

## Common Nutrition and Management Problems

Donna M. Amaral-Phillips  
Extension Dairy Nutritionist  
University of Kentucky

Sub-optimum forage quality, lack of proper feedbunk management and lack of properly “steaming” cows up before calving are three areas of the nutritional program which quickly limit profitability on a dairy. The following three articles deal with each of these problem areas and offer ways to make changes in your operation to correct each problem area.

### **Problem: Sub-optimum Forage Quality**

by Donna M. Amaral-Phillips

**Importance:** The quality of forage fed directly impacts the amount of grain which must be fed and also the performance of the cattle fed that forage. As the quality of the forage decreases, more grain must be fed to compensate for some of the decreases in nutrient content resulting in a more costly ration. At the same time, cattle, especially high performance cattle, such as milking dairy cows and beef stockers, eat less of the lower quality forage which often times decreases weight gain or milk production.

**Take Home Message:** Forages must be harvested at the optimum stage of maturity and moisture content for optimum forage yield and performance of cattle fed that forage. For example, alfalfa should be harvested at 1/10th bloom stage of maturity and grasses at the late boot stage of maturity (just before the head emerges from the stem). Researchers have estimated that it costs dairy producers \$9 per day when alfalfa harvest is delayed.

Corn silage should be harvested between the 1/3 to 3/4 milk line stage of maturity which results in an ensiled forage with 30 to 35 % dry matter or 65-70% moisture. These moisture or dry matter contents are important for effective packing which excludes oxygen and results in a good fermentation pattern to preserve the silage and allow for optimum intake by cattle.

**Putting concepts into practice:** I realize that weather can and often does change the best laid plans. However, I am always amazed at those farmers who have found ways to overcome the weather and harvest high quality forages. The key is being ready to go to the field ahead of time, resetting priorities for the day, accomplishing several different field operations within a day, and a willingness to take a few chances, such as maybe it will not rain today.

## **Problem : Poor Feedbunk Management**

by Donna M. Amaral-Phillips

**Importance:** Sound feeding programs start with sampling and testing forages being fed and designing a balanced ration which is economical and meets the needs of the cattle fed that ration. However, one of the most crucial steps is what comes next... putting that balanced ration into place. Getting that balanced ration into the cow is critical for optimum performance. Also, we need to remember that ... the more feed an early lactation cow eats, the more milk she gives not only in early lactation but also throughout that lactation.

**Putting Concepts into Practice:** I often hear farmers say... “My cows are fed silage or a total mixed ration free-choice.... But when I look in the feedbunk (1) it often times is empty or just has corn cobs or a small amount of refused feed, (2) has spoiled and/or molded feed that needs to be recycled to the “manure lagoon”, (3) limited bunk space for all cows to eat (24-30 inches per cow), (4) uncomfortable freestalls (too short or uncomfortable surface to lie down on), or (5) the cows are away from the feedbunk more than 4 hours a day. If any of these describe your cow’s feedbunk or freestalls, your cows are probably not eating as much as they could and may be cheating you out of potential milk sales.

**Take Home Message:** The more feed an early lactation cow eats the more milk she will produce throughout that lactation. The feeding program needs to be managed so that cows ALWAYS have the opportunity to eat another bite of feed.

## **Problem: Not Steaming Cows Up Before They Calf**

by Donna M. Amaral-Phillips

**Importance:** How we feed and manage a cow three weeks before the expected calving date is critical to her health and milk production after calving. We used to “steam cows up” (slowly increase the amount of grain fed) after they calved. Today, we realize that this is best accomplished BEFORE she calves. Preventing health problems around the time of calving can increase peak milk production by 4 or more pounds of milk. This can easily translate into 1000 lbs or more additional milk production over this lactation.

**Putting Concepts into Practice:** Cows three weeks before expected calving date should be placed in a separate, clean location with shade where they can be easily observed for calving problems. Cows just before and after calving are more susceptible to mastitis. Thus, housing them in a clean environment is very important. These cows are fed a diet intermediate in nutrient density between that fed to the milking herd and dry cows. These cows are fed a specially formulated ration which includes long-stem hay, forages fed to the milking herd (such as corn silage or wheat silage), and up to 8 to 10 lbs of grain (for Holsteins) with a specially formulated mineral/vitamin pack. To decrease the likely of milk fever, this diet should not contain buffers or large amounts of forages high in potassium such as alfalfa hay.

**Take Home Message:** Initiating the transition period for cows and heifers three weeks before calving allows the cow to adjust to the milking herd diet in a stepwise manner before calving. This allows the cow to eat better after calving and have less health and reproductive problems after calving. Researchers estimate that cows properly transitioned onto the milking herd ration may produce 4 lbs or more of milk at peak and cows may breed back better. We need to especially remember to steam cows up in the summer when they are on pasture and we have many different “irons in the fire” and can easily forget details that make us money.