

Support for Local Dairy Products Among Kentucky Consumers

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Executive Summary

In June, 2010 the Kentucky Milk Commission and the University of Kentucky Food Systems Innovation Center sponsored an internet-based survey of Kentucky consumers to evaluate consumer perceptions and willingness-to-pay for locally produced milk and cheese. The survey respondents were 1,052 primary household food shoppers in Kentucky.

On average, households consume 3 gallons of milk weekly. Two-thirds prefer store brand milk, and price awareness is high. For most consumers, the farm location determines whether milk is local, but no consensus existed on the distance implied by "local." Only about one-third of respondents expect to receive personal benefits such as improved safety, taste, or health from local milk, but three-fourths believe that purchasing local milk is better for the community. Kentucky Proud labeling was valued about as much as other attributes such as calcium enrichment, pasture-based systems, and consistency in flavor. Four out of five respondents typically purchase milk in large chain grocery stores, and only one in five agreed that they would go out of their way to purchase local milk. Half of the respondents indicated they were willing to pay a modest premium for local milk, with about 15% willing to pay a premium more than 50 cents per gallon.

Consumers with higher willingness-to-pay were rural residents, heavy milk consumers, and those with some college education. Factors linked with lower willingness-to-pay included children in the household, skim milk consumption, typically paying less than \$3.00 per gallon, annual income below \$50,000, difficulty defining "local," and not expecting the source of milk to affect safety and other attributes. Only 15% of respondents would be willing to pay \$9/lb for cheese produced by a small Kentucky cheesemaker versus \$6/lb for an unidentified source. More respondents were willing to pay the premium in scenarios where the cheesemaker emphasized animal and land stewardship (30%), or purchased supplies within Kentucky (24%).

Recommendations

- (1) Consumers must perceive that the product benefits them personally. Simply being local is not enough to sustain repeat purchases; other desirable attributes are needed.
- (2) If the goal is to serve more than a small niche audience, local products should be distributed through large chain supermarkets. If possible, milk or cheese should be placed in the main dairy case, not in a separate area reserved for local products.
- (3) Many consumers are sincerely willing to pay a little extra for locally produced products, but they also indicated that price is still a dominant factor. Unlike a hypothetical survey in which respondents focus on a novel product, consumers often hurry through their weekly shopping, making habitual purchases and scanning for low prices.

Objectives

The purpose of this market research was to evaluate consumer perceptions and willingness-to-pay for locally produced milk and cheese in Kentucky. With more information about the demand side of the market, Kentucky's dairy community can make better-informed business decisions. The end goal is to find win-win opportunities to launch new products with attributes that consumers value highly, and deliver higher producer profits than conventional market channels allow.

To collect information, we administered an online survey to 1,052 primary food shoppers in Kentucky in late June, 2010. We asked consumers about their milk and cheese consumption habits, what they consider "local" in the context of dairy products, how they expect local milk to differ from other milk, the milk attributes they consider most important, their willingness-to-pay for locally produced milk and cheese, and demographic questions. We designed the survey to take about 10 minutes to complete, and we created four versions with variation in the willingness-to-pay questions to obtain more detailed information. For reference, we included a copy of one version of the survey as an appendix to this report.

A market research company called MarketTools, Inc. provided the online survey platform, called Zoomerang. The Kentucky Milk Commission and the University of Kentucky Food Systems Innovation Center funded the costs of administering the survey through MarketTools, Inc. Appendix 1 contains a copy of the survey. Appendix 2 is a separate, supplementary report containing Zoomerang's visual presentation of results from version 1 of the survey.

Survey Results

The online sample of primary food shoppers in Kentucky was dominated by women (71%), as expected. African-Americans were under-represented in the sample (4%), and Hispanics were severely under-represented (only 0.3%). Over half of the respondents fell into the 45-64 age groups, and average household size was 3.5. One third of the respondents had at least a four-year college degree, and just over half had a high school degree or some college. Over half of respondents had household income below \$50,000, and 9% had household income exceeding \$100,000.

Large majorities of respondents said that it was important or very important to eat a balanced diet (85%) and include milk in their diet (73%). On average, respondents reported milk consumption of three gallons per week. Consistent with the high confidence in private label milk reported in the industry media, 63% preferred to purchase store brand milk, and only 13% preferred national name brands (see Figure 1). Respondents most often preferred reduced-fat or low-fat milk (58%), with 22% preferring skim milk. As Figure 2 shows, consumers' highest priority is the sell-by date, closely followed by price. Price awareness is high for milk. Only 9% of respondents could not recall the price they last paid for milk, while over half reported paying a price between \$2.00 and \$2.99 per gallon.

Consumers have diverse perceptions of what constitutes local milk. Although 73% of respondents considered the farm location as the defining feature of "local," 18% considered the processor's location as the defining feature. Respondents were about evenly split in geographically restricting "local" to neighboring counties, the state line, and neighboring states. Given a long list of brands sold within parts of Kentucky, the ones most likely to be considered

local were Deans (41%), Kroger (34%), Louis Trauth (24%), Southern Belle (24%), Flav-O-Rich (22%), and Mayfield (20%).

A surprisingly high portion of respondents (24%) reported living on a farm or growing up on a farm, and 42% reported living in a rural area, as opposed to urban or suburban. Although it is possible that a non-representative sample of respondents self-selected into the survey, it is equally likely that respondents chose flexible definitions of the terms “farm” and “rural.” If so, it shows a sense of rural pride or willingness to connect with rural self-images, and choosing locally produced foods is one way to deepen that connection.

Four questions suggested that consumers perceive public benefits, but not necessarily personal benefits, from locally produced milk. Only about one third of respondents agreed or strongly agreed with the statements that they trusted local milk more than milk produced elsewhere, that local milk tasted better, and that local milk was healthier. However, almost three quarters believed that purchasing local milk is better for their community. Hypothetical willingness-to-pay responses should be interpreted cautiously in cases where respondents perceive that high answers are socially preferred. A challenging but important marketing recommendation is to identify attributes that add personal benefits to locally produced milk.

One question provided a list of value-added attributes and asked the respondent to choose those for which they would be willing to pay an extra 10 cents per gallon. Four attributes received acceptance rates of 41-44%: Kentucky Proud labeling, calcium enrichment to help prevent cavities and osteoporosis, milk from cows raised in pasture-based versus confinement operations, and milk that never varied in flavor from one purchase to the next.

Willingness-to-pay is an important consideration, but a first step is placing the product in a location where the consumer is willing to purchase it. Over 80% of respondents typically bought milk in large chain grocery stores (see Figure 3), and only 19% agreed or strongly agreed that they would go out of the way to purchase locally produced milk. In a separate question where respondents chose which of four statements best represented their feelings, only 3% of respondents selected “will go out of my way to purchase locally produced milk.”

Almost two thirds of respondents agreed that they would purchase more locally produced milk if it were available at an acceptable price. When hypothetically asked what was an acceptable premium to pay for locally produced milk, 32% said \$0.00/gallon (see Figure 4). Half of respondents were willing to pay a modest premium, with 23% choosing “1 to 10 cents extra,” and 27% choosing “11 to 50 cents extra.” About 15% said they were willing to pay more than 50 cents per gallon extra. The responses were consistent with the willingness-to-pay for Kentucky Proud labeling, suggesting that Kentucky Proud can be a useful symbol of locally produced milk.

The question that directly asked respondents what they were willing to pay is unrealistic in the sense that consumers are almost never offered such a choice. In reality, they are offered products with fixed prices and attributes, and they either choose one of the products or choose not to buy that type of product. A second set of willingness-to-pay questions was designed to mimic a realistic shopping environment. The format we used is one of the most common methods now used in market research on willingness-to-pay for new products, and consists of offering respondents several choice scenarios. In each scenario, the respondent is asked to

choose between two milk products that differ by price, sell-by date, and farm location. The respondent can choose to buy neither of the products if desired.

The results of the choice scenarios suggested a very high average willingness-to-pay of \$0.63/gallon for milk produced in “central Kentucky” versus the alternatives of “northern Indiana” and “western Kansas.” Based on comments provided at the end of the survey, a strong possibility exists that some respondents biased their choices in favor of locally produced milk because they believed they were supporting a worthy cause. A representative example of such comments is, “I appreciate being able to participate in a survey about a Kentucky product. Thank you!” It is prudent to expect that upward bias exists, but the relative preference patterns we observe can be useful in marketing efforts.

Factors that increased willingness-to-pay were residence in a rural area (+\$0.21/gal), higher milk consumption (+\$0.08/gal willingness-to-pay for each additional gallon of weekly consumption), and having community college or some university education (+\$0.15/gal). Considering brand, sell-by date, and organic production as important features boosted willingness-to-pay for local milk by \$0.15/gal, \$0.25/gal, and \$0.28/gal, respectively, as did being willing to pay extra for milk from pasture-based production systems (+\$0.25/gal), and being willing to pay extra for milk that tastes the same with every purchase (+\$0.20/gal). Respondents who considered Southern Belle and Flav-O-Rich to be locally produced milk were also willing to pay more for milk produced in Kentucky, by \$0.33/gal and \$0.16/gal, respectively.

Several factors were associated with lower willingness-to-pay, and knowledge of these factors is no less important for designing marketing strategies. Each additional child in the

household was associated with \$0.09/gal lower willingness-to-pay, and those who normally buy skim milk (-\$0.13/gal) or paid less than \$3.00/gal for their last milk purchase (-\$0.26/gal) were less willing to pay for locally produced milk. Willingness-to-pay was lower for respondents who believed milk safety was similar across the U.S. (-\$0.09/gal), did not care where production occurred as long as the milk was safe (-\$0.36/gal), could not tell the difference between milk produced in different regions (-\$0.10/gal), were unsure about how they would define locally produced milk (-\$0.37/gal), and rated price as a very important feature of milk (-\$0.09/gal). Respondents with household incomes lower than \$50,000 were \$0.12/gal less willing to pay for locally produced milk.

Several survey questions inquired about cheese consumption and willingness-to-pay for cheese produced in Kentucky. Only 15% of respondents said they would pay \$9/lb for cheese made by a small cheesemaker in Kentucky, versus the alternative of paying \$6/lb for a comparable national brand or store brand. In a second question, half of the sample was asked whether they would buy the locally produced cheese at \$9/lb if the small Kentucky cheesemaker emphasized stewardship of animals and land more than the competing brand. In this case, the portion willing to buy the local product rose from 15% to 30%. The other half of the sample was asked if they would pay \$9/lb if the local cheesemaker committed to purchasing as many supplies as possible from within Kentucky. In this case, the willingness-to-purchase rose from 15% to 24%. Stewardship appears to be more important to consumers, on average, than supporting local businesses.

Emphasizing stewardship and support of local businesses adds value in many consumers' eyes, but remain aware that these efforts contribute to public goods that only

benefit the consumer indirectly. Differentiating the product in more tangible ways may boost willingness-to-purchase or willingness-to-pay even more. While processors often focus on attributes of the cheese itself (its flavor, texture, and other sensory features), marketers recognize that the relevant attributes include everything affecting the consumer's experience with the product. For example, many would agree that Corona beer is unremarkable in its sensory features, and the Company itself barely mentions them in advertising, but it delivers real value to consumers through its carefully orchestrated association with beach vacations. Beer cheese is a local example of a dairy product with intangible attributes (Kentucky heritage and rivalry among competing brands' secret recipes) that contribute heavily to the product's value.

Recommendations

Based on the survey results, launching locally produced milk and cheese products in Kentucky is more likely to be successful if three objectives are met.

(1) Consumers must benefit directly

Simply being local is not enough to sustain repeat purchases. Many consumers will occasionally buy local for its own sake as a favor to the producer and as a civic contribution. Sustained purchases, however, require that the consumer perceives a benefit to themselves. In the case of local milk and cheese, some examples of possible benefits are:

- unrivaled freshness
- up-to-date information about individual producers that inspires confidence in the product and a sense of belonging to the community

- products that build the mystique of competing Kentucky beer cheese recipes, such as sampler packages
- fine cheeses that are considerably less expensive than the same cheese imported from Europe, but with the same flavor and other characteristics
- production methods emphasizing land and animal stewardship in ways that broad segments of consumers are proud to support
- convenience products such as single-serve flavored milk and beer cheese / cracker combinations near checkout counters.

Note that not all desirable product attributes need to be tangible. An attribute that makes people feel better about themselves can be at least as valuable as an attribute that affects taste, texture, or shelf life. In the case of intangible attributes like “localness” or stewardship, producers need to maintain credibility that they are indeed supplying the attribute. Ideally, the benefits consumers receive can be linked to the products’ local nature, so that successful products are not easily mimicked by non-local brands.

(2) Local products must be sold where most consumers shop

If the goal is to serve more than a small niche audience, local products should be distributed through large chain supermarkets. Successfully keeping a product on supermarket shelves is not a trivial task. Products may be charged slotting fees, dairy case managers and receiving dock personnel may make strict demands, suppliers must be able to guarantee a stable supply of product, and poorly performing products are quickly banned from the shelves.

Contracting with a distributor may help a new product gain access, but at the cost of paying for the marketing services provided.

Despite these expenses and challenges, consumers indicated that they are unlikely to make an extra stop at a specialty store for locally produced milk or cheese, so the only way to reach a broad spectrum of consumers is through supermarket chains. Even within a supermarket, local products are sometimes positioned separately from conventional products, and may lack visibility.

If possible, it is important to place milk or cheese in the main dairy case where consumers habitually look for such products. Alternatively, one of the authors recently saw locally produced single-serve milk in multiple flavors, including unexpected ones like mint chocolate, being sold as impulse items in a cooler near the checkout at Wegmans stores in upstate New York. Kroger is a special case in Kentucky, because it operates its own dairy processing facilities, and has an incentive to give its private label products favorable pricing and positioning.

(3) Despite support for local products, price is still a dominant factor in consumer purchases

Consumers often indicate higher willingness-to-pay for new products in surveys than they exhibit when real money is involved. Surveys are hypothetical, the consumer's attention is tightly focused on only a few products, supporting local farmers is socially desirable, and surveys often focus on novel products. There might be a difference between willingness to pay to try one gallon of a new product, versus willingness to pay a premium for three gallons of it week after week. Unlike a survey that forces respondents to think about a new product,

consumers often shop for food in a hurry, making habitual purchases and scanning for low prices.

Many consumers are sincere in their willingness to pay a little extra for locally produced products ... but usually only a little extra. Based on comments in this survey and previous surveys, perceptions of fairness seem to influence true willingness-to-pay. Consumers often underestimate economies of scale in processing and marketing, and overestimate transportation costs per unit of food, so a common perception is that locally produced products should not cost much more because they do not need to be shipped as far. Likewise, some consumers may assume that locally produced products should not cost more, because fewer middlemen or large corporations are involved.

Figure 1. Most milk shoppers are not brand-conscious

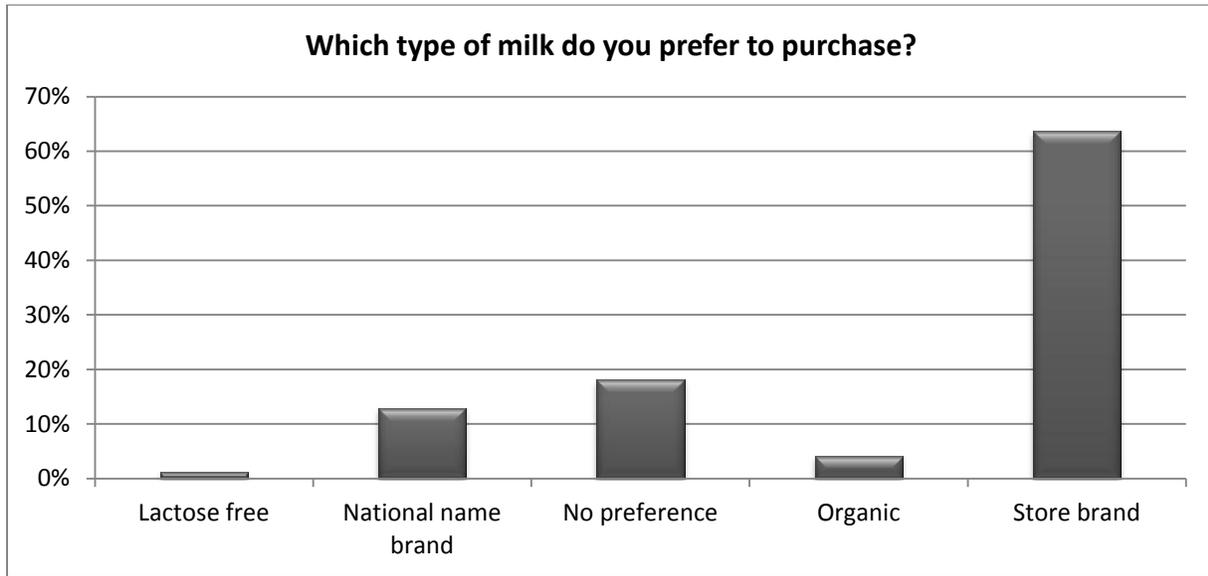


Figure 2. Freshness is consumers' top priority, followed by price

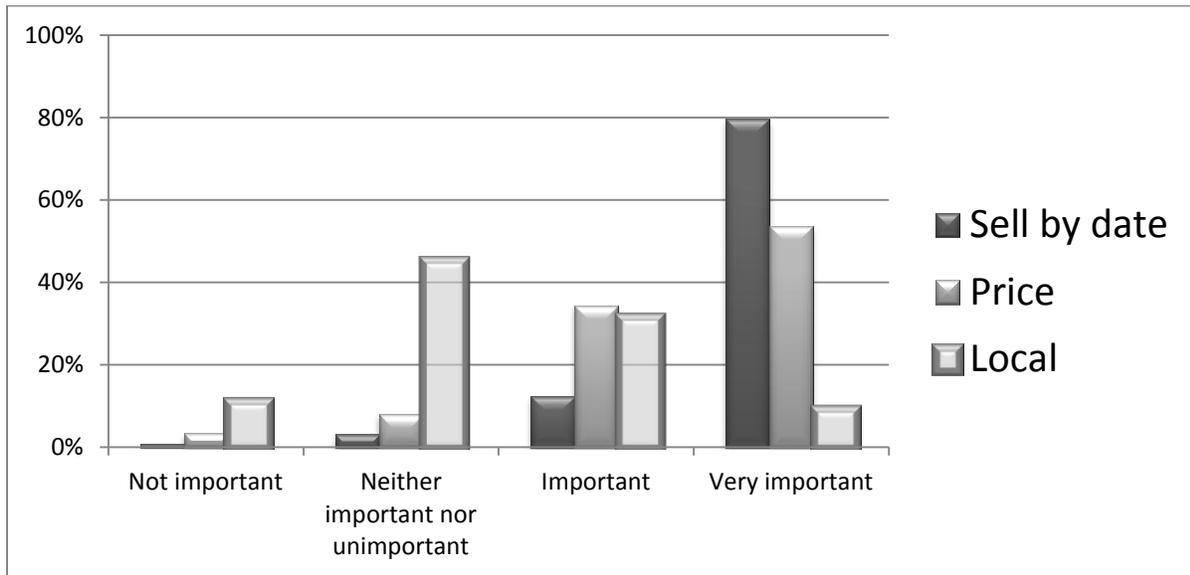


Figure 3. To reach most consumers, distribute local milk to large supermarket chains

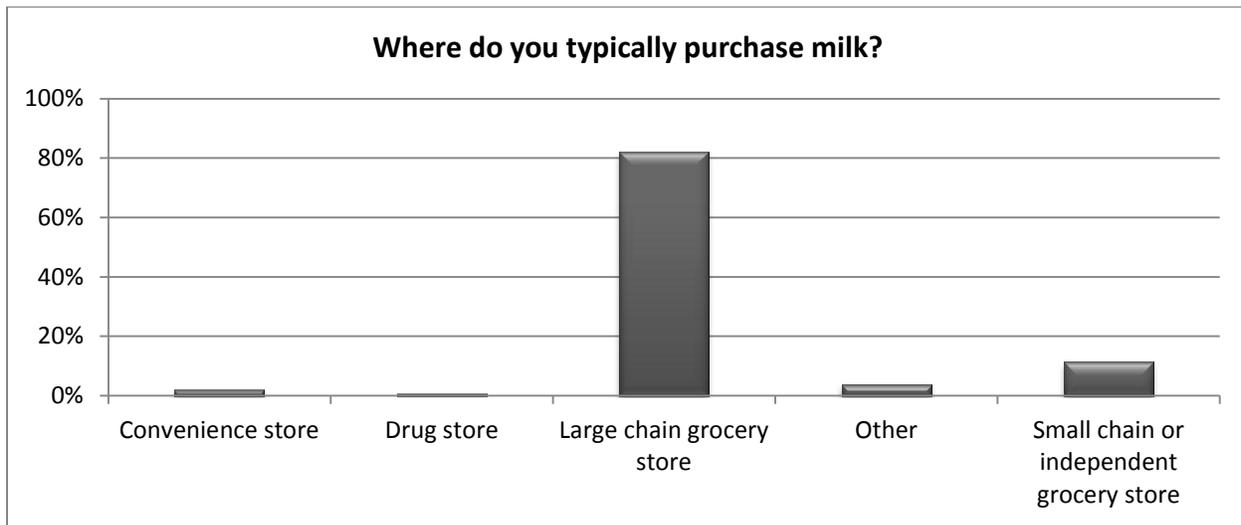
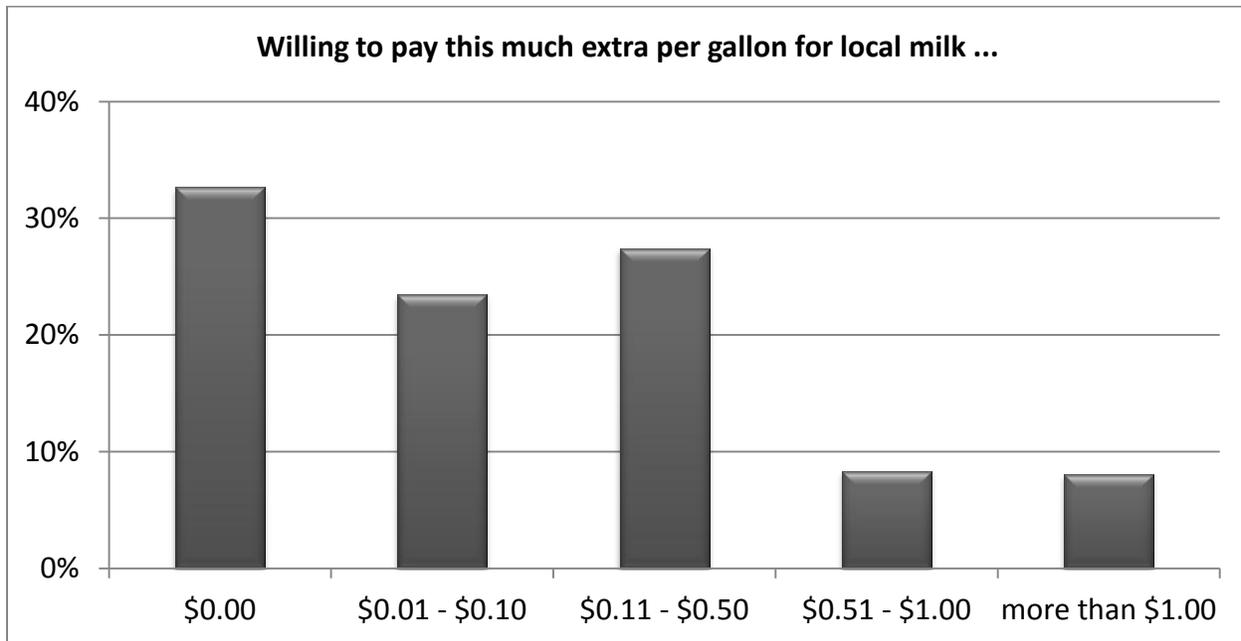


Figure 4. Many consumers are willing to pay a little extra for local milk, but beware of upward bias in survey responses vs. actual behavior



Appendix 1. Version 1 of the survey

If you are viewing an electronic version of this report, double-clicking on the first page of the survey below will open the entire survey in Adobe Acrobat. If you are viewing a hard copy of this report, please feel free to contact Leigh Maynard at leigh.maynard@uky.edu or 859-257-7286 for a full copy of the survey.

Zoomerang

http://app.zoomerang.com/Report/print_survey_body.zgi?ID=L24EVS.M...

Kentucky Consumer Dairy Preference Survey (1)

To the survey participant:

You are being provided an opportunity to give feedback on milk and cheese products. Your input is greatly appreciated and will help Kentucky dairy producers better design and position their products in Kentucky.

The Kentucky Dairy Preferences Survey is targeting households around the Commonwealth to provide opinions on these products. The benefits associated with completing this survey are restricted to those determined by Zoomerang and the associated ZoomPoints. We hope to receive completed surveys from about 1,000 people, so your answers are important to us. Of course, you have a choice about whether or not to complete the survey, but if you do participate, you are free to skip any questions or discontinue at any time.

The survey will take about 10 minutes to complete.

There are no known risks to participating in this study. Your response to the survey is anonymous which means no names will appear or be used on research documents, or be used in presentations or publications. The research team will not know that any information you provided came from you, or even whether you participated in the study. If you have questions about the study, please feel free to ask; my contact information is given below. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866-400-9428.

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As you complete this survey, please note that some questions apply to you personally, while others apply to your entire household. Also, if you wish, you may go back to earlier questions by scrolling down to the bottom of any page and using the backspace key. Thank you for taking time to complete the survey.



Survey Page 1

Kentucky Consumer Dairy Preference Survey (1)

1 How important is it for you to eat a balanced diet?

Not at all Important	Not Important	Neither Important nor Unimportant	Important	Very Important
1	2	3	4	5

Appendix 2. Visual presentation of survey results (version 1) provided by the Zoomerang survey platform

This is a separate, supplementary report showing responses from one version of the survey as charts. Because of its large size, it is included as a separate file, but can be appended here in hard copy printouts. On hard copies of this report, some words may be too small to read easily. Please feel free to contact Leigh Maynard at leigh.maynard@uky.edu or 859-257-7286 for a copy of the PowerPoint file into which Zoomerang places the charts.