

DeLaval Calf College: Webinar #1

Free webinar series begins with calf raising basics

DeLaval kicked-off its free webinar series, Calf College, with a presentation from Dr. Robert James, Ph.D, on the critical points for calf rearing. The webinar, which was the first in a series of eight, began by Dr. James emphasizing the fundamentals calf management and asking, “Can we do it better?”

Dr. James, professor emeritus of Dairy Science at Virginia Tech University and a well-known figure in dairy calf management, admitted that the cost of raising a calf may be high when considering expenses like nutrient-dense food, labor, and facilities, but the time it takes to care for a calf is relatively short. However, he stressed the impact this period can have on her later lactation performance, her longevity and farm profitability.

According to Dr. James, there are a number of critical focus areas which contribute to successful calf raising, starting with your relationship with your veterinarian. This person plays a key role in ensuring the health, management and biosecurity of your calf operation.

Raising healthy calves starts with caring for dry cows by managing their nutrition and providing a low stress, comfortable environment. “I can’t overemphasize the importance of what happens during this time,” said Dr. James. “It really sets this calf up for success or failure.”

His next critical focus points for calf raising success were calving environment and colostrum management. Calving should take place in a clean, dry, well-ventilated area with good means for observation in the event assistance is needed. Clean colostrum – with a bacterial count of 50,000 or less – should be fed to the calf within the first six hours of life, providing the calf with essential antibodies and hormones necessary for a healthy start.

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Feeding the preweaned calf



This is a baby!

- Depends upon high quality milk solids for first month.
 - Digestible ingredients
 - Low risk of pathogens?
- Meeting the nutrient requirements for maintenance and growth!
- Eventual transition to dry feeds
- What are the performance goals?

A preweaned calf get its nutrients from either pasteurized milk or milk replacer and will typically drink eight to 12 quarts per day (more in the beginning). The goal, according to Dairy Calf & Heifer Association’s Gold Standard, should be to double the animal’s birth weight in 56 days, regardless of breed.

As far as calf housing systems go, there are basically two options: individual or group housing. “There can be success

and challenges with each one,” said Dr. James. Traditionally, individual housing systems have been widely adopted because of the belief it’s the best way to control disease transmission. However, Dr. James stated that in well-managed group housing facilities, there’s potential for an equally high level of care.

Managing the group housing system

- Assure production of excellent quality colostrum.
- Colostrum management to optimize transfer of immunity.
- Strict biosecurity.
- Biologically normal feeding program?
- Facility design – well ventilated and excellent drainage.
- Others? Space/calf, age range, when to group?

While biosecurity, colostrum and nutrient management, and good ventilation are important considerations in group housing systems, the potential upside for calves includes better growth rates, earlier dry feed intake, less post-weaning slump and pre-socialized animals.

With group housing there are a few different options for feeding calves, including mob feeders, lock-ups and acidified free choice. [Automated calf feeders](#) offer unique benefits like feed mixing consistency and milk intake data. “These are some wonderful tools we can use for disease detection,” said Dr. James. “In fact, on our research on farms, some of these things can tell us that calves are getting sick before we really even see it.”

Autofeeders also have the potential to save or “repurpose” labor. Dr. James stated, “They’ve shifted some of that labor cost from washing bottles, washing buckets, and the challenges of individually feeding animals ... to spending more time taking care of calves ... managing calves more effectively.”

Calves visit the autfeeder throughout the day to drink their pre-determined ration. According to Dr. James, calves can be weaned over 10 to 14 days by gradually reducing their liquid feed – compared to individual feeding systems where whole feedings are eliminated from a day, which can be traumatic. “I think this is one of the advantages of the autfeeder and acidified free systems,” he said. “The calf determines when she wants to eat, and I think it can potentially [be less stressful] on that calf.”

Goals for any system

- Colostrum management – can I feed dam’s colostrum?
- Meet nutrient requirements for growth and maintenance under my environmental conditions!
- System which is labor efficient and labor friendly!
- Provides an excellent environment.
- Cost effective.

To succeed with autofeeders, Dr. James stressed the need for detail-oriented people to manage and maintain the machines, keep the operation clean, and interpret and apply the system’s data. He noted that equipment dealerships also play a big role. “I’ve had the pleasure of working with DeLaval and with the training of their dealers. They have really gone above and beyond the competition...

They have trained their dealers. Their dealers are well-stocked with the parts.”

With any new system, it is important to establish standards and protocols. Dr. James concluded by saying, “[Autofeeders are] a great investment in better calf management if used properly and installed properly. It can really work well.”

The entire Calf College webinar series is available for playback online at www.delaval.com.