Willingness to Pay and Information Demand for Locally Produced Honey

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Introduction
The market for honey is changing rapidly. One important factor affecting the market is the recent die-off of domestic honey bees at dramatic rates, leading to drastic decreases in domestic honey production. The honey market, therefore, increasingly relies on foreign honey to satisfy demand (Ward and Boynton, 2010). Foreign honey, however, runs the risk of containing traces of pesticides and heavy metals; therefore, they may pose risks to consumer health (Ezenwa, 2009; Wei Guo-xue et al., 2012).

Objectives
This project aims at analyzing how consumers evaluate health risks of consuming international honey and how these risks influence consumer willingness to pay for honey produced in Wyoming. Our focus is on Wyoming consumers. Specifically, our objectives are to answer the following: (1) are consumers willing to pay a premium for Wyoming honey?; (2) how is consumer willingness-to-pay for Wyoming honey impacted by food safety information about Wyoming honey?; (3) do consumers feel guilty about consuming non-local honey?; (4) will consumers avoid information about the origin of honey to avoid feelings of guilt?

Materials and Methods
The studies were conducted using economic experiments at (1) the James C. Hageman Sustainable Agriculture Research and Extension Center (SAREC) near Lingle during spring 2015; (2) Eastern Wyoming College in Torrington during spring 2015; and (3) the University of Wyoming in Laramie during fall 2015 and spring 2016. The experiments were designed to extract consumers’ true willingness-to-pay for Wyoming honey, versus honey of unknown origin, as well as determinants of honey demand. In the first round of experiments (in 2015), 449 people from the general public participated, while another 516 subjects participated in the second round of experiments (spring 2016). Subjects were divided into different treatment groups, which enabled measures of how consumer demand for local honey is affected by different types of information, as well as by their willingness to inform themselves about the food safety attributes of local honey. Further, different methods were used to extract the willingness-to-pay (or demand) for Wyoming honey, compared to honey of unknown origin. In the first round of experiments, participants were faced with a fixed-price premium for Wyoming honey (and stated if they wanted to buy Wyoming honey at that premium, under different information regimes), while in the second round of experiments, participants got to state their own individual, willingness-to-pay for Wyoming honey. The latter enabled us to examine the variation in willingness-to-pay for Wyoming honey over different consumer types.

Results and Discussion
In general, we found that consumers are highly concerned about their honey being locally produced. In one study, we found that the average premium Wyoming consumers are willing to pay for Wyoming honey—over honey of unknown origin—is $2.08 per eight ounces of honey. In another study, we presented participants with a fixed premium of $2.48 for an eight-ounce jar of honey produced in Wyoming, compared to honey of unknown origin. We found that a majority of consumers (53%) were willing to pay the premium. In a third study, we found that providing consumers with information on the food safety benefits of locally produced honey significantly increased the percentage of consumers willing to pay the $2.48 premium for Wyoming honey.
Further, we found that consumers generally assign a positive value to information on the origin of the honey they are offered to buy. More specifically, around 80% of experiment participants preferred (costless) information about the origin of the honey (over ignorance of the origin), and they used that knowledge to ensure that they bought locally produced honey, even if the local product came at an additional cost of $2.48.

Finally, we found that the willingness to pay for Wyoming-produced honey is higher for consumers who assign a higher value to local production in general, and who are less concerned about price.

Our results suggest that a successful strategy to expand the market share of Wyoming honey may entail communication of food safety benefits to locally produced honey. It may also entail information that strengthens consumer preferences for local production in general.

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PARP: VII:5 (although the project concerns honey, not meat)

Literature Cited


Figure 1. Locally produced honey and honey of unknown origin were put in identical looking bottles that were given randomly to subjects.