

Dusting cubicle beds

David Gleeson at Teagasc Moorepark looked at the effects of dusting cubicles with hydrated lime, ground limestone or a mixture of the two. All products were effective at disinfecting the cubicles without any adverse reaction to cows' teats due to the higher pH of the hydrated lime. However, it is important to apply the recommended level of hydrated lime (170g) per cubicle bed, as higher application rates than that specified are considered unnecessary due to the drying properties of the lime and possibility of deterioration in teat condition. David recommends using a mask if dusting with hydrated lime. He also advises that cubicle beds be dusted and cleaned twice daily. Contamination of the ends of the cubicle beds with dung could increase the risk of udder and leg lesions in cubicles dusted with hydrated lime. Whether milking or dry, dairy cows need a clean dry bed to lie on while indoors. A well-maintained bed of sawdust keeps the bed dry.

However, when wet, bacterial growth is rapid and this can quickly result in large bacterial populations on teats. Adding hydrated lime to sawdust or wood shavings increases the pH and suppresses bacterial growth.

Edited by
Tom O'Dwyer,
Head of Dairy
Knowledge Transfer



Dusting cubicles with lime can help prevent bacterial growth.

Feed lighter weanling heifers to catch up to target



Weighing heifers at the start of housing and in late December will determine if they are gaining enough weight.

Weanling heifers are by now settled onto winter diets. A simple target is to keep weight gain at 18kg per month or 0.6kg per day for heifers that are already on target for age and breed.

This figure holds well irrespective of maintenance sub-index. Is your winter diet delivering enough weight gain? Weighing heifers at the start of housing and again in late December will tell the tale. Silage analysis should dictate concentrate feeding rates for housed heifers (**Table 1**).

Weanling heifers on poor-quality silage (66 DMD) will need 1.8-2.2kg of high-quality concentrate with minerals included, depending on target gain. It is well worth drafting out the lightest heifers into a separate pen for extra feeding. Better-quality silage will deliver target gains at

lower feeding rates. However, it is still worth feeding a bit extra to those few lighter heifers in the group. Do not rely on early turnout to make up the difference.

Animals can be weighed again in mid January and feeding rates reviewed; heifers that are ahead of target and eating very good silage may be taken off meal until turnout at that point.

Finally, lighter animals respond well to a higher balance of protein to energy in terms of lean growth. If silage protein is low and a low-protein ration is being fed, replacing 0.25kg per head of ration with soya will be beneficial. For example, for a pen of 12 weanling heifers, replace 3kg of ration with 3kg soya in the daily concentrate allowance to the group.

Table 1: Concentrate feeding guidelines for different levels of silage quality.

Target daily weight gain	Silage quality	
	Poor (66 DMD)	Good (72 DMD)
0.6kg (heifers on target)	1.8kg	0.8kg
0.8kg (lighter heifers)	2.2kg	1.2kg

SPECIAL FEATURE



Setting up the farm for spring: facilities and practices

In the second of our special features looking at setting up your farm for spring 2021, MARION BEECHER and MARTINA GORMLEY look at getting your facilities and practices ready.

Research indicates that inefficient work practices and inadequate facilities contribute to an increased workload on dairy farms. Improving facilities and practices associated with milking and calf rearing can reduce labour demand. Now is the time to take stock. Complete all repairs and maintenance on facilities. Think about what caused you stress last spring and make a plan to avoid that this spring. Good facilities and

practices make work more efficient and easier. This is important for the farmer, for family members and for hired staff. Recent research on time-use on 72 Irish dairy farms identified facilities and practices that are associated with reduced labour demand (Table 2). Some may be long-term projects, as significant expenditure and planning are required, whereas others require little capital but a change of habit.

Table 2: Milking and calf-rearing facilities and practices associated with reduced labour demand.

Milking	Calf rearing
Milking seven or less rows of cows.	400m or less from milking parlour to calf shed.
Once a day milking for the first four weeks of lactation.	Calf sheds can be cleaned out mechanically.
Automatic cluster removers.	Calves penned in groups.
Dumpline.	Use of an automatic calf feeder.
Autowasher.	Switch to once a day feeding of milk from four weeks of age.
Automatic drafting.	Calves turned out to grass after 10 weeks of age.
Good cow flow (not necessary to leave pit to bring cows into the parlour).	Bull calves sold (after 10 days of age).
Not leaving the pit during milking to feed calves.	Contract rearing.

Hygiene, hygiene, hygiene!



The focus this month is on the main points to remember on the day of dry off.

1. Take your time and have sufficient help available to complete the task as safely and hygienically as possible.
2. Inserting intra-mammary tubes should be carried out as a sterile procedure, which is difficult to achieve, as the parlour is not a sterile environment.

- Think about the level of cleaning and sterilisation that a cow undergoes before a caesarean section; failure to adequately prepare the surgical site would certainly lead to an infection post surgery. The same could be said for tubing cows without sterilising the teats properly first.
3. Don't forget to mark cows before treatment, to avoid any mistakes afterwards.

4. Keep the number of cows to be treated to a manageable number, approximately 20 per person. It will take between five and seven minutes to dry off a cow correctly and if cows spend too long waiting in the parlour, they will naturally create a lot of faeces, increasing the risk of environmental contamination.
5. When sterilising the teats, start with the furthest away teat first. When tubing, start with the nearest teats.
6. Remember that teat sealers are not massaged into the udder like antibiotic treatments. They must sit in the lower part of the teat to create the seal. This is achieved by gently squeezing the top of the teat where it attaches to the udder to close it, ensuring the sealer remains in the canal.
7. Make sure cows can stand in a clean yard for at least half an hour afterwards.
8. Finally, the importance of good hygiene during the dry period should not be forgotten. Cows are very susceptible to picking up new infections during the dry period, but especially in the first two weeks after drying off until the teats have sealed properly, and in the two weeks prior to calving. They need to be monitored closely and regularly for any signs of infection during these high-risk times.

HEALTH & SAFETY

Prevent fire deaths in the home

Deaths due to fire are a source of tragedy in farmhouses. An Irish Health Research Board (HRB) study has shown that farmers and agricultural workers account for 20% of fire deaths nationally. This is proportionately higher than other sectors. Almost all fires occurred in dwelling houses. Contributory factors included smoking, high alcohol consumption, plugged-in or faulty electrical devices, open fires, and frying or chip pans. A small number of fires were linked to candles burning. Give preventing fires in your home and on your



Take fire-safety action.

farm attention over the coming months. This year, due to Covid-19, people are likely to be home more often, so the risk is increased. Fire safety advice is available at: www.firesafetyweek.ie.

And finally

Teagasc would like to wish you, and your family, a happy, safe and peaceful Christmas. We look forward to working with you in 2021.

