

Consumer Perceptions of Kentucky-Grown Chicken Products in Farmers' Markets

Siddhartha Dasgupta¹

Kentucky State University, Frankfort, Kentucky 40601

and

Janet Eaton and Angela Caporelli

Kentucky Department of Agriculture, Frankfort, Kentucky 40601

ABSTRACT

Data were collected via a survey of patrons of farmers' markets in Kentucky to determine consumer perceptions of chicken products. A conjoint experiment was included in the survey that elicited respondent preferences for different chicken product attributes. Results showed that a majority of consumers were willing to buy chickens in farmers' markets, with strong preference towards chicken breast quarters and whole-dressed birds. Certified organic chickens were more popular among Caucasian consumers. Conjoint analysis results indicated that product price and form were more important to consumers than the product's origin or whether or not the chickens were organic.

INTRODUCTION

Kentucky's agricultural landscape consists of many small-scale farmers seeking to be profitable using low-investment enterprises. Small-scale broiler production is one such enterprise where chickens are raised on pastures in bottomless cages so that they can access vegetation, seeds, insects, etc. in addition to prepared feed. This is unlike intensive commercial broiler production where the animals are grown in climate-controlled enclosed buildings without access to a more natural environment (Cunningham 2008). It is obvious that small-scale pastured broiler farming has higher production costs per chicken than large scale intensive farms where cost efficiency is a primary management goal. Cunningham (2009) reported that intensive broiler operations received, on average, \$0.40 per bird from integrated chicken processors while Dasgupta and Skelton (2007) used Kentucky pastured poultry data to project a breakeven production cost of \$4.67 per bird. Higher costs make much of Kentucky's pastured broilers a higher-priced product, leading to marketing concerns among farmers. Concerns usually result in

producers seeking niche markets where they could receive a greater share of retail prices.

Farmers' markets were designed to offer consumers with locally-grown food products. In many cases these outlets have evolved to become sources of 'naturally grown' and certified organic foods, and patrons have come to expect such products. These markets allow producers to receive retail prices, which is necessary for most small-scale agriculture to survive financially.

Over the last 20 years there had been many media reports on intensive farming of chickens that highlighted the reliance of producers on antibiotics and other medications to keep their stock healthy. Bernard et al. (2007) reported that concerns over the use of genetically modified (GM) feedstuff and antibiotics/hormones coupled with the lack of a natural growth environment in intensive chicken production had led to increased consumer interest in medication-free pastured poultry. This paper investigates the consumer perceptions of locally-grown pastured broilers in Kentucky's farmers' markets. Results of this paper could be useful tools to delineate the type of chicken products that farmers' market consumers prefer.

The agricultural marketing literature has many examples of farmers' market research. Govindswamy et al. (1998) provided general-

¹ Corresponding author e-mail: Siddhartha.Dasgupta@kysu.edu

ized attitudes, preferences, and characteristics of consumers at farmers' markets. They reported consumption trends of fresh fruits/vegetables and organic produce. Using New Jersey data, they discovered that lack of knowledge arising out of poor promotional efforts was a chief reason for consumers to not attend farmers' markets. As expected, most farmers' market consumers placed a high premium on freshness and quality of the produce and most were willing to pay a premium for supporting local agriculture.

Henneberry and Agustini (2004) reported results of a survey of consumers, producers, and managers of Oklahoma farmers' markets. Consumers reported that purchasing fresh, high quality produce and supporting local farmers were the primary reasons for shopping in farmers' markets. These consumers did not consider "price shopping" as a very important reason for shopping at farmers' markets. Producers cited "receiving retail prices" as the most common reason for using farmers' market as their outlet; however, having customer interaction also was another important reason. Farmers' market managers indicated that they never received any specialized training for their jobs at the farmers' markets. Econometric results showed that urban and suburban consumers were much more likely to patronize farmers' markets located conveniently near urban areas.

MATERIALS AND METHODS

Data for this study came from a 2005 survey of consumers in Kentucky's farmers' markets conducted in collaboration with the Kentucky Department of Agriculture (KDA). The survey was conducted by face-to-face interviews during which respondents tasted different Kentucky-grown foods and answered questions regarding 1) familiarity and willingness to purchase food products in farmers' markets, 2) visiting and spending patterns in a farmers' market, and 3) consumer demographics. A total of 166 useful observations were obtained from Ashland (N = 20), Corbin (N = 12), Erlanger (N = 10), Frankfort (N = 27), Lawrenceburg (N = 5), Louisville (N = 26), Lexington (N = 12), Owensboro (N = 23), and Paducah (N = 31) farmers' markets. These markets were chosen randomly from a subset of Kentucky farmers' markets, available

to the KDA that had been identified to be strongly patronized by consumers. Because chickens were available only at the Erlanger, Louisville, Lexington, and Owensboro farmers' markets, data from these sources were used in our analyses. The relatively low number of respondents in some markets was due to the scheduling of data gathering activities during the week when the survey staff were available. Queries made to farmers' market managers indicated that the number of patrons varied based upon the season, day of the week, weather, etc. For example, the Lexington farmers' market had as few as 85 patrons per day during certain times of the year and occasionally as many as 500 patrons per day. Attendance in Owensboro and other farmers' markets was usually from (fewer than) 100 to 250 patrons per day (Table 1).

Applying the work of Lancaster (1966), which stated that consumers derived utility from attributes that goods possess instead of the goods *per se*, we describe chickens sold in farmers' markets as a collection of attributes such as the product's price, the product's form (i.e., whether it was a whole chicken or certain cuts), whether the chicken was certified organic or if it were raised in Kentucky. These attributes and their levels (Table 2) were chosen to represent chicken characteristics that are both relevant in a farmers' market setting and under control of producers/processors.

Consumer preference data indicated the importance placed on these attributes on a five-point Likert scale: very important, important, somewhat important, slightly important, and not important (Wuensch 2005). These data were used to generate binary (0/1) variables for product attributes such as price, product origin (local vs. imported), etc. Each variable was equal to 1 if consumers considered the corresponding attribute to be at least "somewhat important," and 0 if otherwise. It was hypothesized that consumer demographics might exert a systematic influence over their ascribed importance for different product attributes (Dasgupta et al. 2000). Hence, several demographic parameters (Table 1) were used as independent variables in a logistic regression model (Equation 1) (Greene 1993). $P[\text{consumer } i \text{ considers attribute } j \text{ to be important}] = \Lambda(\beta_j' \times X_i)$ where Λ

Table 1. Distribution of key demographic information expressed as a percentage of respondents in each market.

	Farmers' market								
	Ash ^a	Cor ^b	Lex ^c	Lou ^d	Fra ^e	Law ^f	Pad ^g	Erl ^h	Owr ⁱ
Age									
21 or less	0.00	0.00	0.00	0.00	0.00	0.00	6.45	0.00	0.00
21-35	5.00	8.33	16.67	30.77	11.11	0.00	12.90	0.00	13.04
36-50	15.00	41.67	25.00	19.23	40.74	60.00	32.26	20.00	17.39
51-65	50.00	16.67	58.33	30.77	25.93	40.00	41.94	40.00	21.74
66 or more	30.00	33.33	0.00	11.54	14.82	0.00	3.23	20.00	39.13
Education									
Not high school grad	10.00	8.00	0.00	7.69	0.00	0.00	3.23	0.00	4.35
High school grad	30.00	8.33	0.00	11.54	18.52	0.00	6.45	10.00	26.09
Some college	25.00	50.00	16.67	23.08	22.22	40.00	38.71	30.00	26.09
4-year degree	10.00	25.00	25.00	15.39	40.74	0.00	25.81	20.00	26.09
More advanced degree	25.00	8.33	58.33	34.62	14.82	60.00	22.58	20.00	8.70
Race									
African American	5.00	8.00	0.00	46.15	18.52	40.00	12.90	0.00	13.04
Native American	0.00	8.33	8.33	0.00	0.00	0.00	6.45	10.00	13.04
Caucasian	85.00	75.00	83.33	42.31	74.07	60.00	67.74	60.00	65.22
Asian	0.00	0	0.00	0.00	0.00	0.00	3.23	0.00	0.00
Hispanic	0.00	8.33	0.00	0.00	3.70	0.00	3.23	0.00	0.00
Other	0.00	0	0.00	0.00	0.00	0.00	3.23	0.00	0.00
Residence									
Urban	45.00	17.00	41.67	80.77	33.33	20.00	22.58	40.00	47.83
Suburban	40.00	8.33	41.67	11.54	25.93	40.00	41.94	30.00	30.45
Rural	15.00	66.67	8.33	0.00	29.63	40.00	29.03	10.00	4.35
Annual income									
\$20K or less	10.00	8.00	0.00	15.39	11.11	0.00	9.68	0.00	13.04
>\$20K but <\$40K	20.00	8.33	16.67	26.92	7.41	0.00	22.58	20.00	26.09
>\$40K but <\$60K	20.00	0.25	33.33	23.08	22.22	40.00	9.68	20.00	17.39
>\$60K but <\$80K	20.00	33.33	8.33	11.54	29.63	20.00	22.58	0.00	8.70
>\$80K but <\$100K	0.00	0	8.33	3.85	14.82	0.00	9.68	20.00	0.00
\$100K or more	5.00	16.67	16.67	7.69	7.41	0.00	16.13	10.00	4.35
Household size									
Mean	2.47	3.00	2.9	2.31	2.65	1.80	2.59	2.71	2.20
Standard deviation	0.96	1.34	1.52	1.01	1.27	1.3	1.12	1.70	1.11
N	20	12	12	26	27	5	31	10	23

^a Ashland farmers' market. ^b Corbin farmers' market. ^c Lexington farmers' market. ^d Louisville farmers' market. ^e Frankfort farmers' market. ^f Lawrenceburg farmers' market. ^g Paducah farmers' market. ^h Erlanger farmers' market. ⁱ Owensboro farmers' market.

represents the Logistic cumulative distribution function, β_j represents a $(k \times 1)$ vector of regression coefficients for the j th attribute of a product, and X_i represents a $(k \times 1)$ vector of consumer characteristics, as discussed above.

Examples of the above methodology exist in Foltz et al. (1999) and Dasgupta et al. (2000)

Table 2. Product attributes and corresponding levels associated with chickens offered in farmers' markets that were used in the conjoint model.

Attributes:	Levels:
Price	\$6.60/kg (\$3.00/lb), \$9.90/kg (\$4.50/lb), or \$13.20/kg (\$6.00/lb)
Form	Whole, Leg quarters, or Breast quarters
Type	"Organic" or "Non organic"
Origin	"KY grown" or "Not KY grown"

where consumer preferences, elicited on a Likert scale, were regressed with respect to demographic parameters to characterize respondents that have systematically demonstrated a high/low preference for products. By applying Equation 1 to our data, we developed a logistic likelihood function for each product attribute, which was maximized by selecting the appropriate β_j s. The β_j s were used to identify subgroups of consumers that exhibited a significantly (i.e., $P \leq 5\%$) higher/lower preference for different chicken products.

The farmers' market survey also collected data for a conjoint experiment; however, only the Louisville and Owensboro farmers' market contributed useful data for this experiment. Conjoint analysis was used to evaluate buyer

acceptance of multi-attribute products (Wirth et al. 1990). Product attributes were carefully selected based upon characteristics that are under control of sellers and thought to be important to buyers. In this study, broilers sold in farmers' markets were described by the following attributes 1) price (alternative levels: \$6.60/kg or \$3.00/lb, \$9.90/kg or \$4.50/lb, \$13.20/kg or \$6.00/lb), 2) form (alternative levels: whole, leg quarter, breast quarter), 3) origin (alternative levels: Kentucky-grown, not Kentucky grown), and 4) type (alternative levels: certified organic chicken, not organic). Other attributes such as chicken breed, broiler size, etc., were considered to follow industry standards. Using the three levels of "price" and "form" attributes, and two levels of "origin" and "type" attributes, respectively, a list of $3 \times 3 \times 2 \times 2 = 36$ alternative product profiles was developed (Dasgupta et al. 2007).

If respondents rated all 36 product profiles, the resulting conjoint experiment would be a full factorial design. However, requiring respondents to rate 36 products is unreasonable; hence, an orthogonal fractional factorial design developed from the full factorial experiment was used to reduce the total number of products to be rated in the survey from 36 to 11. Orthogonal fractional factorial designs are used in conjoint analyses in which a subset of all factor-treatment combinations is selected to allow estimation of the main effects of each product attribute on consumer perceptions of the product (Dasgupta et al. 2007). Wirth et al. (1990), Halbrendt et al. (1995), and Harrison et al. (1998) provided details of methodology and justification for using orthogonal fractional-factorial designs in conjoint experiments.

The 11 product profiles (Table 3) were selected from the 36 total profiles using SAS %mktruns and %mktex macros (SAS 2008). Surveyed consumers rated each of the 11 product profiles on a 0 to 10 scale (0: extreme dislike; 10: extreme like). The 11 profiles included two "holdout" profiles which were used to validate the conjoint results by comparing predicted ratings of holdout products to their average observed ratings. Holdout products were chosen to represent likely products available in farmers' markets in the future. Hence, their presence in the conjoint experiments allowed us to investigate the consumer utility for potential future products.

A conjoint analytical model expresses a causal relationship between a buyer's utility to the combination of attribute levels that defines the product (Bernard et al. 2007). Using the preference ratings as proxy for utility, model (2) was developed to investigate which product attributes enhanced or diminished a typical respondent's utility. We adopted the part-worth utility model that provided the greatest flexibility in the shape of the utility function (Wirth and Davis 2003). This analytical model allowed for separate estimates of the effect of each level of every attribute on the mean rating/utility of a product. Mean deviation dummy variables were used in (2) (Harrison et al. 1998). The estimated coefficients (β 's) are called "part worths" of attribute levels towards calculating the consumer utility. Using product attributes (Table 2) and following the conjoint methodology outlined in Harrison et al. (1998) and Dasgupta et al. (2007), the conjoint model used in this paper is outlined as (Equation 2) $R_{ij} = \beta_0 + \beta_1 \times \text{PriceMed}_i + \beta_2 \times \text{PriceHi}_i + \beta_3 \times \text{KY-Grown}_i + \beta_4 \times \text{BreastQuarter}_i + \beta_5 \times \text{LegQuarter}_i + \beta_6 \times \text{Organic}_i + \epsilon_{ij}$, where R_{ij} represents the rating of product 'i', made by respondent 'j', where PriceMed (PriceHi) is a dummy variable which takes values of 1, 0, -1 if product price was \$9.90/kg (\$13.20/kg), \$13.20/kg (\$9.90/kg), or \$6.60/kg, respectively. KY-Grown is a dummy variable that takes a value of 1 (-1) if a chicken product were grown (not grown) in Kentucky; BreastQuarter (LegQuarter) was a dummy variable 1, 0, or -1 if the chicken product form were a breast quarter (leg quarter), leg quarter (breast quarter), or whole-dressed, respectively. Organic is a dummy variable that takes a value of 1 (-1) if a chicken product were (were not) certified organic.

Equation (2) was estimated with 2-limit TOBIT regressions using the SAS QLIM procedure (SAS 2008).

The part worth estimates were used to calculate the relative importance (RI) of each product attribute to the respondents. The RI results help suppliers to prioritize their attention on those product attributes that their customers consider to be highly important in suppliers efforts to develop an "ideal" product for consumers. The RI of a product attribute is calculated by first measuring the

Table 3. Hypothetical chicken products rated by survey respondents in farmers' markets as part of a conjoint experiment.

Product number	Price: \$/kg (\$/lb)	Form	Type	Origin
1	\$13.20 (\$6.00)	Whole	Organic	Not KY grown
2	\$9.90 (\$4.50)	Whole	Non-organic	KY grown
3	\$9.90 (\$4.50)	Leg quarter	Organic	Not KY grown
4	\$6.60 (\$3.00)	Whole	Non-organic	Not KY grown
5	\$13.20 (\$6.00)	Breast quarter	Non-organic	Not KY grown
6	\$6.60 (\$3.00)	Leg quarter	Non-organic	Not KY grown
7	\$6.60 (\$3.00)	Breast quarter	Organic	KY grown
8	\$13.20 (\$6.00)	Leg quarter	Non-organic	KY grown
9	\$9.90 (\$4.50)	Breast quarter	Non-organic	Not KY grown
10 (Holdout)	\$9.90 (\$4.50)	Leg quarter	Organic	Not KY grown
11 (Holdout)	\$13.20 (\$6.00)	Breast quarter	Organic	KY grown

range of part worth estimates over all levels of that attribute. The RI of an attribute is expressed as the ratio of the range of part worth estimates of different levels of the attribute over the sum of such ranges for all attributes of the product, i.e., $RI(\text{Attribute } i) = \text{Part worth range}(\text{Attribute } i) / \text{Part worth range}(\text{Attribute } j)$, where 'j' indexes all relevant attributes of the product (Halbrendt et al. 1995).

RESULTS

Surveyed consumers indicated their willingness to purchase three alternative chicken products (whole-dressed chickens, breast quarters, and leg quarters) (Table 4). By aggregating data from all surveyed farmers' markets, a weighted average of results (Table 4) indicated that overall 65%, 68%, and 88% of consumers preferred chicken leg quarters, whole dressed chickens, and chicken breast quarters, respectively. Chicken breast quarters and chicken leg quarters were the most and least popular products, respectively.

Respondents were asked to choose product attributes such as product form, type, size and price to formulate their "ideal" chicken

product. The most popular product was certified organic chicken breast quarters packaged in 0.83 kg (2 lb) portions and priced between \$2.20/kg and \$4.40/kg (\$1/lb and \$2/lb) (Table 5). Also 34% of respondents preferred whole-dressed chickens over other, more processed, product types. The "\$6.60/kg (\$3/lb)–\$8.80/kg (\$4/lb)" price category was the second most popular of all price ranges available to the respondents.

Logit regression results indicated that a consumer's demographics did impact their opinions about the price of chickens. A respondent's age and the distance of residence from the farmers' market made them significantly more sensitive to chicken prices (Table 6). Older respondents and those living farther from a farmers' market considered price to be an important aspect in making purchasing decisions than other demographic groups of respondents. A contingency table analysis found that a respondent's race significantly affected their opinions: Caucasian respondents were more sensitive to having "certified organic" chickens; they considered this attribute to be significantly more important in making purchasing deci-

Table 4. Percentage of respondents from each farmers' market that would purchase the indicated product in a farmers' market, retail grocery store, or directly from farmers.

Product	Farmers' market								
	Ash ^a	Cor ^b	Lex ^c	Lou ^d	Fra ^e	Law ^f	Pad ^g	Erl ^h	Ow ⁱ
Whole-dressed chicken	61	67	75	65	85	20	53	78	79
Chicken breast quarters	95	100	100	84	89	100	71	89	95
Chicken leg quarters	56	70	91	50	74	20	90	28	55

^a Ashland farmers' market. ^b Corbin farmers' market. ^c Lexington farmers' market. ^d Louisville farmers' market. ^e Frankfort farmers' market. ^f Lawrenceburg farmers' market. ^g Paducah farmers' market. ^h Erlanger farmers' market. ⁱ Owensboro farmers' market.

Table 5. Ideal chicken product as indicated by respondents. Data aggregated over Lexington, Louisville, Erlanger, and Owensboro farmers' markets.

	Frequency (percentage)
Product form	
Whole chicken	19 (35)
Leg quarter	4 (7)
Breast quarter	32 (58)
Product type	
Certified organic	34 (67)
Not certified organic	17 (33)
Package size	
0.41 kg (1 lb)	3 (5)
0.83 kg (2 lb)	33 (62)
2.07 kg (5 lb)	13 (25)
>2.07 kg (5 lb)	4 (8)
Price in \$/kg (\$/lb)	
<\$2.20/kg (\$1/lb)	3 (10)
≅\$2.20/kg (\$1/lb) and <\$4.40/kg (\$2/lb)	8 (25)
≅\$4.40/kg (\$2/lb) and <\$6.60/kg (\$3/lb)	3 (10)
≅\$6.60/kg (\$3/lb) and <\$8.80/kg (\$4/lb)	7 (24)
≅\$8.80/kg (\$4/lb) and <\$11.00/kg (\$5/lb)	5 (17)
≅\$11.00/kg (\$5/lb) and <\$13.20/kg (\$6/lb)	2 (7)
≅\$13.20/kg (\$6/lb) and <\$15.40/kg (\$7/lb)	0 (0)
≅\$15.40/kg (\$7/lb) and <\$17.60/kg (\$8/lb)	1 (4)
≅\$8	0 (0)

sions than non-Caucasian respondents (chi-squared test statistic = 4.13; $P = 0.04$; Mantel-Haenszel chi-squared test statistic = 4.06; $P = 0.04$; $N = 53$).

Conjoint regression results (Table 7) showed that a consumer's rating of a chicken product was significantly reduced when price was \$13.20/kg (\$6/lb) and the product form was "leg quarters." However, the ratings significantly improved if product form was "breast quarters" (except at Owensboro farmers' market), or the chickens were locally grown, or were certified organic animals.

Two holdout products were investigated to evaluate the consumer preferences for chicken products that can be feasibly offered in farmers' markets. These holdout products were "organic chicken leg quarters, not KY grown, priced at \$9.90/kg (\$4.50/lb)" and "organic chicken breast quarters, grown in KY, priced at \$13.20/kg (\$6.00/lb)," and their average respondent ratings were 2.60 and 3.44, respectively. Using the conjoint results for the pooled data, the predicted ratings for holdout products 1 and 2 were 2.70 and 4.48, respectively. These results clearly show that offering the preferred form (i.e., breast quarters) allowed products to command a higher price and simultaneously provided buyers with a greater utility, as captured by the product ratings.

Using the conjoint results, the relative importance of different chicken attributes was calculated (Table 8). A product's price was deemed to be the most important attribute. This was followed by a product's form (i.e., whole chicken, leg quarters, or breast quarters), type (i.e., organic or not organic), and origin (i.e., locally grown or not) for the Louisville farmers' market. In the Owensboro farmers' market, a product's form, origin, and type were considered by the respondents to be in order of decreasing relative importance.

CONCLUSIONS

Our study of consumer perceptions of chickens sold in Kentucky's farmers' markets revealed that the majority of respondents were willing to purchase locally-grown chickens. Our results showed that chicken breast quarters were the most preferred product

Table 6. Results of a logistic regression on the importance that consumers place on chicken price in farmers' markets to identify systematic effects of demographic parameters.

	Regressors ^a						
	Intercept	Age > 36	White	HI income	Distance	College	VisitOften
Coefficient estimate	-0.73	1.62	0.07	-1.05	0.38	-0.91	0.54
Standard error	1.70	0.84	0.74	0.99	0.21	1.24	0.85
P-value	0.67	0.05	0.92	0.29	0.07	0.46	0.53

^a $N = 53$; Generalized $R^2 = 0.21$; LR test = 11.35 ($P = 0.07$); Tan- $\alpha = 0.26$.

^b Dependent variable: Price Important = 1 if respondents consider product price to be very important, important or somewhat important on a Likert scale; Price Important = 0 if respondents consider price to be slightly important or not important.

^c Age > 36 is a dichotomous variable which is '1' if respondent's age exceeds 36, '0' otherwise. HI income is a dichotomous variable which is '1' if respondent's age exceeds 36; '0' otherwise. Distance in miles from respondent's residence to the farmers' market. College is a dichotomous variable which is '1' if respondent has college education; '0' otherwise. VisitOften = '1' if respondent visits a farmer's market at least weekly; otherwise it is '0'.

Table 7. TOBIT regression results for estimating conjoint model for data from Louisville and Owensboro farmers' markets. Dependent variable: product ratings on a 0–10 scale.

Regressors	Farmers' market		
	Louisville	Owensboro	Pooled data
Intercept	2.69* (<0.0001 ^b)	3.05 (<0.0001 ^b)	2.88 (<0.0001 ^b)
PriceMed	-0.38 (0.440)	0.32 (0.430)	-0.02 (0.961)
PriceHi	-1.73 (0.001 ^b)	-1.27 (0.002 ^b)	-1.50 (<0.0001 ^b)
KY grown	0.93 (0.013 ^b)	0.68 (0.026 ^b)	0.80 (0.001 ^b)
Breast Quarter	1.33 (0.007 ^b)	0.63 (0.124)	0.97 (0.003 ^b)
Leg Quarter	-1.00 (0.045 ^b)	-1.05 (0.011 ^b)	-1.03 (0.001 ^b)
Organic	1.11 (0.003 ^b)	0.51 (0.09)	0.81 (0.001 ^b)
N	171	162	333
Likelihood Ratio Index	0.057	0.033	0.043

* Coefficient estimate (P-value).

^b The estimated coefficient is significantly different from zero for $\alpha = 5\%$.^c The estimated coefficient is significantly different from zero for $\alpha = 10\%$.

form and whole-dressed chickens were preferred over leg quarters. This is encouraging for producers/processors wanting to sell whole-dressed chickens, and it shows that the commonly-held notion that highly processed food products command greater consumer demand than less-processed versions of the same food may not always be true.

The main conclusions from this study are 1) younger consumers and those that live close to farmers' markets were less price sensitive than other consumers; 2) Caucasians were more willing to buy certified organic chickens than consumers of other racial groups; and 3) the product form of chickens (i.e., whole chickens vs. different cuts) was more important to buyers than the knowledge of whether the chickens were certified organic or guaranteed to be produced in Kentucky, although the latter two attributes received 20% RI, each.

The "ideal" chicken product for farmers' markets patrons was chicken breasts quarters that were certified organic, available in 0.83 kg (2 lb) packages, and priced from \$2.20–\$4.40/kg (\$1–\$2/lb). While this price range is likely to be unacceptable for producers/processors

for breast quarters, it is more likely that such prices are feasible for whole-dressed chickens, which product form had received 68% of respondent approval, on average. Hence, this study's recommendations are for continued investigations into the willingness-to-pay for Kentucky-grown whole-dressed chickens among farmers' markets patrons.

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Table 8. Relative importance of different chicken product attributes.

Attributes	Farmers' market		
	Louisville	Owensboro	Pooled data
Price	37.45%	35.37%	36.66%
Form	22.76%	26.67%	24.25%
Type	21.68%	16.37%	19.64%
Origin	18.11%	21.59%	19.45%

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