



CALF HEALTH: THE POWER OF ELEVATED MILK FEEDING



Lilly Cochrane
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Does increasing milk intake from six litres to eight litres daily have a positive effect on calf health? One farm in North Devon gave it a go.

Kat and Steve Pomeroy embarked on a mission to revolutionise their calf-rearing practices. Their primary goal was to produce stronger, healthier calves, with robust immune systems. They hoped this would lead to improved growth rates, bigger heifers at insemination, and lower mortality.

“Ideally, we would like heifers to reach 85% of mature bodyweight and yield in first lactation. We are currently achieving this, but as we push for 9,500 litres next season, we can’t expect the heifers to do this independently. We must play our part in setting up that future dairy cow, starting with the growth and development from day one in the calf shed,” says Kat, who milks 330 cows alongside her husband Steve at Wedfield Farm, Putford.

Last year, most calves doubled their birthweight by weaning at 11 weeks, achieving an average daily liveweight gain (DLWG) of 0.7kg. However, Kat recognised the potential for further improvement.

The gold standard of 1kg of DLWG served as a benchmark and highlighted opportunities to optimise calf growth and development.

COLOSTRUM MANAGEMENT

Kat aims to feed calves at least three litres (L), if not more, of clean, quality colostrum (measuring 24% or above on a Brix refractometer) as soon as possible after birth. If the colostrum does not make the grade, a replacement feed of SCCL colostrum (always tubed) is given.

A second feed of transition milk totalling 3L is fed 12 hours later. This is sourced fresh from the parlour and must also measure 24%.

On day two, calves move onto 3L of milk replacer; mixed at 150g to 850ml of water, to make 1L of milk. By day 8, they will reach 8L/day.

BENEFITS

Calf health

Since implementing these changes, Kat has observed significant improvements in calf health.

She says that this year’s calves appeared more energetic, maintained a fuller body condition for longer periods, exhibited better bodyweight distribution, and had a shiny coat.

“We still had pneumonia, which we do vaccinate for, but we believe the additional 2L of milk provided calves with extra energy to withstand fluctuating temperatures and combat infections,” says Kat.

To further enhance calf health, they have adopted a proactive treatment approach.

“Any calf exhibiting symptoms is immediately treated,” Kat explains.

Despite increased treatment frequency, she says they have used less medication overall. *“This highlights the positive impact of improved nutrition on overall calf resilience,”* she adds.

CONCENTRATE INTAKE

Despite feeding more milk, concentrate intake increased.

Calves were weaned gradually over three weeks, which helped because taking the milk away too quickly will dent the calf’s growth. By the end of the second week of weaning, calves were eating over 2kg/head/day and then over 3kg of cake once weaned. Water intake also went up. For every 1kg of concentrate, calves drink 2L of water on top of their milk allocation. Calves must have access to clean, fresh water to ruminate efficiently.

THE FINAL WEIGHTS

Results (see table 1) show feeding an extra 2L of milk has improved overall calf health and concentrate intake at weaning by 1kg/head/day. This means the Pomeroy’s are on track to hit 1kg of DLWG next season.

For more information and help creating the right feed plan for your farm, please contact your Feed Specialist.

Feed rate	6L	8L
Average weaning weights (% of bodyweight)	235%	283%
Number of calves that failed to double their bodyweight	7	0
Number of calves that tripled their bodyweight	5	6 (including twins)
Number of calves that quadrupled their bodyweight	0	2 (set of twins)
Mortality	1.2%	0%
Treatments (navel infections and pneumonia)	38	30
Concentrate intake at weaning	2kg	3kg

FARM FACTS

- ✓ Milking 330 ProCROSS cows, to reach 400 by autumn 2025
- ✓ Supplying Saputo – Cathedral City Cheese
- ✓ Averaging 8,750 litres at 4.33% butterfat and 3.6% protein, aiming for 9,500 litres by autumn 2025
- ✓ Heifers calving at 23 months, aiming for 8,100 litres in first lactation
- ✓ Milking through a 32:32 parlour twice a day
- ✓ Autumn-block calving.

FARMING THOUGHTS

GRAIN AND STRAIGHTS MARKETS

Thank you to those of you who joined our three buses to Westminster in November.

The family farm tax, as it is now known, was sprung upon us in Mrs Reeves's first budget. Solicitors and accountants have been busy since. What was very noticeable while in London was the positive response from the public, all supporting our actions and British food.

Down on the farm, market prices have picked up through the Autumn, so hopefully, it will be a profitable winter for all. Most dairies are now paying 45ppl+, beef has reached £5.30/kg deadweight and lamb £6.80/kg.

We have now started pouring concrete at the new farm store and hope to see you at the Open Day.

The two new grinders are speeding up our mill's production, grinding 2t in 2.5 minutes.

Last but by no means least, may I thank you for your custom over the previous 12 months. We wish you and your families a Merry Christmas and a healthy New Year.



Glen Johns
Sales Director
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Since Trump won the US election, the dollar has continued to strengthen, trading at a high of 1.34 against the pound in September to 1.26 in November.

The dollar is likely to remain strong, which is not good for us when we are buying US-based commodities. As he did in 2018, tariffs are likely to be imposed on China, which could result in China switching to South America for their soya. This would increase US soya stocks. Trump intends to bring the Ukrainian conflict to an end, but it is unclear yet how this might affect us.

Closer to home, AHDB and DEFRA have put UK wheat production at 11.051 million tonnes (t), down nearly 3m t on last year. Meanwhile, barley is estimated to be 7.2m t, 250,000t above last year due to increased spring barley production. The price remains relatively static, but growers are reluctant sellers, and forward prices remain at a premium. Wheat imports continue to flow into the country with 280,000t imported in September, bringing the season to 887,000t — double of last year.

Barley, which is trading at about a £20 discount to wheat, is finding export destinations, so we could see this gap narrow. With cereals at current levels, it is very difficult to see much downside.

Global soya production looks good despite a 2% drop in US yields to 121.42m t. Currently, South American crops have ideal planting conditions, and record crops are being forecast for next spring. Soya looks exceptionally good value. With all this good news in the market, it is very difficult to see how much downside there is.

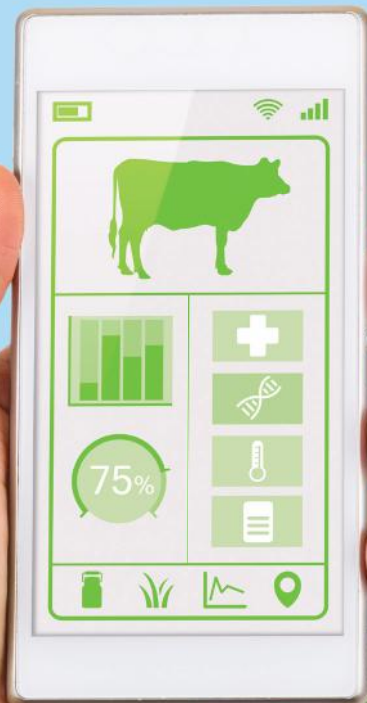
Rape remains expensive on a protein basis, and lower plantings are likely to keep rape prices firm, meaning soya will feature heavily. To summarise, next year could be very unpredictable!



Andrew Davies
Operations Director
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HARNESS THE POWER OF DATA

Using NMR herd data reports, fine adjustments can be made to rations, further improving your dairy herd's performance.



When studying the herd data on NMR Herd Companion, milk yields and fat and protein ratios are a couple of the main things that are monitored. Fat and protein ratios are crucial to monitoring energy balance in the diet, ensuring the cows have sufficient energy at peak lactation to prevent them from milking off their backs. Doing this will help maintain peak milk yields for longer.

Without careful monitoring of the precise herd data, cows could be mobilising their own body condition to hit the required litres. Monitoring tank collection results alone only gives us herd averages, which is sometimes not enough to assess top-yielding cows accurately.

Herd companion KPI and benchmarking are crucial to ensuring farm efficiencies are met to reach targets. This is then closely linked to the costings service that we provide.

Major KPIs that we monitor on the dairy costings service include:

- ✓ Feed Rate
- ✓ Milk yield from forage
- ✓ Margin Over Purchased Feed (MOPF) per cow
- ✓ MOPF per litre.

All these figures are closely linked. Making quality forage will help reduce the feed rate. But overall, the crucial figure to look at is the MOPF per cow. This shows the overall margin after all feeds, from concentrates and forages.

The costings service allows us to monitor yearly from April through to March or on a rolling 12-month basis. I would encourage you to sit down with your representatives to set short- and long-term targets. These can range from improving milk yield from forage, by improving grass leys and cutting for silage more frequently, through to feeding more to increase milk yields.

To find out more, speak to your Feed Specialist.



Alex Cornish
Ruminant Feed Specialist
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ADVICE FOR FINISHING LAMBS

As we head into the final month of the year, the days shorten, and the weather turns colder. This reduces the potential to grow good-quality and decent quantities of grass.

Depending on farm resources, this may mean that remaining lambs start to compete against other enterprises on the farm such as breeding ewes for winter keep. Labour might be limited, or required for other enterprises, and housing availability/space could be required to finish leftover lambs.

If the remaining lambs start to compromise the farm system, then a good question to ask is: should they be sold as store lambs to a purpose store-lamb finisher/buyer rather than finished on your unit?

To ensure good returns on lambs being sold as stores, they must be well-grown and have an adequate frame, so that the level of desired finish and overall weight can be achieved.

To achieve this, good flock management should be performed for their lifetime. This includes lameness prevention, parasite control, and lambs need up-to-date trace element supplementation and vaccinations.



	Weight	Time to finish
Short Keep	Over 35kg	4-6 weeks
Medium Keep	30-35kg	6-12 weeks
Long Keep	Under 30kg	Over 12 weeks

A good way to assess lambs is to batch them by weight. This will ensure store lambs are sold in even batches and if finishing them on concentrate, such as our 15% Lamb Finisher Nuts including ammonia chloride, lambs are penned evenly to their weight.

An example of sorting lambs to weight is shown in the table above.

For every day a lamb is on a farm, it is a cost. A finishing system's profitability relies on good flock management, nutrition, and a strong understanding of the market.

ADVICE FOR FINISHING STORE LAMBS

When buying store lambs, always quarantine and treat for parasites such as worms. Do not assume the vendor has done this, as this can limit weight gain.

The transition from grazing to indoor finishing must be smooth when purchasing store lambs, either out of markets or when bringing them indoors from grass.

Careful management is required to avoid digestive disorders such as acidosis which can cause growth checks. Acidosis is caused by a poor adaptation to a starch-based diet, with a subsequent acid load in the rumen. A gradual transition from forage to concentrate is advisable over a two-week period building up to ad-lib. Sometimes, when lambs have not consumed concentrate before, it will take time for them to start eating significant quantities. Offering straw/haylage in racks to ensure sufficient fibre intake is important, as is good water availability and access.

Our 15% Lamb Finisher compound is an excellent option for efficient finishing of lambs. It is specifically formulated for lambs that have the required frame but need the desired finish. It contains a balanced raw material matrix of protein, energy, starch and fibre for efficient conversion and finish. To reduce the risk of urinary calculi, Lamb Finisher includes ammonia chloride, as standard. This works by reducing the pH level in the urine, which leads to urinary calculi.

QUOTES FROM CUSTOMERS

Lambs handle very well with an excellent level of finish, killing out percentages and grades are always good.

We always finish our lambs over the winter months outdoors in a field using Lamb Finisher in creep feeders. Lambs always take to it well, and within a month, we are picking lambs for slaughter.

Some of the bought-in lambs would not have seen hard feed before, but the transition is always smooth, and lambs don't suffer from digestive upsets.

The lambs take to the nut in the feeders very well. We get good intakes once the lambs are indoors, and they can reach target slaughter weight within 3-5 weeks.

WHY FINISHERS SHOULD BEWARE OF THE 'SECOND WEIGHING'

Now that cattle have been in on their finishing diet for a few weeks, it is important not to be deceived by the second weighing.

If you have weighed your cattle at housing, there is every chance they will be fairly empty having come inside from grass. When you weigh them one month later they carry more weight as feed is in the rumen. Therefore, their performance may look good, but this does not tell the full story, as a full rumen does not equate to liveweight gain.

Weigh again two months post-housing to assess how much liveweight has been achieved and if the diet has been balanced correctly.

THREE KEY DRIVERS OF PERFORMANCE

1 - DRY MATTER INTAKE

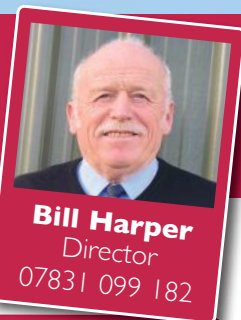
Are your finishing cattle eating enough? A 400kg animal should eat 1kg of 35% dry matter (DM) silage and concentrates/hour.

2 - DIGESTION

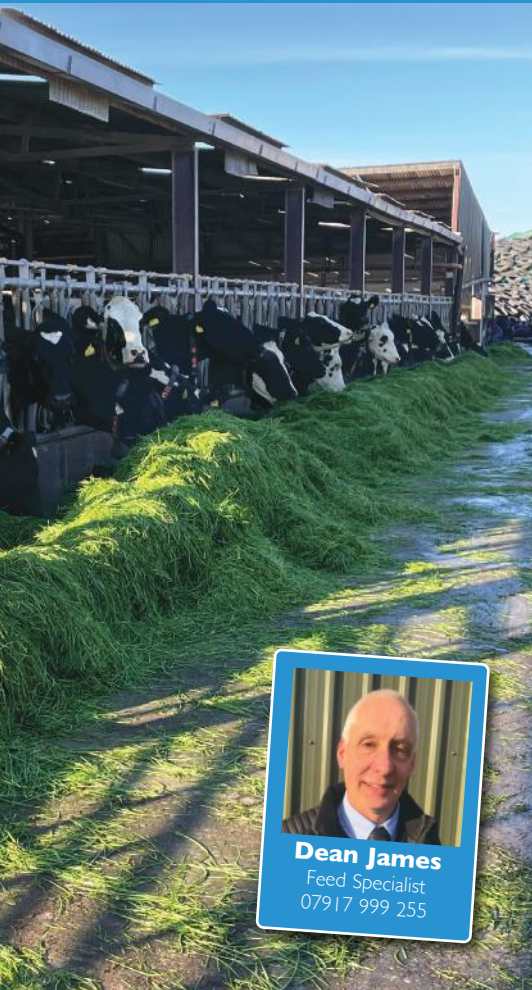
Is feed completely digested in dung? Firm faeces indicate too much fibre and not enough protein and energy, but loose dung is a result of grain not being digested. Try adding yeast to the ration.

3 - DISEASE CHALLENGES

Worm at housing to remove worm burdens. Watch out for digital dermatitis and footbath weekly with formalin if cattle become lame. Lastly, work with your vet to develop a vaccination programme for pneumonia. Cattle that have lung damage will never perform well in the finishing shed, so do everything you can to keep them healthy throughout their lives.



IRISH TRIP OFFERS INSIGHT INTO GRAZING ON ROBOTIC DAIRY FARMS



In mid-October, Alex and I joined a small group of farmers on a trip to Ireland to look at six very different farms using robot milking systems

We stayed in Mullingar in central Southern Ireland, and the farms we visited were all within 45 minutes from there.

The first farm we visited was an all-year-round calving herd milking 250 cows on five Lely A5 robots. The farmer was using a specialist zero-grazing machine to utilise grass grown away from the farm, as there was only a limited amount of land close to the buildings. He considered that making silage was more expensive than zero grazing.

The second farm was another housed unit that had converted from beef to dairy in 2020. This farmer also has a contracting business and was sometimes away from the farm when cows needed feeding. To overcome this problem, he installed the Lely Vector feeding system.

This is a fully automated system, which loads itself from a feed kitchen which requires replenishing every other day. It calculates how much feed to put in front of the cows by scanning how much is left at the feed fence every time it passes. The farmer had seen a lift in milk since the system was installed. Both units were similar in many ways to the robot units we see in our area.



The other four farms we visited were robot units that used Lely Grazeway gates and ABC grazing systems to achieve as much milk from grass as possible. The units ranged from 75 cows to 220 cows and had paddocks set up in three blocks.

The grazing gate is set to give access to block A from 2am to 10am, the B block from 10am to 6pm and the C block from 6pm to 2am. Grazing is managed so that the cows want to come back to the robot for milking so they can access fresh pasture. However, cows can be in two, even all three blocks, at the same time when the system is working well.

It was stressed that the cows should not be fetched from paddocks and will learn to manage themselves. This was a very interesting trip for us and the farmers with us who are hoping to adopt this system on their own farms in Devon.

CHRISTMAS OPENING HOURS

We are only closed on Christmas Day, Boxing Day Bank Holiday, and New Year's Day Bank Holiday but our normal delivery days may be subject to change.

The last order date before Christmas is **Tuesday 10th December** and the last order date before New Year is **Tuesday 17th December**.

Please help us help you by providing as much spread as possible during the holiday season. Thank you for your co-operation.

Everyone at Harpers Feeds and Massey Harpers Country Stores wishes all our customers a Merry Christmas and a Happy New Year.



DATES FOR YOUR DIARY

We look forward to seeing you at events throughout the rest of the year. Make sure to pop in and see us.

Event	Date	Location
Wednesday 4th December	Massey Harpers Birthday Open Day	Massey Harpers, EX22 6FU 8am-8pm
Saturday 11th January 2025	Bude Rugby Game - <i>To book, call 01409 254 300</i>	Bude Rugby Club, EX23 8QG 12.30pm
Saturday 11th January 2025	Okehampton Rugby Game - <i>To book, call 01409 254 300</i>	Okehampton Rugby Club, EX20 1JB 12.30pm (In conjunction with Torch Vets)
Saturday 11th January 2025	Bideford VS Penryn Rugby Game - <i>To book, call 01409 254 300</i>	Bideford Rugby Club, EX39 2QS
Wednesday 15th January	Harpers Sheep Meeting - <i>To book, call 01409 254 300</i>	South Molton RFC, South Molton, 6.30pm