

Calf autofeeders: Consulting opportunities can help prevent health disasters

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Abstract

Recent graduate veterinarians are often seeking consulting opportunities on farms. Regular reproductive herd work and other adult herd consulting opportunities may already be captured by other veterinarians within the practice. Calf health consulting is an excellent area for recent graduate veterinarians to begin gaining consulting confidence while providing tremendous value to the farm. Regardless of the calf housing system, veterinarians can rely on many of the same management principles and health recommendations to maximize calf growth and health. Opportunities to improve respiratory health by colostrum management, monitoring sanitation, vaccination protocols, ventilation and lung ultrasound are some of the ways for veterinarians to be intricately involved in ensuring that the next generation of dairy cows reach their maximum potential. Autofeeders provide a unique opportunity for veterinary involvement in these areas.

Key words: autofeeder, ventilation, lung ultrasound, colostrum

Throughout many parts of the eastern United States, there has been a shift to labor efficient methods of calf management and utilizing facilities that are more pleasant for human comfort. Within these calf facilities, group housing and autofeeders are an option for producers to improve growth and labor savings. The use of autofeeder facilities presents veterinarians with a unique opportunity to prevent potential health disasters utilizing data collection, monitoring and observational skills. While labor efficient, the use of autofeeders requires improved management to minimize disease risk and prevent health disasters.

During the initial phases of the calf housing implementation discussions, it is important for veterinarians to understand the producer's motivation for autofeeder systems. If the producer is implementing autofeeders to improve nutritional plane, increase growth and capitalize on labor savings, the results will likely be positive. If autofeeders are utilized so that the farm no longer needs to focus on feeding calves and calf management, the autofeeder system is destined for suboptimal results or failure. As in any calf management system, prevention of disease, particularly respiratory disease, is paramount to success.

It is critical for veterinarians to understand that while autofeeders provide a different means of calf management, many of the proven principles still apply to promote health and growth. More recent data suggests that there is tremendous opportunity for prevention of preweaning diseases by increasing transfer of passive immunity via colostrum. Data suggests that driving serum total protein above 6.2 g/dL provides the best opportunity for disease prevention in the preweaning period.¹

The data is also clear that calves that gain more weight in the preweaning period will have increased production in first lactation.² Veterinarians are uniquely qualified to provide nutritional and disease prevention consultation to producers to maximize gains in the preweaning period. Oversight of average

daily gain monitoring and intake data is critically important and provides an excellent consulting opportunity. Autofeeders can deliver nutritional precision, but oversight and consulting expertise is required.

Ventilation of calf facilities is an area that all veterinarians should be familiar with. Even if a veterinarian is not trained to design a positive pressure tube ventilation system, they should at least be able to consult with farms on the common pitfalls, benefits and opportunities that these systems provide. Veterinarians should be able to point producers in the right direction for proper design while also being able to troubleshoot and monitor current systems. Use of air bacterial meters, foggers and hot wire anemometers provide information on the performance of the ventilation system.

Autofeeders must also be frequently monitored for properly cleaning and sanitation. These systems are often touted as “self-cleaning,” however, they are no different than a milking system. When milking system bacterial counts become elevated, producers must perform a more thorough cleaning to remove any potential organic buildup and nidus for bacterial growth. Autofeeders should be managed in a similar way, and perhaps even more proactively. Veterinarians possess excellent observational skills to provide oversight on sanitation of autofeeders, pasteurizers and other feeding equipment. The use of ATP meters (bioluminescence) can provide useful information to producers on the surface cleanliness of any accessible point in the system.

Veterinarians can also provide consultation and protocol development on acclimation of calves to the autofeeder, group sizes and disease detection. Many sales representatives and product support consultants recommend that groups of 25 calves per autofeeder are acceptable. Groups of this size will negatively impact calf health and increase risk of respiratory disease.³ If the facility is still in the planning stages, the veterinarian must be involved to consult on ensuring that group sizes do not negatively impact health. Backgrounding calves individually before introduction to the autofeeder is also critically important, and placing calves on the autofeeder earlier than 12 days of age can negatively impact calf health.⁴

Lung ultrasound is a way to provide objective data on the respiratory health of calves in any housing system, including autofeeders. Lung ultrasound can provide data to aid in treatment decisions, culling decisions, and the impact that management and management changes have on respiratory health. There are also several studies that correlate lung ultrasound scores of 3 or more with reduced future milk production⁵ and scores of 4 with increased culling risk prior to calving.⁶

Autofeeders can certainly create challenges if not properly managed, but veterinarians can be the conduit to improved calf health and productivity by providing both observations and data to guide producers to management practices that optimize health and prevent health disasters.

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