

Critical Dairy Nutrition Areas Which Can Dramatically Affect Your Bottom Line

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COOPERATIVE
EXTENSION
SERVICE



- **Rebalance rations on continuous basis:** Rations need to reflect current forage quality, be balanced to maintain milk production and contain economical feed ingredients (grains and by-products) for not only the milking herd but also the dry cows.
- **Water availability:** Water should be located within 50 ft. of the feedbunk, within the holding pen and upon exit from the milking parlor. When cows drink from waterers, they should be able to drink without gulping air. In addition, waterers should be cleaned out weekly.
- **Improve cow comfort:** Cow comfort directly impacts milk production and how well cows respond to balanced rations. To help improve cow comfort, heat stress needs to be reduced. When temperatures are greater than 70 degrees F, sprinklers and fans should be used to help cool cows at the feedbunk and in the holding pens. Secondly, freestalls should be designed such that cows have room to lie down and lunge forward when they get up. Stalls should be bedded with 4 to 6 inches of dry, clean bedding for a comfortable, dry place to lie down. Cows need a comfortable place to lie down and ruminate or chew their cud. On average, cows chew their cuds 8 hours daily.
- **Feedbunk Management:** When cows do not eat adequate amounts of high quality feed, production often suffers and therefore profitability. For early lactation cows, eating an extra bite of feed may make the difference of a pound or two more milk. This extra pound or two of milk may not sound like much, but over her lactation it can add up to 250 to 500 more pounds of milk over the lactation (250 lbs more milk per addition pound of milk at peak production). In order to get cows to consume adequate amounts of feed, cows need adequate bunk space (24-30 inches per cow), they should be close to the feed 20 hours per day, and you should stimulate cows to eat more feed by pushing feed up in front of cows or feeding more times per day.
- **Management of the Pre-fresh Cow:** Many fresh cow problems can be traced back to the feeding and management program of cows three weeks before calving. Cows within three weeks of calving need to be housed and fed differently than both the dry cows and the milking herd. These cows need a specially formulated diet that utilizes lower potassium forages such as corn silage (if fed to the milking herd) and specially formulated grain other than what is typically fed to the dry cow. Diets that are fed to the milking herd are typically high in potassium and sodium which is the opposite of what you want to feed the close-up dry cow. Also, limiting competition at the feedbunk and resting space becomes most important at this time.
- **Dry Cow Management:** Feeding and management programs of the dry cow can directly impact production next lactation. Prevention of fresh cow disorders, such as retained placenta and mastitis, start with the proper mineral and vitamin nutrition (copper, zinc,

selenium, and vitamins A and E) for the far-off dry cow. Adequate, but not excessive amounts of body condition allow cows to milk better the next lactation. Dry cows should be turned dry with adequate body condition (body condition score = 3.0 to 3.25) or weight and then maintain this condition during the dry period since they can more efficiently at laying down body fat stores when lactating versus during the dry period. To maintain these body stores, the amount of grain fed needs to complement the forages being fed. Thus, the importance of testing forages and using these results to determine the amount and protein content of the grain mix which needs to be fed to the dry cows. At the same time, minimizing the effects of heat stress on dry cows is important on milk production this next lactation.