DAIRY VETERINARY NEWSLETTER

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What Consumers Want in Buying Dairy and Other Foods - Mixed Messages

I attend the American Association of Veterinary Laboratory Diagnosticians conference every year. Because I am the epidemiologist at the Utah Veterinary Diagnostic Laboratory as well as a dairy extension veterinarian, there are many pertinent presentations and committee meetings there. They include many presentations about health and disease of dairy cattle, with an emphasis on diagnostics, regulations, and interesting cases. Some of them impact dairy practice directly in practical ways, and thus reach this newsletter. This year, one of the presentations was interesting to me because it contrasted with what we hear so often regarding "what consumers want" when buying food, including dairy products.

For example, during May 2017 there were numerous articles in dairy press stating that "most" or "close to 90%" of milk produced in the U.S. would be going to processors who would no longer accept any rBST treated cows' milk by January 2018. There are still quite a few of these stories on line. I have not been able to find any actual numbers regarding the pounds or percentage of U.S. milk that will go to milk buyers who do not accept rBST. Some major milk processors in Utah and Idaho have apparently not made this decision yet. Nevertheless, it seems clear that many dairy producers ship milk to buyers that will no longer purchase rBGH milk by the end of this year. The direct cause cited was usually that many companies that purchase milk, milk powder or other milk products for use in baby formula, cheese or other products were demanding rBST free milk. However, the underlying reason is always stated as consumer preference, often accompanied by some industry commentary that "ignorance", "fear", or some way of expressing that there is no basis in fact regarding food safety were the drivers of this collective decision. The lack of scientific evidence for a human or cow safety threat from rBST use is well documented.

The presentation by K. Kefaber at AAVLD suggested a different picture regarding what consumers primarily want, however. Do consumers really "demand" or purchase livestock derived food <u>primarily based</u> on issues of animal care, "hormones", "non-GMO", etc.? Does labelling or advertising emphasizing things like animal welfare reassure consumers or affect much food buying?

Kefaber said that a recent survey had determined that <u>consumers valued taste the most in buying foods of livestock origin</u>, followed by price. Consumers liked terms such as "broiled" or "juicy" when describing meat, and their comments often included something like, "when I'm buying food, I don't want to think about the animal then". Comments also indicated that labelling such as "grass fed", from a certain breed, "hormone free", "cage-free", etc. often just irritated consumers, who wanted to see the appearance of the meat or cheese, the sell by date, and the price. Again, consumers often cited their perception of taste of the product as the number one reason to purchase it.

Some statistics presented about marketing of eggs:

Stores that make a store-wide commitment to cage-free eggs lose 2/3 of all egg sales

- 5% of all eggs sold are cage-free, but approximately 50% of eggs are raised cage-free (This statistic I found amazing; it was explained that many states now mandate cage-free eggs, but most of them can't be sold as such because consumers won't pay more for them. I assume this means that to be sold at all, they are labeled without distinction, and sold cheaper than those sold as cage-free. I know that where I live, cage-free eggs usually cost double or more what non-labeled, conventional eggs do.)
- While a small percentage of consumers will pay more for "organic", "non-GMO", etc. food, the price of the specially raised food eventually comes down close or equal in price to that of conventionally raised food
- Cage-free layer hens have increased bird mortality, and such flocks have more outbreaks of severe disease, resulting in more usage of "medically important" antibiotics in response

Source of the survey and types of questions asked regarding consumer food buying

The discipline which people work in, such as consumer science or the economics of purchasing, compared with food science or animal science may be associated with the types of questions that consumers are asked. I found a 2014 study by T. Schroeder, a livestock economist for Research and Extension (it stated that they worked with "other faculty" on the study) from Kansas State University. They did a <u>nationwide online survey of consumers buying specific categories of food products from livestock</u>. "'We wanted some diversity among those (livestock) products,' said Garrett Lister, a K-State graduate student who worked on the study. 'We also wanted them to be specific, which is why we kept them in the livestock sector.'" They asked questions about consumers' buying of milk, chicken breast, ground beef, and beef steak.



Yankeefarmersmarket.com

They asked consumers about the following 11 values (in *alphabetical order* here):

- animal welfare
- convenience
- environmental impact
- freshness
- health
- hormone-free/antibiotic-free
- nutrition

- origin
- price
- safety
- taste

They mentioned that <u>most consumer food buying surveys do not ask about some of these factors</u>. Many surveys focus on factors other than freshness, taste, convenience, etc. and focus on things like "non-GMO", "organic", "hormones", "how raised", etc. There were 1950 responses to the survey. There was no complete ranking of the 11 values for each of the 4 products, but the authors summarized:

"Safety was the most important value in the general food products study, and it was either first or second most important for milk, ground beef, beef steak and chicken breast. Freshness was the other top value for livestock products. In contrast, the values of environmental impact, animal welfare, origin and convenience were less important for the livestock products."

"Price fell in the middle of the list, Lister said. This was because some consumers valued price as one of their key components in making a decision on what foods to buy, while others felt it was less important."

"The social values, including animal welfare, environmental impact and origin, for example, aren't irrelevant, Schroeder said-- but overall they aren't the major drivers that lead the average consumer to purchase a particular product."

The message at AAVLD was similar. The presentation suggested that overproduction, including that driven by new legislation in more states, of food raised in ways that are more expensive, but not the best for overall animal and bird health puts more financial strain on food producers. This also has been associated with adverse effects on animal welfare, including increased use of medically important antibiotics.

What does this mean for veterinarians working with dairy or other food animals?

I am not certain; can anyone predict the future? My opinion is that the entire question of restricted antibiotic use, possible restrictions on use of more types of hormones, and emphasis on particular housing types, non-GMO feed, etc. is going to continue to affect food animal veterinarians. Our profession and professional organizations need to consider our role as major stewards of animal health and welfare while also feeding a country with 20% of households with food insecurity. It may be time to question the push toward less sustainable or financially viable practices, especially those that lead to overproduction of expensive food that most people do not really demand or even accept paying a higher price for, and more outbreak-driven use of medically important antibiotics. It is one thing to accept the will of consumers, but maybe collectively agriculture - or agricultural regulation - is overreacting to the will of only a distinct minority. Veterinarians are in a unique position to weigh in on future legislation or regulations regarding dairy and other food animals. The sustainability (a term often used with implications of some kind of return to old practices) of the food supply and the finances of all of our society are greatly affected.

What do you think?

A New PCR for Bovine Respiratory Viruses at the Utah Veterinary Diagnostic Laboratory

The Molecular Diagnostics section at UVDL has a new test called the "Bovine Respiratory Panel qPCR (BVD/IBR/BRSV/PI3)". Dr. Tom Baldwin, laboratory director, informs me that in comparison to the very low sensitivity of Virus Isolation on tissues or post-mortem specimens to detect these viruses, the sensitivity of this new

multiplex real-time PCR test is much higher. (The tests all include positive and negative controls, but no exact percentage sensitivity has been calculated.) The price per test is \$50.00. Samples listed on the UVDL website are lung or nasal swabs, but in the actual laboratory procedure, it states, "acceptable samples include lung, trachea, and nasal swabs". For more information, consult the Utah Veterinary Diagnostic Laboratory website, Services Offered, Bovine Respiratory Panel qPCR (BVD/IBR/BRSV/PI3). The UVDL main phone number is (435) 797-1895. From my experience, the greatest practicality of this test would be when producers are either using a vaccine missing some of these viruses (e.g. an IBR PI3 vaccine), or not keeping vaccination status current. The isolation of any of these viruses would point out the need for a more complete vaccination program.

Please let us know your comments and suggestions for future topics. I can be reached at (435) 760-3731 (Cell), (435) 797-1899 M-Tues, (435) 797-7120 W-F or **David.Wilson@usu.edu**.

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David J. Wilson