
HALTING HEIFER LOSSES

Over one in five dairy heifers does not live long enough to give any milk. As well as being an animal welfare tragedy, that is a huge cost that dairy farmers simply cannot afford.

While cows that are calving or actively milking are their immediate priority on a day-to-day basis, they need to adopt sound systems to ensure they take adequate care of heifers.

The 22% of heifers that die (DAISY Report, Esslemont and Kossabaiti 2000), are the tip of the iceberg as there is significant compromise in the health of the others through the rearing process on some farms.

So designing a robust heifer rearing system than ensures you turn out as many fit, healthy animals that can express their full yield potential and which can be expected to milk for at least six lactations is crucial, for both the health of the animals and the business.

The greatest losses occur in the first six weeks of life. A DAISY report (DAISY Report, Esslemont and Kossabaiti 2000) that surveyed 26 dairy herds revealed average calf mortality of 9%, with scours taking the greatest toll, followed by pneumonia.

Without labouring the point, by far the most important single step in successful heifer rearing is ensuring they get 2.5 litres of colostrum, less for jersey's, twice within six hours of being born. This can be delivered by bottle, or by tubing.

Even if a cow calves during the night and it looks as though the calf has suckled, I would still suggest waiting a couple of hours and bottle feeding it a couple of litres, because you cannot tell how much colostrum it received, and too much is far better than too little!

Where scours in calves can be attributed to rota virus, e-coli or corona virus (which can be confirmed by sending a fecal sample to a lab) try the following:

Vaccinate a third of the herd - especially older cows - during the dry period and freeze their colostrum after they have calved (2 litre ice cream tubs are perfect for this!). You then have a 'clean supply' of colostrum with which to feed all calves, which should help cut the incidence of scours.

One further note: the cows being vaccinated should also be screened and tested for Johnes disease, otherwise 'pooling' colostrum can spread this disease.

Scours can also be caused by cryptosporidia, salmonella and - when the animals are slightly older, cocci. Similarly, nutritional scours can occur. It is certainly worth sampling any calves that are scouring as there are specific treatments now available for crypto (Halocur, Intervet) and coccidiosis (Vecoxan, Janssen).

Treatment for scours involves killing the bug, correcting the dehydration and the concurrent metabolic acidosis.

Third generation electrolyte fluids have elements that correct the acidosis and dehydration, while specific treatments are necessary to remove the bug. Current thinking is to skip one feed of milk and replace it with electrolytes like Lectade or glutalyte. Then make the next feed from half milk and half electrolytes, so the calf's nutrition is not compromised.

You should also increase the volume of fluid the calf receives by raising feeding to four times a day (using the same

volumes/feed as before) to counter the effects of feed loss caused by the scour. If the calves are still scouring after 24 hours or remain weak, then seek veterinary help as a drip containing sodium bicarbonate is probably required.

The 'milk-bar' system used in New Zealand style dairy systems may be very labour efficient, but they place a greater onus on the quality of stockmanship, as it can be difficult to keep track of and care for individual calves.

One danger of these systems is that hygiene may be overlooked, resulting in diseases such as cryptosporidia and cocci causing losses. Eye infections and pneumonia can also be more prevalent, as calves are in very close contact when feeding, and may swap between teats. If well organised, New Zealand systems work very well; but they can be a disaster if not properly managed.

I would advocate a maximum group size of 25 calves, with all animals being within a tight size range - that is as important as keeping their pastures free from poaching and providing effective shelter from the elements.

Calves on these systems seem to do better when fed whole milk rather than milk replacer, and are only housed outdoors from two weeks old.

If all goes to plan, calves should be weaned at five weeks - an age when Holsteins should weigh 65kg - having gained about 0.5kg/day, and when they are consuming about one kg of calf nuts per head per day.