumers? And if so, how much are consumers spending on products with potentially misleading labels?

In a recent study published in the journal *Environmental and Resource Economics* (<https://link.springer.com/article/10.1007/s10640-017-0132-9>), Baker Center Fellow and UT Economics professor Christian Vossler, and assistant professor Julianna Butler of the University of Delaware, investigate consumer perceptions about “natural” food labels and whether consumers are willing to pay more or less for products with these labels. In the marketplace, there are countless reasons why someone might buy a product labelled as “natural” versus one labelled otherwise, which of course would have nothing to do with the label. As an alternative to using grocery store scanner data, the authors ran an experiment with adult grocery shoppers where participants placed bids to actually buy “natural” and standard versions of six grocery items: peanut butter, cereal, crackers, chips, cooking oil and toothpaste. Using experimental methods, they were able to control for differences between comparable items, with the exception of how the products were labelled.

In reality, “natural” is not regulated and has no definitive meaning. But a post-experiment survey showed that the vast majority of participants (87%) believed that the label “natural” conveyed something meaningful such as “no artificial flavors”, “no genetically modified organisms (GMOs)”, “organic”, “environmentally-friendly”, and so on. More importantly, consumers were willing to pay, on average, a 20% premium for “natural” items. The size of the “natural” premium depended on participant beliefs attributed to products with “natural” labels, which suggested there was an important information failure. For example, the premium was the highest for those who thought that “natural” meant “no GMOs”. Interestingly, the small fraction of participants who attributed no meaning to the “natural” labels were willing to pay less for products advertised as such.

The FDA has not regulated “natural” phrasing partly due to the uncertainty surrounding the benefits of doing so. According to this study, many are misled by “natural” labels and are unfortunately spending more money because of it. Thus, providing better information to consumers – either through regulating “natural” labels or through information campaigns designed to eliminate consumer misperceptions – is likely to lead to better consumer choices and substantial benefits to consumers. Of course, the companies that have earned higher profits from marketing their products as “natural” are bound to disagree.