

# Recommendations for Managing Fresh Dairy Cows



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Proper management and feeding of dairy cows in the first two to four weeks after calving is critical for preventing disease and ensuring cows reach maximum milk production and optimum reproductive performance. During early lactation, cows' intake of energy and other nutrients is not enough to meet their demand for milk production and other needs. During this time, cows are in negative energy and calcium/phosphorus balance and are immunosuppressed, making them especially susceptible to several diseases. Therefore, to achieve the best possible performance and profitability, special attention must be given to fresh cow programs.

- **Provide separate housing.** Ideally, fresh cows should be housed in a separate pen for the first 10 to 14 days in milk. This allows for easier evaluation of individual cow's health and the ability to feed a specific diet to this pen of cows. It also minimizes stress, minimizes time spent in the holding pen, prevents exposure to sick cows, and reduces competition with cows who are further in lactation. A fresh cow pen should be stocked at no more than 85% occupancy of lockup feed space, or should provide at least 30 inches of bunk space. There should be at least one free stall or 100 square feet per cow of lying space. When designing these facilities, they should be designed for the maximum number of cows at any given time. The housing environment should be well-maintained and manure should be cleared frequently to prevent disease exposure, as fresh cows are immunosuppressed.
- **Provide a specialized diet.** Fresh cows need diets that promote dry matter intake so the period of negative energy balance they experience after calving is as short as possible. Energy intake can be increased by providing a diet with high quality forages. The particle size of the feed should stimulate rumination, achieve rumen fill, and maintain optimum ruminal pH. Diets should also contain slow-digesting starches, such as dry shell corn, and not more rapidly fermentable starches, such as high moisture corn. Feeding of supplemental fats should be kept low to prevent a reduction in dry matter intake. Feed should be available and easily accessible for at least 22 hours each day.
- **Examine health of individual fresh cows daily.** For every clinical case of a disease, several subclinical cases (symptoms not seen) may exist. For example, the cost of subclinical hypocalcemia, or subclinical milk fever, in a herd costs four times that of clinical cases because, although treatment per subclinical case is less expensive than a clinical case, subclinical cases occur more frequently. Daily observation of fresh cows is needed to help prevent and detect diseases early. Some indicators of disease to look for include depression, decreased appetite, signs of dehydration, droopy ears, eye or nasal discharge, and a sudden decline in production. Checking rectal temperatures and using technologies are additional ways to monitor health of cows. Milking technicians should

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look for disease indicators, such as poor udder fill while the cow is in the parlor. Fresh cows are most susceptible to toxic metritis, hypocalcemia, ketosis, mastitis, rumen acidosis, displaced abomasum, pneumonia, and salmonellosis. Determining ketone concentrations (BHBA) in the blood can help detect cows with either clinical or subclinical ketosis. A cow with a BHBA of 1.2 mmol/L or higher is considered to have ketosis. A temperature of 103° or higher, abnormal uterine discharge, or a cow isolating herself can all be indicators of metritis. When evaluating cows and treating for diseases, good records should be kept to make sure that all cows are evaluated daily and all treatments follow protocols developed with your veterinarian's advice.

- **Give special attention to management of dry cows.** The management and feeding of dry cows impacts their health as fresh cows. Cows should have a body condition score of 3.0 to 3.25 at dry off and again at calving and should lose no more than 0.5 units in body condition score over the first 60 days following calving. Dry cows should not be over-conditioned before calving because this could decrease their dry matter intake after calving. Over-conditioned dry cows are also more likely to develop ketosis or fatty liver syndrome because body fat can be mobilized too quickly during this time of negative energy balance and accumulate in the liver. Prevention of stress is also important for dry cows. Within three weeks of expected calving, 36 inches of feedbunk space should be provided per cow to prevent competition for feed and a minimum of 1 freestall or 100-125 ft<sup>2</sup> of lying space per cow to provide adequate lying space. Fans and sprinklers should be used to prevent heat stress, and regrouping of cows should be minimized to prevent social stress. Preventing stress in dry cows that are within three weeks of calving is especially important.
- **Avoid housing sick cows with fresh cows.** Since fresh cows are immunosuppressed, their exposure to sick cows should be minimized. Housing a sick cow with a contagious disease, such as mastitis, will expose the already vulnerable fresh cows to disease-causing pathogens.

Giving special attention to the management and nutrition of cows in the weeks following calving benefits them throughout the rest of their lactation. Providing separate housing for fresh cows with additional feedbunk and lying space helps ensure adequate feed intake and reduces stress. It also allows for a separate diet that contains high-quality forages so that the period of negative energy balance a cow experiences after calving is shortened. Daily observations and health monitoring, as well as the use of technology, can help with prevention and early detection of common fresh cow disorders. Proper management and nutrition of dry cows will also help prevent common health issues in fresh cows. These practices for fresh cows help ensure the best possible health, milk production, and reproductive performance throughout the rest of the lactation.