

An Analysis of Organic Fresh Produce Choice: A Consumer Preference Study in the Mid-Atlantic USA

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Abstract

Global sales of organic food and drink reached \$80 billion in 2014, a more than four-fold market expansion since 2000 (\$18 billion in organic sales). Demand for organic products is concentrated in North America and Europe, which create 96% of global revenues. Organic production expanded during the 1980s, with different certifiers developing their own standards and certification processes. Since that time, the industry has grown from experimental garden plots to large farms with surplus products sold under a special organic label. In the United States, sales of organic products topped \$35 billion (USD) in 2013 (an increase of 11.5% from 2012) and grew by more than 11% in 2015.

Market development in this area could enhance both the net profits and the sustainability of small farms by serving the organic niche market. This study profiles a typical organic consumer in the mid-Atlantic United States. An online survey was conducted to capture organic consumers' interests in and expectations of organic fruits and vegetables. Data were collected through an online survey of 1,100 participants who were pre-screened and whose identities were checked from a selection of 5,191 candidates provided by a private online survey company. We developed a multinomial logit model to predict organic consumers' choice of fresh fruits and

vegetables. The seven most important fruits and vegetables were identified for this study, the rest were included in the “other” category. The choice of “other” fruits and vegetables has been left out of the regression as the base case.

Results show that consumers who think that organic food tastes better and consumers who are college graduates are more likely to choose bananas compared to other fruits and vegetables. Respondents who are concerned about freshness, provide support to local farmers, have a two-year college degree, and are Caucasian are more likely to choose carrots. Those who provide support to local farmers and who have an education above high school are more likely to choose lettuce. Respondents with a two-year college degree are more likely to choose strawberries, while those who prefer organic wine are more likely to choose apples. Caucasians are more likely to choose tomatoes but less likely to choose spinach. Those living in urban areas are less likely to choose spinach. Producers of organic fruits and vegetables can target customers for sales based on their demographics and their preferences.

Keywords: consumer choice, fruits and vegetables, mid-Atlantic region, multinomial logit (mnl) model, organic fresh produce

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Acknowledgements

This project was supported by the Federal-State Marketing Improvement Program (FSMIP), U.S. Department of Agriculture (USDA), Agricultural Marketing Service (AMS), grant 15FSMIPNJ0005.