Sound Fresh Dairy Cow Nutrition Practices Necessary To Get Cows Off to a Good Start

By: Donna Amaral-Phillips, Ph.D.



Feeding and management practices for early lactation dairy cows, especially fresh cows, can have a substantial impact on a cow's health, well-being, future milk production, and reproductive performance. All of these directly impact a dairy cow's potential profitability. When managing fresh cows, it is imperative that they get off to a good start after calving. Early lactation cows, especially just after they freshen, need to be managed so that they eat well in addition to being fed and managed well before calving to avoid metabolic diseases or disorders such as milk fever, displaced abomasums (DA's), or retained placentas around calving time.

Feeding and Management Programs for Fresh Cows

One of the key points in managing fresh dairy cows is to spend time observing these cows. Carefully observing these cows goes a long way in detecting problems early so that you can intervene at the early stages of a disease. Fresh cows need to be observed and monitored (1) to make sure they are chewing their cuds, (2) to see that they are eating their feed, and (3) to make sure that their body temperature, rumen movements, and uterine discharge are normal. Fresh cows should **NOT** be housed with sick animals. To ensure the best possible scenario, cow comfort and plenty of fresh feed in bunks with plenty of feed bunk space and easy access to clean, cool water are critical. This is not the time for overcrowding at the feedbunk or in resting areas. Reduction of heat stress is also very critical for this group of dairy cows as well as maintaining a clean housing environment to prevent mastitis. Remember that dairy cows have a weaker immune system approximately 10 days before and after calving.

Preventing Fresh Cow Diseases

The second key point when managing fresh cows is to prevent metabolic diseases. Metabolic diseases in fresh cows have been estimated to cost dairy farmers between \$150 and \$350 per incidence—which represents a large portion of a cow's potential profit assuming she only succumbs to one disease or disorder. Unfortunately, health problems around calving usually display the domino effect, where one disease or disorder leads to others which, in turn, continue to lead to other diseases or disorders. For example, cows with milk fever, either clinical or subclinical (where you do not see the outward signs of the disease), increases the incidence of dystocia or difficult birth by 4.2 times and doubles the likelihood she will have a retained placenta. In turn, a retained placenta increases the likelihood of metritis or uterine infections by almost 6 times. The bottom line is that we need to prevent these problems to get these cows off to a good start.

Feeding and management programs before calving can help prevent many of these diseases or disorders. Providing plenty of bunk and resting space to minimize competition (stocking rates at 80% of capacity) can help decrease stress and increase feed intake before calving

just like after calving with fresh cows. Studies have shown improving feed intake before calving can improve intake after calving. Cows that eat better after calving generally milk better and have fewer health problems. Feeding programs before calving need to provide adequate, but not excessive amounts of fiber, and should contain the proper mineral balance to prevent milk fever. Low potassium diets have been shown to decrease the incidence of milk fever. Corn silage is a low potassium forage and thus, the reason for including corn silage in diets for cows 3 weeks before calving. Generally, the amount of grain is increased slightly to allow for adaptations to begin in the rumen (elongation of the rumen papillae to absorb volatile fatty acids) to prevent rumen acidosis after calving. Essentially, these cows need a specially formulated diet that helps them transition into the milking herd and prevents health problems around calving. Providing separate facilities and feeding programs for dairy cows 3 weeks before calving, prevent post-calving can pay dividends by getting these cows to eat well after calving, prevent post-calving health problems and improve the likelihood they be profitable.