Maintaining Animal Health in Organic Dairy Herds

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Several University of Kentucky graduate and undergraduate students attended the American Dairy Science Association's annual meeting this July in Orlando, Florida. One of the topics covered extensively was how to maintain health in organic dairy herds, which is summarized in this article.

Dr. Katy Proudfoot of the Ohio State University explained that perceived animal welfare is one of the top reasons people buy organic milk versus conventional. Some of these welfare concerns include how producers handle disease, pain, and fear in the animals, and the animals' ability to express natural behavior and live in a natural environment. Organic dairy herds have to focus on disease prevention because of the complete restriction of synthetic antibiotics in the United States. However, she explained that there is a lack of education on what is allowable for pain control within the organic dairy farming limits, thus sometimes compromising animal welfare. While the USDA requires housing that accommodates natural behavior, Dr. Proudfoot went on to explain that "naturalness" sometimes should be taken beyond the pasture. Some of her past research showed that cows chose to calve in privacy versus a close-up pen with other cows around. Sick cows also isolated themselves socially when given the opportunity to do so. Therefore, giving cows room to separate themselves from the herd may be an important factor in maintaining animal welfare in both conventional and organic dairy herds. Group housing might be a better option for calves because it allows expression of natural behaviors starting at a young age.

Dr. Andre Brito from the University of New Hampshire explained that a growing number of organic dairy farms are transitioning to a high forage or no grain diet system. This switch is occurring because of reduced feed costs, reduced labor, additional premiums, and new grass-fed milk markets available to those who feed this type of diet. Challenges include milk production decreases, consistent production of high quality forage, and maintenance of body condition and reproductive performance.

Lastly, Dr. Pam Ruegg of the University of Wisconsin-Madison presented some results of a large comparison study conducted where both organic and conventional producers were interviewed in three states. Interestingly, organic dairy producers reported fewer cases of clinical mastitis, but there was no overall somatic cell count difference between organic and conventional dairy herds. She attributed the difference in reported cases to varied detection methods. Producers who milked in tie-stalls and those who called veterinarians to their farms more often had higher odds of reporting greater clinical mastitis occurrence, because these producers were looking more closely at these animals in order to find clinical cases. Only half of both organic and conventional producers were satisfied with treatment outcomes for clinical mastitis, even though treatments allowed between the two groups differ greatly. Beyond clinical mastitis, 30% of both organic and conventional producers did not understand what subclinical mastitis was, leaving room for improvement in this area. No differences were observed between the two groups for bulk tank bacterial counts. Organic dairy farms had more coagulase-negative staphylococci (CNS) and *Streptococcus agalactiae* while conventional herds had more Gram-negative samples. No great overall differences in prevention practices were discovered between organic and conventional herds, although there were slight differences in a few measures. Organic producers tended to utilize DHI, vaccines, gloves while milking, automatic take-offs, and regular veterinarian visits less often than conventional producers.

Dr. Gustavo Schuenemann from the Ohio State University explained that organic milk consumers are willing to pay a higher price for their milk compared to conventional milk consumers. Organic herds are faced with more costly replacement cows (approximately $3,500) and 20 to 30% lower milk production compared to conventional herds. However, organic producers receive a high milk price ($36/cwt). While all types of dairy farmers care about animal welfare concerns, organic dairies are met with unique animal welfare challenges because of USDA restrictions particularly regarding disease treatment and housing. However, it is important to remember that organic and conventional dairy producers can learn from one another and should be working toward the same goal of providing safe and nutritious milk to consumers.