

THE FEEDER IS THE LINCHPIN that holds the entire feeding program together.



## FIVE MUST DO'S when you're the feeder

With high feed costs, it is extremely critical to get the most bang for your buck. These five feeding priorities will streamline the feeder-nutritionist relationship.

by Steve Mooney

**F**EEDING the dairy herd can account for 50 percent or more of the costs to operate a dairy, and the return on those invested dollars will be influenced by the skills and practices of the feeder. With current economic pressures, accurate mixing and delivery of rations is essential for maximum return and utilization.

A feeding program with daily quality control can create an opportunity for two-way communication between the cows and the nutritionist. Ultimately, the feeder is the linchpin that holds the whole feeding program together.

### Regrettably, three rations can exist . . .

Someone wiser than this author said that three rations exist on every dairy farm: the ration the nutritionist balances, the ration the feeder delivers, and the ration the cow eats. These three different rations occur when the nutritionist, the feeder, or the cows make mistakes.

The nutritionist might balance a ration based on inaccurate analyses, out-of-date dry matters, or ingredients that are no longer available on the dairy. The feeder might use the wrong mix sheet, select the wrong ingredients, add the wrong amount of a specific ingredient, or underfeed a group of cows. The cows may not eat the amounts predicted on the ration sheet or may sort for or against specific ingredients.

### Consistency is key . . .

Three existing ration possibilities can make conclusions about nutritional "cause and effect" difficult if not impossible. The goal of every feeder must be to eliminate the mistakes and generate only one ration for each group of cattle. The ration mixed and delivered by the feeder must be the same as the ration balanced by the nutritionist and eaten by the cows. Only then can the communication through the feeder between the nutritionist and the cows have any meaning or value.

The feeder's job can be distilled into five ranked priorities for a high-quality feeding program. The

ranking is important as each skill is required by the next.

#### 1. Mix it correctly

Mixing correctly is simple in theory. The feeder needs to identify the correct feed from the choices available, select only edible feed from inventory, and incorporate the clean, correct feed into the ration at the correct amount. In practice, mixing correctly is more complicated. Identifying the correct feed requires a standardized system of labeling feeds that everyone knows and everyone uses.

Adding the right amount of the feed is the hardest sub-skill of mixing correctly. Practice is required to operate the feeder's equipment without "thinking" and to learn how each feed flows. Some people have more natural talent than others for adding the right amount. One loader-operator we give a wide safety margin for fear of losing fingers and toes, while another we'd trust to scratch an itch on the tip of our nose. Adding the right amount with a coffee can, scoop shovel, or three-yard loader is all about control. With practice, feeders gain control of equipment operation and feed flow, and with that control comes accuracy. This accuracy allows the day-to-day consistency required for the health and productivity of our lactating cows.

#### 2. Maintain the mix sheet

The feeder maintains both the animal and feed sides of the mix sheet. For the animal side, the feeder tracks feed refused and number of animals in a pen, decides how much will be offered next, and can provide input and adjustments to the description of the animal described on the ration sheets.

On the feed side, the feeder monitors feed inventories, decides when new feed analysis is needed, and tracks feed dry matters. Every mix sheet should have the date formulated, ration description or group name, ingredients with standardized names and associated weights and dry matters, mix totals, and cow numbers. Some mix sheets have adjustments should dry matters change or alternate mixes if cow numbers change, provid-

ing proactive solutions to changes the feeder may encounter within a day.

#### 3. Observe and plan

Observing focuses on the "here and now." The feeder should be watching feeds, cows, and equipment. Feeds should be checked daily for quality, stability, and changes. Dry matters should be measured at least weekly, and samples for nutrient composition should be drawn based on variability. The more variable the composition, the more frequent the sampling.

Planning involves regularly scheduled tasks to maintain a high-quality feed program as well as looking ahead and trying to foresee challenges and opportunities to the feeding program in coming weeks and months. Planning can begin with tracking of feed inventories including how much feed is on hand and, at current rates of use, how long it will last.

This begins the overall planning of the feeding program, projecting when orders should be placed and when program changes are likely to occur. The goal is a proactive approach ensuring that, in a timely manner, samples are run, rations adjusted, and mix sheets are current. Having projected rations ready for forage changes and rainy or hot days can be the difference between consistency and bumps in your feeding program.

#### 4. Deliver feed properly

Assembling a ration involves not only choosing good feed and adding it in the right amount, but also managing the batch so that the final mix is uniform and complete. Some mixers produce a better mix if forages are added first, others concentrates. Ultimately, the sequence of filling is unique to each dairy and, once established, the sequence becomes standard operating procedure (SOP) for the dairy. With each mixer, reading the manual, talking with the dealer, and experience will give a place to start for estimating the time and speed for mixing.

In a well-mixed batch, you should not see clumps, particle size reduction, or changes in color or texture from the beginning to end of the load. If the mix is incomplete, time or speed need to be increased, or the batch size needs to be reduced. Never overfill the mixer.

#### 5. Measure dry matter intake

With the first four priorities satisfied, the measuring of DMI (dry matter intake) becomes a powerful and meaningful exercise providing a clear communication between the cows and nutritionist and elevating the feeding program to high-quality status. The accurate calculation of DMI requires five numbers:

1. Weight of feed offered
2. Dry matter percentage of feed offered
3. Weight of feed refused
4. Dry matter percentage of feed refused
5. Number of animals fed with the feed offered

Weight of feed offered and its dry matter percentage are relatively easy to obtain. With accurate scales, the weight of feed offered to a group is easily tallied. With an up-to-date mix sheet and accurate mixing, the dry matter percentage of the feed offered can be taken off the mix sheet or measured with a quick sample. Obtaining the three other numbers can be more challenging.

"Measure intake daily" is a common recommendation to dairy producers. It sounds simple enough. Measure what the cows eat each day. But, accurate measurement of dry matter intake (DMI) is a challenge on most dairies, requiring a good system built on attention to detail, ingenuity, and daily effort. In a future article, practical measures of on-farm dry matter intake will be discussed. 🐄