

Are Your Feeding Practices on Target?



By Donna M. Amaral-Phillips

Routinely reviewing feeding practices with the person feeding the dairy's lactating cows, heifers, and dry cows can ensure your feeding program achieves its intended results. Practices to review for the lactating herd include, but are not limited to:

- Lactating cows should have access to the feed bunk at least 20 hours daily, but preferably 22 hours daily (i.e., in holding pen and lock-ups for no more than 2 hours daily). Minimizing the time away from feed allows cows to eat multiple meals for optimum intake and allows for adequate time for rest. This is especially important for fresh, early-lactation, and high-producing dairy cows.
- Cows like consistency. Cows should be fed a consistent ration at a consistent time each day.
- Feed should not be heating in the feed bunk. Routinely check that this is not occurring by grabbing a handful of TMR and silages.
- Uneaten feed should be routinely removed (usually daily) from the feed bunk. Milking cows should be fed for 1% to 2% of their daily intake left after a 24-hr feeding period. If a farmer is feeding for a slick bunk at the time of feeding, the bunks have to be monitored throughout the day and feeding time adjusted rather than feeding at the same time every day. Fresh cow groups should be fed such that 5% remains.
- Feed should be provided throughout the entire feed bunk at each feeding for the lactating herd.
- Waterers should be cleaned out multiple times weekly and scrubbed once weekly with a brush and weak chlorinated solution (1 cup of household bleach to 5 gallons of water). Rinse the chlorinated solution out after cleaning. Water intake drives feed intake and vice versa.
- Adequate bunk and freestall (or resting) space should be provided such that groups are not overcrowded. Ideally, 24 inches of bunk space should be provided per milking cow (six-row barns may provide 18 inches per cow, less than ideal). For fresh and close-up dry cow groups, the recommendation is 36 inches per cow and one freestall or at least 100 ft² of resting area per cow. Post and rail feed barriers should be at a height of 48 inches from the cow-standing surface and located 8 to 12 inches forward of the bottom barrier to allow cows to reach and consume feed. Head locks should be angled such that the top is 4 to 6 inches forward of the bottom of the attached headlock (Dan McFarland).
- Fans should be located over the feedbunk, stalls/resting area, and holding pen and should be connected to sensors that automatically turn on fans when temperatures are above 65° to 68°F. High-producing cows should be in an environment with a temperature-humidity index below 68. Fans should deliver 800 to 900 cfm per headlock or feeding space. Sprinklers along the feedbunk and in holding pens should be

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used in conjunction with fans and should start at 68°F with water nozzles delivering 0.5 to 1.0 gallons of water per minute for 1 to 2 minutes within the 15 minute total cycle. Fans should run continuously. As the temperature increases, the cycle interval for the sprinklers decreases. For example, at 82°F, sprinklers run for 1 to 2 min with a cycle time of 6 to 7 minutes.

- TMR mixers need to be serviced and adjusted for the feeds being added. Check to make sure the TMR mixer is not overfilled, TMR mixtures are not over- or under-mixed, and ingredients are being added at the correct amounts, location, and order for the mixer. The mixing quality of the TMR should be evaluated occasionally. Does the mix look the same over the length of the feed bunk? Has the mixer decreased the particle size too much? The use of the Penn State Particle Size box can be a useful on-farm tool to evaluate mixes.
- Maintain clean faces on bunkers and other silage storage structures to prevent heating and ensure that a high-quality feed is being fed.
- Dairy cows should be consuming a similar amount of feed as suggested in balanced rations. If not, discuss this observation with your nutritionist, who may wish to make adjustments in the diet, if large differences are detected. Daily or weekly refusals will need to be weighed to assess the consumption by a group of cows.
- First-calf heifers should be housed separately from the mature cows. Studies have shown feeding times increased by 11% and milk production increased by 9% when housed separately from mature cows. Separation of first-calf heifers is even more critical when freestalls are overcrowded and/or feedbunk space is limited, i.e. with 6 row barns.