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Packaging of Organic and Conventional Products—A Comparison

Katie Gifford and John C. Bernard

Organic food is a niche market that is growing at a significantly faster rate than food sales overall. Consumers have various motives for choosing organic products, with most buyers seeking either to avoid perceived risks from conventional agriculture or to gain perceived benefits from organic methods. Marketers can provide information such as research on organic foods or the USDA standards to make risks and benefits salient to the consumers in order to increase purchase likelihood and capture the higher price for this credence good. In theory, if consumers have a certain willingness to pay for each individual benefit or reduced risk characteristic of organic food, then a product which presents a larger number of claims about its production will inspire a higher WTP and will therefore have a higher price. Marketers can also choose whether to use positive or negative framing of the organic methods. Positive framing presents benefits from organic food, and negative framing presents risks from conventional food. Both types of messages attempt to lead consumers to the same conclusion: that organic food is better. However, research suggests that positive and negative framing provoke different responses from consumers.

Objectives

The overall objective of this project is to model the price premium of organic food as a function of the message components and information provided on the product packaging.

The sub-components of this goal are to develop a method of recording and quantifying label claims and messages; to determine if positive or negative framing is more prevalent on package information; and to determine the price premium for individual products and categories of organic foods.

Methods

The pilot study was conducted at three grocery stores in the Newark, Delaware area. Price and product-label information were examined for organic and conventional counterparts of milk, pasta, and soup. Only products where exact counterparts were available were used. For instance, only certain types of pasta (spinach fettucine, tubetti, whole-wheat spaghetti, whole-wheat penne) were included because organic and conventional varieties were available to determine the exact price premium. Choosing food categories was difficult because the organic products often included added functional ingredients such as grains, soy, flax-seed, etc. A form was developed and refined during the pilot study in order to capture the various categories of message claims in use on the packages observed.

Data

A total of 37 packages were examined in the three categories of milk, pasta, and soup (see Table 1). The highest price premium was for organic milk, which cost on average 92% more than the conventional 2% milk (see Table 2 for all price premiums). All four brands of milk specifically mentioned that they were produced without using hormones and antibiotics, so the marketers are not assuming that the consumer knows this is a requirement for organic labeling. Pasta had a slightly lower price premium, and only one of the four organic brands offered any information on the package about organic methods. An interesting tactic in this category was the smaller package size of organic pasta, possibly in an attempt to disguise the price premium. Soup had the lowest price premium, and only positive framing was used. These statements tended to be upbeat but unspecific: "Organic ingredients make for better tasting, better-for-you foods that are better for the environment." Among the organic-food packages observed, there were only two examples of negative framing, such as the statement, ". . . no dangerous pesticides or

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chemicals are ever used,” on Horizon Organic milk. A similar statement was made on DeBoles organic pasta. Otherwise, packages had positively framed messages or no additional information at all beyond the label “organic.”

Conclusions and Limitations

The USDA seal appears to be coming into more widespread use, with one brand of milk switching over to the use of the USDA seal during the observation period for the pilot study. Organic food carried a higher price premium than expected (Dimitri and Greene 2002). Most package text stressed positive framing instead of negative framing. One limitation

of this project as we proceed is that the relationship between product information and price premiums may be difficult to model, since a low standard deviation of organic price premiums compared to the average price was observed, especially for milk and soup. This suggests that the product price may depend more on the type of product than on the marketing information provided.

References

Dimitri, C. and C. Greene. 2002. *Recent Growth Patterns in the U.S. Organic Foods Market*. Economic Research Service/USDA, Washington, D.C.

Table 1. Pilot Study Data.

	2% Milk		Pasta		Soup	
	Organic	Conven- tional	Organic	Conven- tional	Organic	Conven- tional
No. packages	4	3	7	4	11	8
Package size	½ gallon	½ gallon	11.9 oz	13.6 oz	15 oz	15 oz
Average price	\$3.91	\$2.03	\$0.19/oz	\$0.10/oz	\$2.04	\$1.28
Std. dev. price	\$0.29	\$0.29	\$0.08	\$0.03	\$0.29	\$0.52
No. brands	4	3	4	2	6	6

Table 2. Organic Price Premiums and USDA Seal Usage.

	2% Milk	Pasta	Soup
Price Premium	92%	84%	59%
Brands with USDA seal	75%	0%	17%